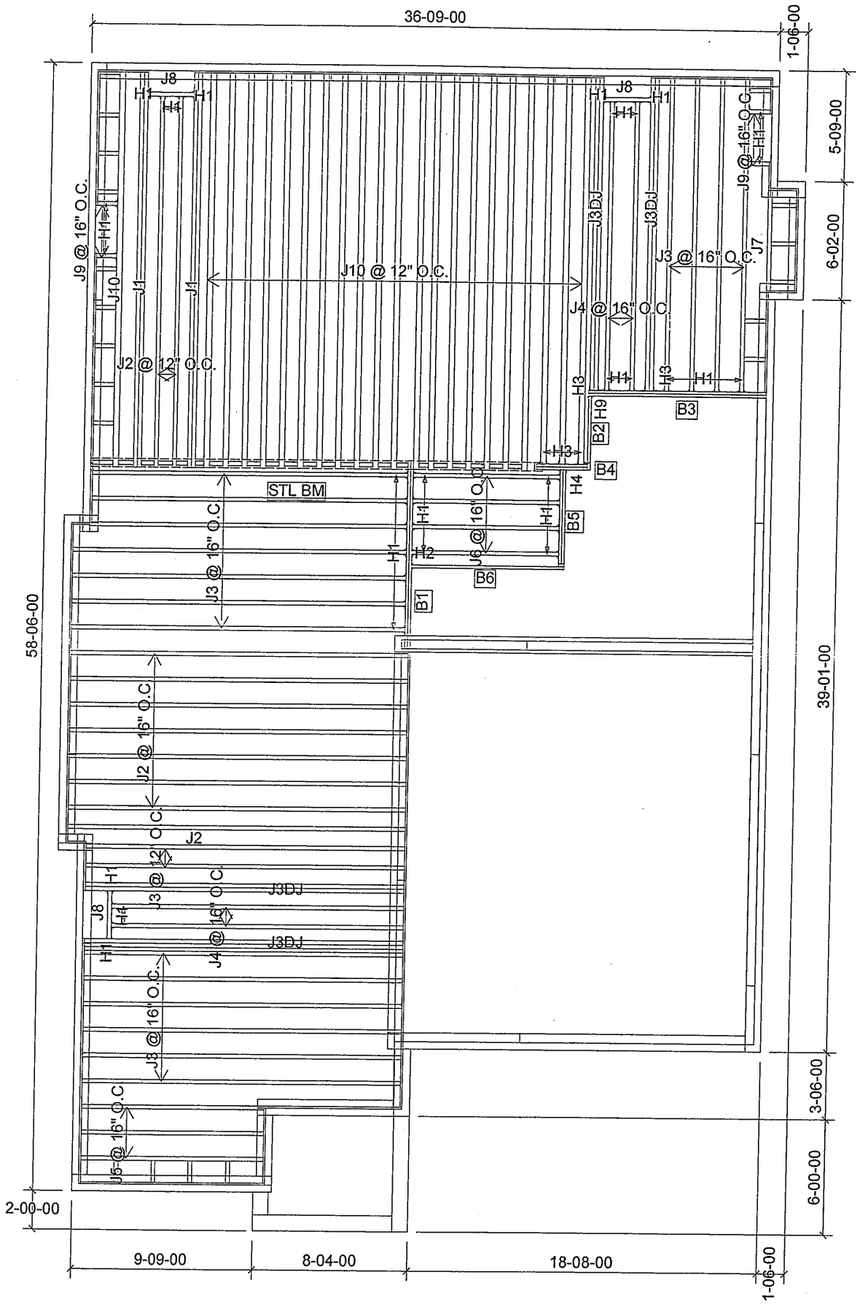


Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	10
J3	18-00-00	11 7/8" NI-40x	1	19
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	10-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
21	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-09-27

1st FLOOR

NON SUNKEN

DATE 10042

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178804 THROUGH DWG# TAM 178894, INCLUSIVE DATED 8.14.21

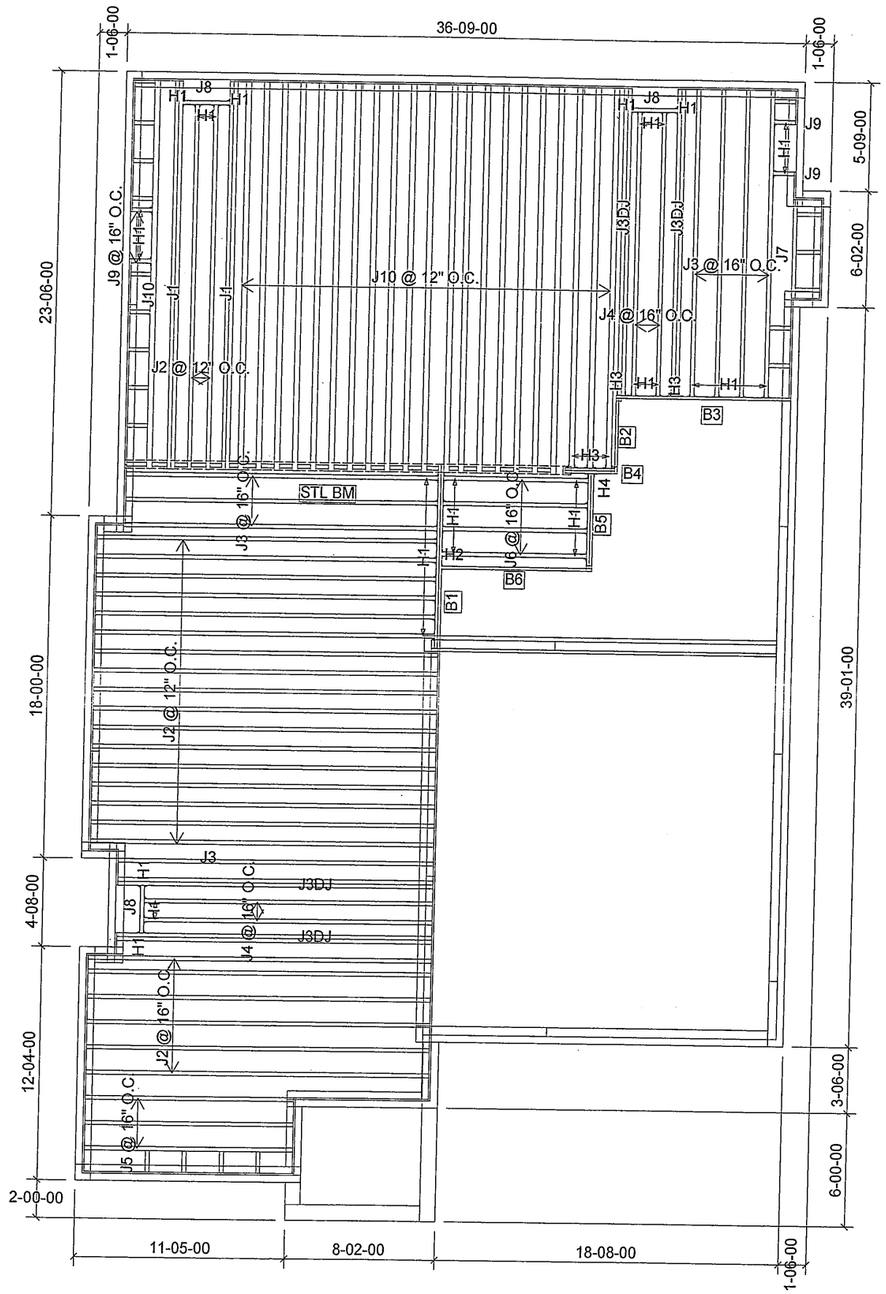
SEALED STRUCTURAL COMPONENTS ONLY: +179421
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND A HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 21542-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
10042
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	25
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J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	12-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
6	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-09-27

1st FLOOR

NON SUNKEN

DATE 10042

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178874 THROUGH DWG# TAM 178894 INCLUSIVE DATED 8.24.24

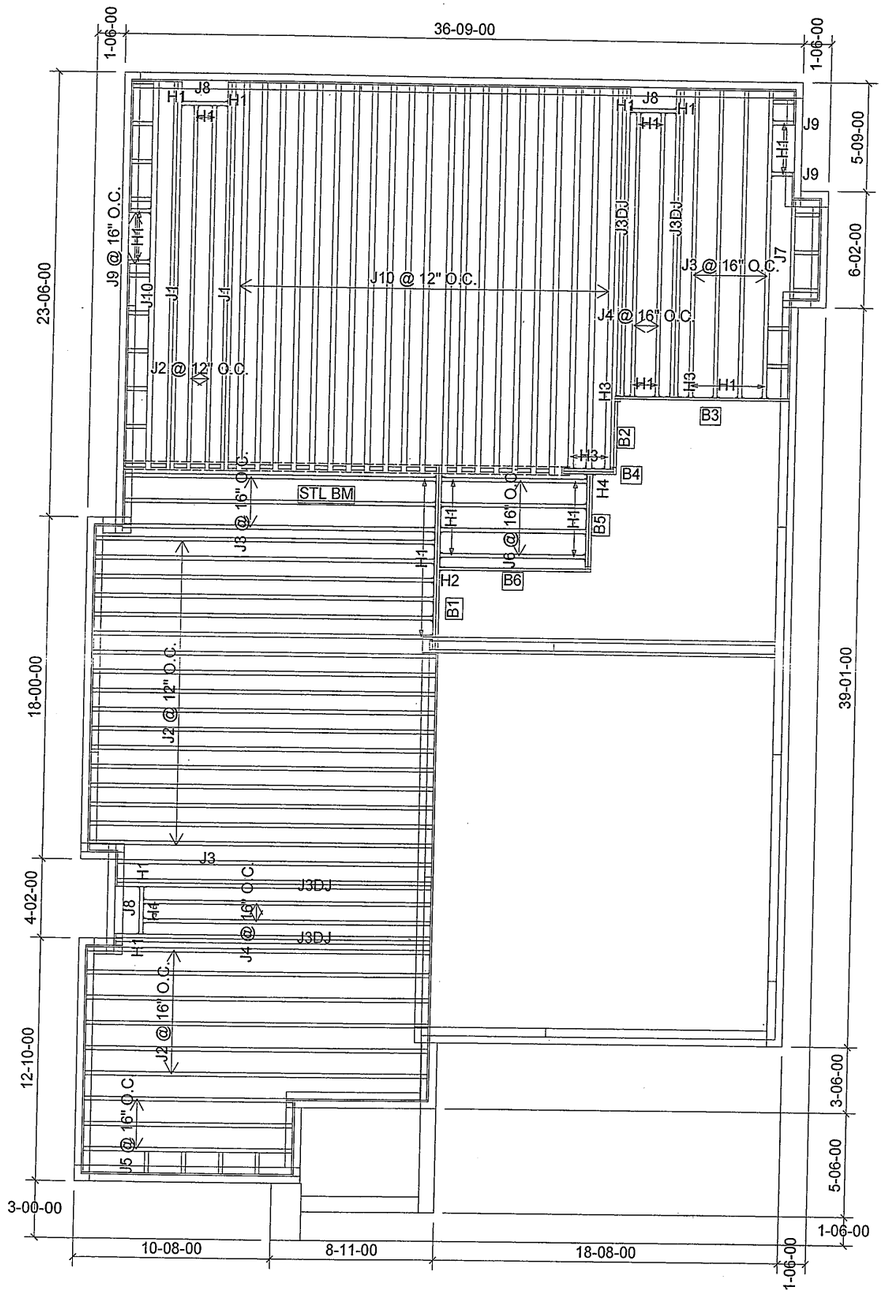
SEALED STRUCTURAL COMPONENTS ONLY: +179042
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 215432
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
10042
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	25
J3	18-00-00	11 7/8" NI-40x	1	8
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	12-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
6	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:

REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-09-27

1st FLOOR

NON SUNKEN

DATE 10 09 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178804 THROUGH DWG# TAM 178844 INCLUSIVE DATED 8 24 21

SEALED STRUCTURAL COMPONENTS ONLY: +178904-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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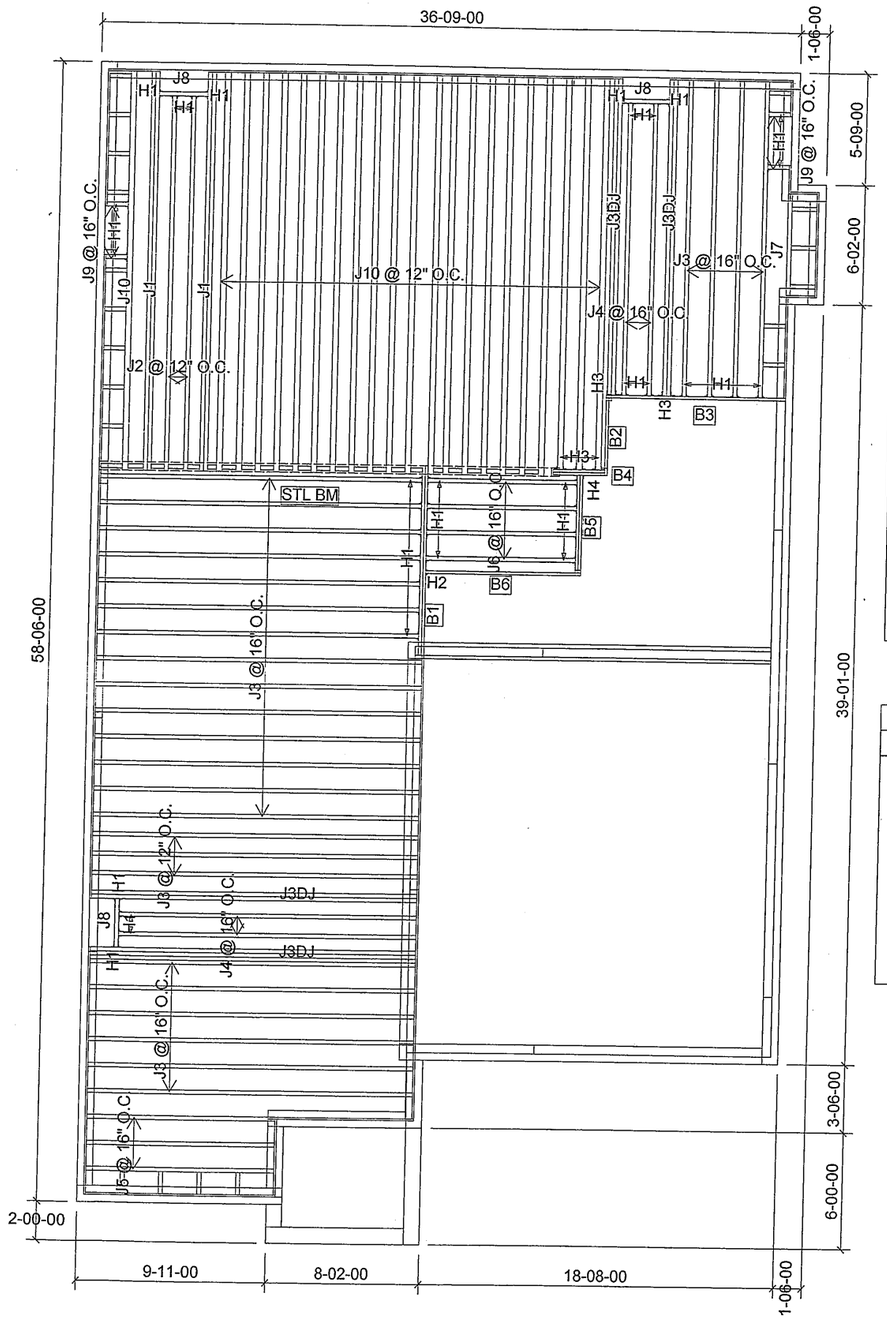
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 215442
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
10 09 21
S. KATSOULIDIS
PROVINCE OF ONTARIO



Products				
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J4	16-00-00	11 7/8" NI-40x	1	4
J5	10-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
6	H1	IUS2.56/11.88
15	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H3	HU312-2
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LOADING:
DESIGN LOADS: L/480.000
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DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: A,B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-09-27

1st FLOOR

NON SUNKEN

DATE 10/09/21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178824 THROUGH DWG# TAM 178842 INCLUSIVE DATED 8/19/21

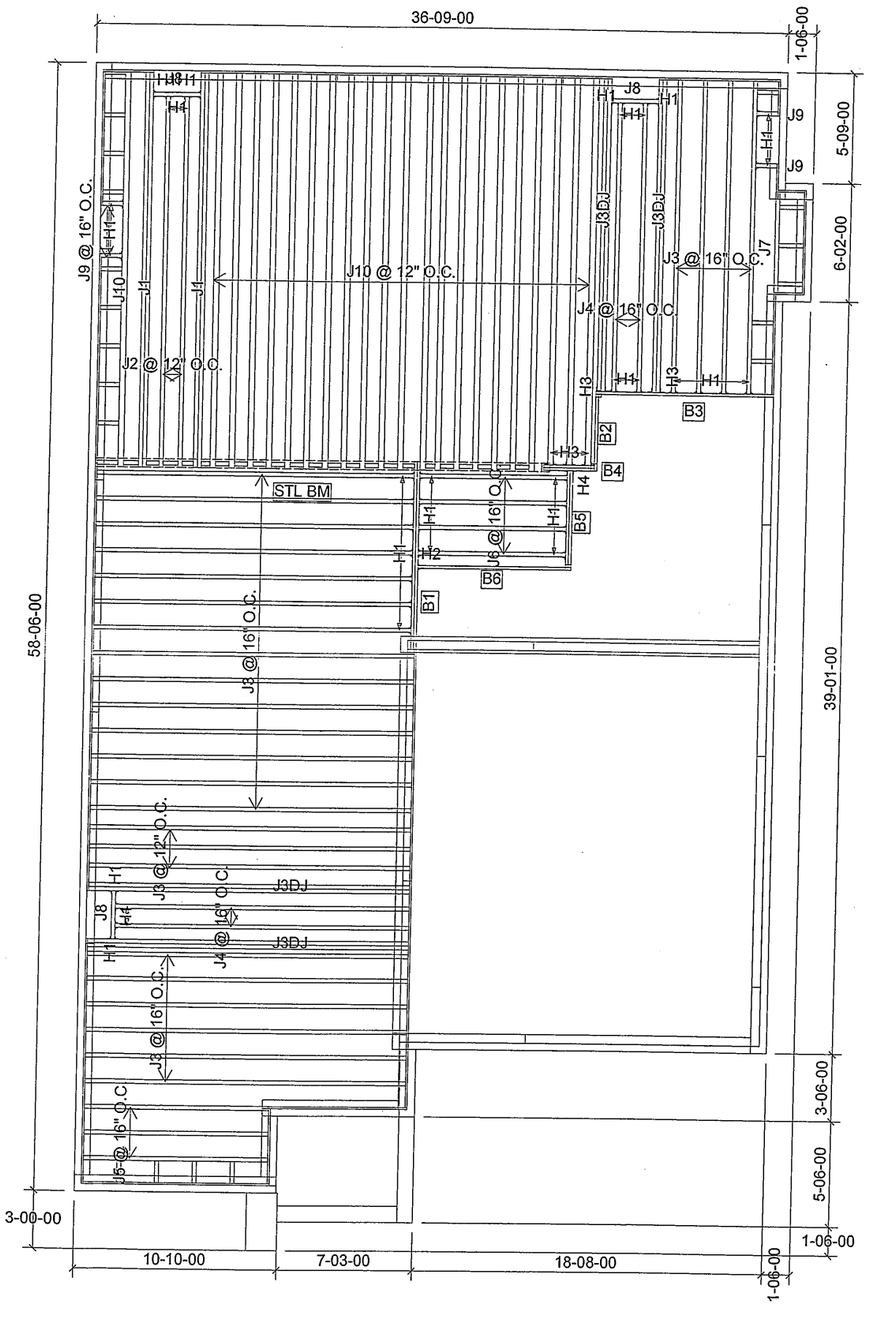
SEALED STRUCTURAL COMPONENTS ONLY: 178824-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 21545-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
10/09/21
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	2
J3	18-00-00	11 7/8" NI-40x	1	27
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	10-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
6	H1	IUS2.56/11.88
15	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-09-27

1st FLOOR

NON SUNKEN

DATE 10-09-21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 170824 THROUGH DWG# TAM 170924, INCLUSIVE DATED 8/24/21

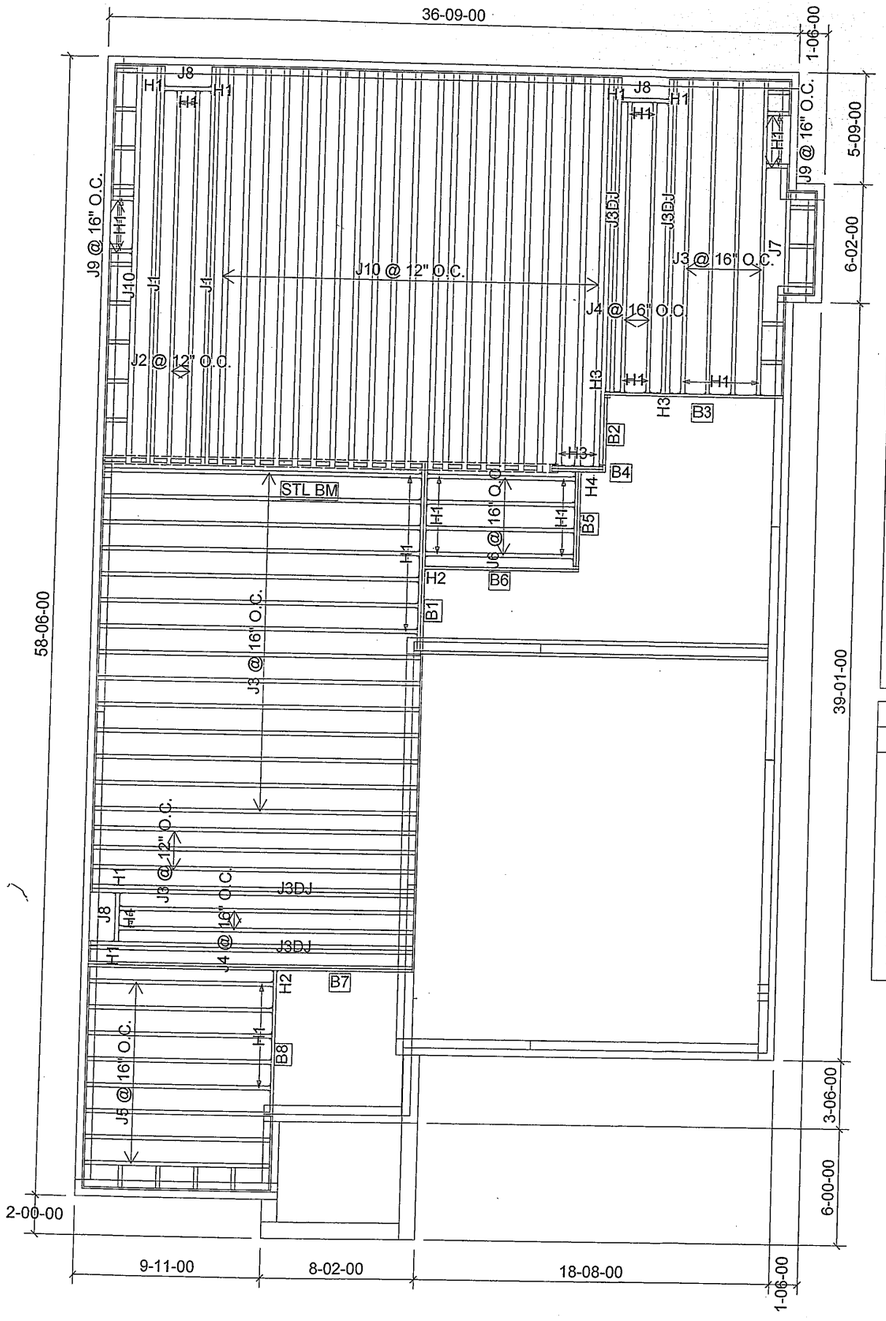
SEALED STRUCTURAL COMPONENTS ONLY: 170924
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 215464
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO
10-09-21



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	2
J3	18-00-00	11 7/8" NI-40x	1	21
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	10-00-00	11 7/8" NI-40x	1	8
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
11	H1	IUS2.56/11.88
15	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: A,B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

DATE 9014

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

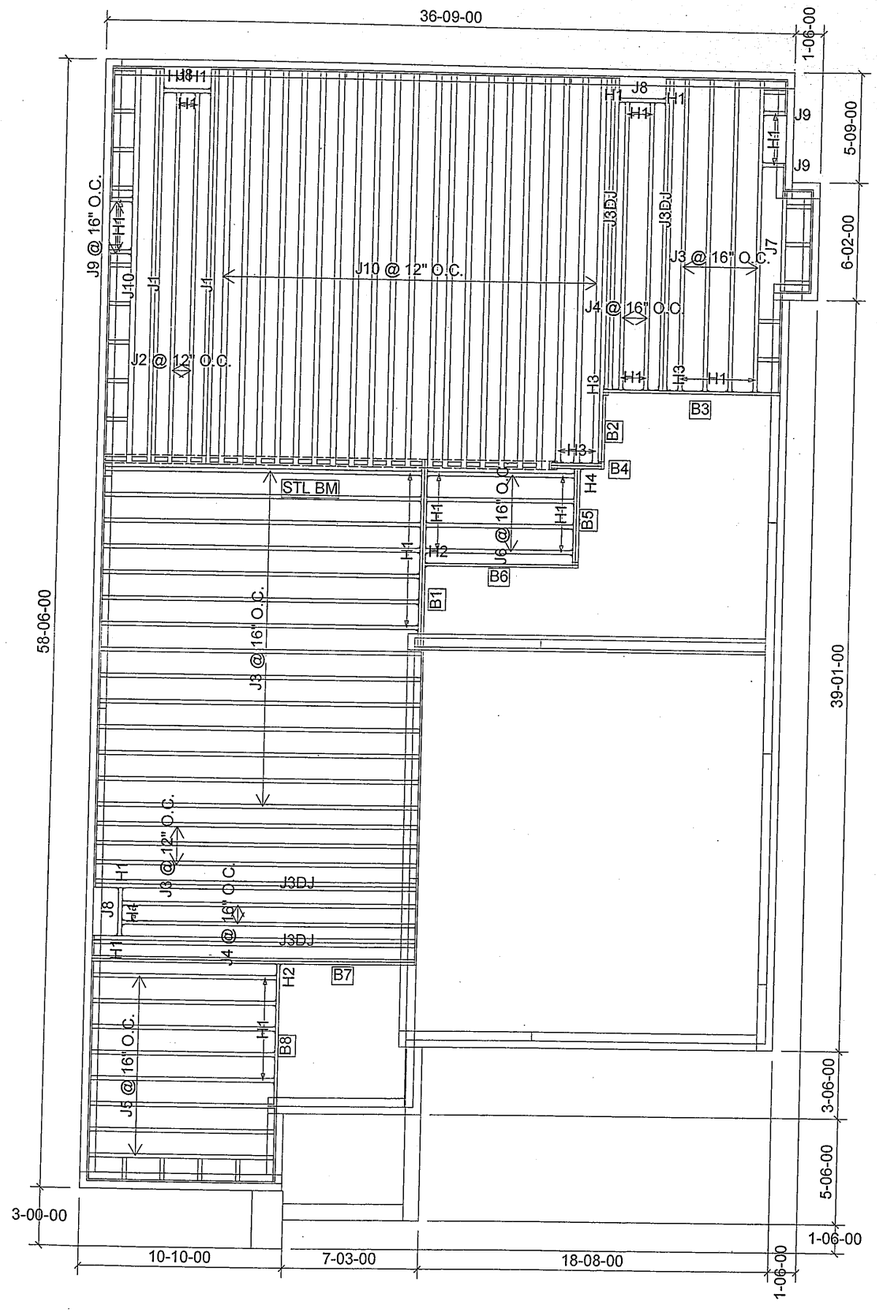
DWG# TAM 179824 THROUGH DWG# TAM 178854, INCLUSIVE DATED 8/14/21
SEALED STRUCTURAL COMPONENTS ONLY: + 179824 + 17905-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 195934
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO
9014



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	2
J3	18-00-00	11 7/8" NI-40x	1	21
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	10-00-00	11 7/8" NI-40x	1	8
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
11	H1	IUS2.56/11.88
15	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

DATE 9 DEC 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 170804 THROUGH DWG# TAM 170854, INCLUSIVE DATED 8 DEC 21

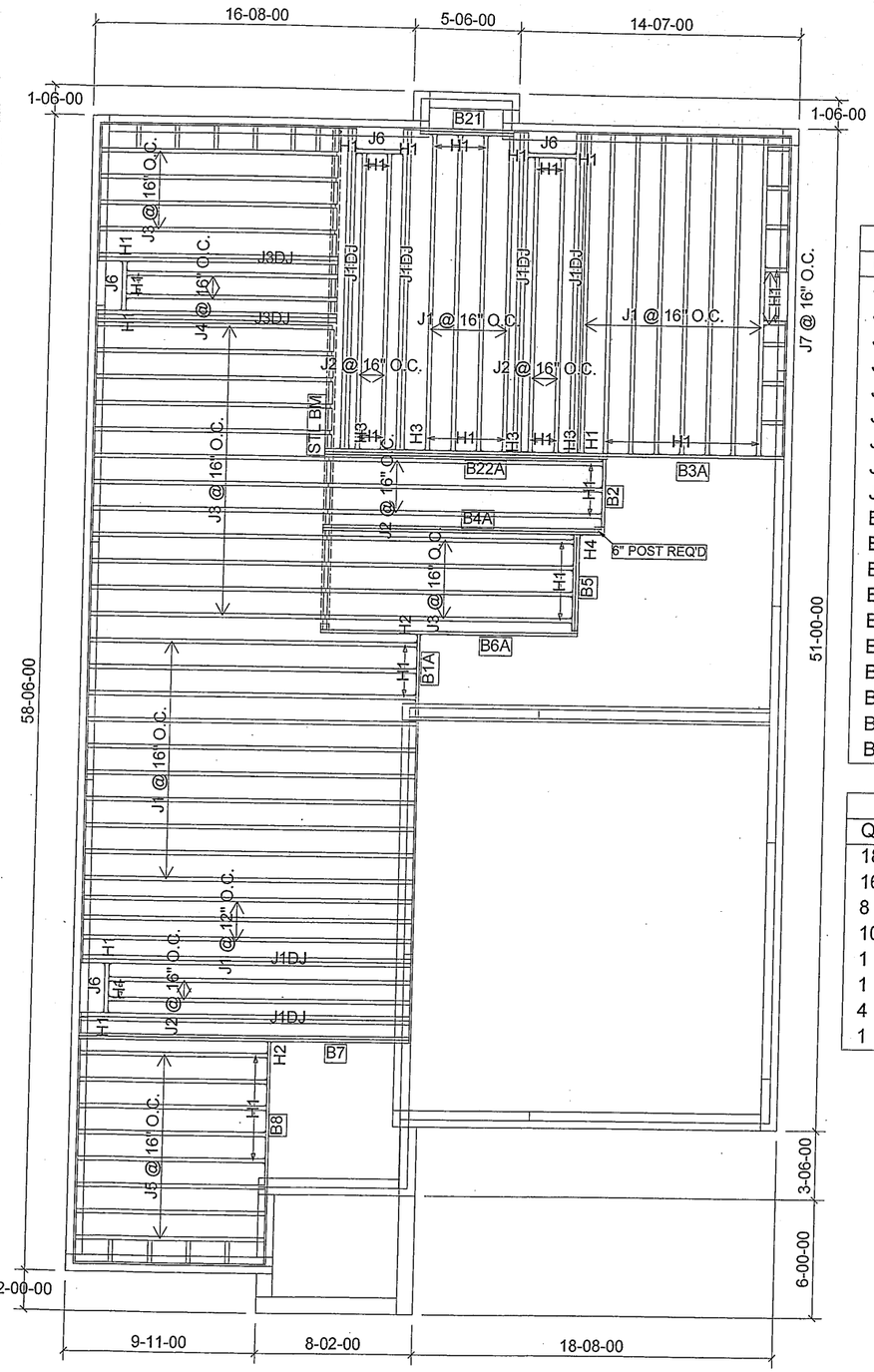
SEALED STRUCTURAL COMPONENTS ONLY: # 179042-1 # 17905-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIST DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19594-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 DEC 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	25
J1DJ	18-00-00	11 7/8" NI-40x	2	12
J2	16-00-00	11 7/8" NI-40x	1	9
J3	14-00-00	11 7/8" NI-40x	1	20
J3DJ	14-00-00	11 7/8" NI-40x	2	4
J4	12-00-00	11 7/8" NI-40x	1	2
J5	10-00-00	11 7/8" NI-40x	1	8
J6	4-00-00	11 7/8" NI-40x	1	4
J7	2-00-00	11 7/8" NI-40x	1	2
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B22A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6A	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3A	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B21	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
18	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
10	H1	IUS2.56/11.88
1	H2	HUS1.81/10
1	H2	HUS1.81/10
4	H3	HU312-2
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: A,B,C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

OPTION

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178984 THROUGH DWG# TAM 17901-4 INCLUSIVE DATED 8 24 21

SEALED STRUCTURAL COMPONENTS ONLY: + 17905-21 + 179082 + 178814 + 17883-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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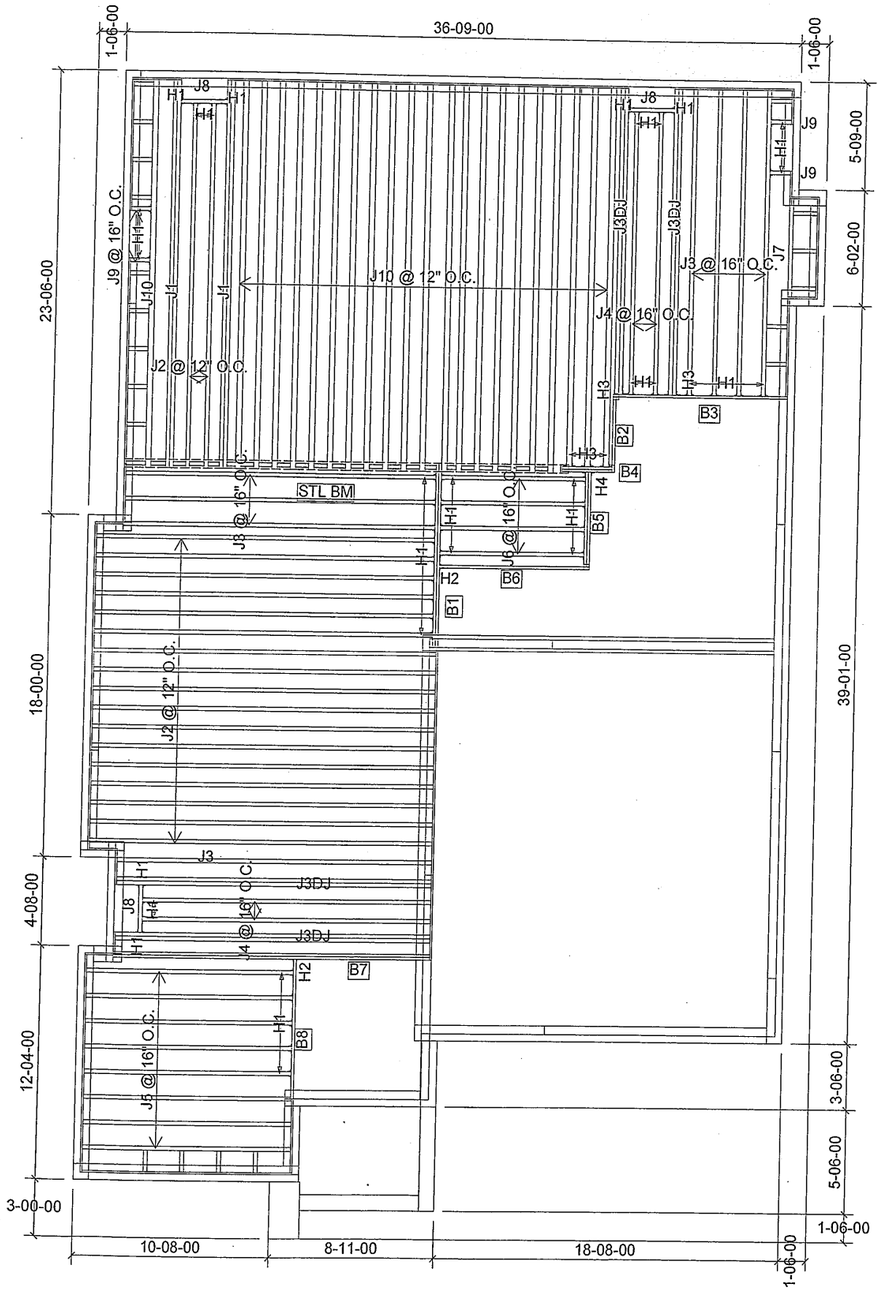
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19595-4
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	19
J3	18-00-00	11 7/8" NI-40x	1	8
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	12-00-00	11 7/8" NI-40x	1	8
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
11	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKS DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178804 THROUGH DWG# TAM 178805-21, INCLUSIVE DATED 9 01 21

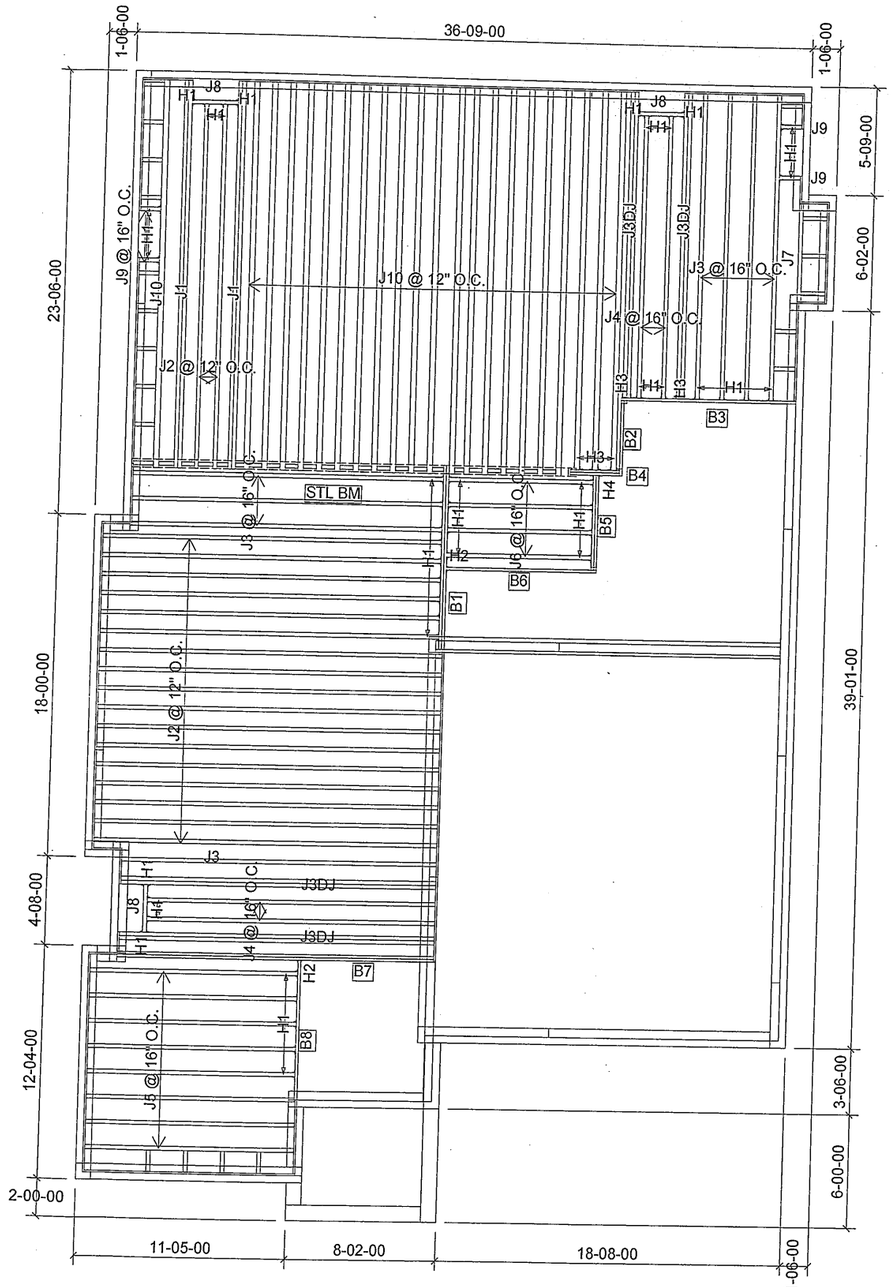
SEALED STRUCTURAL COMPONENTS ONLY: # 17904-21 + 17905-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19600-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

PROFESSIONAL ENGINEERS — S. KATSOULAKOS — 9 01 21 — PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	19
J3	18-00-00	11 7/8" NI-40x	1	8
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	12-00-00	11 7/8" NI-40x	1	8
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
11	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 176026 THROUGH DWG# TAM 178854 INCLUSIVE DATED 8 24 21

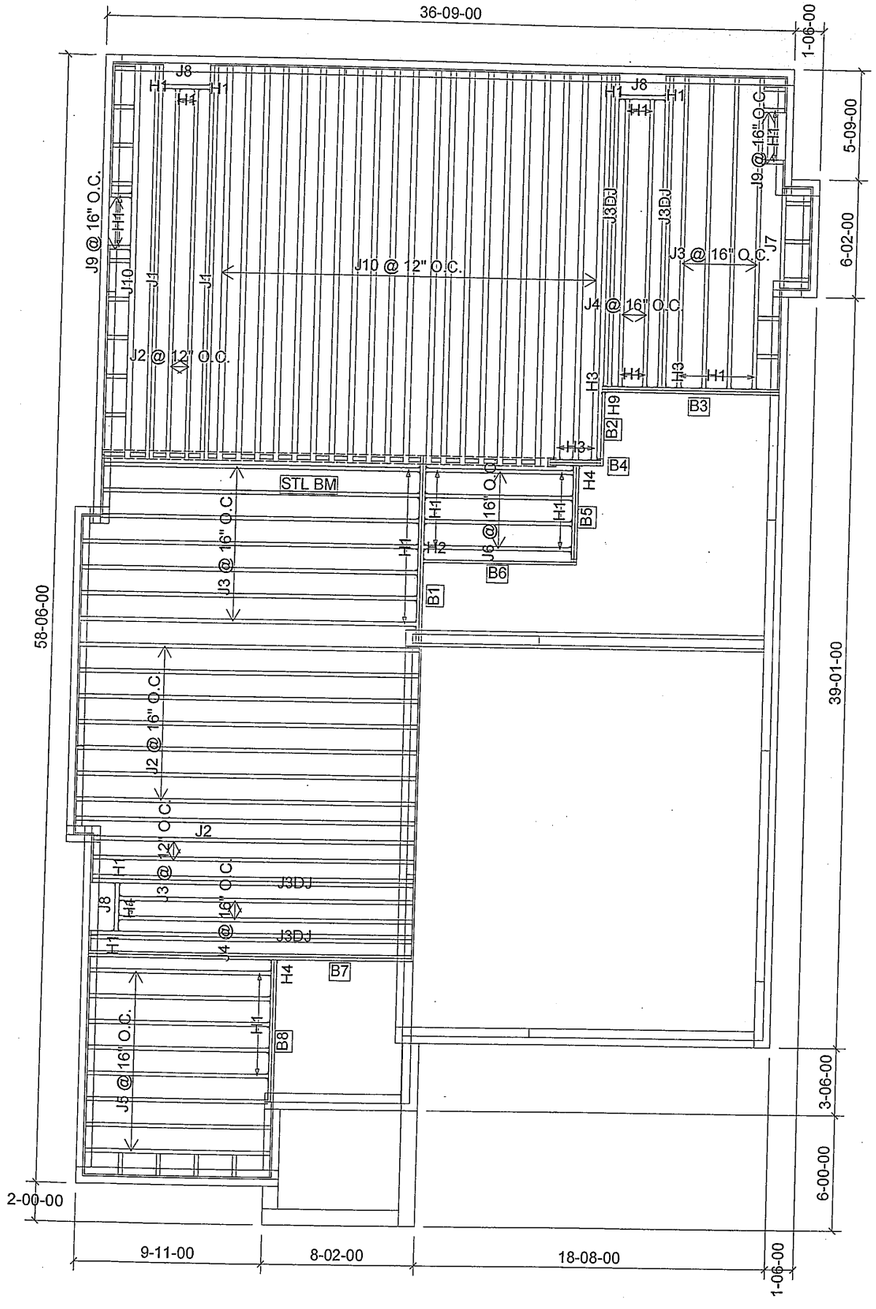
SEALED STRUCTURAL COMPONENTS ONLY: #17904-21 #17905-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19599-4
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

S. KATSOULAKOS
9014
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	4
J2	20-00-00	11 7/8" NI-40x	1	10
J3	18-00-00	11 7/8" NI-40x	1	13
J3DJ	18-00-00	11 7/8" NI-40x	2	8
J4	16-00-00	11 7/8" NI-40x	1	4
J5	10-00-00	11 7/8" NI-40x	1	8
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	22-00-00	11 7/8" NI-80	1	22
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
26	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H3	HU312-2
3	H3	IUS3.56/11.88
2	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

DATE 9 01 21
BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178824 THROUGH DWG# TAM 178852 INCLUSIVE DATED 8 24

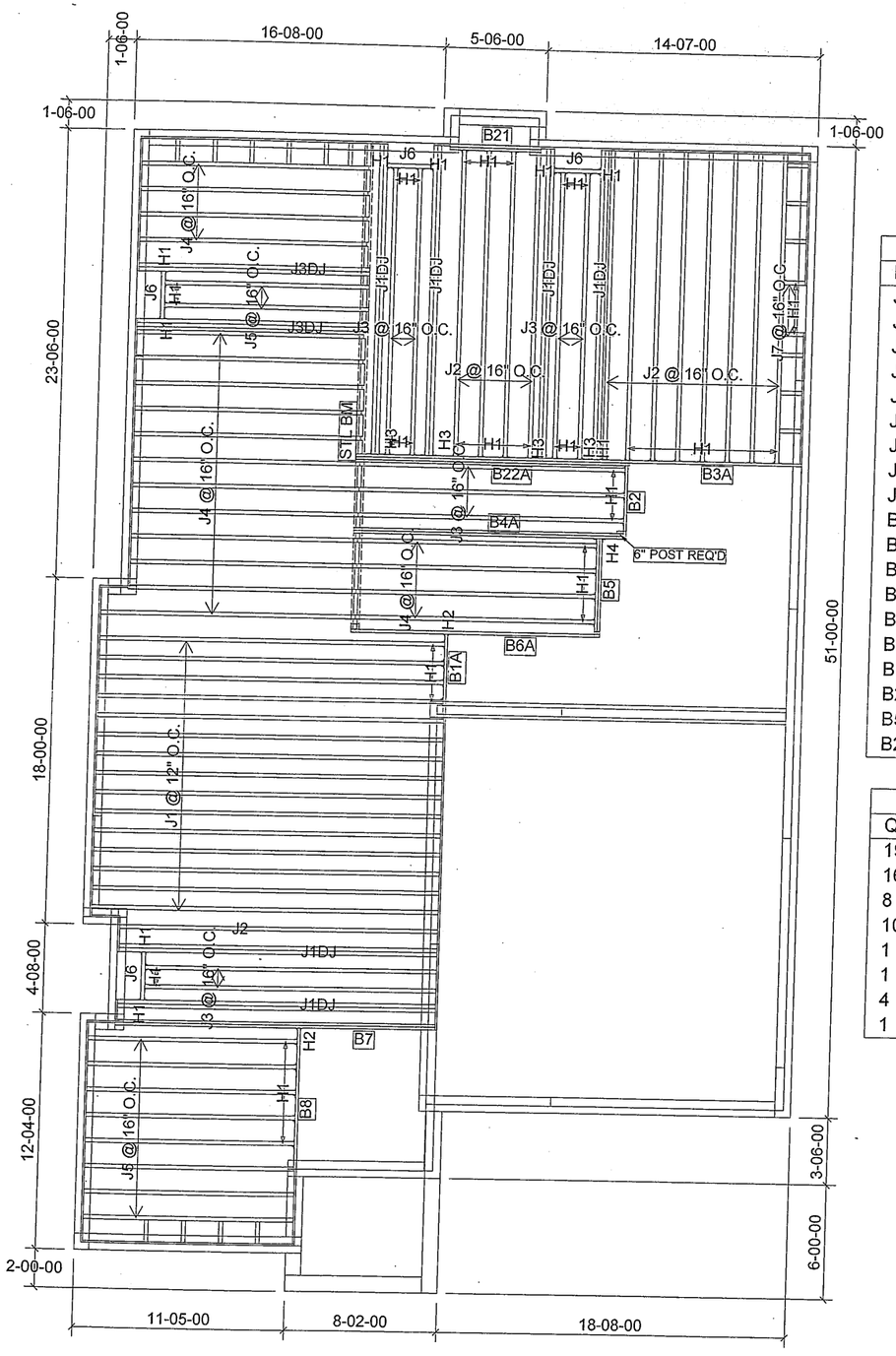
SEALED STRUCTURAL COMPONENTS ONLY: #17904-21+17905-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19597-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	15
J2	18-00-00	11 7/8" NI-40x	1	13
J1DJ	18-00-00	11 7/8" NI-40x	2	12
J3	16-00-00	11 7/8" NI-40x	1	9
J4	14-00-00	11 7/8" NI-40x	1	20
J3DJ	14-00-00	11 7/8" NI-40x	2	4
J5	12-00-00	11 7/8" NI-40x	1	10
J6	4-00-00	11 7/8" NI-40x	1	4
J7	2-00-00	11 7/8" NI-40x	1	2
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B22A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6A	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3A	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B21	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
19	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
10	H1	IUS2.56/11.88
1	H2	HUS1.81/10
1	H2	HUS1.81/10
4	H3	HU312-2
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

OPTION

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 179084 THROUGH DWG# TAM 179014, INCLUSIVE DATED 8 24 21

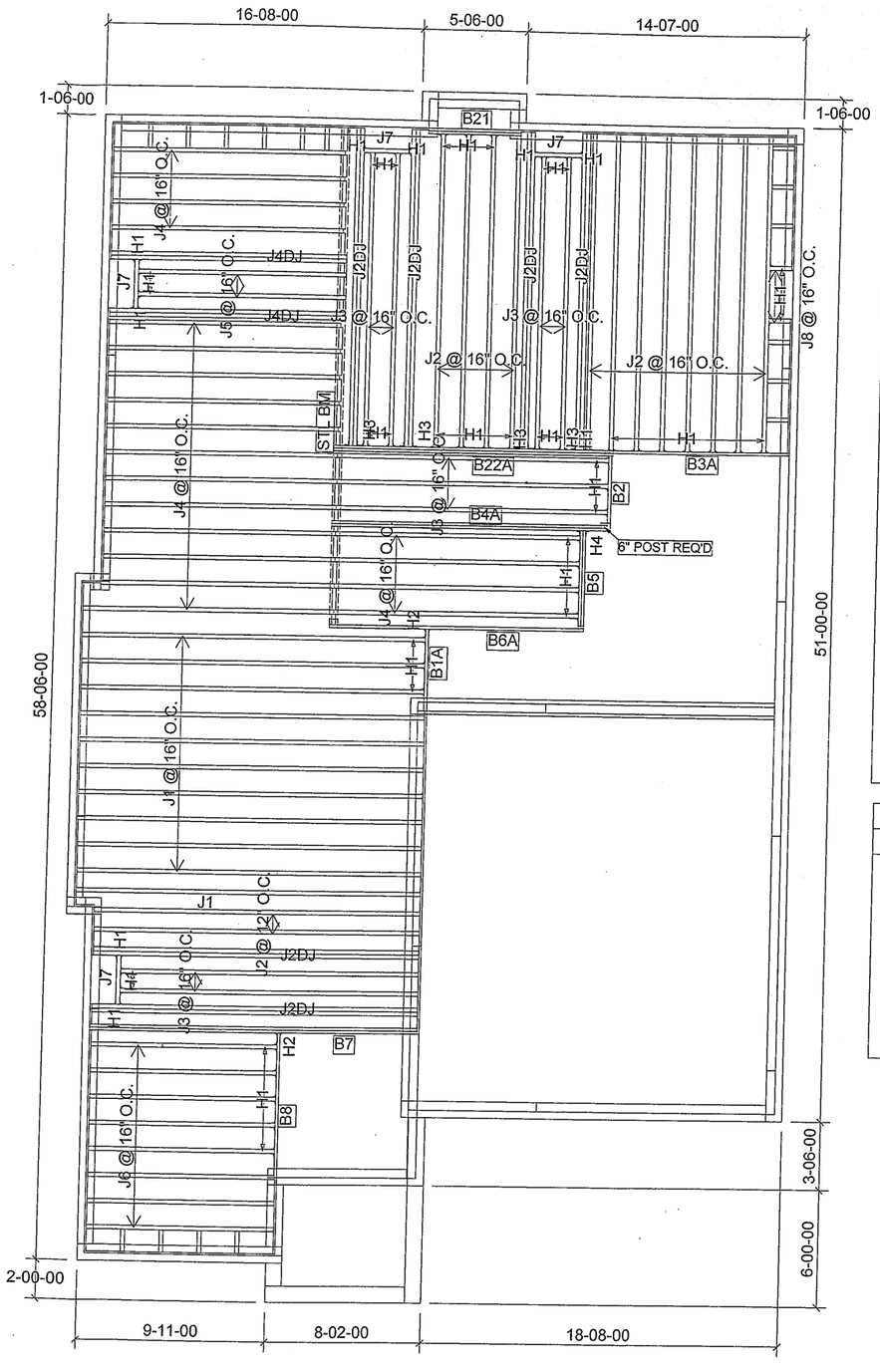
SEALED STRUCTURAL COMPONENTS ONLY: #179084+179014+179081-21+179083-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 195962
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAROS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	11
J2	18-00-00	11 7/8" NI-40x	1	14
J2DJ	18-00-00	11 7/8" NI-40x	2	12
J3	16-00-00	11 7/8" NI-40x	1	9
J4	14-00-00	11 7/8" NI-40x	1	20
J4DJ	14-00-00	11 7/8" NI-40x	2	4
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	8
J7	4-00-00	11 7/8" NI-40x	1	4
J8	2-00-00	11 7/8" NI-40x	1	2
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B22A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6A	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3A	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B21	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
18	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
10	H1	IUS2.56/11.88
1	H2	HUS1.81/10
1	H2	HUS1.81/10
4	H3	HU312-2
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:
DATE: 2021-08-31

1st FLOOR

OPTION

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178982 THROUGH DWG# TAM 179024, INCLUSIVE DATED 8 24 21

SEALED STRUCTURAL COMPONENTS ONLY: +179052+179082+178812+178832-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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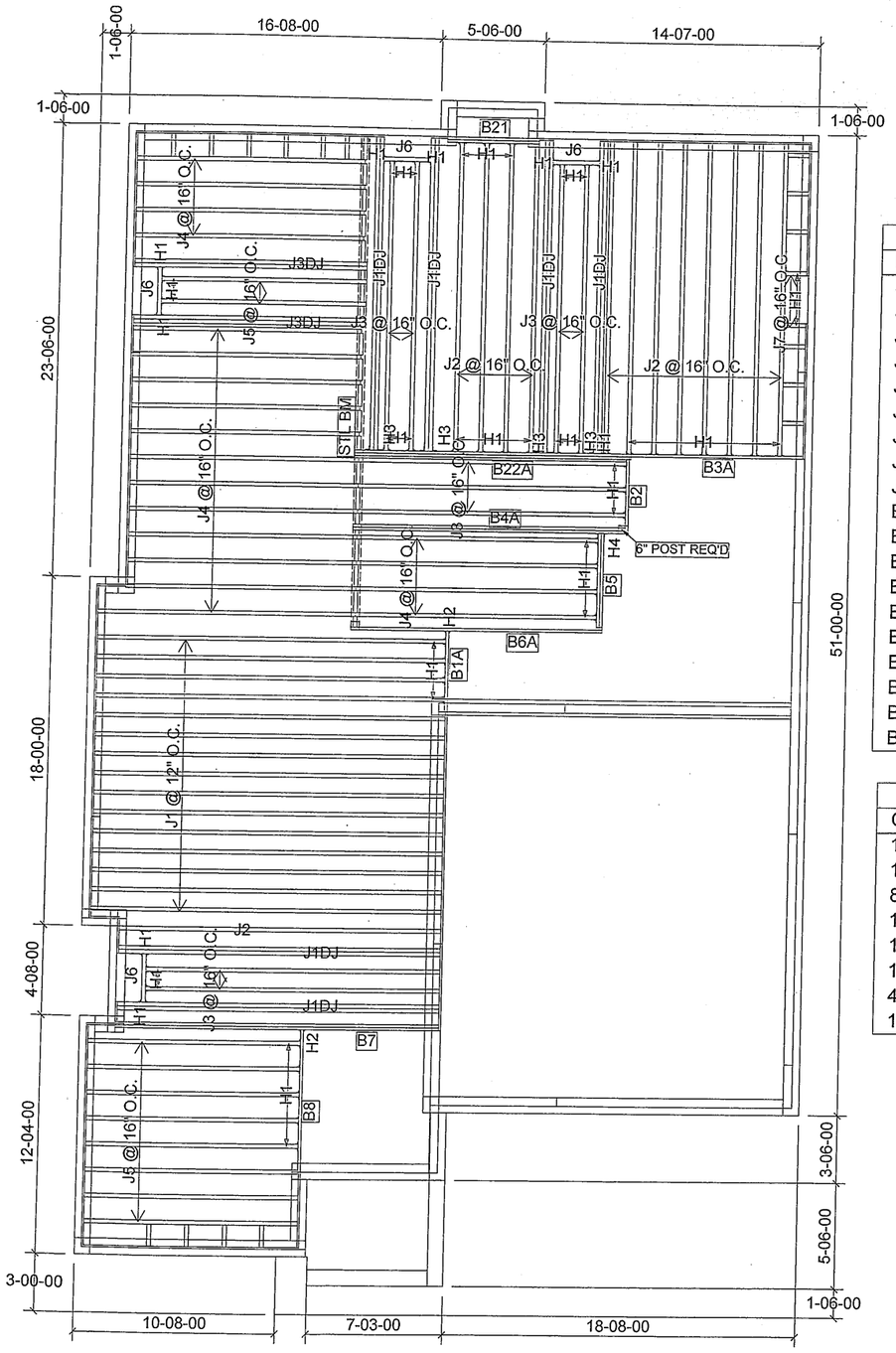
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 195982

BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
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J2	18-00-00	11 7/8" NI-40x	1	13
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J3	16-00-00	11 7/8" NI-40x	1	9
J4	14-00-00	11 7/8" NI-40x	1	20
J3DJ	14-00-00	11 7/8" NI-40x	2	4
J5	12-00-00	11 7/8" NI-40x	1	10
J6	4-00-00	11 7/8" NI-40x	1	4
J7	2-00-00	11 7/8" NI-40x	1	2
B7	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B22A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4A	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6A	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3A	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B8	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B21	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
19	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
8	H1	IUS2.56/11.88
10	H1	IUS2.56/11.88
1	H2	HUS1.81/10
1	H2	HUS1.81/10
4	H3	HU312-2
1	H4	HGUS410

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

1st FLOOR

OPTION

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178984 THROUGH DWG# TAM 17901-21, INCLUSIVE DATED 8/24/21

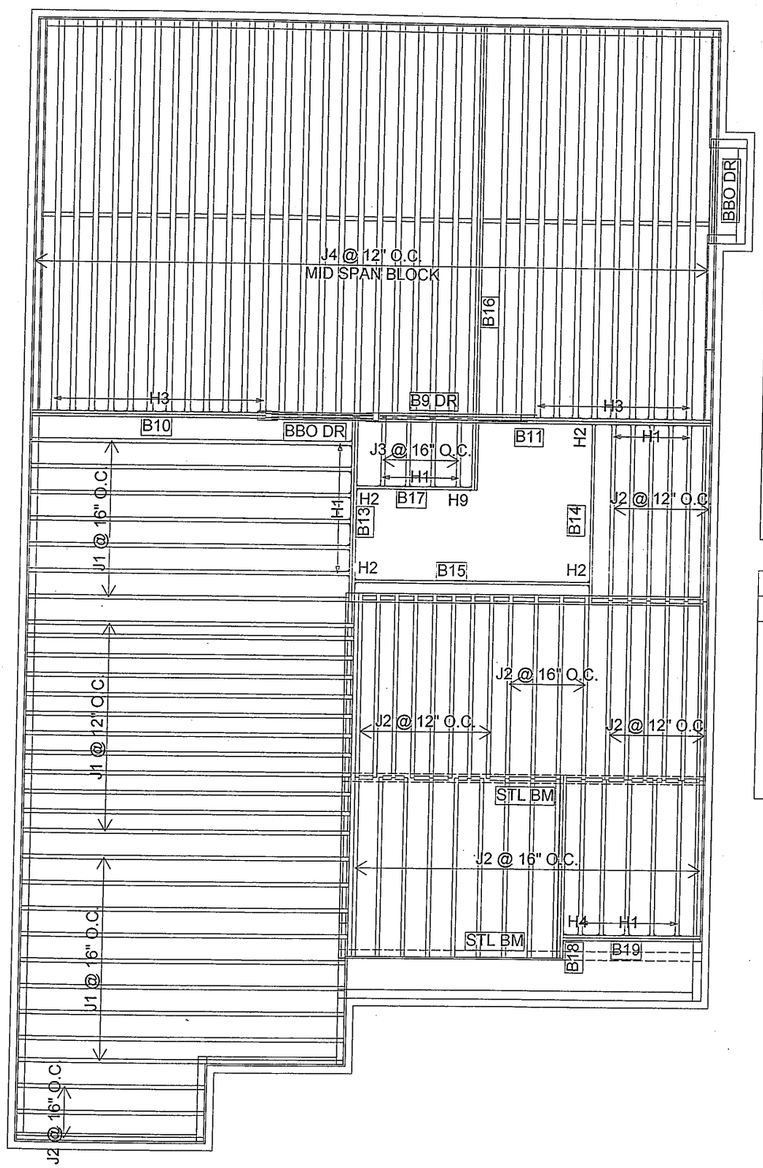
SEALED STRUCTURAL COMPONENTS ONLY: 17905-21+17908-21+17881-21+17883-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19601-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULARIS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	28
J2	10-00-00	11 7/8" NI-40x	1	42
J3	4-00-00	11 7/8" NI-40x	1	4
J4	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

DATE 9 01 24

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178864 THROUGH DWG# TAM 178924 INCLUSIVE DATED 8 24

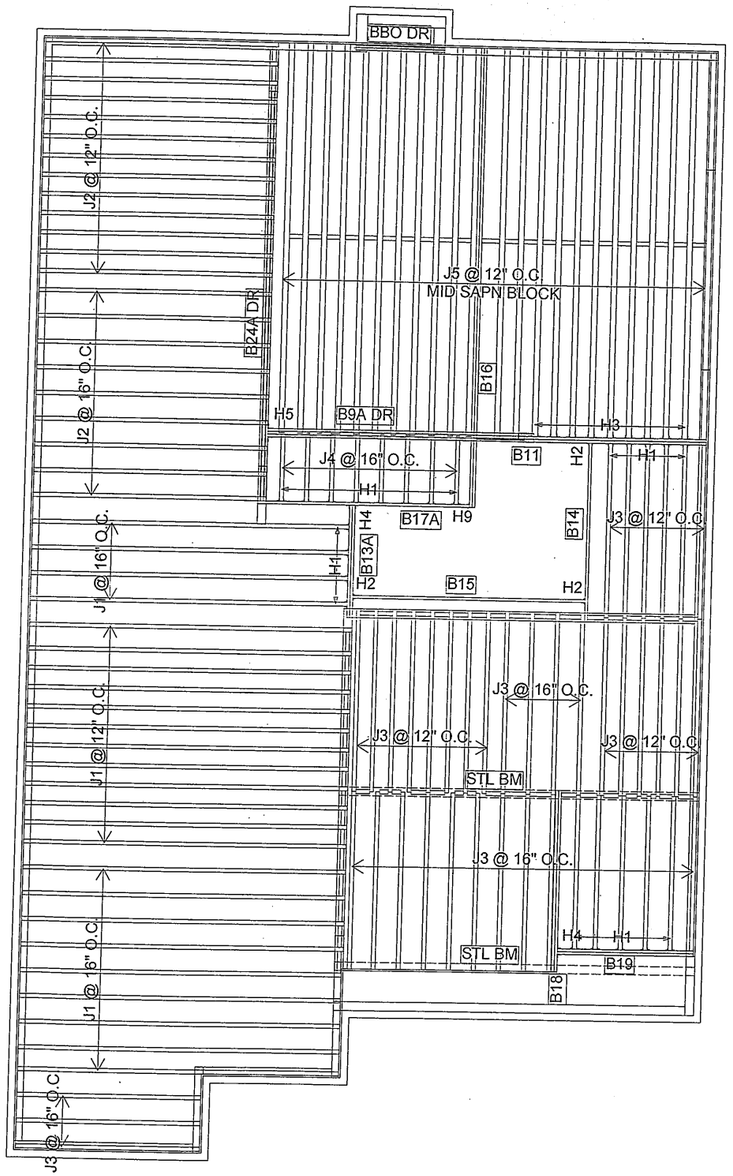
SEALED STRUCTURAL COMPONENTS ONLY: +179064 +179074
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19602-24
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

PROFESSIONAL ENGINEERS
9 01 24
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	25
J2	14-00-00	11 7/8" NI-40x	1	22
J3	10-00-00	11 7/8" NI-40x	1	42
J4	4-00-00	11 7/8" NI-40x	1	8
J5	22-00-00	11 7/8" NI-80	1	23
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9A DR	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B17A	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B19	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B24A DR	22-00-00	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	3	3

Connector Summary		
Qty	Manuf	Product
8	H1	IUS2.56/11.88
14	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H2	HUS1.81/10
9	H3	IUS3.56/11.88
1	H4	HGUS410
1	H4	HGUS410
1	H5	HGUS5.5/11.88
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION

DATE 9 01 24

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178924 THROUGH DWG# TAM 178924, INCLUSIVE DATED 8.24.24

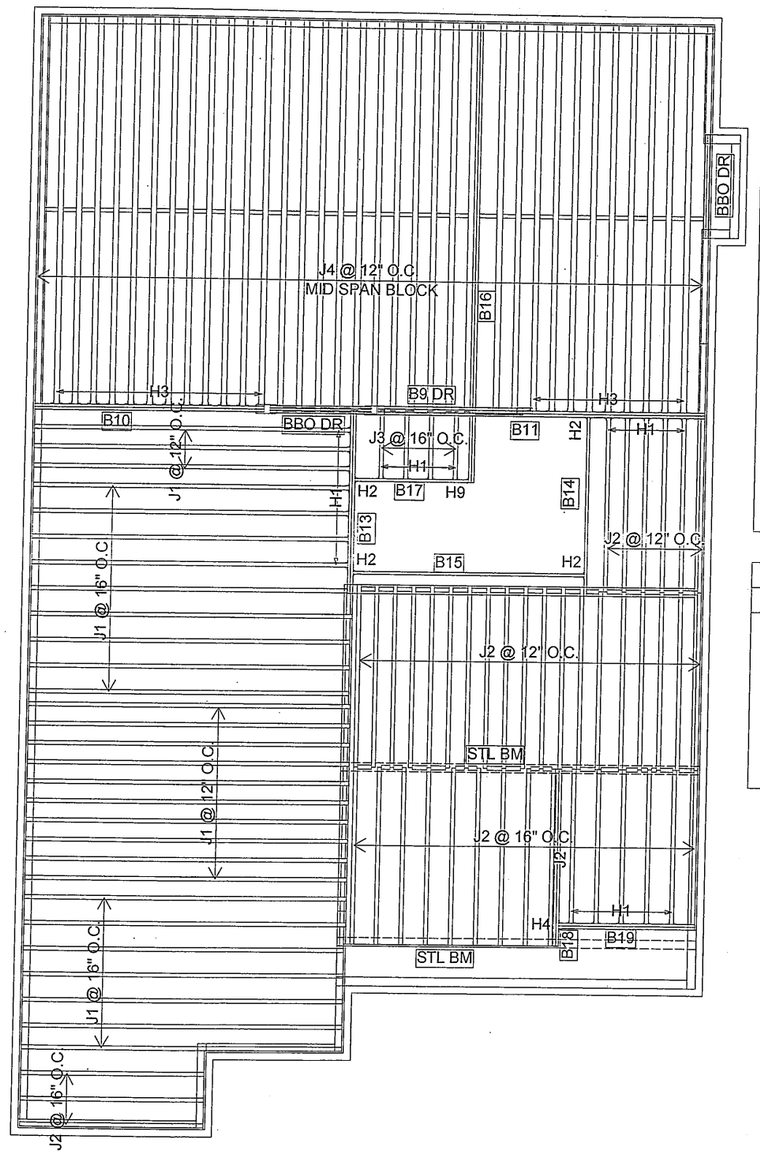
SEALED STRUCTURAL COMPONENTS ONLY: +178924+178924+178924+178924+178924+178924
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 196034
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 24
S. KATSOULIDIS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	29
J2	10-00-00	11 7/8" NI-40x	1	43
J3	4-00-00	11 7/8" NI-40x	1	4
J4	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION 5 BEDROOM

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178864 THROUGH DWG# TAM 178934 INCLUSIVE DATED 8 19 21

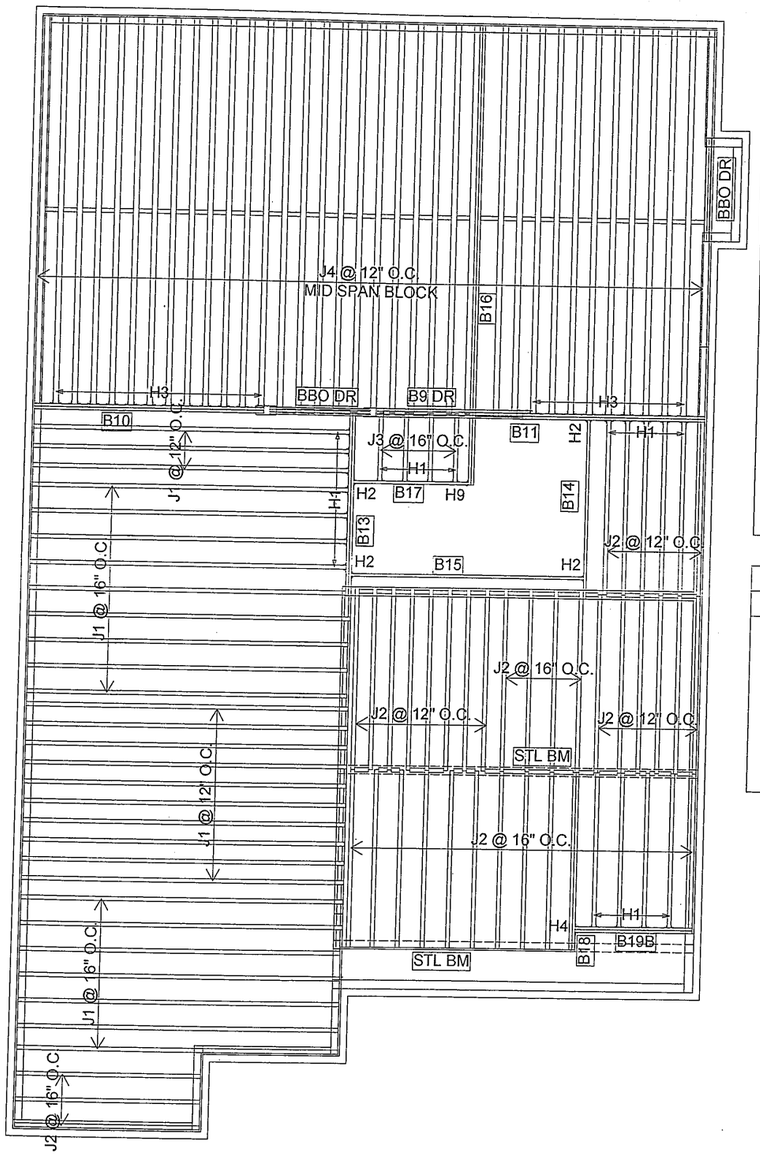
SEALED STRUCTURAL COMPONENTS ONLY: #179021 + 17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19604-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	29
J2	10-00-00	11 7/8" NI-40x	1	41
J3	4-00-00	11 7/8" NI-40x	1	4
J4	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19B	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

DATE 9 08-21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178862 THROUGH DWG# TAM 178922, INCLUSIVE DATED 8/24

SEALED STRUCTURAL COMPONENTS ONLY: +179022 +179062 +179072
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

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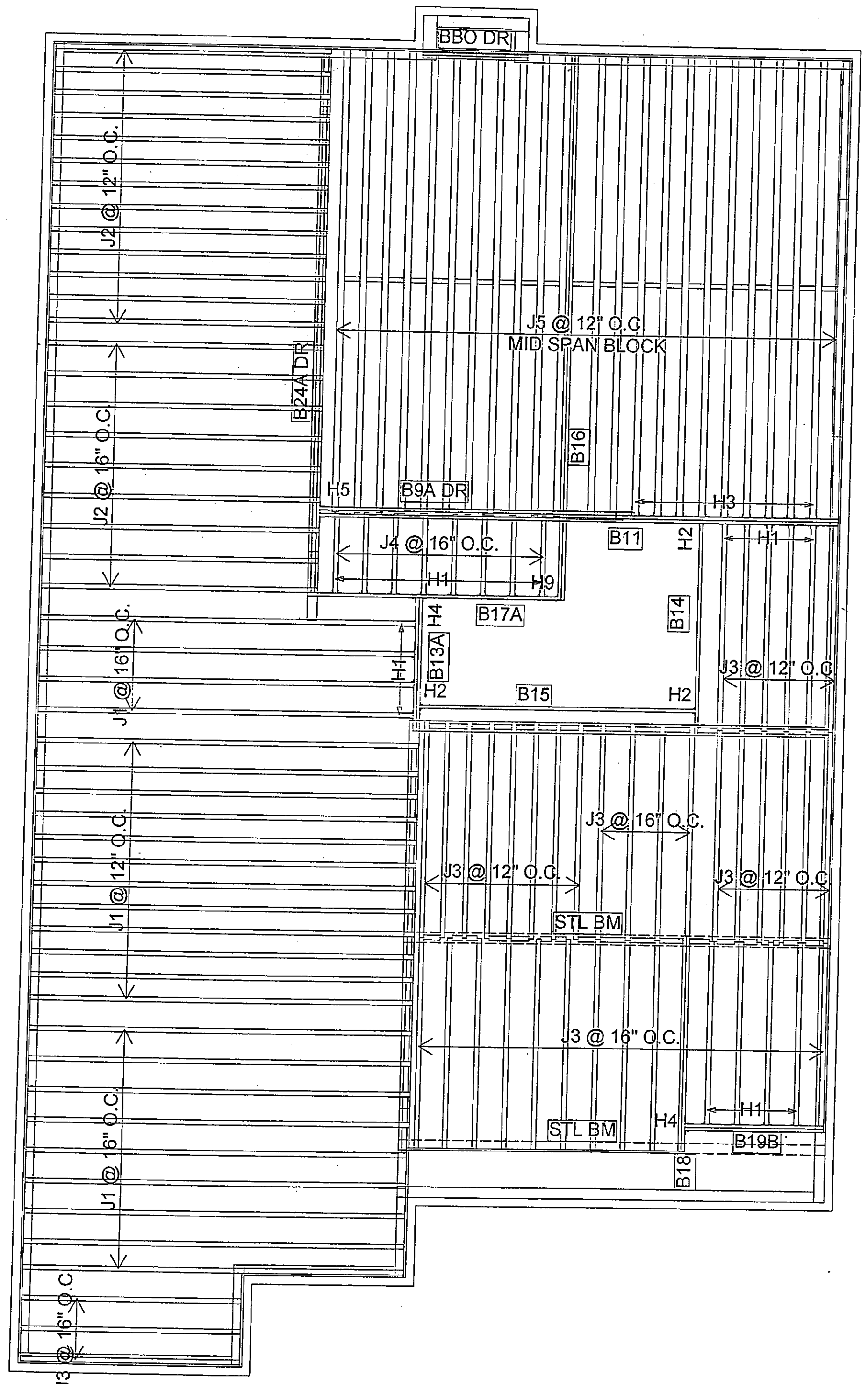
REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19605-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
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J2	14-00-00	11 7/8" NI-40x	1	22
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J4	4-00-00	11 7/8" NI-40x	1	8
J5	22-00-00	11 7/8" NI-80	1	23
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9A DR	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B17A	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
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B13A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B24A DR	22-00-00	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	3	3

Connector Summary		
Qty	Manuf	Product
8	H1	IUS2.56/11.88
13	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H2	HUS1.81/10
9	H3	IUS3.56/11.88
1	H4	HGUS410
1	H4	HGUS410
1	H5	HGUS5.5/11.88
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

DATE: 2021-08-31

2nd FLOOR

SUBFLOOR: 5/8" GLUED AND NAILED

OPTION

DATE 9 01 21
BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
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DWG# TAM 17894-21 THROUGH DWG# TAM 17897-21 +17888-21 +17890-21, INCLUSIVE DATED 8 24 21

SEALED STRUCTURAL COMPONENTS ONLY: +17906-21 +17907-21 +17892-21 +17902-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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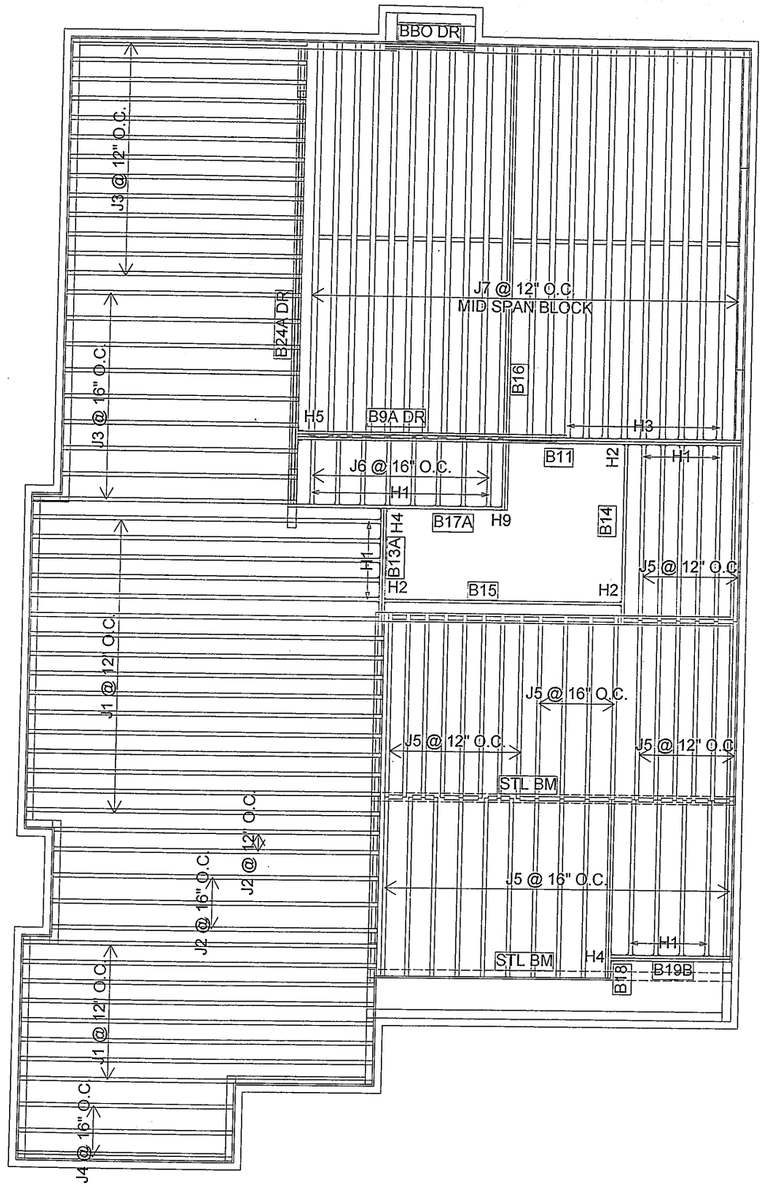
REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19606-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
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J2	18-00-00	11 7/8" NI-40x	1	5
J3	14-00-00	11 7/8" NI-40x	1	22
J4	12-00-00	11 7/8" NI-40x	1	3
J5	10-00-00	11 7/8" NI-40x	1	38
J6	4-00-00	11 7/8" NI-40x	1	8
J7	22-00-00	11 7/8" NI-80	1	23
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9A DR	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B17A	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
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B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B19B	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B24A DR	22-00-00	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	3	3

Connector Summary		
Qty	Manuf	Product
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14	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H2	HUS1.81/10
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REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION

DATE 9 01 24

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
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DWG# TAM 178924 +178822 +17890-24 THROUGH DWG# TAM 178924 +178822 +17890-24 INCLUSIVE DATED 8 01 24

SEALED STRUCTURAL COMPONENTS ONLY: +17906-24 +17907-24 +17892-24 +17902-24
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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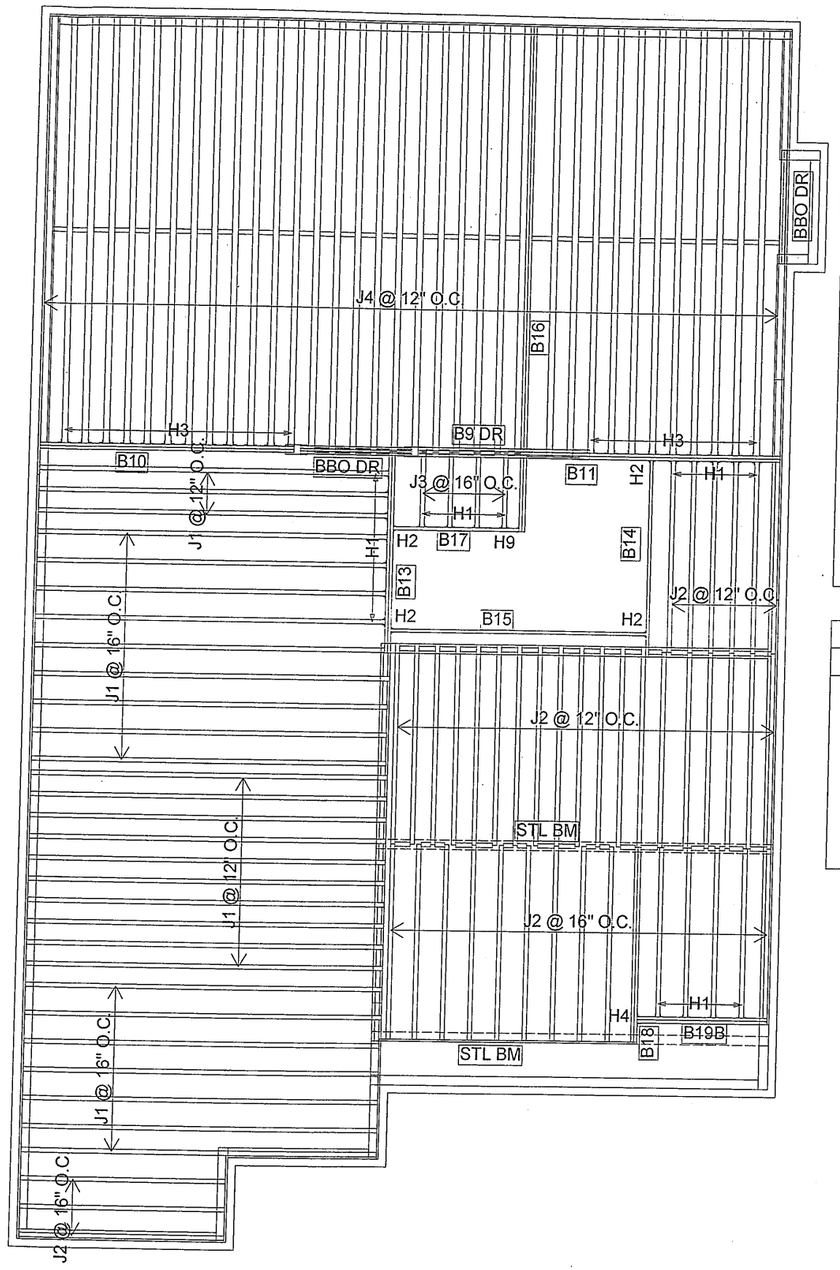
REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19607-24
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEERS
9 01 24
S. KATSOULAROS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
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B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19B	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION 5 BEDROOM

DATE 9 07 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178064 THROUGH DWG# TAM 17892-4 INCLUSIVE DATED 8/4/21

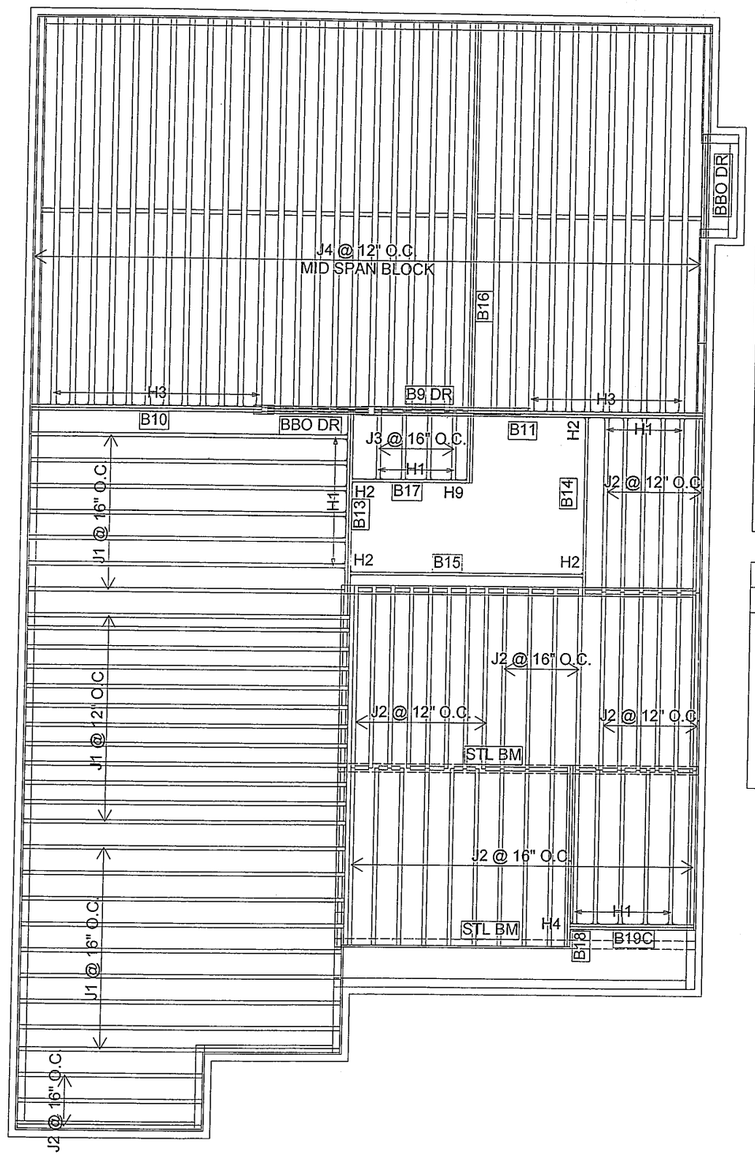
SEALED STRUCTURAL COMPONENTS ONLY: +17902-4 +17906-4 +17907-4
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19608-4
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9071
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	28
J2	10-00-00	11 7/8" NI-40x	1	42
J3	4-00-00	11 7/8" NI-40x	1	4
J4	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19C	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

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LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

DATE 9 0CT 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178864 THROUGH DWG# TAM 17892-21 INCLUSIVE DATED 8 OCT 21

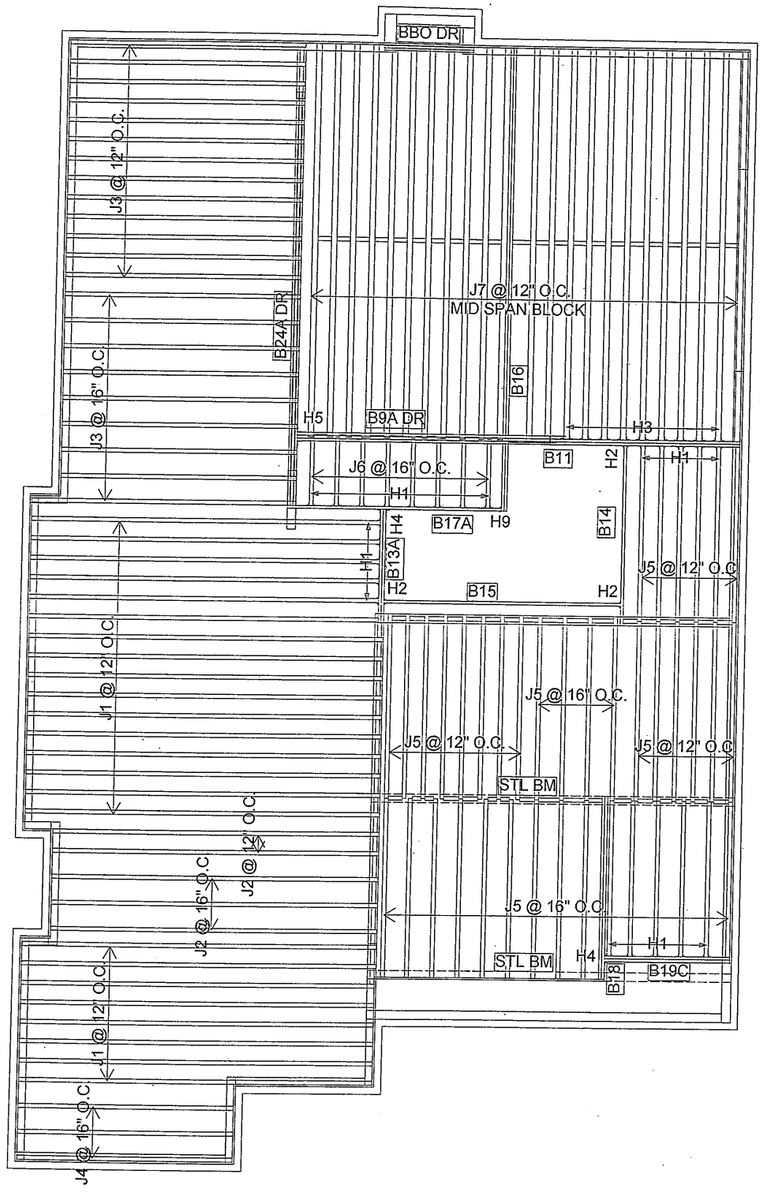
SEALED STRUCTURAL COMPONENTS ONLY: #17903-21 + 17906-21 + 17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19609-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
9 OCT 21
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	24
J2	18-00-00	11 7/8" NI-40x	1	5
J3	14-00-00	11 7/8" NI-40x	1	22
J4	12-00-00	11 7/8" NI-40x	1	3
J5	10-00-00	11 7/8" NI-40x	1	39
J6	4-00-00	11 7/8" NI-40x	1	8
J7	22-00-00	11 7/8" NI-80	1	23
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9A DR	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B17A	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B19C	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B24A DR	22-00-00	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	3	3

Connector Summary		
Qty	Manuf	Product
8	H1	IUS2.56/11.88
15	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H2	HUS1.81/10
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1	H4	HGUS410
1	H4	HGUS410
1	H5	HGUS5.5/11.88
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION

DATE 9 01 21

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
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DWG# TAM 17894 THROUGH DWG# TAM 17897-21, INCLUSIVE DATED 8 24 21 +17888-21 +17890-21

SEALED STRUCTURAL COMPONENTS ONLY: +17906-21 +17907-21 +17892-21 +17903-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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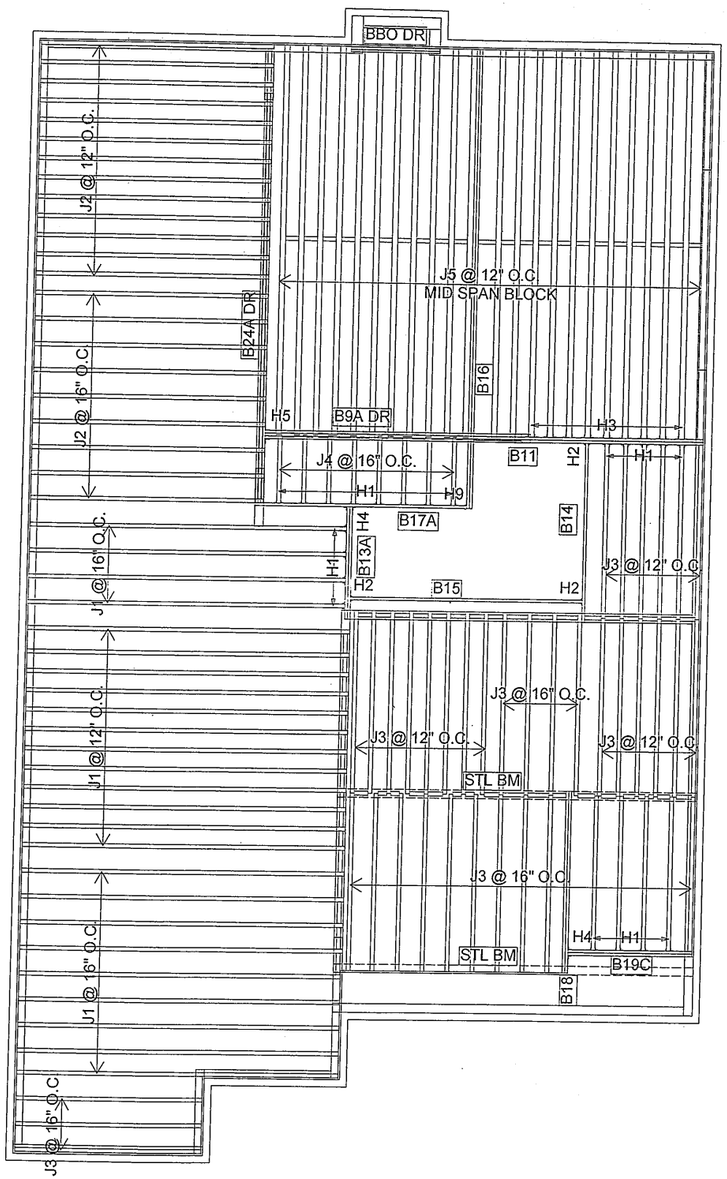
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19610-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

9 01 21



Products				
PlotID	Length	Product	Plies	Net Qty
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J5	22-00-00	11 7/8" NI-80	1	23
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9A DR	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B17A	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B19C	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B24A DR	22-00-00	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	3	3

Connector Summary		
Qty	Manuf	Product
8	H1	IUS2.56/11.88
13	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H2	HUS1.81/10
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NOTES:
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LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION

DATE 9 0124
BCIN: 26064, FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 17894-21 THROUGH DWG# TAM 17897-21, INCLUSIVE DATED 8 24 +17898-21 +17899-21

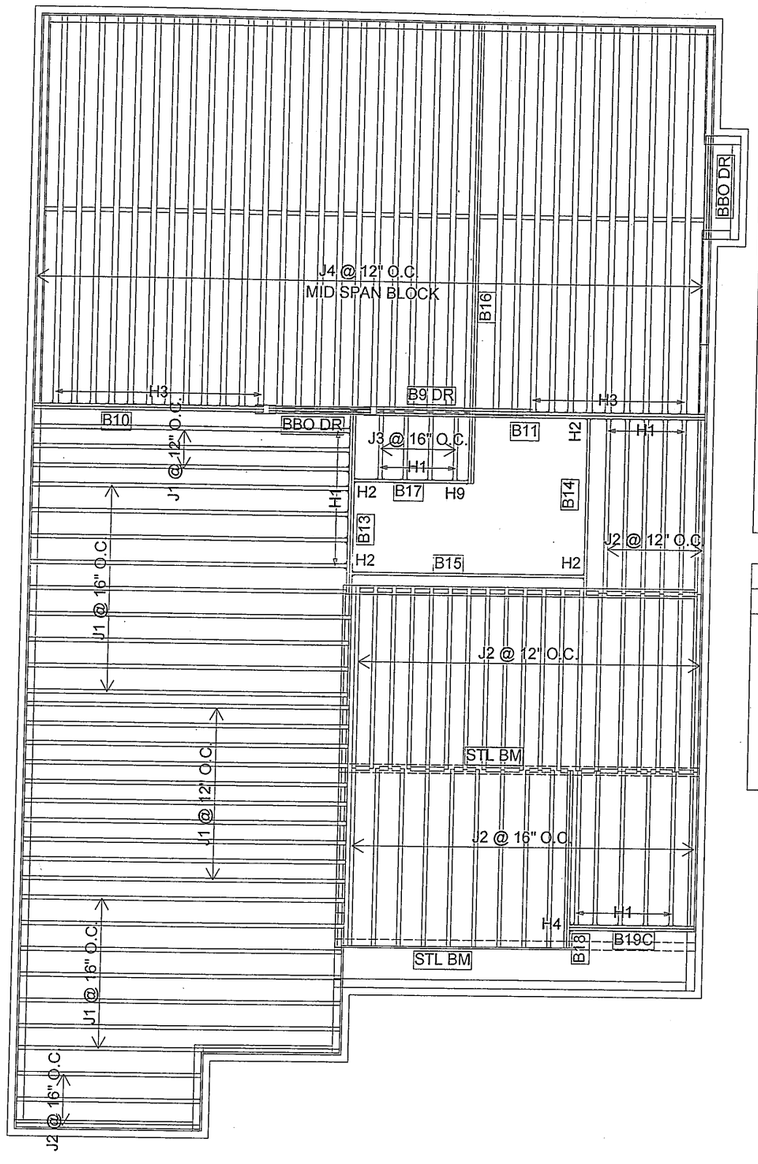
SEALED STRUCTURAL COMPONENTS ONLY: +17900-21+17901-21+17902-21+17903-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19611-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 24
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	29
J2	10-00-00	11 7/8" NI-40x	1	43
J3	4-00-00	11 7/8" NI-40x	1	4
J4	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19C	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION 5 BEDROOM

DATE 9 01 21
BCIN: 26064 FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 17886-21 THROUGH DWG# TAM 17892-21 INCLUSIVE DATED 8/4/21

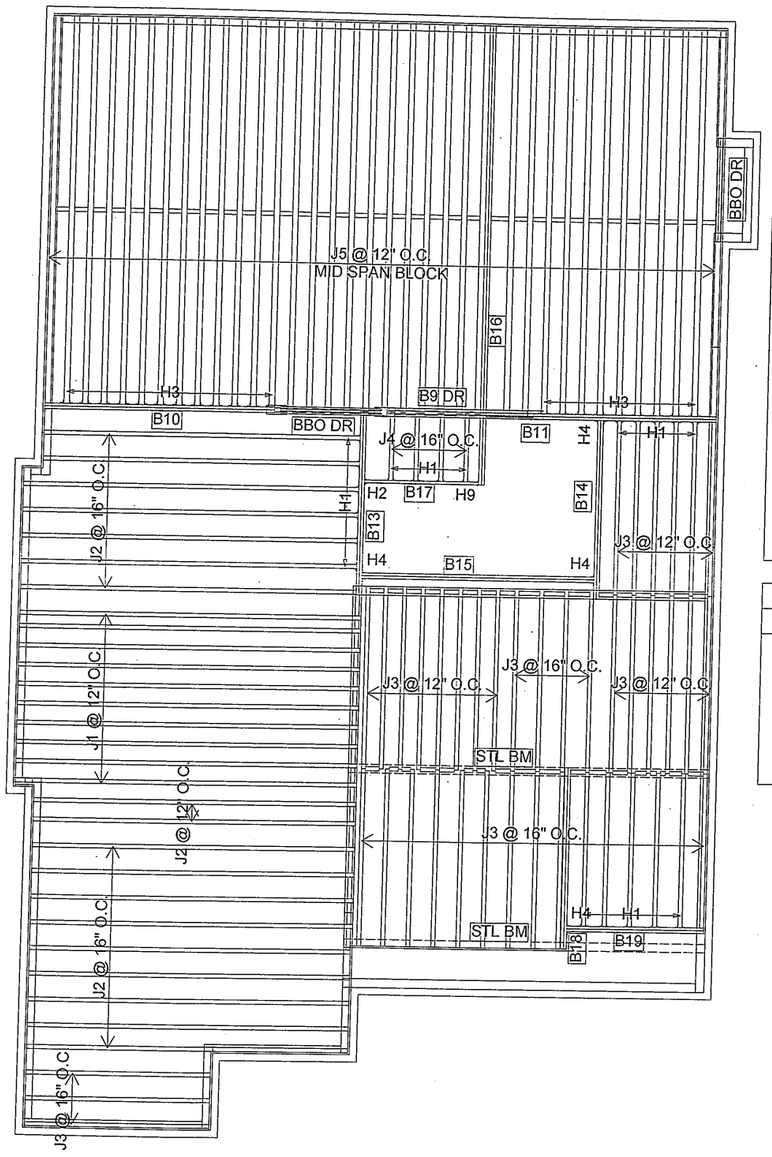
SEALED STRUCTURAL COMPONENTS ONLY: #17903-21 #17906-21 #17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19612-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	10
J2	18-00-00	11 7/8" NI-40x	1	18
J3	10-00-00	11 7/8" NI-40x	1	42
J4	4-00-00	11 7/8" NI-40x	1	4
J5	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
16	H1	IUS2.56/11.88
1	H2	HUS1.81/10
21	H3	IUS3.56/11.88
4	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

DATE 9 0121

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS THAN PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECTS END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 179062 THROUGH DWG# TAM 179324 INCLUSIVE DATED 8/24/21

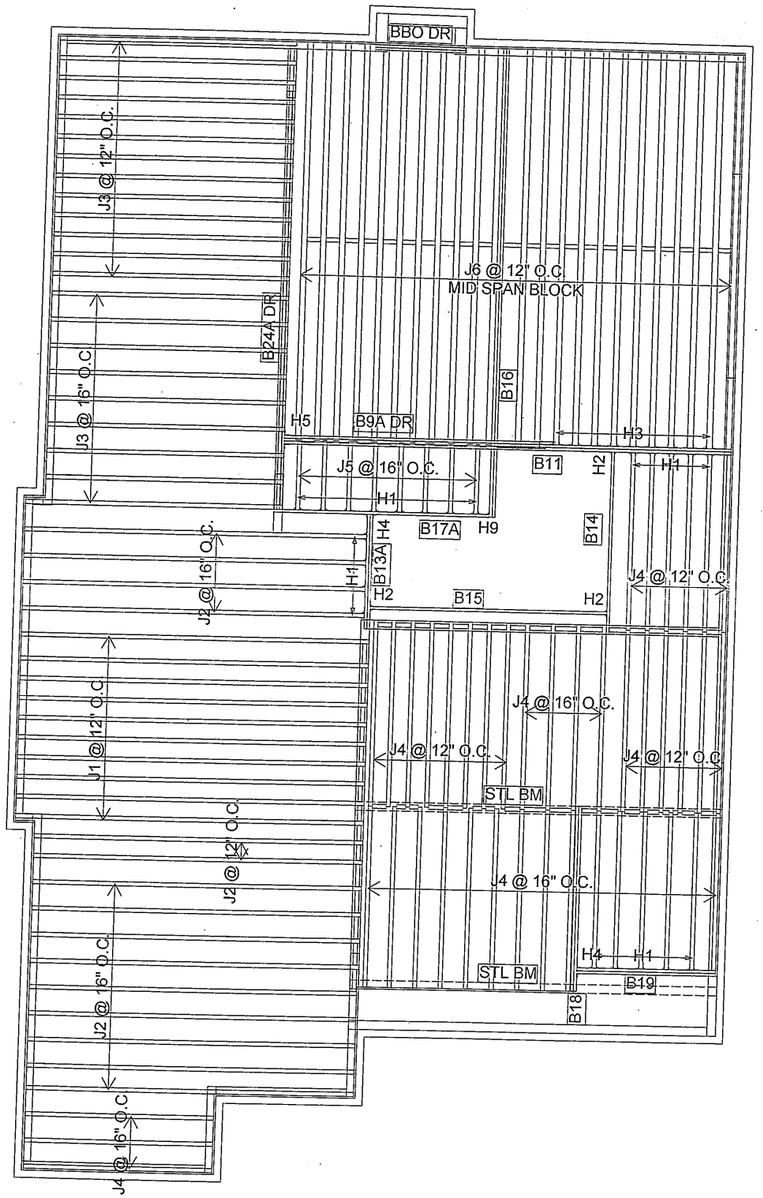
SEALED STRUCTURAL COMPONENTS ONLY: +179062 + 179072
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 196132
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

PROFESSIONAL ENGINEER
9014
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	10
J2	18-00-00	11 7/8" NI-40x	1	15
J3	14-00-00	11 7/8" NI-40x	1	22
J4	10-00-00	11 7/8" NI-40x	1	42
J5	4-00-00	11 7/8" NI-40x	1	8
J6	22-00-00	11 7/8" NI-80	1	23
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9A DR	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B17A	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B19	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13A	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B24A DR	22-00-00	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	3	3

Connector Summary		
Qty	Manuf	Product
8	H1	IUS2.56/11.88
14	H1	IUS2.56/11.88
1	H2	HUS1.81/10
2	H2	HUS1.81/10
9	H3	IUS3.56/11.88
1	H4	HGUS410
1	H4	HGUS410
1	H5	HGUS5.5/11.88
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION

DATE 9 07 24
BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 17891-24 +17888-24 +17890-24 THROUGH DWG# TAM 17897-24, INCLUSIVE DATED 8 24 24

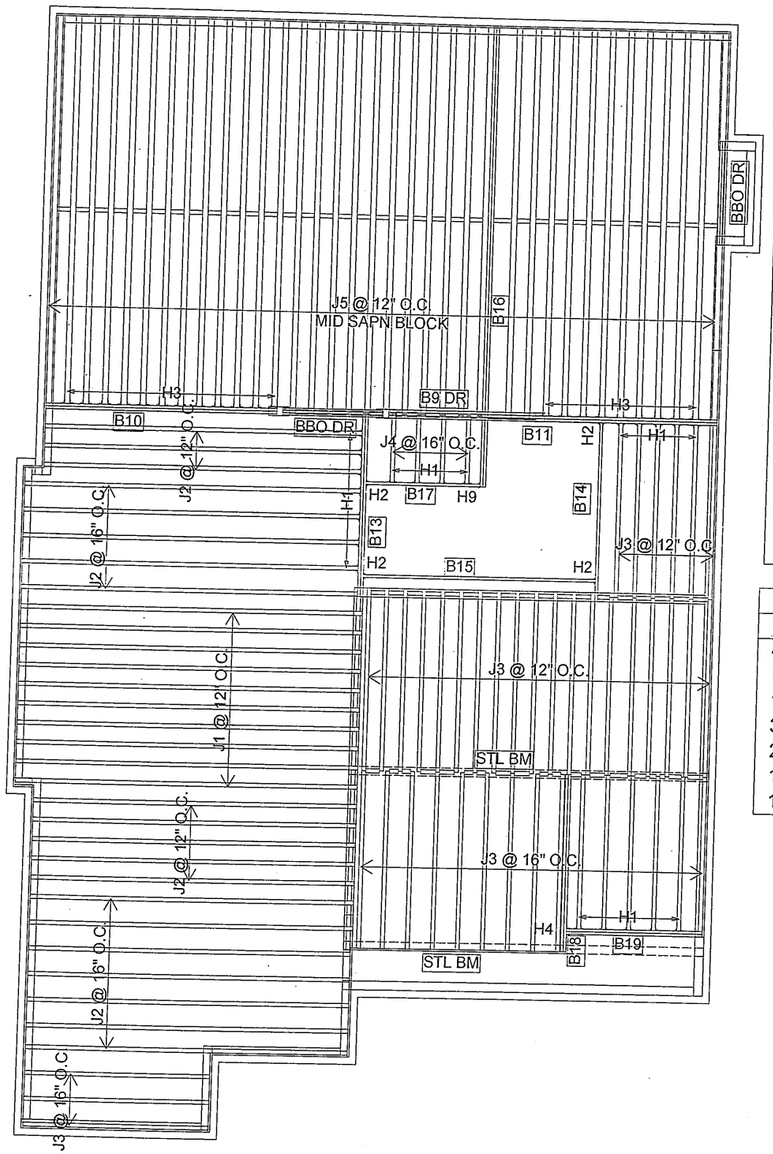
SEALED STRUCTURAL COMPONENTS ONLY: +17906-24 +17907-24 +17892-24
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19614-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

PROFESSIONAL ENGINEER
9 07 24
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	10
J2	18-00-00	11 7/8" NI-40x	1	20
J3	10-00-00	11 7/8" NI-40x	1	43
J4	4-00-00	11 7/8" NI-40x	1	4
J5	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: A
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION 5 BEDROOM

DATE 9 0ct 21
BCIN: 26064, FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 178824 THROUGH DWG# TAM 178934 INCLUSIVE DATED 9 Oct 21

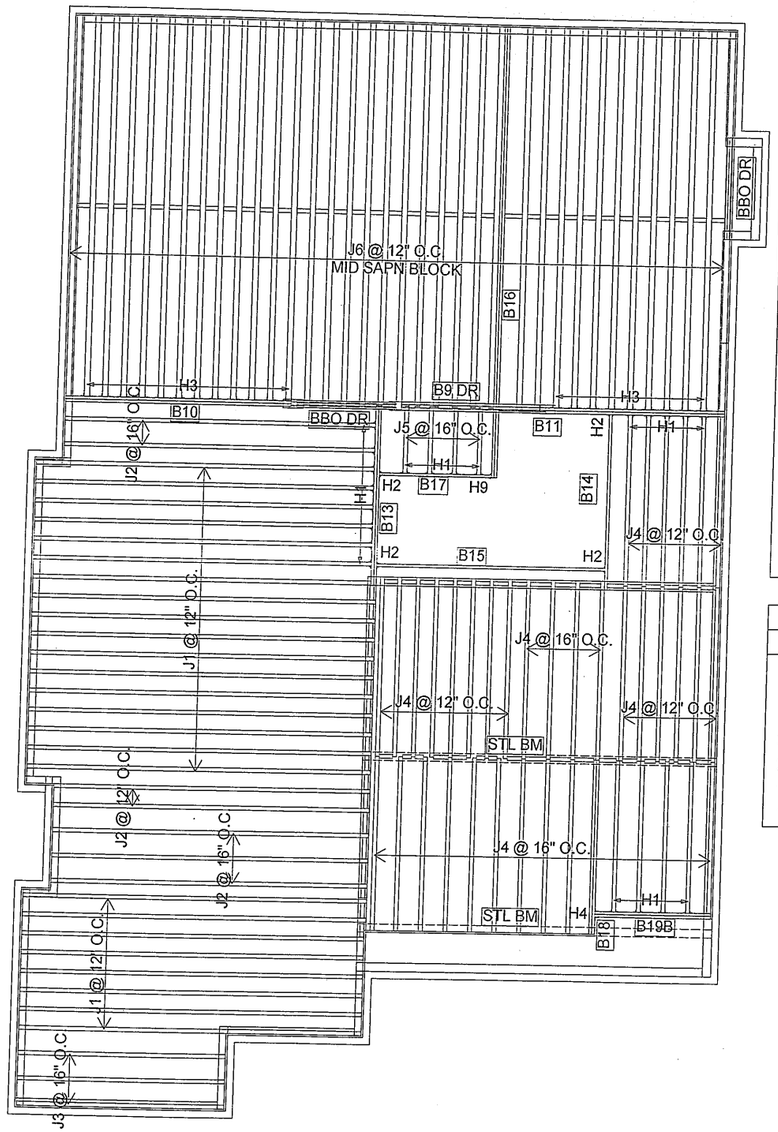
SEALED STRUCTURAL COMPONENTS ONLY: #179062-21 + #17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19615-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 Oct 21
S. KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
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J4	10-00-00	11 7/8" NI-40x	1	38
J5	4-00-00	11 7/8" NI-40x	1	4
J6	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
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B19B	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
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1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
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LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

DATE 9 01 24

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
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DWG# TAM 178864 THROUGH DWG# TAM 178924 INCLUSIVE DATED 8 14 24

SEALED STRUCTURAL COMPONENTS ONLY: T17902-24 T17906-24 T17907-24
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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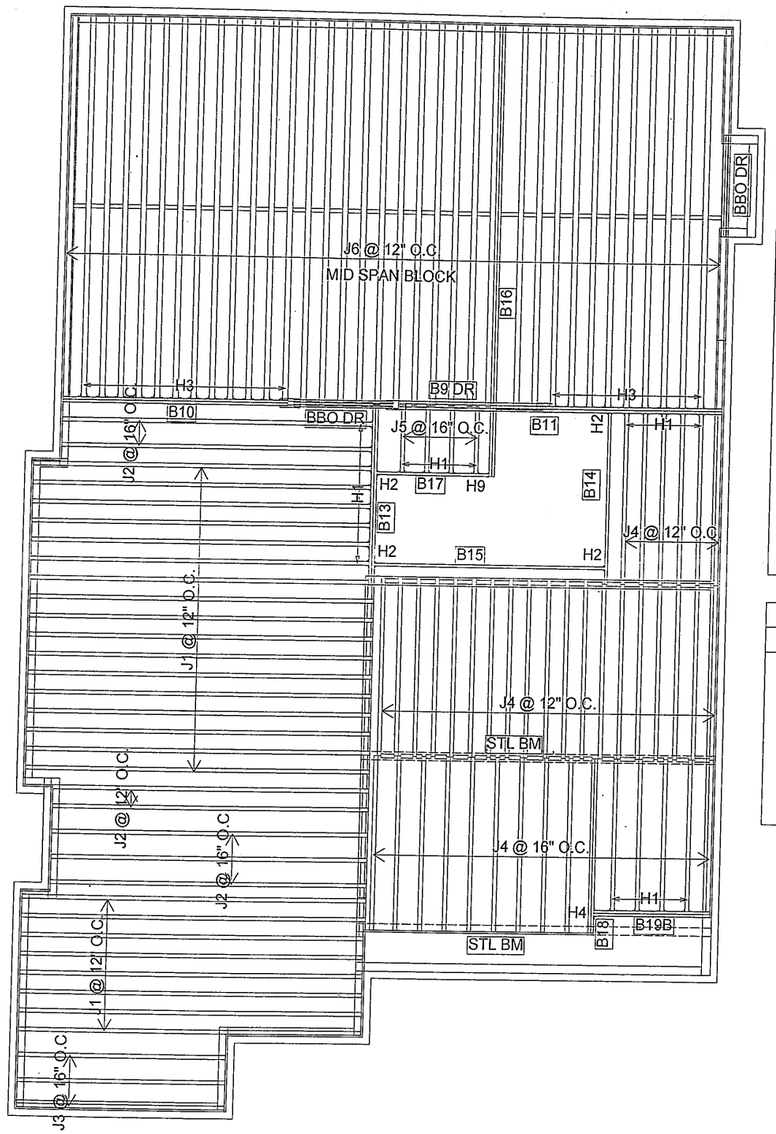
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19616-24
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 24
S. KATSOULAROS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	25
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J4	10-00-00	11 7/8" NI-40x	1	39
J5	4-00-00	11 7/8" NI-40x	1	4
J6	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
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B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19B	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
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LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: B
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION 5 BEDROOM

DATE 9 0V4

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
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DWG# TAM 17886-21 THROUGH DWG# TAM 17892-21 INCLUSIVE DATED 8.24.21

SEALED STRUCTURAL COMPONENTS ONLY: +17902-21 +17906-21 +17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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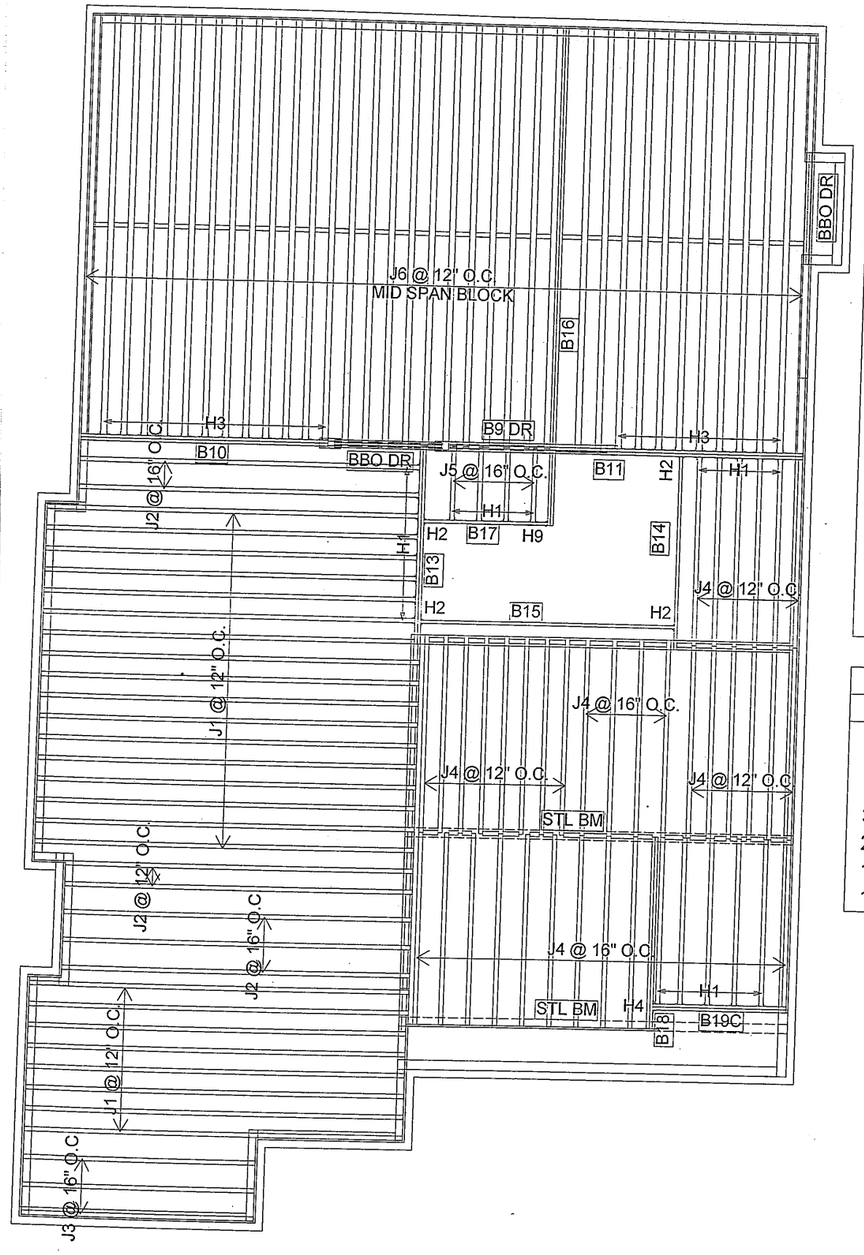
REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19611-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 0V4
S. KATSOULAKOS
PROVINCE OF ONTARIO



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B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
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B19C	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
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LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

DATE 9 01 21
BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 170862-1 THROUGH DWG# TAM 17892-4 INCLUSIVE DATED 8 24 21

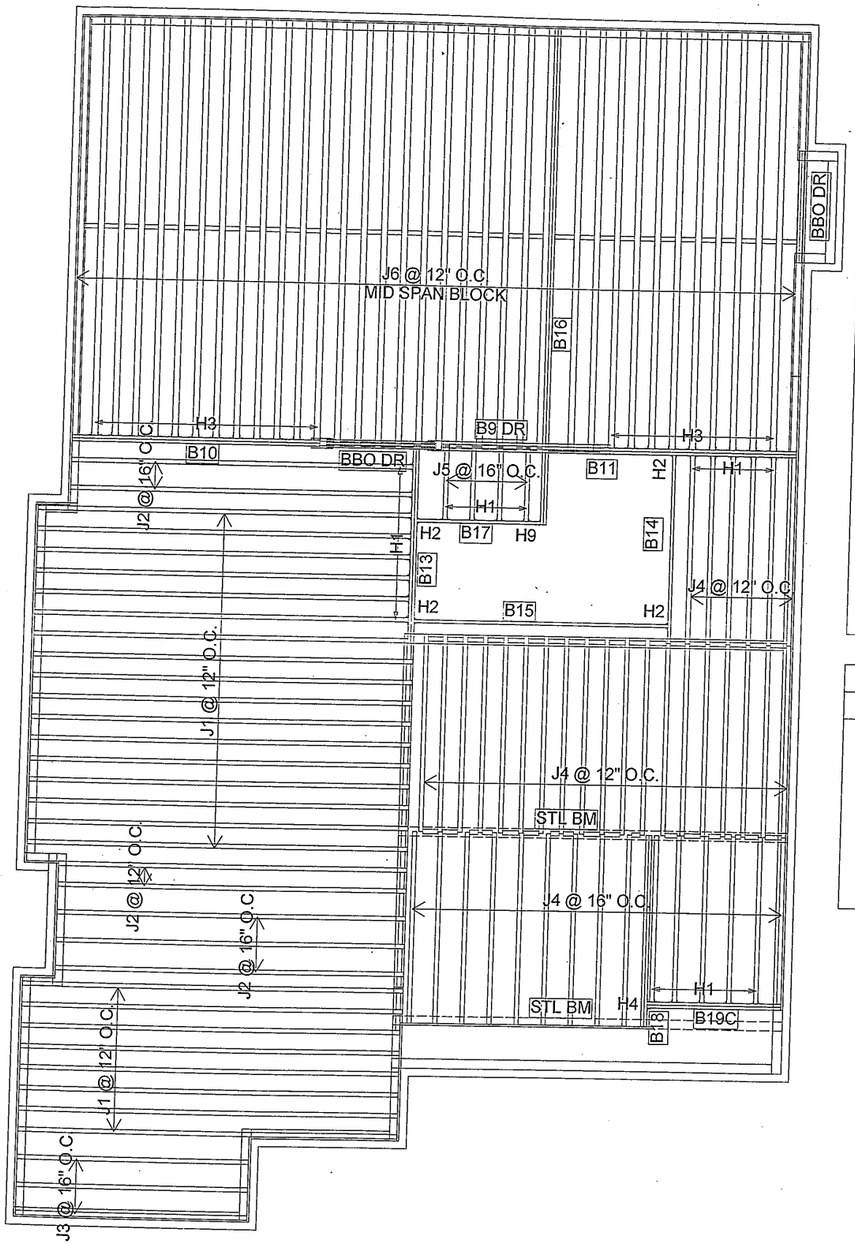
SEALED STRUCTURAL COMPONENTS ONLY: #17903-21 +17906-21+17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16□ DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 196182-1
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY

LICENSED PROFESSIONAL ENGINEER
9 01 21
S KATSOULAKOS
PROVINCE OF ONTARIO



Products				
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	25
J2	18-00-00	11 7/8" NI-40x	1	7
J3	12-00-00	11 7/8" NI-40x	1	3
J4	10-00-00	11 7/8" NI-40x	1	40
J5	4-00-00	11 7/8" NI-40x	1	4
J6	22-00-00	11 7/8" NI-80	1	36
B9 DR	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	3	3
B16	24-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B19C	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
4	H1	IUS2.56/11.88
18	H1	IUS2.56/11.88
1	H2	HUS1.81/10
3	H2	HUS1.81/10
21	H3	IUS3.56/11.88
1	H4	HGUS410
1	H9	LS90

NOTES:
REFER TO THE **NORDIC INSTALLATION** GUIDE FOR PROPER STORAGE AND INSTALLATION. **SQUASH BLOCKS** OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. **MULTIPLE SQUASH BLOCKS** REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. **CANTILEVERED JOISTS** INCLUDING **CANT' OVER BRICK** REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND **FIELD CUT OPENINGS** SEE FIGURE 7, TABLES 1 & 2. **CERAMIC TILE** APPLICATION AS PER O.B.C 9.30.6.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 20.0 lb/ft²
SNOW LOAD: 24.0 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

TAMARACK LUMBER INC
ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06
BUILDER: ROYAL PINE HOMES
SITE: VALES OF HUMBER NORTH
MODEL: 4504 FLANKAGE COR
ELEVATION: C
LOT:
CITY: BRAMPTON
SALESMAN: RICK DICIANO
DESIGNER: AJ
REVISION:

DATE: 2021-08-31

2nd FLOOR

OPTION 5 BEDROOM

DATE 9 OCT

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS □AS PER PLAN WORK□ DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
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DWG# TAM 178867 THROUGH DWG# TAM 17892-4, INCLUSIVE DATED 8 OCT

SEALED STRUCTURAL COMPONENTS ONLY: +179032 +17906-21 +17907-21
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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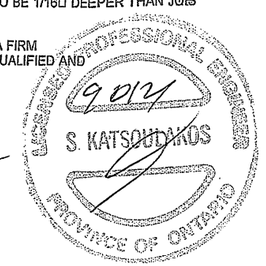
REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19619-21
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL COMPONENTS ONLY



NORDIC

INSTALLATION GUIDE
NORDIC JOIST

NS-GI33

ENGLISH

VERSION
2020-10-01

Engineered Wood Products

BASIC INSTALLATION GUIDE FOR RESIDENTIAL FLOORS

NORDIC JOIST

NORDIC STRUCTURES

nordic.ca

INSTALLING NORDIC I-JOISTS

1. Installation of Nordic I-joists shall be as shown in details 1.
2. Except for cutting to length, I-joist flanges should never be cut, drilled or notched.
3. Install I-joists so that top and bottom flanges are within 1/2 inch of true vertical alignment.
4. Concentrated loads should only be applied to the top surface of the top flange. Concentrated loads should not be suspended from the bottom flange with the exception of light loads, such as ceiling fans or light fixtures.
5. I-joists must be protected from the weather prior to installation.
6. I-joists must not be used in applications where they will be permanently exposed to weather, or will reach a moisture content of 15 percent or greater, such as in swimming pool or hot tub areas. They must not be installed where they will remain in direct contact with concrete or masonry.
7. End bearing length must be at least 1-3/4 inch. For multiple-span joists, intermediate bearing length must be at least 3-1/2 inches.
8. Ends of floor joists shall be restrained to prevent rollover. Use rim board or I-joist blocking panels.
9. I-joists installed beneath bearing walls perpendicular to the joists shall have full-depth blocking panels, rim board, or squash blocks (cripple blocks) to transfer gravity loads from above the floor system to the wall or foundation below.
10. For I-joists installed directly beneath bearing walls parallel to the joists or used as rim board or blocking panels, the maximum vertical load using a single I-joist is 3,300 plf, and 6,600 plf if double I-joists are used.
11. Continuous lateral support of the I-joist's compression flange is required to prevent rotation and buckling. In simple span uses, lateral support of the top flange is normally supplied by the floor sheathing. In multiple-span or cantilever applications, bracing of the I-joist's bottom flange is also required at interior supports of multiple-span joists, and at the end support next to the cantilever extension. The ends of all cantilever extensions must be laterally braced as shown in details 3, 4, or 5.
12. Nails installed in flange face or edge shall be spaced in accordance with the applicable building code requirements or approved building plans, but should not be closer than those specified on page 3.3 of the Nordic Joist Technical Guide (NS-GT3).
13. Details 1 show only I-joist-specific fastener requirements. For other fastener requirements, see the applicable building code.
14. For proper temporary bracing of wood I-joists and placement of temporary construction loads, see APA Technical Note: Temporary Construction Loads over I-Joist Roofs and Floors, Form J735.

All nails shown in the details are assumed to be common nails unless otherwise noted. Nails shall have a diameter not less than 0.128 inch for 2-1/2-inch nails, or 0.144 inch for 3-inch nails. Individual components not shown to scale for clarity.

SAFETY AND CONSTRUCTION PRECAUTIONS

I-joists are not stable until completely installed, and will not carry any load until fully braced and sheathed.

Avoid Accidents by Following these Important Guidelines:

1. Brace and nail each I-joist as it is installed, using hangers, blocking panels, rim board, and/or cross-bridging at joist ends. When I-joists are applied continuous over interior supports and a load-bearing wall is planned at that location, blocking will be required at the interior support.
2. When the building is completed, the floor sheathing will provide lateral support for the top flanges of the I-joists. Until this sheathing is applied, temporary bracing, often called struts, or temporary sheathing must be applied to prevent I-joist rollover or buckling.
   - Temporary bracing or struts must be 1x4 inch minimum, at least 8 feet long and spaced no more than 8 feet on centre, and must be secured with a minimum of two 2-1/2-inch nails fastened to the top surface of each I-joist. Nail the bracing to a lateral restraint at the end of each bay. Lap ends of adjoining bracing over at least two I-joists.
   - Or, sheathing (temporary or permanent) can be nailed to the top flange of the first 4 feet of I-joists at the end of the bay.
3. For cantilevered I-joists, brace top and bottom flanges, and brace ends with closure panels, rim board, or cross-bridging.
4. Install and fully nail permanent sheathing to each I-joist before placing loads on the floor system. Then, stack building materials over beams or walls only.
5. *Never* install a damaged I-joist.

Improper storage or installation, failure to follow applicable building codes, failure to follow span ratings for Nordic I-joists, failure to follow allowable hole sizes and locations, or failure to use web stiffeners when required can result in serious accidents. Follow these installation guidelines carefully.

Do not walk on I-joists until fully fastened and braced, or serious injuries can result.

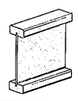
Never stack building materials over unsheathed I-joists. Once sheathed, do not overstress I-joist with concentrated loads from building materials.

NORDIC I-JOIST SERIES — RESIDENTIAL SERIES

NI-20
2x3 S-P-F No. 2
3/8 in. web
Depths
9-1/2 and 11-7/8 in.
33 pieces per unit

NI-40x
2x3 1950f MSR
3/8 in. web
Depths
9-1/2, 11-7/8 and 14 in.
33 pieces per unit

NI-60
2x3 2100f MSR
3/8 in. web
Depths
9-1/2, 11-7/8, 14 and 16 in.
33 pieces per unit



NI-80
2x4 2100f MSR
3/8 in. web
Depths
9-1/2, 11-7/8, 14 and 16 in.
23 pieces per unit

NI-90
2x4 2400f MSR
7/16 in. web
Depths
11-7/8, 14 and 16 in.
23 pieces per unit

RIM BOARDS

Width	Length
1-1/8 in.	16 ft

Depths
9-1/2 to 16 in.

APA Rim Board Plus

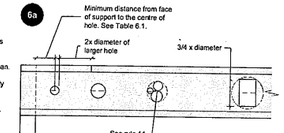
WEB HOLES AND OPENINGS

WEB HOLES IN I-JOISTS

Rules for Cutting Holes in I-Joists

1. The distance between the inside edge of the support and the centreline of any hole shall be in compliance with the requirements of Table 6.1.
2. I-joist top and bottom flanges must never be cut, notched or otherwise modified.
3. Whenever possible, field-cut holes should be centred on the middle of the web.
4. The maximum size hole that can be cut into an I-joist web shall equal the clear distance between the flanges of the I-joist minus 1/4 inch. A minimum of 1/8 inch should always be maintained between the top or bottom of the hole and the adjacent I-joist flange.
5. The sides of square holes or longest sides of rectangular holes should not exceed 3/4 of the diameter of the maximum round hole permitted at that location.
6. Where more than one hole is necessary, the distance between adjacent hole edges shall exceed twice the diameter of the largest round hole or twice the size of the largest square hole - or twice the length of the longest rectangular hole -, and each hole must be sized and located in compliance with the requirements of Table 6.1.
7. Holes measuring 1-1/2 inch or smaller shall be permitted anywhere in a cantilevered section of a joist. Holes of greater size may be permitted subject to verification.
8. A 1-1/2 inch hole or smaller can be placed anywhere in the web provided that it meets the requirements of rule number 6 above.
9. All holes shall be cut in accordance with the restrictions listed above and as illustrated in detail 6a.
10. Limit three maximum-size holes per span.
11. A group of round holes at approximately the same location shall be permitted if it meets the requirements for a single round hole circumscribed around them.

6a



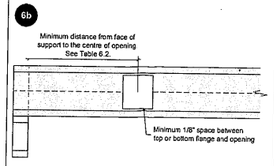
Notes:
1. Never drill, cut or notch the flange, or over-cut the web.
2. Holes in web should be cut with a sharp saw.
3. For rectangular holes, avoid over-cutting the corners, as this can cause unnecessary stress concentrations. Slightly rounding the corners is recommended. Starting the rectangular hole by drilling a 1-inch-diameter hole in each of the four corners and then making the cuts between the holes is another good method to minimize damage to the I-joist.

DUCT CHASE OPENINGS

Rules for Cutting Duct Chase Openings in I-joists

1. The distance between the inside edge of the support and the centreline of a duct chase opening shall be in compliance with the requirements of Table 6.2.
2. I-joist top and bottom flanges must never be cut, notched or otherwise modified.
3. The maximum depth of a duct chase opening that can be cut into an I-joist web shall equal the clear distance between the flanges of the I-joist minus 1/4 inch. A minimum of 1/8 inch should always be maintained between the top or bottom of the opening and the adjacent I-joist flange.
4. All openings shall be cut in accordance with the restrictions listed above and as illustrated in detail 6b.
5. Limit one maximum-size duct chase opening per span.

6b



Notes:
1. Never drill, cut or notch the flange, or over-cut the web.
2. Holes in web should be cut with a sharp saw.
3. Avoid over-cutting the corners, as this can cause unnecessary stress concentrations. Slightly rounding the corners is recommended. Starting the rectangular hole by drilling a 1-inch-diameter hole in each of the four corners and then making the cuts between the holes is another good method to minimize damage to the I-joist.

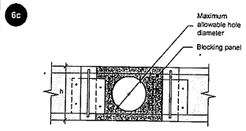
I-joist depth (in.)	Maximum depth of the opening (in.)
9-1/2	6-1/4
11-7/8	8-5/8
14	10-3/4
16	12-3/4

HOLES IN BLOCKING PANELS

Maximum Allowable Hole Size in Lateral-restraint-only Blocking Panels

1. The maximum allowable hole size for a lateral-restraint-only blocking panel is 2/3 of the lesser dimension of the blocking's depth or length. Assuming the blocking panel is longer than its height (or depth), the table aside applies. For other applications, contact Nordic Structures.
2. Holes cut into the blocking panels are subject to the following limitations:
   - The top and bottom flanges of an I-joist blocking panel must never be cut, notched or otherwise modified.
   - Field-cut holes must be centred in the blocking horizontally.
   - While round holes are preferred, rectangle holes may be used provided the corners are not over cut. Slightly rounding corners or pre-drilling corners with a 1-inch-diameter bit is recommended.
   - All holes must be cut in a workman-like manner in accordance with the limitations listed above.

6c



I-joist or rim board blocking depth (in.)	Maximum allowable hole diameter (in.) [a]
9-1/2	6-1/4
11-7/8	7-3/4
14	9-1/4
16	10-1/2

[a] Maximum allowable hole diameter in blocking panel, where the blocking panel is longer than its height.

TABLE 6.1 – LOCATION OF WEB HOLES

Simple or multiple span
Minimum distance from inside face of any support to centre of hole (ft-in.)

Joist depth	Joist series	Round hole diameter (in.) 2	3	4	5	6	6-1/4	7	8	8-5/8	9	10	10-3/4	11	12	12-3/4
9-1/2"	NI-20	0'-7"	1'-6"	2'-10"	4'-3"	5'-8"	6'-0"	-	-	-	-	-	-	-	-	-
	NI-40x	0'-7"	1'-6"	3'-0"	4'-4"	6'-0"	6'-4"	-	-	-	-	-	-	-	-	-
	NI-60	1'-3"	2'-6"	4'-0"	5'-4"	7'-0"	7'-5"	-	-	-	-	-	-	-	-	-
	NI-80	2'-3"	3'-6"	5'-0"	6'-6"	8'-2"	8'-8"	-	-	-	-	-	-	-	-	-
11-7/8"	NI-20	0'-7"	0'-8"	1'-0"	2'-4"	3'-8"	4'-0"	5'-0"	6'-6"	7'-9"	-	-	-	-	-	-
	NI-40x	0'-7"	0'-8"	1'-3"	2'-8"	4'-0"	4'-4"	5'-5"	7'-0"	8'-4"	-	-	-	-	-	-
	NI-60	0'-7"	1'-8"	3'-0"	4'-3"	5'-9"	6'-0"	7'-3"	8'-10"	10'-0"	-	-	-	-	-	-
	NI-80	1'-6"	2'-10"	4'-2"	5'-6"	7'-0"	7'-5"	8'-6"	10'-3"	11'-4"	-	-	-	-	-	-
	NI-90	0'-7"	0'-8"	1'-5"	3'-2"	4'-10"	5'-4"	6'-9"	8'-9"	10'-2"	-	-	-	-	-	-
14"	NI-40x	0'-7"	0'-8"	0'-8"	1'-0"	2'-4"	2'-9"	3'-9"	5'-2"	6'-0"	6'-6"	8'-3"	10'-2"	-	-	-
	NI-60	0'-7"	0'-8"	1'-8"	3'-0"	4'-3"	4'-8"	5'-8"	7'-2"	8'-0"	8'-8"	10'-4"	11'-9"	-	-	-
	NI-80	0'-10"	2'-0"	3'-4"	4'-9"	6'-2"	6'-5"	7'-6"	9'-0"	10'-0"	10'-5"	12'-4"	13'-9"	-	-	-
	NI-90	0'-7"	0'-8"	0'-10"	2'-5"	4'-0"	4'-5"	5'-9"	7'-5"	8'-8"	9'-4"	11'-4"	12'-11"	-	-	-
16"	NI-60	0'-7"	0'-8"	0'-8"	1'-6"	2'-10"	3'-2"	4'-2"	5'-6"	6'-4"	7'-0"	8'-5"	9'-8"	10'-2"	12'-2"	13'-9"
	NI-80	0'-7"	1'-3"	2'-6"	3'-10"	5'-3"	5'-6"	6'-6"	8'-0"	9'-0"	9'-5"	11'-0"	12'-3"	12'-9"	14'-5"	16'-0"
	NI-90	0'-7"	0'-8"	0'-8"	1'-9"	3'-3"	3'-8"	4'-9"	6'-5"	7'-5"	8'-0"	9'-10"	11'-3"	11'-9"	13'-9"	15'-4"

Notes:
1. Tabulated values are applicable to residential floor construction meeting the above design criteria.
2. The above table is based on the I-joists being used at their maximum spans. The minimum distance as given above may be reduced for shorter spans; contact your local distributor.

Design Criteria

Joist spacing	Up to 24 inches
Loads	Live load = 40 psf and dead load = 15 psf
Deflection limits	L/480 under live load and L/240 under total load

TABLE 6.2 – LOCATION OF DUCT CHASE OPENINGS

Simple span
Minimum distance from inside face of any support to centre of opening (ft-in.)

Joist depth	Joist series	Duct chase length (in.) 8	10	12	14	16	18	20	22	24
9-1/2"	NI-20	4'-1"	4'-5"	4'-10"	-	-	-	-	-	-
	NI-40x	5'-3"	5'-8"	6'-0"	6'-5"	6'-10"	7'-3"	7'-8"	-	-
	NI-60	5'-4"	5'-9"	6'-2"	6'-7"	7'-1"	7'-5"	8'-0"	-	-
	NI-80	5'-3"	5'-8"	6'-0"	6'-5"	6'-10"	7'-3"	7'-8"	8'-2"	8'-6"
11-7/8"	NI-20	5'-9"	6'-2"	6'-6"	-	-	-	-	-	-
	NI-40x	6'-8"	7'-2"	7'-6"	8'-1"	8'-6"	9'-1"	9'-6"	-	-
	NI-60	7'-3"	7'-8"	8'-0"	8'-6"	9'-0"	9'-3"	9'-9"	-	-
	NI-80	7'-2"	7'-7"	8'-0"	8'-5"	8'-10"	9'-3"	9'-8"	10'-2"	10'-8"
	NI-90	7'-6"	7'-11"	8'-4"	8'-9"	9'-2"	9'-7"	10'-1"	10'-7"	10'-11"
14"	NI-40x	8'-1"	8'-7"	9'-0"	9'-6"	10'-1"	10'-7"	11'-2"	-	-
	NI-60	8'-9"	9'-3"	9'-8"	10'-1"	10'-6"	11'-1"	11'-6"	-	-
	NI-80	9'-0"	9'-3"	9'-9"	10'-1"	10'-7"	11'-1"	11'-6"	12'-1"	12'-6"
	NI-90	9'-2"	9'-8"	10'-0"	10'-6"	10'-11"	11'-5"	11'-9"	12'-4"	12'-11"
16"	NI-60	10'-3"	10'-8"	11'-2"	11'-6"	12'-1"	12'-6"	13'-2"	-	-
	NI-80	10'-4"	10'-9"	11'-3"	11'-9"	12'-1"	12'-7"	13'-1"	13'-8"	14'-4"
	NI-90	10'-9"	11'-2"	11'-8"	12'-0"	12'-5"	13'-0"	13'-6"	14'-2"	14'-10"

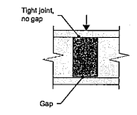
Design Criteria

Joist spacing	Up to 24 inches
Loads	Live load = 40 psf and dead load = 15 psf
Deflection limits	L/480 under live load and L/240 under total load

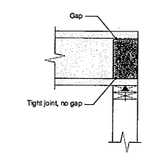
Note:
1. Tabulated values are applicable to residential floor construction meeting the above design criteria.

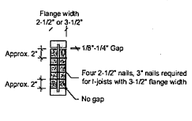
WEB STIFFENERS

2 Concentrated Load (Load Stiffener)



End Bearing (Bearing Stiffener)

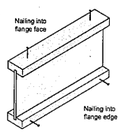




Stiffener Size Requirements

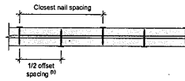
Flange width (in.)	Web stiffener size each side of web (in.)
2-1/2	1 x 2-5/16 Minimum width
3-1/2	1-1/2 x 2-5/16 Minimum width

NAIL SPACING



Nailed to Only One Flange Edge (Top View)

Nailed to Both Flange Edges (Top View)

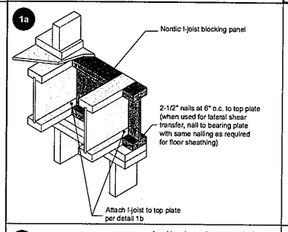


Recommended Closest Nail Spacing for Fastening Sheathing to I-joist Flanges to Minimize Splitting

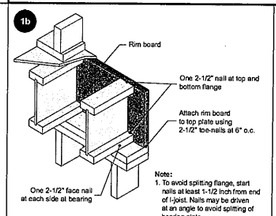
Fastener size (diameter x length)	Flange face nailing [a] End distance (in.)	Nail spacing (in.)	Flange edge nailing [b] End distance (in.)	Nail spacing (in.) Nailed to only one flange edge	Nailed to both flange edges
0.128" or smaller in diameter, and 3-1/4" or shorter in length	2	2	2	2	4
Greater than 0.128" up to 0.148" in diameter, and 3-1/4" or shorter in length	2	3	2	3	6

[a] If more than one row is required, offset rows a minimum of 1/2 inch and stagger.
[b] Closest nail spacing measured from one flange edge. Nails on opposite flange edge must be offset one-half the minimum spacing.

1a

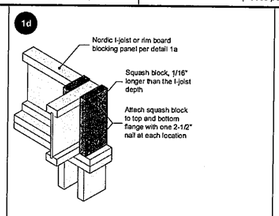


1b

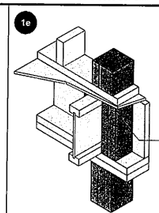


Note:
1. To avoid splitting flange, start nails at least 1-1/2 inch from end of I-joist. Nails may be driven at an angle to avoid splitting of bearing plate.

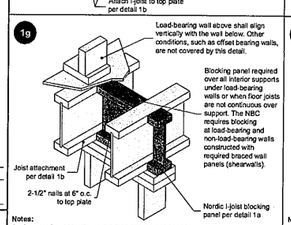
1d



1e

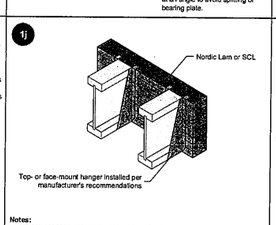


1g



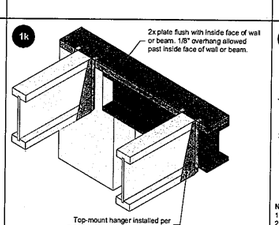
Notes:
1. An occasional blocking panel (one per line of blocking) may be left out for the passage of plumbing or ventilation ducts. For other applications, contact Nordic Structures.
2. For other options, see details 1g-1 to 1g-5.

1j



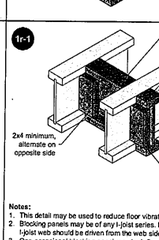
Notes:
1. Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.
2. For nailing schedules for multiple Nordic Lam or SCL beams, see the manufacturer's recommendations.

1k



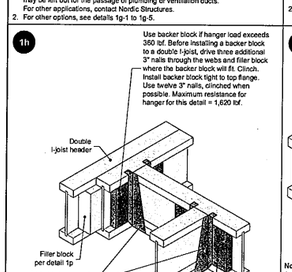
Note:
1. Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.

1r-1



Notes:
1. This detail may be used to reduce floor vibration.
2. Blocking panels may be of any I-joist series. Nails attaching lumber piece to I-joist web should be driven from the web side and clinched on the lumber side.
3. One occasional blocking panel may be left out for the passage of plumbing or ventilation ducts. Otherwise, a hole of not more than 2/3 of the lesser dimension of the blocking depth or length may be drilled in the blocking panel.

1h

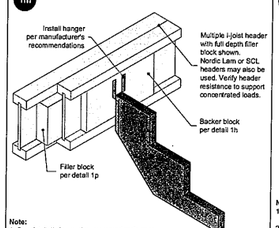


Flange width (in.)	Material thickness required (in.) [a]	Minimum depth (in.) [b]
2-1/2	1	5-1/2
3-1/2	1-1/2	7-1/4

[a] Minimum grade for backer block material shall be S-P-F No. 2 or better for solid sawn lumber and wood structural panels conforming to CAN/CSA-O325 Standard.
[b] For face-mount hangers use net joist depth minus 3-1/4 inches for joists with 1-1/2-inch-thick flanges.

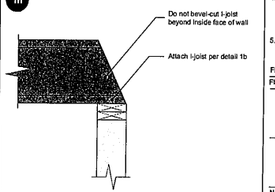
Notes:
1. Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.
2. For hanger resistance, see manufacturer's recommendations.
3. Verify double I-joist resistance to support concentrated loads.
4. Backer blocks must be long enough to permit required nailing without splitting.

1m



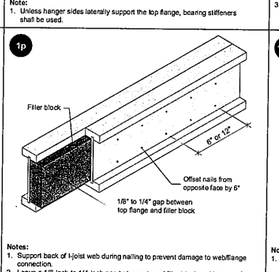
Note:
1. See detail 1h for maximum support resistance.

1n



Note:
1. Blocking required at bearing for lateral support, not shown for clarity.

1p



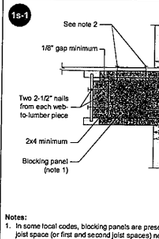
Notes:
1. Support back of I-joist web during nailing to prevent damage to web/flange connection.
2. Leave a 1/8-inch to 1/4-inch gap between top of filler block and bottom of top I-joist flange.
3. Filler block is required between joists for full length of span.
4. For flange width of 2-1/2 inches, nail joists together with two rows of 3-inch nails at 12 inches o.c. (clinched when possible) on each side of the double I-joist (total of four nails per foot). For flange width of 3-1/2 inches, use two rows of 3-inch nails at 6 inches o.c. on each side of the double I-joist (total of eight nails per foot).
5. The maximum factored load that may be applied to one side of the double I-joist using this detail is 860 lbf/ft.

Filler Block Requirements for Double I-joist Construction

Flange width (in.)	Net depth (in.)	Filler block size (in.)	Example
2-1/2	9-1/2	2-1/8 to 2-1/4 x 6	2x6 + 5/8" or 3/4" sheathing
	11-7/8	2-1/8 to 2-1/4 x 8	2x8 + 5/8" or 3/4" sheathing
	14	2-1/8 to 2-1/4 x 10	2x10 + 5/8" or 3/4" sheathing
	16	2-1/8 to 2-1/4 x 12	2x12 + 5/8" or 3/4" sheathing
3-1/2	9-1/2	3 x 6	2 x 2x6
	11-7/8	3 x 8	2 x 2x8
	14	3 x 10	2 x 2x10
	16	3 x 12	2 x 2x12

Note:
1. The height of the filler block may be different from that specified in the table, as long as it allows nailing and respects the required gap.

1s-1



Notes:
1. In some local codes, blocking panels are prescriptively required in the first joist space (for first and second joist spaces) next to the starter joist. Where required, see local code requirements for spacing of the blocking panels. As a minimum, it is recommended to use blocking panels spaced at 4 feet on centre.
2. Details shown are for minimum blocking attachment. Transfer of lateral loads may require additional fasteners. In such cases, nail size, spacing and specific design detailing shall be provided by the building designer.
3. Where blocking panels are required between adjacent joists, the blocking panels can be staggered by approximately 3 inches, and end-nailed as shown.
4. Nails attaching lumber piece to I-joist web should be driven from the web side and clinched on the lumber side.

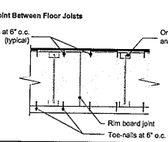
This document supersedes all previous versions. For the latest version, consult nordic.ca or contact Nordic Structures.

FOR ALL construction details →DC3

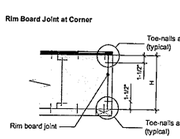
RIM BOARDS

8a

Rim Board Joint Between Floor Joists

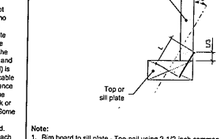


Rim Board Joint at Corner



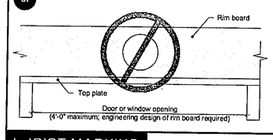
Notes:
1. Floor sheathing to rim board - Use 2-1/2-inch common nails at 6 inches o.c. Caution: The horizontal load resistance is not necessarily increased with a decreased nail spacing. Under no circumstances should the nail spacing be less than 3 inches. The 3-1/2-inch common nails used to connect the bottom plate of a wall to the rim board framing when sheathing do not reduce the horizontal load resistance of the rim board provided that the 2-1/2-inch nail spacing (sheathing-rim board) is 6 inches o.c. and the 3-1/2-inch nail spacing (bottom plate-sheathing-rim board) is in accordance with the prescriptive requirements of the applicable code. APA recommends a minimum 3/8-inch panel edge distance be maintained when nailing. Calculations show that the tongue does not need to be removed for floor sheathing 7/8-inch thick or less when used in conjunction with rim boards of 1-1/8 inch. Some local code jurisdictions, however, may require removal of the tongue at the edge of floor framing when nailing it to rim board.
2. Rim board to I-joist - Use two 2-1/2-inch common nails, one each into the top and bottom flange.

8b

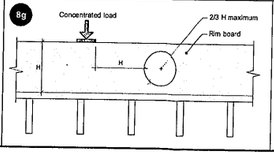


Note:
1. Rim board to sill plate - Toe-nail using 2-1/2-inch common nails at 6 inches o.c.

8f

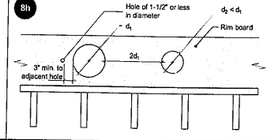


8g

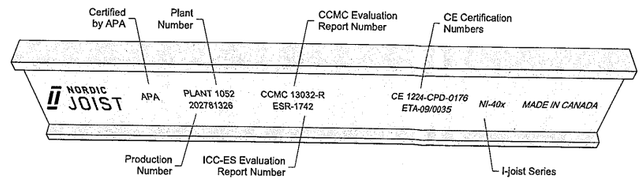


Note:
1. Do not cut holes in rim board installed over openings, such as doors or windows, where the rim board is not fully supported, except that holes of 1-1/2 inch or less in size are permitted provided they are positioned at the mid-depth and in the middle one-third of the span.

8h



I-JOIST MARKING



Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT: VALES OF HUMBER NORTH–MODEL:UNIT 4504 FLANKAGE COR–ELEV.A-1ST FLOOR-NONSUNKEN-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM21542-21** DATED **10-04-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 10 04 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM21542-21S
DWG #TAM21547-21S
10-04-21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:		**Unit no.**	**Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		**MICRO CITY ENGINEERING SERVICES INC.**	
Street address **R.R #1, PO BOX 61**		Unit no.	Lot/con.
Municipality **GLENCOE**	Postal code **N0L 1M0**	Province **ONTARIO**	E-mail **mcengr@xplornet.com**
Telephone number **(519) 287-2242 Business**	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT: VALES OF HUMBER NORTH–MODEL:UNIT 4504 FLANKAGE COR–ELEV.B-1ST FLOOR-NONSUNKEN-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM21543-21** DATED **10-04-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, **SAM KATSOULAKOS** declare that (choose one as appropriate):
(print name)

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: **26064**

Firm BCIN: **29991**

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 10 09 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM21543-21S
DWG #TAM21548-21S
10 09 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name	Firm		
SAM KATSOULAKOS	MICRO CITY ENGINEERING SERVICES INC.		
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT: VALES OF HUMBER NORTH–MODEL:UNIT 4504 FLANKAGE COR–ELEV.C-1ST FLOOR-NONSUNKEN-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM21544-21** DATED **10-04-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 10 Dec 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM21544-21S
DWG #TAM21549-21S
10 Dec 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT: VALES OF HUMBER NORTH–MODEL:UNIT 4504–ELEV.A OR B-1ST FLOOR-NONSUNKEN-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM21545-21** DATED **10-04-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 10 DEC 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM21545-21S
DWG #TAM21550-21S
10 DEC 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name	Firm		
SAM KATSOULAKOS	**MICRO CITY ENGINEERING SERVICES INC.**		
Street address **R.R #1, PO BOX 61**		Unit no.	Lot/con.
Municipality **GLENCOE**	Postal code **N0L 1M0** / Province **ONTARIO**	E-mail **mcengr@xplornet.com**	
Telephone number **(519) 287-2242 Business**	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT: VALES OF HUMBER NORTH–MODEL:UNIT 4504–ELEV.C-1ST FLOOR-NONSUNKEN-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM21546-21** DATED **10-04-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS declare that (choose one as appropriate):
(print name)

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: **26064**

Firm BCIN: **29991**

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 10 OCT 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM21546-21S
DWG #TAM21551-21S
10 OCT 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61			Unit no. / Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.A OR B–1ST FLOOR-STD-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19593-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19593-21S
DWG #TAM19620-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0	Province: ONTARIO	E-mail: mcengr@xplornet.com
Telephone number: (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

- ☐ House
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Complex Buildings
- ☐ HVAC – House
- ☐ Building Services
- ☐ Detection, Lighting and Power
- ☐ Fire Protection
- ☒ Building Structural
- ☐ Plumbing – House
- ☐ Plumbing – All Buildings
- ☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.C–1ST FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19594-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19594-21S
DWG #TAM19621-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.A OR B OR C–1ST FLOOR-OPTION-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19595-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19595-21S
DWG #TAM19622-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

- ☐ House
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Complex Buildings
- ☐ HVAC – House
- ☐ Building Services
- ☐ Detection, Lighting and Power
- ☐ Fire Protection
- ☒ Building Structural
- ☐ Plumbing – House
- ☐ Plumbing – All Buildings
- ☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.B–1ST FLOOR-OPTION-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19596-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19596-21S
DWG #TAM19623-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code:	Plan number/ other description:	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number:	Cell number:	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

- ☐ House
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Complex Buildings
- ☐ HVAC – House
- ☐ Building Services
- ☐ Detection, Lighting and Power
- ☐ Fire Protection
- ☒ Building Structural
- ☐ Plumbing – House
- ☐ Plumbing – All Buildings
- ☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.A–1ST FLOOR-STD-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19597-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 OCT 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19597-21S
DWG #TAM19624-21S

9 OCT 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.A–1ST FLOOR-OPTION-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19598-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19598-21S
DWG #TAM19625-21S 9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities			
Name SAM KATSOULAKOS		Firm MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61			Unit no. / Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.B–1ST FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19599-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS declare that (choose one as appropriate):
(print name)

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19599-21S
DWG #TAM19626-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.C–1ST FLOOR-STD-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19600-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19600-21S
DWG #TAM19627-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		**MICRO CITY ENGINEERING SERVICES INC.**	
Street address **R.R #1, PO BOX 61**			Unit no. / Lot/con.
Municipality **GLENCOE**	Postal code **N0L 1M0**	Province **ONTARIO**	E-mail **mcengr@xplornet.com**
Telephone number **(519) 287-2242 Business**	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.C–1ST FLOOR-OPTION-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19601-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19601-21S
DWG #TAM19628-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.A–2ND FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19602-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19602-21S
DWG #TAM19629-21S 9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

- ☐ House
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Complex Buildings
- ☐ HVAC – House
- ☐ Building Services
- ☐ Detection, Lighting and Power
- ☐ Fire Protection
- ☒ Building Structural
- ☐ Plumbing – House
- ☐ Plumbing – All Buildings
- ☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.A–2ND FLOOR-OPTION-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19603-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19603-21S
DWG #TAM19630-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.A–2ND FLOOR-OPTION 5 BEDROOM–NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19604-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19604-21S
DWG #TAM19631-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code:	Plan number/ other description:	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number:	Cell number:	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.B–2ND FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19605-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19605-21S
DWG #TAM19632-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		**MICRO CITY ENGINEERING SERVICES INC.**	
Street address **R.R #1, PO BOX 61**			Unit no. / Lot/con.
Municipality **GLENCOE**	Postal code **N0L 1M0**	Province **ONTARIO**	E-mail **mcengr@xplornet.com**
Telephone number **(519) 287-2242 Business**	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.B–2ND FLOOR-OPTION-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19606-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS declare that (choose one as appropriate):
(print name)

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19606-21S
DWG #TAM19633-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information

Building number, street name:		Application number:	
		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0	Province: ONTARIO	E-mail: mcengr@xplornet.com
Telephone number: (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.B–2ND FLOOR-OPTION-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19607-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19607-21S
DWG #TAM19634-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.B–2ND FLOOR-OPTION 5 BEDROOM-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19608-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19608-21S
DWG #TAM19635-21S

9/01/21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.C–2ND FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19609-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS declare that (choose one as appropriate):
(print name)

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19609-21S
DWG #TAM19636-21S 9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		**MICRO CITY ENGINEERING SERVICES INC.**	
Street address **R.R #1, PO BOX 61**			Unit no. / Lot/con.
Municipality **GLENCOE**	Postal code **N0L 1M0**	Province **ONTARIO**	E-mail **mcengr@xplornet.com**
Telephone number **(519) 287-2242 Business**	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.C–2ND FLOOR-OPTION-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19610-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19610-21S
DWG #TAM19637-21S

9 10 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.C–2ND FLOOR-OPTION-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19611-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19611-21S
DWG #TAM19638-21S 9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

- ☐ House
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Complex Buildings
- ☐ HVAC – House
- ☐ Building Services
- ☐ Detection, Lighting and Power
- ☐ Fire Protection
- ☒ Building Structural
- ☐ Plumbing – House
- ☐ Plumbing – All Buildings
- ☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-ELEV.C–2ND FLOOR-OPTION 5 BEDROOM-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19612-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19612-21S
DWG #TAM19639-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information

Building number, street name:		Application number:	
		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.A–2ND FLOOR-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG #TAM19613-21 DATED 9-01-21). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19613-21S
DWG #TAM19640-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

- ☐ House
- ☐ Small Buildings
- ☐ Large Buildings
- ☐ Complex Buildings
- ☐ HVAC – House
- ☐ Building Services
- ☐ Detection, Lighting and Power
- ☐ Fire Protection
- ☒ Building Structural
- ☐ Plumbing – House
- ☐ Plumbing – All Buildings
- ☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.A–2ND FLOOR-OPTION-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19614-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19614-21S
DWG #TAM19641-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code:	Plan number/ other description:	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number:	Cell number:	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.A–2ND FLOOR-OPTION 5 BEDROOM-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19615-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19615-21S
DWG #TAM19642-21S 9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			**Application number:**
Building number, street name:			**Unit no.** / **Lot/con.**
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61			Unit no. / Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.B–2ND FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19616-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS declare that (choose one as appropriate):
(print name)

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.
Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19616-21S
DWG #TAM19643-21S
9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0	Province: ONTARIO	E-mail: mcengr@xplornet.com
Telephone number: (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.B–2ND FLOOR-OPTION 5 BEDROOM-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19617-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19617-21S
DWG #TAM19644-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	**Postal code**	**Plan number/ other description**	

B. Individual who reviews and takes responsibility for design activities

Name		Firm	
SAM KATSOULAKOS		MICRO CITY ENGINEERING SERVICES INC.	
Street address R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.C–2ND FLOOR-NOT LOT SPECIFIC
REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19618-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19618-21S
DWG #TAM19645-21S

9 01 21

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information — **Application number:**

Building number, street name:		Unit no.	Lot/con.
Municipality: CITY OF BRAMPTON	Postal code	Plan number/ other description	

B. Individual who reviews and takes responsibility for design activities

Name: SAM KATSOULAKOS		Firm: MICRO CITY ENGINEERING SERVICES INC.	
Street address: R.R #1, PO BOX 61		Unit no.	Lot/con.
Municipality: GLENCOE	Postal code: N0L 1M0 / Province: ONTARIO	E-mail: mcengr@xplornet.com	
Telephone number: (519) 287-2242 Business	Fax number	Cell number	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☐ House	☐ HVAC – House	☒ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work:

ROYAL PINE HOMES–PROJECT:VALES OF HUMBER NORTH–MODEL: 4504-FLANKAGE-COR-ELEV.C–2ND FLOOR-OPTION 5 BEDROOM-NOT LOT SPECIFIC REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK LUMBER INC. (SEE DWG **#TAM19619-21** DATED **9-01-21**). SUPPORTING STRUCTURE (S) TO BE REVIEWED AND VERIFED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS (print name) declare that (choose one as appropriate):

☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

Date 9 01 21 Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19619-21S
DWG #TAM19646-21S

9 01 21

NORDIC STRUCTURES	COMPANY July 19, 2021 13:12	PROJECT J10 1ST FLOOR.wwb

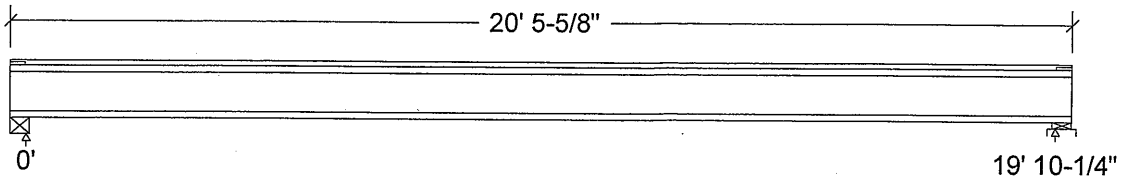
Design Check Calculation Sheet

Nordic Sizer – Canada 8.0

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start	End	Magnitude Start	End	Unit
Load1	Dead	Full Area				20.00		psf
Load2	Live	Full Area				40.00		psf

Maximum Reactions (lbs) and Support Bearing (in):



Unfactored:			
Dead	199		199
Live	397		397
Factored:			
Total	844		844
Bearing:			
Capacity			
Joist	2336		2336
Support	9686		10841
Des ratio			
Joist	0.36		0.36
Support	0.09		0.08
Load case	#2		#2
Length	4-1/2		4-3/8
Min req'd	1-1/2		1-1/2
Stiffener	No		No
KD	1.00		1.00
KB support	1.00		1.00
fcp sup	769		769
Kzcp sup	1.00		1.15

*Minimum bearing length for joists is 1-1/2" for exterior supports

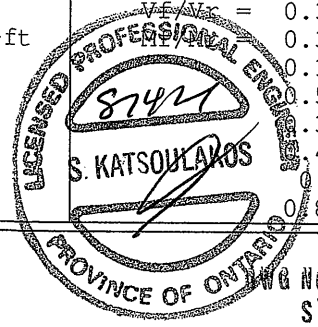
Nordic Joist 11-7/8" NI-80 Floor joist @ 12" o.c.

Supports: 1 - Lumber Beam, No.1/No.2; 2 - Lumber Sill plate, No.1/No.2;
Total length: 20' 5-5/8"; Clear span: 19' 8-3/4"; 3/4" nailed and glued OSB sheathing

This section PASSES the design code check.

Limit States Design using CSA O86-14 and Vibration Criterion:

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 844	Vr = 2336	lbs	Vf/Vr = 0.36
Moment(+)	Mf = 4188	Mr = 11609	lbs-ft	0.36
Perm. Defl'n	0.13 = < L/999	0.66 = L/360	in	0.19
Live Defl'n	0.25 = L/937	0.50 = L/480	in	0.51
Total Defl'n	0.38 = L/624	0.99 = L/240	in	0.38
Bare Defl'n	0.29 = L/819	0.66 = L/360	in	0.44
Vibration	Lmax = 19'-10.2	Lv = 21'-2.7	ft	0.94
Defl'n	= 0.027	= 0.032	in	0.85



pg 1/2

DWG NO. TAM17878-21
STRUCTURAL
COMPONENT ONLY

Additional Data:

FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#
Vr	2336	1.00	1.00	-	-	-	-	-	#2
Mr+	11609	1.00	1.00	-	1.000	-	-	-	#2
EI	547.1 million		-	-	-	-	-	-	#2

CRITICAL LOAD COMBINATIONS:

```
Shear     : LC #2  = 1.25D + 1.5L
Moment(+) : LC #2  = 1.25D + 1.5L
Deflection: LC #1  = 1.0D  (permanent)
            LC #2  = 1.0D + 1.0L  (live)
            LC #2  = 1.0D + 1.0L  (total)
            LC #2  = 1.0D + 1.0L  (bare joist)
Bearing   : Support 1 - LC #2 = 1.25D + 1.5L
            Support 2 - LC #2 = 1.25D + 1.5L
Load Types:  D=dead  L=live(use,occupancy)
Load Patterns: s=S/2  L=L+Ls  _=no pattern load in this span
All Load Combinations (LCs) are listed in the Analysis output
```

CALCULATIONS:

```
EIeff = 625.37 lb-in^2  K =  6.18e06 lbs  GA = 0.77e06 lb
"Live" deflection is due to all non-dead loads (live, wind, snow...)
```

CONFORMS TO OBC 2012
AMENDED 2020

Design Notes:

1. WoodWorks analysis and design are in accordance with the 2015 National Building Code of Canada (NBC), Division B, Part 4, and the CSA O86-14 Engineering Design in Wood standard, Update No. 2 (June 2017).
2. Please verify that the default deflection limits are appropriate for your application.
3. Refer to Nordic Structures technical documentation for installation guidelines and construction details.
4. Nordic I-joists are listed in CCMC evaluation report 13032-R.
5. Joists shall be laterally supported at supports and continuously along the compression edge.
6. Allowable vibration-controlled span as per the Concluding Report, Development of Design Procedures for Vibration Controlled Spans using Engineered Wood Members, CWC et al for CCMC, 1997.
7. Floor vibration design from the CCMC Concluding Report (1997) on vibration controlled spans for engineered wood products.
8. The design assumptions and specifications have been provided by the client. Any damages resulting from faulty or incorrect information, specifications, and/or designs furnished, and the correctness or accuracy of this information is their responsibility. This analysis does not constitute a record of the structural integrity of the building nor suitability of the design assumptions made. Nordic Structures is responsible only for the structural adequacy of this component based on the design criteria and loadings shown.

DWG NO. TAM18B7B21
STRUCTURAL
COMPONENT ONLY

NORDIC STRUCTURES	COMPANY July 19, 2021 13:13	PROJECT J4 2ND FLOOR.wwb

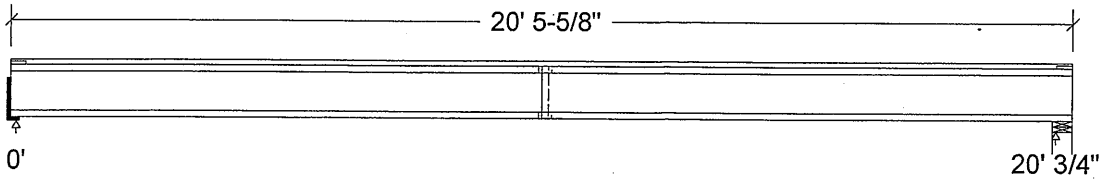
Design Check Calculation Sheet

Nordic Sizer – Canada 8.0

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start	End	Magnitude Start	End	Unit
Load1	Dead	Full Area				20.00		psf
Load2	Live	Full Area				40.00		psf

Maximum Reactions (lbs) and Support Bearing (in):



Unfactored:			
Dead	201		201
Live	401		401
Factored:			
Total	853		853
Bearing:			
Capacity			
Joist	2154		2336
Support	-		10841
Des ratio			
Joist	0.40		0.37
Support	-		0.08
Load case	#2		#2
Length	2		4-3/8
Min req'd	1-1/2		1-1/2
Stiffener	No		No
KD	1.00		1.00
KB support	-		-
fcp sup	-		769
Kzcp sup	-		-

*Minimum bearing length for joists is 1-1/2" for exterior supports
Bearing for wall supports is perpendicular-to-grain bearing on top plate. No stud design included.

Nordic Joist 11-7/8" NI-80 Floor joist @ 12" o.c.

Supports: 1 - Hanger; 2 - Lumber Wall, No.1/No.2;

Total length: 20' 5-5/8"; Clear span: 19' 11-1/4"; 5/8" nailed and glued OSB sheathing with 1 row of blocking and 1/2" gypsum ceiling

This section PASSES the design code check.

DWG NO. TAM 1787721
STRUCTURAL
COMPONENT ONLY

P6 of 6

Limit States Design using CSA O86-14 and Vibration Criterion:

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 853	Vr = 2336	lbs	Vf/Vr = 0.37
Moment(+)	Mf = 4276	Mr = 11609	lbs-ft	Mf/Mr = 0.37
Perm. Defl'n	0.13 = < L/999	0.67 = L/360	in	0.20
Live Defl'n	0.27 = L/895	0.50 = L/480	in	0.54
Total Defl'n	0.40 = L/596	1.00 = L/240	in	0.40
Bare Defl'n	0.30 = L/798	0.67 = L/360	in	0.45
Vibration	Lmax = 20'-0.7	Lv = 23'-5.6	ft	0.85
Defl'n	= 0.023	= 0.032	in	0.71

Additional Data:

FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#
Vr	2336	1.00	1.00	-	-	-	-	-	#2
Mr+	11609	1.00	1.00	-	1.000	-	-	-	#2
EI	547.1 million		-	-	-	-	-	-	#2

CRITICAL LOAD COMBINATIONS:

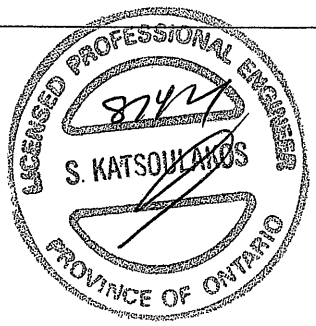
Shear : LC #2 = 1.25D + 1.5L
Moment(+) : LC #2 = 1.25D + 1.5L
Deflection: LC #1 = 1.0D (permanent)
LC #2 = 1.0D + 1.0L (live)
LC #2 = 1.0D + 1.0L (total)
LC #2 = 1.0D + 1.0L (bare joist)
Bearing : Support 1 - LC #2 = 1.25D + 1.5L
Support 2 - LC #2 = 1.25D + 1.5L
Load Types: D=dead L=live(use,occupancy)
Load Patterns: s=S/2 L=L+Ls _=no pattern load in this span
All Load Combinations (LCs) are listed in the Analysis output

CALCULATIONS:

EIeff = 613.27 lb-in^2 K = 6.18e06 lbs GA = 0.77e06 lb
"Live" deflection is due to all non-dead loads (live, wind, snow...) CONFORMS TO OBC 2012 AMENDED 2020

Design Notes:

1. WoodWorks analysis and design are in accordance with the 2015 National Building Code of Canada (NBC), Division B, Part 4, and the CSA O86-14 Engineering Design in Wood standard, Update No. 2 (June 2017).
2. Please verify that the default deflection limits are appropriate for your application.
3. Refer to Nordic Structures technical documentation for installation guidelines and construction details.
4. Nordic I-joists are listed in CCMC evaluation report 13032-R.
5. Joists shall be laterally supported at supports and continuously along the compression edge.
6. Allowable vibration-controlled span as per the Concluding Report, Development of Design Procedures for Vibration Controlled Spans using Engineered Wood Members, CWC et al for CCMC, 1997.
7. Floor vibration design from the CCMC Concluding Report (1997) on vibration controlled spans for engineered wood products.
8. The design assumptions and specifications have been provided by the client. Any damages resulting from faulty or incorrect information, specifications, and/or designs furnished, and the correctness or accuracy of this information is their responsibility. This analysis does not constitute a record of the structural integrity of the building nor suitability of the design assumptions made. Nordic Structures is responsible only for the structural adequacy of this component based on the design criteria and loadings shown.



DWG NO. TAM/7082921
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

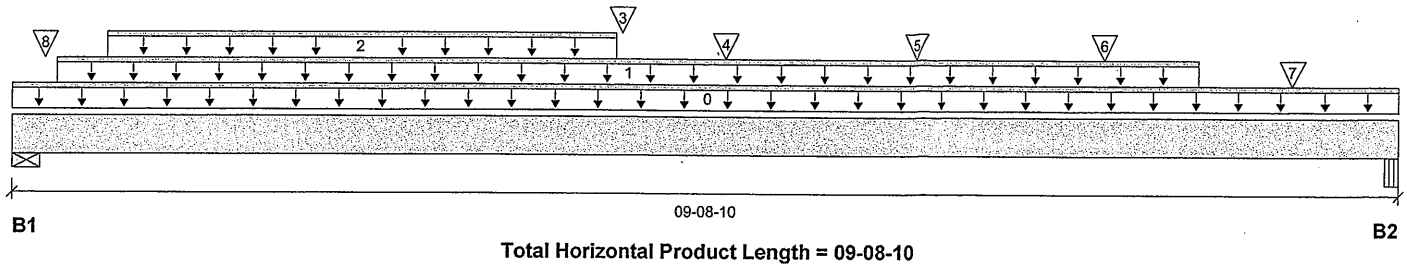
1ST FLR FRAMING\Flush Beams\B1(i1750) (Flush Beam)

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

Dry | 1 span | No cant.

July 19, 2021 13:22:29

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B1(i1750)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 09-08-10

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	4292 / 0	2861 / 0		
B2, 5-1/4"	2271 / 0	1305 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-08-10	Top		12			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-03-12	08-03-12	Top	341	170			n\a
2	WALL	Unf. Lin. (lb/ft)	L	00-08-00	04-02-10	Top	240	120			n\a
3	B6(i1368)	Conc. Pt. (lbs)	L	04-03-02	04-03-02	Top		291			n\a
4	J6(i1314)	Conc. Pt. (lbs)	L	04-11-12	04-11-12	Top	171	85			n\a
5	J6(i1306)	Conc. Pt. (lbs)	L	06-03-12	06-03-12	Top	217	109			n\a
6	J6(i1306)	Conc. Pt. (lbs)	L	07-07-12	07-07-12	Top	217	109			n\a
7	-	Conc. Pt. (lbs)	L	08-11-12	08-11-12	Top	463	232			n\a
8	6(i1175)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Top	1840	1431			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	12151 ft-lbs	35392 ft-lbs	34.3%	1	04-11-12
End Shear	4983 lbs	14464 lbs	34.4%	1	01-05-06
Total Load Deflection	L/851 (0.126")	n\a	28.2%	4	04-09-09
Live Load Deflection	L/999 (0.078")	n\a	n\a	5	04-09-09
Max Defl.	0.126"	n\a	n\a	4	04-09-09
Span / Depth	9.0				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	10015 lbs	84.6%	42.6%	Spruce-Pine-Fir
B2	Beam	5-1/4" x 3-1/2"	5038 lbs	51.3%	22.5%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17880-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B1(i1750) (Flush Beam)

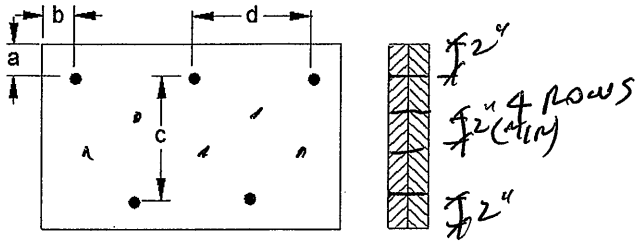
BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B1(i1750)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Calculated Side Load = 970.5 lb/ft
Connectors are: 1 Row Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17880-21
STRUCTURAL
COMPONENT ONLY

Disclosure

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

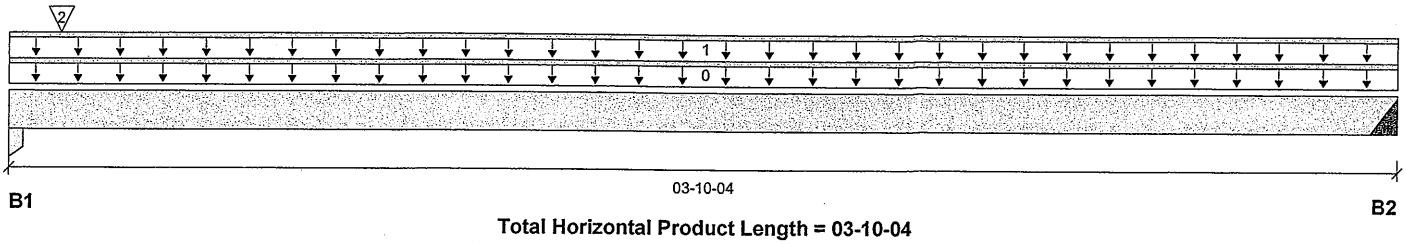
PASSED

1ST FLR FRAMING\Flush Beams\B2(i1535) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 13:22:29

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B2(i1535)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 03-10-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4-1/2"	2373 / 0	1698 / 0		
B2, 2"	17 / 0	20 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	03-10-04	Top		6			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	03-10-04	Top	10	5			n\a
2	5(i323)	Conc. Pt. (lbs)	L	00-01-12	00-01-12	Top	2354	1676			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	41 ft-lbs	17696 ft-lbs	0.2%	1	02-00-06
End Shear	19 lbs	7232 lbs	0.3%	1	01-04-06
Total Load Deflection	L/999 (0")	n\a	n\a	4	02-00-06
Live Load Deflection	L/999 (0")	n\a	n\a	5	02-00-06
Max Defl.	0"	n\a	n\a	4	02-00-06
Span / Depth	3.5				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	4-1/2" x 1-3/4"	5683 lbs	88.9%	59.1%	Unspecified
B2	Hanger	2" x 1-3/4"	51 lbs	n\a	1.2%	LS90

DWG NO. TAM17884-21
STRUCTURAL
COMPONENT ONLY

Cautions

Header for the hanger LS90 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model LS90 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
CONFORMS TO OBC 2012 AMENDED 2020
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 03-06-12.

Disclosure

Boise Cascade® ENGINEERED WOOD PRODUCTS

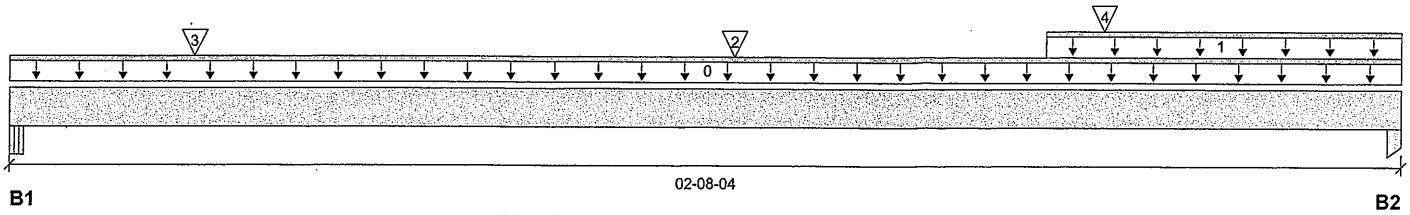
Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B4(i1422) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B4(i1422)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 02-08-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	1481 / 0	844 / 0		
B2, 2-1/4"	2603 / 0	1634 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	02-08-04	Top		12			00-00-00
1	5(i323)	Unf. Lin. (lb/ft)	L	02-00-00	02-08-04	Top		81			n\a
2	-	Conc. Pt. (lbs)	L	01-04-12	01-04-12	Top	1113	586			n\a
3	J10(i1657)	Conc. Pt. (lbs)	L	00-04-04	00-04-04	Top	403	201			n\a
4	-	Conc. Pt. (lbs)	L	02-01-06	02-01-06	Top	2548	1593			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2684 ft-lbs	35392 ft-lbs	7.6%	1	01-05-00
End Shear	2373 lbs	14464 lbs	16.4%	1	01-03-14
Total Load Deflection	L/999 (0.002")	n\a	n\a	4	01-05-13
Live Load Deflection	L/999 (0.001")	n\a	n\a	5	01-05-13
Max Defl.	0.002"	n\a	n\a	4	01-05-13
Span / Depth	2.3				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	4" x 3-1/2"	3278 lbs	43.8%	19.2%	Unspecified
B2	Column	2-1/4" x 3-1/2"	5948 lbs	93.1%	62.0%	Unspecified

Cautions

Concentrated side load(s) 4 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 00-08-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17882-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B4(i1422) (Flush Beam)

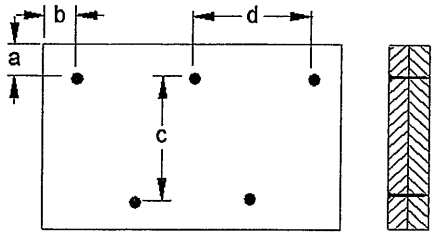
Dry | 1 span | No cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B4(i1422)
Specifier:
Designer: AJ
Company:

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = [redacted] 8"

Calculated Side Load = 427.9 lb/ft
Connectors are: 16d [redacted] Nails

3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
8744
S. KATSOULAROS
PROVINCE OF ONTARIO

DWG NO. TAM 20822 L
STRUCTURAL
COMPONENT ONLY

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Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

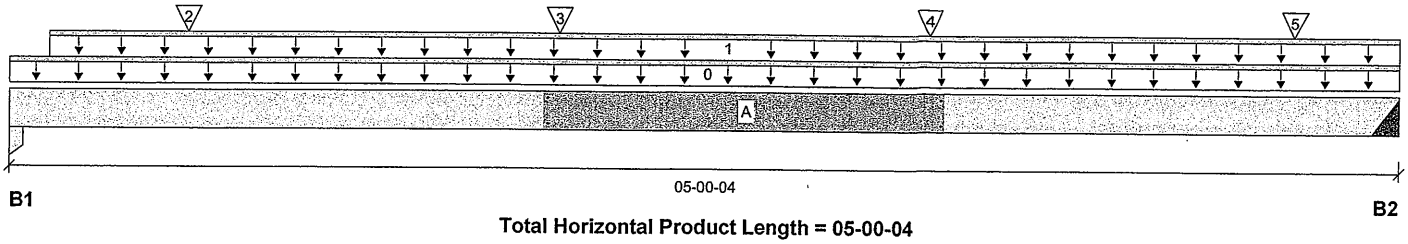
1ST FLR FRAMING\Flush Beams\B5(i1329) (Flush Beam)

Dry | 1 span | No cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B5(i1329)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 05-00-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 1-3/4"	633 / 0	346 / 0		
B2, 4"	743 / 0	402 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	05-00-04	Top		12			00-00-00
1	STAIR	Unf. Lin. (lb/ft)	L	00-01-12	05-00-04	Top	120	60			n\a
2	J6(i1314)	Conc. Pt. (lbs)	L	00-07-12	00-07-12	Top	179	90			n\a
3	J6(i1306)	Conc. Pt. (lbs)	L	01-11-12	01-11-12	Top	225	112			n\a
4	J6(i1352)	Conc. Pt. (lbs)	L	03-03-12	03-03-12	Top	225	112			n\a
5	J6(i1287)	Conc. Pt. (lbs)	L	04-07-12	04-07-12	Top	162	81			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1654 ft-lbs	35392 ft-lbs	4.7%	1	02-00-12
End Shear	923 lbs	14464 lbs	6.4%	1	01-01-10
Total Load Deflection	L/999 (0.005")	n\a	n\a	4	02-04-12
Live Load Deflection	L/999 (0.003")	n\a	n\a	5	02-04-12
Max Defl.	0.005"	n\a	n\a	4	02-04-12
Span / Depth	4.7				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	1-3/4" x 3-1/2"	1381 lbs	27.8%	18.5%	Unspecified
B2	Hanger	4" x 3-1/2"	1618 lbs	n\a	9.5%	HGUS410

Cautions

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
8744
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17033-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B5(i1329) (Flush Beam)

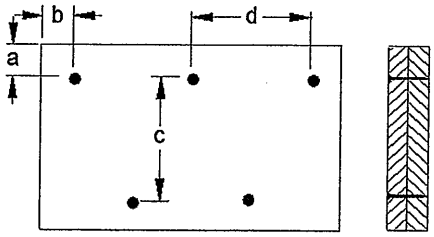
Dry | 1 span | No cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B5(i1329)
Specifier:
Designer: AJ
Company:

Connection Diagram: Full Length of Member

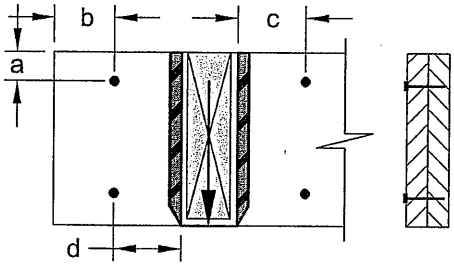


a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Calculated Side Load = 190.5 lb/ft
Connectors are: 1 on Nails
3½" ARDOX SPIRAL

Connection Diagrams: Concentrated Side Loads

Connection Tag: ~~A~~ Applies to load tag(s): 3+4



a minimum = 2"
b minimum = 4"
c minimum = 4"
d maximum = 12"
Connectors are: 1
Nails 3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17883-21
STRUCTURAL
COMPONENT ONLY

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

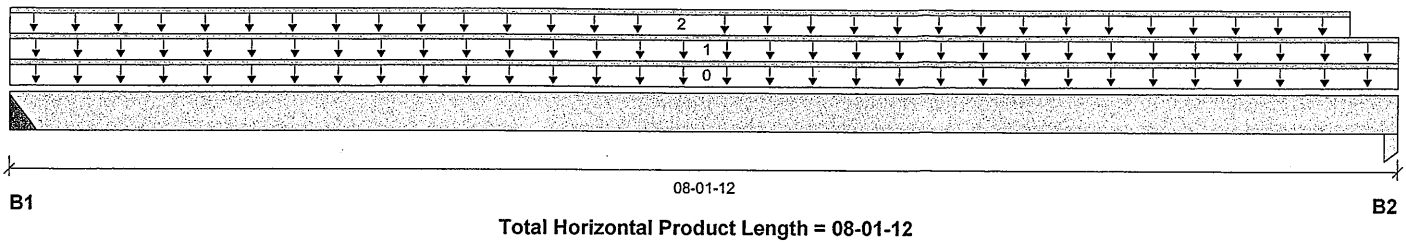
Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B6(i1368) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B6(i1368)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 08-01-12

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2"	63 / 0	296 / 0		
B2, 3-1/2"	65 / 0	288 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	08-01-12	Top		6			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	08-01-12	Top	16	8			n\a
2	WALL	Unf. Lin. (lb/ft)	L	00-00-00	07-10-04	Top		60			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	790 ft-lbs	11502 ft-lbs	6.9%	0	04-00-02
End Shear	295 lbs	4701 lbs	6.3%	0	01-01-14
Total Load Deflection	L/999 (0.015")	n\a	n\a	4	04-00-02
Live Load Deflection	L/999 (0.003")	n\a	n\a	5	04-00-02
Max Defl.	0.015"	n\a	n\a	4	04-00-02
Span / Depth	7.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	415 lbs	n\a	15.0%	HUS1.81/10
B2	Column	3-1/2" x 1-3/4"	404 lbs	12.5%	8.3%	Unspecified

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 19864 R1
STRUCTURAL
COMPONENT ONLY

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 07-10-04.

CONFORMS TO OBC 2012
AMENDED 2020

Disclosure

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Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

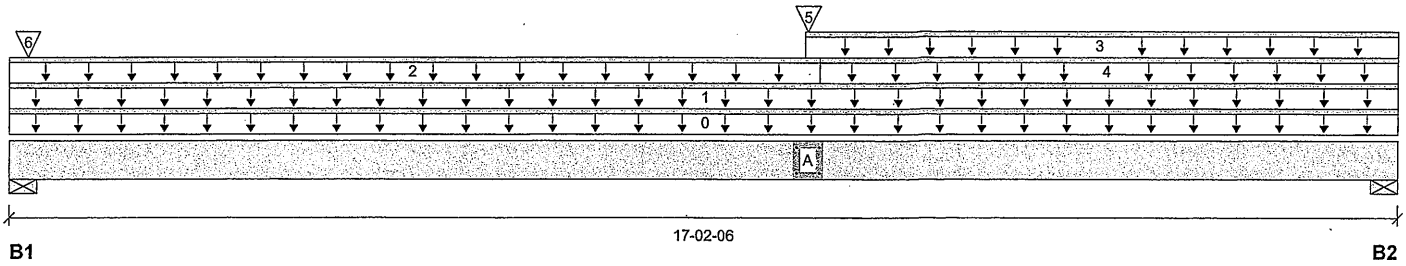
1ST FLR FRAMING\Flush Beams\B7(i1729) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B7(i1729)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 17-02-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	852 / 0	571 / 0		
B2, 4-3/8"	1313 / 0	782 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	17-02-06	Top		12			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	17-02-06	Top	20	10			n\a
2	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	10-00-00	Top	17	9			n\a
3	STAIR	Unf. Lin. (lb/ft)	L	09-09-13	17-02-06	Top	120	60			n\a
4	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	10-00-00	17-02-06	Top	6	3			n\a
5	B8(i1470)	Conc. Pt. (lbs)	L	09-10-04	09-10-04	Top	629	354			n\a
6	E1(i309)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Top	101	74			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	12025 ft-lbs	35392 ft-lbs	34.0%	1	09-10-04
End Shear	2508 lbs	14464 lbs	17.3%	1	15-10-02
Total Load Deflection	L/519 (0.382")	n\a	46.3%	4	09-00-06
Live Load Deflection	L/837 (0.237")	n\a	43.0%	5	09-00-06
Max Defl.	0.382"	n\a	n\a	4	09-00-06
Span / Depth	16.7				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	1992 lbs	16.8%	8.5%	Spruce-Pine-Fir
B2	Wall/Plate	4-3/8" x 3-1/2"	2947 lbs	31.3%	15.8%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 09-03-00.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

P6 4

DWG NO. TAM 17885-21
STRUCTURAL
COMPONENT ONLY

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

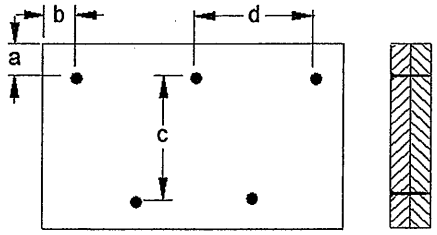
1ST FLR FRAMING\Flush Beams\B7(i1729) (Flush Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 13:22:29

Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B7(i1729)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member

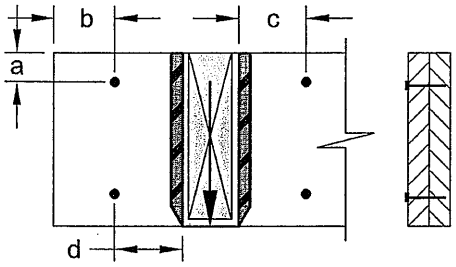


a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Connectors are: 1 Nails
3½" ARDOX SPIRAL

Connection Diagrams: Concentrated Side Loads

Connection Tag: A ~~Applies to load tag(s): 5~~



a minimum = 2"
b minimum = 4"
c minimum = 4"
d maximum = 12"
Connectors are: 16d 1 Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
8744
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM N665-21
STRUCTURAL
COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

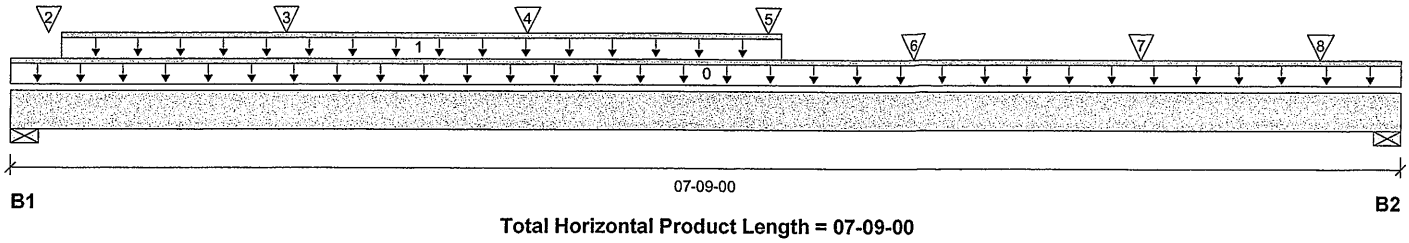
Triple 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Dropped Beams\B9 DR(i1554) (Dropped Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 13:22:29
Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Dropped Beams\B9 DR(i1554)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 07-09-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	1996 / 0	1140 / 0		
B2, 4"	2221 / 0	1429 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	07-09-00	Top		14			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-03-06	04-03-06	Top	402	201			n\a
2	J3(i1641)	Conc. Pt. (lbs)	L	00-02-08	00-02-08	Top	105	53			n\a
3	J3(i1576)	Conc. Pt. (lbs)	L	01-06-08	01-06-08	Top	98	49			n\a
4	J3(i1531)	Conc. Pt. (lbs)	L	02-10-08	02-10-08	Top	98	49			n\a
5	J3(i1476)	Conc. Pt. (lbs)	L	04-02-08	04-02-08	Top	82	41			n\a
6	-	Conc. Pt. (lbs)	L	05-00-02	05-00-02	Top	1345	893			n\a
7	J4(i1673)	Conc. Pt. (lbs)	L	06-03-10	06-03-10	Top	461	298			n\a
8	J4(i1687)	Conc. Pt. (lbs)	L	07-03-10	07-03-10	Top	411	267			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	8988 ft-lbs	36222 ft-lbs	24.8%	1	04-09-04
End Shear	4284 lbs	17356 lbs	24.7%	1	06-07-08
Total Load Deflection	L/999 (0.078")	n\a	n\a	4	03-11-15
Live Load Deflection	L/999 (0.049")	n\a	n\a	5	03-10-11
Max Defl.	0.078"	n\a	n\a	4	03-11-15
Span / Depth	9.1				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4" x 5-1/4"	4419 lbs	15.8%	17.2%	Spruce-Pine-Fir
B2	Wall/Plate	4" x 5-1/4"	5117 lbs	18.3%	20.0%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-11-12, Bottom: 07-09-00.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17886-21
STRUCTURAL
COMPONENT ONLY

Triple 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

PASSED

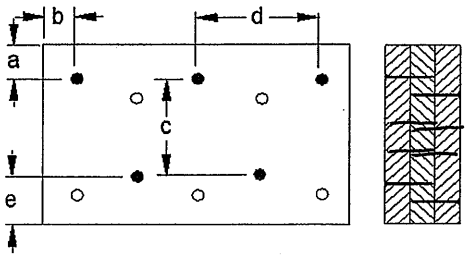
2ND FLR FRAMING\Dropped Beams\B9 DR(i1554) (Dropped Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 13:22:29

Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Dropped Beams\B9 DR(i1554)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



4 rows

a minimum = 1"
b minimum = 3"
c = 7-1/2"
d = 8"
e minimum = 2"

Nailing applies to both sides of the member
Connectors are: 1 Nails

3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
8144
PROVINCE OF ONTARIO

DWG NO. TAM 088621
STRUCTURAL
COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

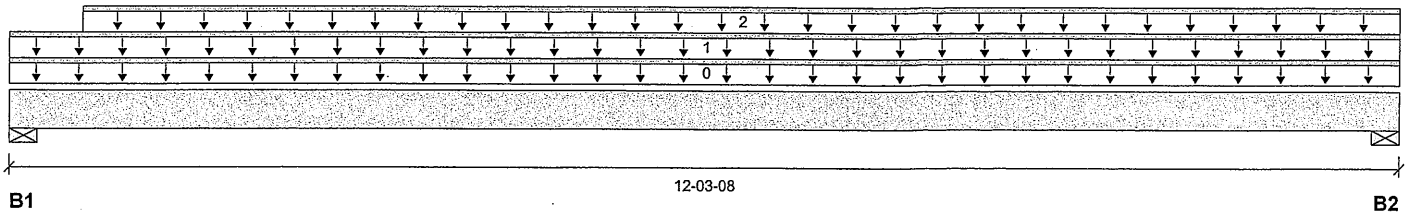
2ND FLR FRAMING\Flush Beams\B10(i1443) (Flush Beam)

Dry | 1 span | No cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B10(i1443)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 12-03-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4-3/8"	2373 / 0	1257 / 0		
B2, 5-1/8"	2801 / 0	1472 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	12-03-08	Top		12			00-00-00
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	12-03-08	Top	28	14			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	00-07-12	12-03-08	Top	415	207			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	15762 ft-lbs	35392 ft-lbs	44.5%	1	06-01-12
End Shear	4851 lbs	14464 lbs	33.5%	1	01-04-04
Total Load Deflection	L/505 (0.276")	n\a	47.5%	4	06-01-12
Live Load Deflection	L/771 (0.181")	n\a	46.7%	5	06-01-12
Max Defl.	0.276"	n\a	n\a	4	06-01-12
Span / Depth	11.7				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4-3/8" x 3-1/2"	5131 lbs	54.5%	27.5%	Spruce-Pine-Fir
B2	Wall/Plate	5-1/8" x 3-1/2"	6042 lbs	54.7%	27.6%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 00-08-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

P6 of 6

DWG NO. TAM17087-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

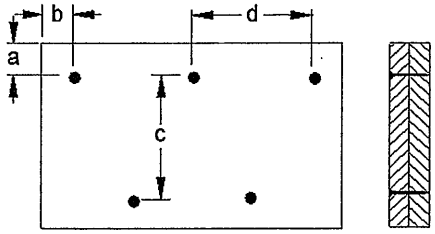
2ND FLR FRAMING\Flush Beams\B10(i1443) (Flush Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 13:22:29

Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B10(i1443)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



a minimum = 2" c = 7-7/8"
b minimum = 3" d = 8 4

Calculated Side Load = 855.8 lb/ft
Connectors are: 16d 1 Nails

3½" ARDOX SPIRAL

DWG NO. TAM NBBL-21
STRUCTURAL
COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

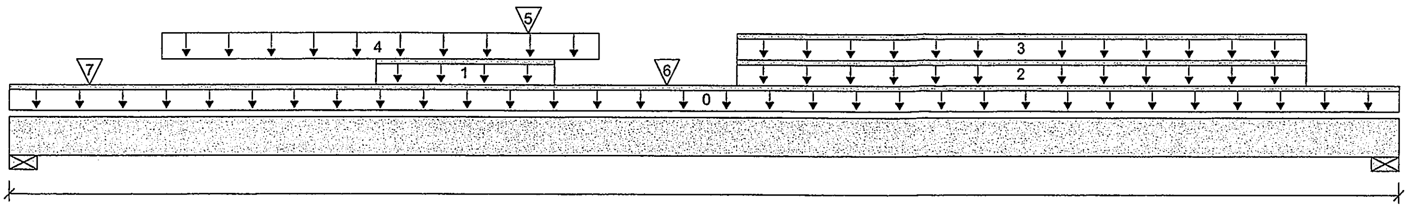
2ND FLR FRAMING\Flush Beams\B11(i1637) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B11(i1637)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 09-08-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 6"	2356 / 0	1659 / 0		
B2, 4-3/8"	2346 / 0	1396 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-08-06	Top		12			00-00-00
1	WALL	Unf. Lin. (lb/ft)	L	02-06-10	03-09-07	Top		30			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	05-00-10	09-00-10	Top	404	202			n\a
3	Smoothed Load	Unf. Lin. (lb/ft)	L	05-00-10	09-00-10	Top	184	92			n\a
4	Smoothed Load	Trapezoidal (lb/ft)	L	01-00-10		Top	401	274			n\a
					04-01-02		401	210			
5	B14(i1564)	Conc. Pt. (lbs)	L	03-07-04	03-07-04	Top	111	418			n\a
6	-	Conc. Pt. (lbs)	L	04-06-13	04-06-13	Top	596	299			n\a
7	J4(i1595)	Conc. Pt. (lbs)	L	00-06-10	00-06-10	Top	410	265			n\a

Controls Summary

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	12727 ft-lbs	35392 ft-lbs	36.0%	1	04-07-02
End Shear	4963 lbs	14464 lbs	34.3%	1	08-04-02
Total Load Deflection	L/807 (0.133")	n\a	29.7%	4	04-11-07
Live Load Deflection	L/999 (0.08")	n\a	n\a	5	04-11-07
Max Defl.	0.133"	n\a	n\a	4	04-11-07
Span / Depth	9.1				

Bearing Supports

Bearing Supports		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	6" x 3-1/2"	5608 lbs	43.4%	21.9%	Spruce-Pine-Fir
B2	Wall/Plate	4-3/8" x 3-1/2"	5263 lbs	55.9%	28.2%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 00-08-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

p6 ¼

DWG NO. TAM 17088-21
STRUCTURAL
COMPONENT ONLY

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

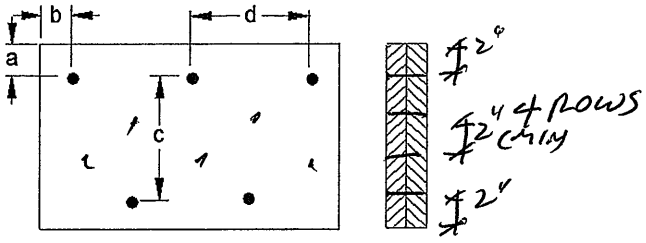
PASSED

2ND FLR FRAMING\Flush Beams\B11(i1637) (Flush Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 13:22:29
Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B11(i1637)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



a minimum = 2" c = 7-7/8"
b minimum = 3" d = 8"

Calculated Side Load = 934.0 lb/ft
Connectors are: 1 Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 18886-21
STRUCTURAL
COMPONENT ONLY

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

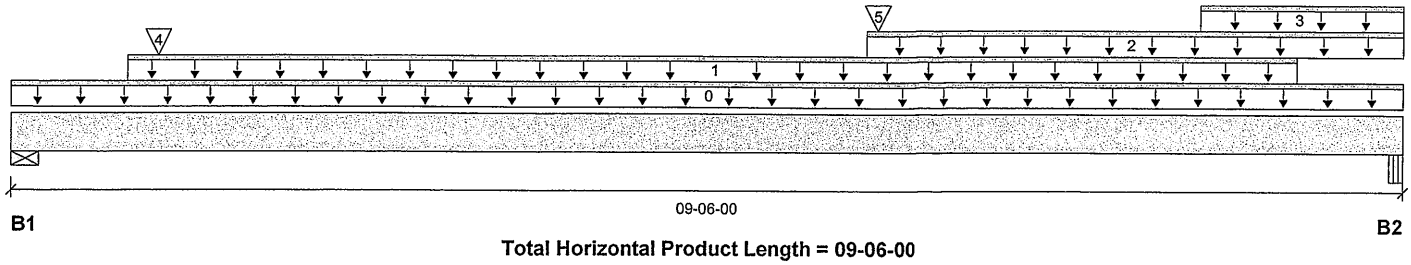
2ND FLR FRAMING\Flush Beams\B13(i1523) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B13(i1523)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 09-06-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	1626 / 0	1294 / 0		
B2, 2-1/4"	1576 / 0	884 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-06-00	Top		12			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-09-08	08-09-08	Top	339	169			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	05-09-12	09-06-00	Top	30	15			n\a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	08-01-08	09-06-00	Top	36	18			n\a
4	B15(i1417)	Conc. Pt. (lbs)	L	01-00-00	01-00-00	Top	126	509			n\a
5	B17(i1485)	Conc. Pt. (lbs)	L	05-10-10	05-10-10	Top	178	108			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	8678 ft-lbs	35392 ft-lbs	24.5%	1	05-05-08
End Shear	3649 lbs	14464 lbs	25.2%	1	01-05-06
Total Load Deflection	L/999 (0.091")	n\a	n\a	4	04-11-08
Live Load Deflection	L/999 (0.058")	n\a	n\a	5	04-11-08
Max Defl.	0.091"	n\a	n\a	4	04-11-08
Span / Depth	9.1				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	4056 lbs	34.3%	17.3%	Spruce-Pine-Fir
B2	Beam	2-1/4" x 3-1/2"	3469 lbs	71.6%	36.1%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENCED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

P6 4/4

DWG NO. TAM17089-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B13(i1523) (Flush Beam)

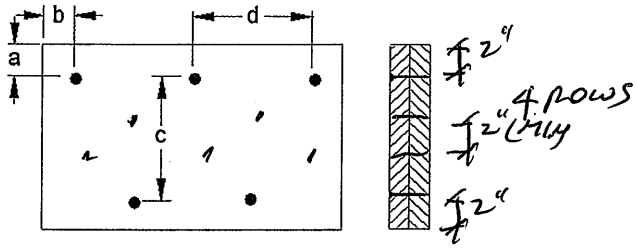
BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B13(i1523)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Calculated Side Load = 974.8 lb/ft
Connectors are: 1 Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAROS
PROVINCE OF ONTARIO

BWB NO. TAM N8892

STRUCTURAL COMPONENT ONLY

Disclosure

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

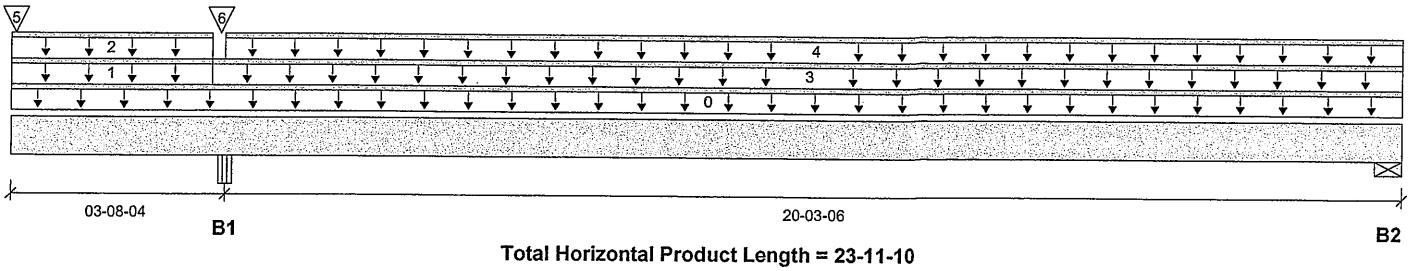
2ND FLR FRAMING\Flush Beams\B16(i1506) (Flush Beam)

Dry | 2 spans | L cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 2ND FLR FRAMING\Flush Beams\B16(i1506)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 23-11-10

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/4"	1090 / 0	765 / 0		
B2, 4-3/8"	315 / 85	231 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	23-11-10	Top		12			00-00-00
1	User Load	Unf. Lin. (lb/ft)	L	00-00-00	03-05-10	Top	120	60			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	03-05-10	Top	20	10			n\a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	03-05-10	23-11-10	Top	25	12			n\a
4	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	03-08-04	23-11-10	Top	6	3			n\a
5	B17(i1485)	Conc. Pt. (lbs)	L	00-00-14	00-00-14	Top	208	123			n\a
6	WALL	Conc. Pt. (lbs)	L	03-07-06	03-07-06	Top		29			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	3397 ft-lbs	35392 ft-lbs	9.6%	3	14-05-06
Neg. Moment	-3803 ft-lbs	-20124 ft-lbs	18.9%	1	03-08-04
End Shear	653 lbs	14464 lbs	4.5%	3	22-07-06
Cont. Shear	1240 lbs	14464 lbs	8.6%	1	02-05-12
Total Load Deflection	L/1420 (0.169")	n\a	16.9%	10	13-10-13
Live Load Deflection	L/999 (0.112")	n\a	n\a	13	13-07-07
Total Neg. Defl.	2xL/1998 (-0.075")	n\a	n\a	10	00-00-00
Max Defl.	0.169"	n\a	n\a	10	13-10-13
Span / Depth	20.2				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 3-1/2"	2591 lbs	11.6%	11.6%	VL 2.0 3100 SP
B2	Wall/Plate	4-3/8" x 3-1/2"	762 lbs	8.1%	4.1%	Spruce-Pine-Fir

p6 44

DWG NO. TAM 1890-21
STRUCTURAL
COMPONENT ONLY

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B16(i1506) (Flush Beam)

Dry | 2 spans | L cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773

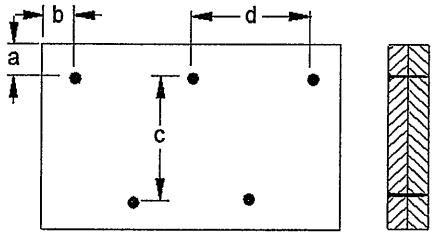
Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B16(i1506)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.
Calculations assume unbraced length of Top: 00-00-00, Bottom: 09-10-11.

CONFORMS TO OBC 2012
AMENDED 2020

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8'

Calculated Side Load = 232.9 lb/ft
Connectors are: 1 Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM17892
STRUCTURAL
COMPONENT ONLY

Disclosure

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

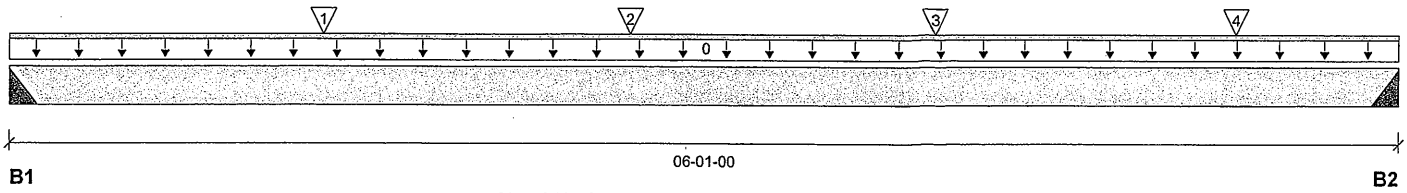
2ND FLR FRAMING\Flush Beams\B17(i1485) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B17(i1485)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 06-01-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2"	178 / 0	108 / 0		
B2, 2"	208 / 0	123 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	06-01-00	Top		6			00-00-00
1	J3(i1641)	Conc. Pt. (lbs)	L	01-04-08	01-04-08	Top	105	53			n\a
2	J3(i1576)	Conc. Pt. (lbs)	L	02-08-08	02-08-08	Top	98	49			n\a
3	J3(i1531)	Conc. Pt. (lbs)	L	04-00-08	04-00-08	Top	98	49			n\a
4	J3(i1476)	Conc. Pt. (lbs)	L	05-04-08	05-04-08	Top	85	43			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	719 ft-lbs	17696 ft-lbs	4.1%	1	02-08-08
End Shear	393 lbs	7232 lbs	5.4%	1	01-01-14
Total Load Deflection	L/999 (0.006")	n\a	n\a	4	03-00-08
Live Load Deflection	L/999 (0.004")	n\a	n\a	5	03-00-08
Max Defl.	0.006"	n\a	n\a	4	03-00-08
Span / Depth	5.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	401 lbs	n\a	9.4%	HUS1.81/10
B2	Hanger	2" x 1-3/4"	466 lbs	n\a	10.9%	LS90

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Header for the hanger LS90 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model LS90 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

OVD

LICENSED PROFESSIONAL ENGINEER
8244
S. KATSOULAKOS
PROVINCE OF ONTARIO

P6 6

DWG NO. TAM 17891-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B17(i1485) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B17(i1485)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-03-04.

CONFORMS TO OBC 2012
AMENDED 2020

DWG NO. TAM 1891-21
STRUCTURAL
COMPONENT ONLY

Disclosure

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Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

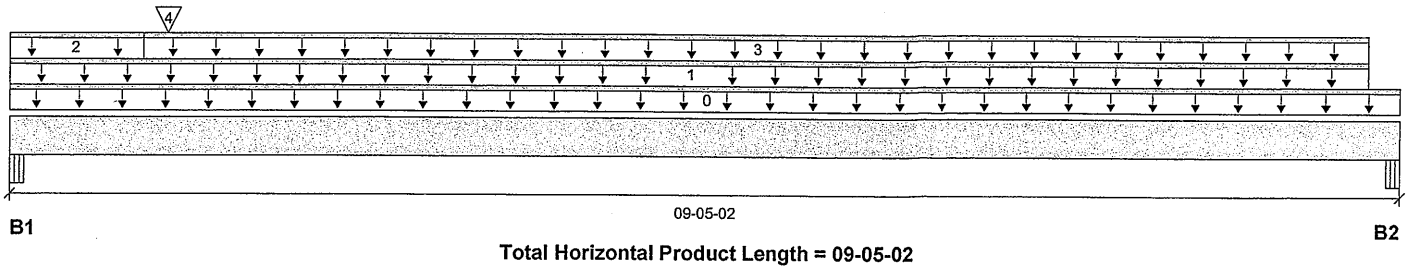
PASSED

2ND FLR FRAMING\Flush Beams\B18(i1747) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 13:22:29

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 2ND FLR FRAMING\Flush Beams\B18(i1747)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 09-05-02

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4-1/8"	596 / 0	1040 / 0	524 / 0	
B2, 5-1/4"	168 / 0	204 / 0	53 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-05-02	Top		12			00-00-00
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	09-02-08	Top	6	3			n\a
2	E14(i1161)	Unf. Lin. (lb/ft)	L	00-00-00	00-10-14	Top		81			n\a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-10-14	09-02-08	Top	21	10			n\a
4	-	Conc. Pt. (lbs)	L	01-00-14	01-00-14	Top	532	942	577		n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2075 ft-lbs	35392 ft-lbs	5.9%	1	01-05-04
End Shear	1964 lbs	14464 lbs	13.6%	1	01-04-00
Total Load Deflection	L/999 (0.021")	n\a	n\a	35	04-03-00
Live Load Deflection	L/999 (0.011")	n\a	n\a	51	04-03-00
Max Defl.	0.021"	n\a	n\a	35	04-03-00
Span / Depth	8.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	4-1/8" x 3-1/2"	2719 lbs	35.3%	15.4%	Unspecified
B2	Beam	5-1/4" x 3-1/2"	560 lbs	5.7%	2.5%	Unspecified

Cautions

Concentrated side load(s) 5 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

OKS

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

P6 44

DWG NO. TAM 1089-21
STRUCTURAL
COMPONENT ONLY

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B18(i1747) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 13:22:29

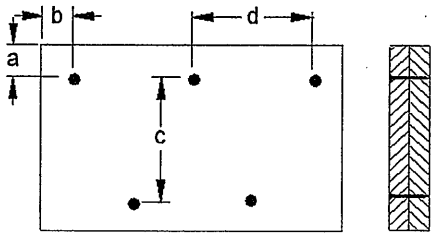
Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B18(i1747)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Unbalanced snow loads determined from building geometry were used in selected product's verification.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 07-09-08.

CONFORMS TO OBC 2012
AMENDED 2020

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Connectors are: [illegible] Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

BWG NO. TAM 178421
STRUCTURAL
COMPONENT ONLY

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Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

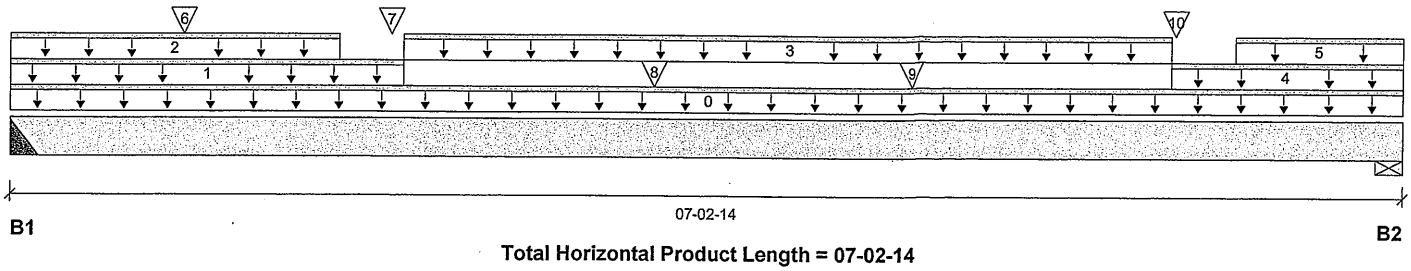
2ND FLR FRAMING\Flush Beams\B19(i1739) (Flush Beam)

Dry | 1 span | No cant.

July 19, 2021 13:22:29

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 2ND FLR FRAMING\Flush Beams\B19(i1739)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 07-02-14

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	544 / 0	756 / 0	282 / 0	
B2, 4-3/8"	502 / 0	735 / 0	282 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	07-02-14	Top		12			00-00-00
1	E15(i1159)	Unf. Lin. (lb/ft)	L	00-00-00	02-00-08	Top		81			n\a
2	E15(i1159)	Unf. Lin. (lb/ft)	L	00-00-00	01-08-08	Top		42	78		n\a
3	E16(i1162)	Unf. Lin. (lb/ft)	L	02-00-08	06-00-08	Top		61			n\a
4	E17(i1163)	Unf. Lin. (lb/ft)	L	06-00-08	07-02-14	Top		81			n\a
5	E17(i1163)	Unf. Lin. (lb/ft)	L	06-04-08	07-02-14	Top		42	78		n\a
6	J2(i1736)	Conc. Pt. (lbs)	L	00-10-12	00-10-12	Top	181	91			n\a
7	-	Conc. Pt. (lbs)	L	01-11-12	01-11-12	Top	206	237	184		n\a
8	J2(i1586)	Conc. Pt. (lbs)	L	03-04-00	03-04-00	Top	225	113			n\a
9	J2(i1586)	Conc. Pt. (lbs)	L	04-08-00	04-08-00	Top	225	113			n\a
10	-	Conc. Pt. (lbs)	L	06-00-12	06-00-12	Top	209	236	180		n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	3082 ft-lbs	35392 ft-lbs	8.7%	1	03-04-00
End Shear	1714 lbs	14464 lbs	11.9%	1	05-10-10
Total Load Deflection	L/999 (0.019")	n\a	n\a	35	03-07-00
Live Load Deflection	L/999 (0.01")	n\a	n\a	51	03-07-00
Max Defl.	0.019"	n\a	n\a	35	03-07-00
Span / Depth	6.7				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	2043 lbs	n\a	12.0%	HGUS410
B2	Wall/Plate	4-3/8" x 3-1/2"	1954 lbs	20.7%	10.5%	Spruce-Pine-Fir

Cautions

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

LICENSED PROFESSIONAL ENGINEER
8244
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17093-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B19(i1739) (Flush Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 13:22:29
Build 7773

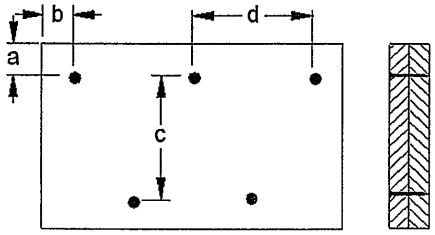
Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B19(i1739)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Unbalanced snow loads determined from building geometry were used in selected product's verification.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

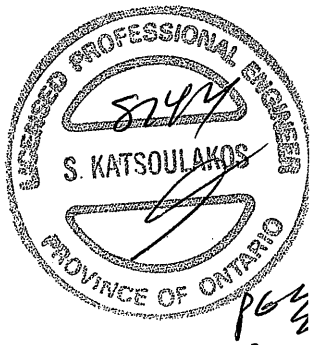
CONFORMS TO OBC 2012
AMENDED 2020

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Calculated Side Load = 478.8 lb/ft
Connectors are: 1 Nails
3½" ARDOX SPIRAL



DWG NO. TAM 1893-21
STRUCTURAL COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Dropped Beams\B9A DR(i3067) (Dropped Beam)

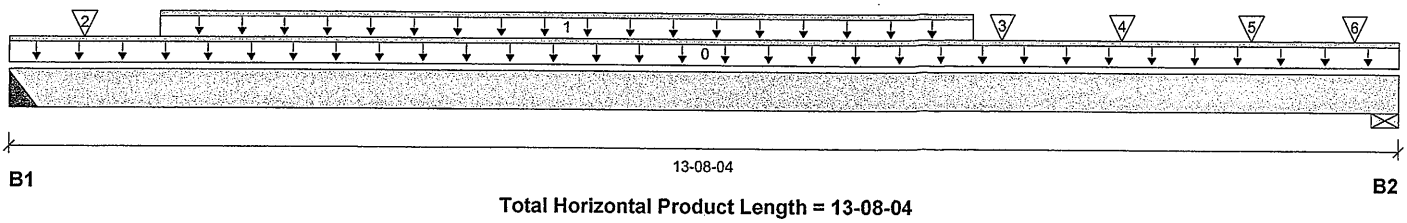
BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 15:30:10

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A OPT..mmdl
Description: 2ND FLR FRAMING\Dropped Beams\B9A DR(i3067)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 13-08-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	3383 / 0	1873 / 0		
B2, 4"	4273 / 0	2615 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	13-08-04	Top		18			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	01-05-12	09-05-12	Top	477	238			n\a
2	-	Conc. Pt. (lbs)	L	00-08-13	00-08-13	Top	477	238			n\a
3	-	Conc. Pt. (lbs)	L	09-09-04	09-09-04	Top	483	200			n\a
4	-	Conc. Pt. (lbs)	L	10-11-09	10-11-09	Top	2001	1287			n\a
5	J5(i3104)	Conc. Pt. (lbs)	L	12-02-14	12-02-14	Top	461	298			n\a
6	J5(i3112)	Conc. Pt. (lbs)	L	13-02-14	13-02-14	Top	411	267			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	26475 ft-lbs	55211 ft-lbs	48.0%	1	07-08-10
End Shear	8809 lbs	21696 lbs	40.6%	1	12-04-06
Total Load Deflection	L/390 (0.404")	n\a	61.5%	4	07-01-03
Live Load Deflection	L/612 (0.258")	n\a	58.8%	5	07-01-03
Max Defl.	0.404"	n\a	n\a	4	07-01-03
Span / Depth	13.3				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 5-1/4"	7415 lbs	n\a	28.9%	HGUS5.5/11.88
B2	Wall/Plate	4" x 5-1/4"	9679 lbs	34.5%	37.8%	Spruce-Pine-Fir

Cautions

Header for the hanger HGUS5.5/11.88 is a Triple 1-3/4" x 14" LVL Beam.
Hanger model HGUS5.5/11.88 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-11-12, Bottom: 13-08-04.

CONFORMS TO OBC 2012
AMENDED 2020

REGISTERED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM17894-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

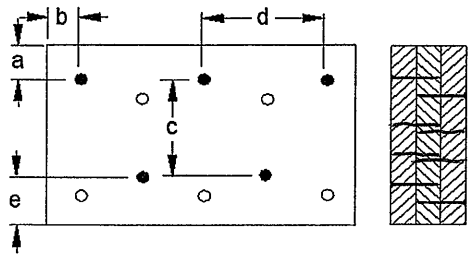
2ND FLR FRAMING\Dropped Beams\B9A DR(i3067) (Dropped Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 15:30:10

Build 7773

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Dropped Beams\B9A DR(i3067)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



4 ROWS

a minimum = 2"
b minimum = 3"
c = 8-7/8" 4
d = 8"
e minimum = 2"

Nailing applies to both sides of the member
Connectors are: 1 Nails

3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEERS
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 0094-21
STRUCTURAL COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

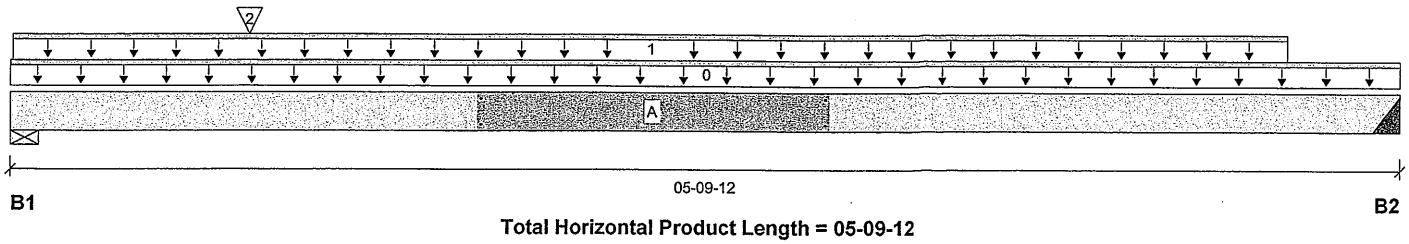
2ND FLR FRAMING\Flush Beams\B13A(i2540) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 15:30:10

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B13A(i2540)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 05-09-12

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	1130 / 0	994 / 0		
B2, 4"	822 / 0	497 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	05-09-12	Top		12			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-00-02	05-04-02	Top	340	170			n\a
2	B15(i2541)	Conc. Pt. (lbs)	L	01-00-00	01-00-00	Top	123	507			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2750 ft-lbs	35392 ft-lbs	7.8%	1	03-04-02
End Shear	1792 lbs	14464 lbs	12.4%	1	01-05-06
Total Load Deflection	L/999 (0.01")	n\a	n\a	4	02-11-02
Live Load Deflection	L/999 (0.006")	n\a	n\a	5	02-11-02
Max Defl.	0.01"	n\a	n\a	4	02-11-02
Span / Depth	5.2				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	2937 lbs	24.8%	12.5%	Spruce-Pine-Fir
B2	Hanger	4" x 3-1/2"	1855 lbs	n\a	10.9%	HGUS410

Cautions

Header for the hanger HGUS410 is a Single 1-3/4" x 11-7/8" LVL Beam.
Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.
Concentrated side load(s) 5 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

OKG

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULEAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 1095-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B13A(i2540) (Flush Beam)

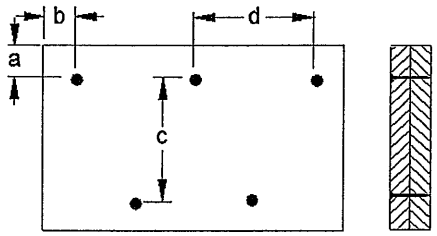
Dry | 1 span | No cant.

BC CALC® Member Report
Build 7773

July 19, 2021 15:30:10

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B13A(i2540)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member

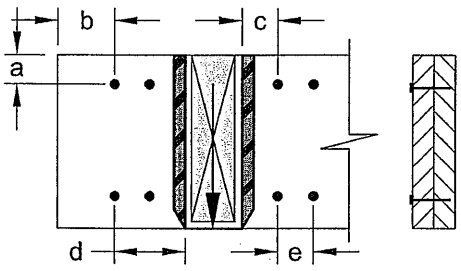


a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Calculated Side Load = 480.3 lb/ft
Connectors are: 1 Nails
3½" ARDOX SPIRAL

Connection Diagrams: Concentrated Side Loads

Connection Tag: A Applies to load tag(s): 7+8



a minimum = 2"
b minimum = 4"
c minimum = 4"
d maximum = 12"
e minimum = 4"
Connectors are: 1
Nails
3½" ARDOX SPIRAL

DWG NO. TAM 17088-21
STRUCTURAL
COMPONENT ONLY

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

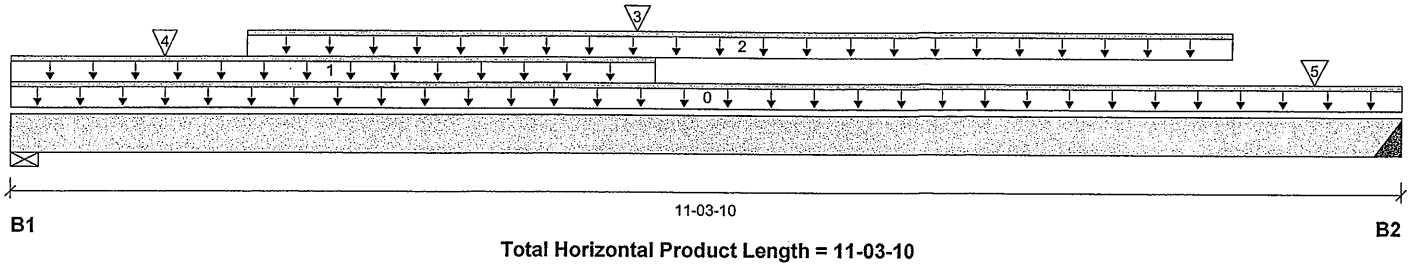
PASSED

2ND FLR FRAMING\Flush Beams\B17A(i3028) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 15:30:10

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A OPT..mmdl
Description: 2ND FLR FRAMING\Flush Beams\B17A(i3028)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 11-03-10

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	917 / 0	546 / 0		
B2, 2"	754 / 0	451 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	11-03-10	Top		6			00-00-00
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	05-02-10	Top	24	12			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	01-11-02	09-11-02	Top	73	36			n\a
3	B13A(i2540)	Conc. Pt. (lbs)	L	05-00-14	05-00-14	Top	789	490			n\a
4	J4(i3054)	Conc. Pt. (lbs)	L	01-03-02	01-03-02	Top	81	40			n\a
5	J4(i3022)	Conc. Pt. (lbs)	L	10-07-02	10-07-02	Top	85	43			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	7411 ft-lbs	17696 ft-lbs	41.9%	1	05-00-14
End Shear	1934 lbs	7232 lbs	26.7%	1	01-05-06
Total Load Deflection	L/658 (0.197")	n\a	36.5%	4	05-07-02
Live Load Deflection	L/999 (0.123")	n\a	n\a	5	05-07-02
Max Defl.	0.197"	n\a	n\a	4	05-07-02
Span / Depth	10.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 1-3/4"	2059 lbs	34.8%	17.5%	Spruce-Pine-Fir
B2	Hanger	2" x 1-3/4"	1695 lbs	n\a	39.7%	LS90

Cautions

Header for the hanger LS90 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model LS90 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 1789621
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B17A(i3028) (Flush Beam)

Dry | 1 span | No cant.

July 19, 2021 15:30:10

BC CALC® Member Report
Build 7773

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B17A(i3028)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

DWG NO. TAM 1789621
STRUCTURAL
COMPONENT ONLY

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Triple 1-3/4" x 14" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B24A DR(i3077) (Flush Beam)

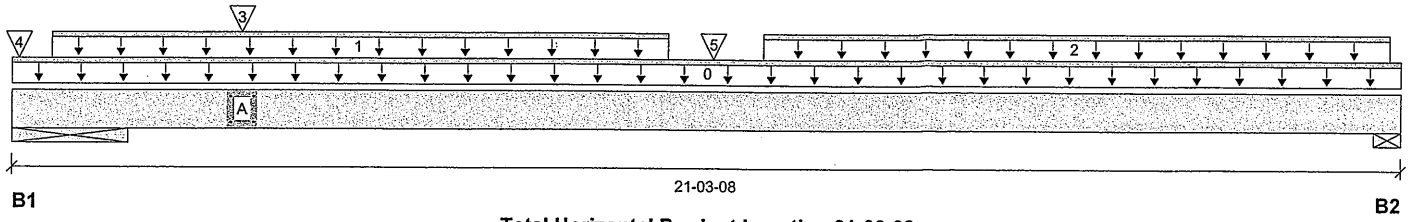
Dry | 1 span | No cant.

July 19, 2021 15:30:10

BC CALC® Member Report
Build 7773

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A OPT..mmdl
Description: 2ND FLR FRAMING\Flush Beams\B24A DR(i3077)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 21-03-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 21-1/2"	6061 / 0	3433 / 0		
B2, 4"	2842 / 0	1649 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	21-03-08	Top		21			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-07-06	10-00-07	Top	239	119			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	11-05-11	21-01-06	Top	251	126			n\a
3	B9A DR(i3067)	Conc. Pt. (lbs)	L	03-06-08	03-06-08	Top	3306	1830			n\a
4	J2(i2542)	Conc. Pt. (lbs)	L	00-01-04	00-01-04	Top	315	157			n\a
5	J2(i2680)	Conc. Pt. (lbs)	L	10-08-10	10-08-10	Top	278	139			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	33608 ft-lbs	75348 ft-lbs	44.6%	1	10-08-10
End Shear	11756 lbs	25578 lbs	46.0%	1	02-11-08
Total Load Deflection	L/339 (0.683")	n\a	70.8%	4	10-09-14
Live Load Deflection	L/534 (0.433")	n\a	67.4%	5	10-09-14
Max Defl.	0.683"	n\a	n\a	4	10-09-14
Span / Depth	16.5				
Dist. Load (B1)	43.78 lb/ft	86467.66 lb/ft	n\a		
Conc. Load (B1)	673 lbs	25220 lbs	2.7%		

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	21-1/2" x 5-1/4"	13383 lbs	8.9%	9.7%	Spruce-Pine-Fir
B2	Wall/Plate	4" x 5-1/4"	6324 lbs	22.6%	24.7%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 01-01-08, Bottom: 17-06-06.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
8144
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 1097-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Triple 1-3/4" x 14" VERSA-LAM® 2.0 3100 SP

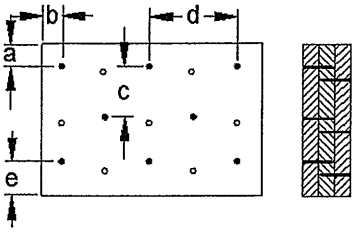
PASSED

2ND FLR FRAMING\Flush Beams\B24A DR(i3077) (Flush Beam)

BC CALC® Member Report — Dry | 1 span | No cant. — July 19, 2021 15:30:10
Build 7773

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B24A DR(i3077)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member

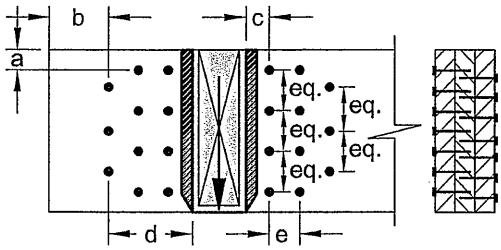


a minimum = 2"
b minimum = 3"
c = 5"
d = 8"
e minimum = 3"

Nailing applies to both sides of the member
Connectors are: 1 Nails
3½" ARDOX SPIRAL

Connection Diagrams: Concentrated Side Loads

Connection Tag: A Applies to load tag(s): 12



a minimum = 2"
b minimum = 4"
c minimum = 4"
d maximum = 12"
e minimum = 4"
Nailing applies to both sides of the member
Connectors are: 16d 1 Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
8744
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM1892-2L
STRUCTURAL
COMPONENT ONLY

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B1A(i3048) (Flush Beam)

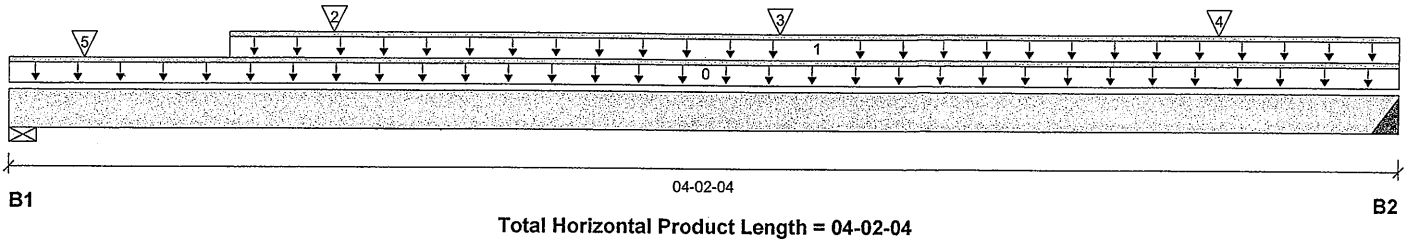
BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 15:30:10

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A OPT..mmdl
Description: 1ST FLR FRAMING\Flush Beams\B1A(i3048)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 04-02-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	2191 / 0	1565 / 0		
B2, 2"	1120 / 0	572 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	04-02-04	Top		6			00-00-00
1	WALL	Unf. Lin. (lb/ft)	L	00-08-00	04-02-04	Top	240	120			n\a
2	J1(i2996)	Conc. Pt. (lbs)	L	00-11-12	00-11-12	Top	455	227			n\a
3	J1(i3032)	Conc. Pt. (lbs)	L	02-03-12	02-03-12	Top	455	227			n\a
4	J1(i3041)	Conc. Pt. (lbs)	L	03-07-12	03-07-12	Top	393	197			n\a
5	6(i1175)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Top	1163	1038			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2219 ft-lbs	17696 ft-lbs	12.5%	1	02-03-12
End Shear	1731 lbs	7232 lbs	23.9%	1	01-05-06
Total Load Deflection	L/999 (0.008")	n\a	n\a	4	02-03-02
Live Load Deflection	L/999 (0.005")	n\a	n\a	5	02-03-02
Max Defl.	0.008"	n\a	n\a	4	02-03-02
Span / Depth	3.7				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 1-3/4"	5242 lbs	88.5%	44.6%	Spruce-Pine-Fir
B2	Hanger	2" x 1-3/4"	2395 lbs	n\a	56.1%	HUS1.81/10

Cautions

Header for the hanger HUS1.81/10 is a Single 1-3/4" x 11-7/8" LVL Beam.
Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

OK

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM NB98-21
STRUCTURAL
COMPONENT ONLY

Disclosure

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

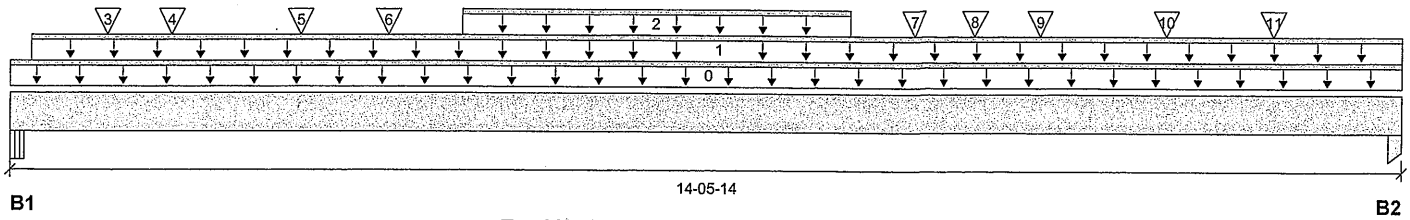
PASSED

1ST FLR FRAMING\Flush Beams\B22A(i2989) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 15:30:10

Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A OPT..mmdl
Description: 1ST FLR FRAMING\Flush Beams\B22A(i2989)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 14-05-14

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/4"	2272 / 0	1224 / 0		
B2, 1-3/4"	2208 / 0	1188 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	14-05-14	Top		12			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-02-10	14-05-14	Top	8	4			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	04-08-06	08-08-06	Top	332	166			n\a
3	J1DJ(i2988)	Conc. Pt. (lbs)	L	01-00-02	01-00-02	Top	264	132			n\a
4	J2(i2859)	Conc. Pt. (lbs)	L	01-08-02	01-08-02	Top	307	153			n\a
5	J2(i2933)	Conc. Pt. (lbs)	L	03-00-02	03-00-02	Top	345	173			n\a
6	J1DJ(i2984)	Conc. Pt. (lbs)	L	03-11-02	03-11-02	Top	403	201			n\a
7	J1(i3012)	Conc. Pt. (lbs)	L	09-04-06	09-04-06	Top	322	161			n\a
8	J1DJ(i3050)	Conc. Pt. (lbs)	L	10-00-02	10-00-02	Top	239	119			n\a
9	J2(i2859)	Conc. Pt. (lbs)	L	10-08-06	10-08-06	Top	310	155			n\a
10	J2(i2933)	Conc. Pt. (lbs)	L	12-00-06	12-00-06	Top	342	171			n\a
11	-	Conc. Pt. (lbs)	L	13-01-15	13-01-15	Top	505	252			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	17752 ft-lbs	35392 ft-lbs	50.2%	1	08-00-06
End Shear	4752 lbs	14464 lbs	32.9%	1	13-04-04
Total Load Deflection	L/369 (0.457")	n\a	65.1%	4	07-04-06
Live Load Deflection	L/566 (0.298")	n\a	63.6%	5	07-04-06
Max Defl.	0.457"	n\a	n\a	4	07-04-06
Span / Depth	14.2				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 3-1/2"	4938 lbs	50.3%	22.0%	Unspecified
B2	Column	1-3/4" x 3-1/2"	4797 lbs	96.4%	64.2%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

DWG NO. TAM 17899-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B22A(i2989) (Flush Beam)

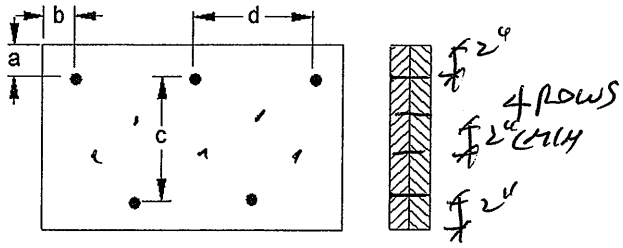
Dry | 1 span | No cant.

BC CALC® Member Report
Build 7773

July 19, 2021 15:30:10

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B22A(i2989)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = @ 8"

Calculated Side Load = 1059.8 lb/ft
Connectors are: 1 Nails

3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 1099-21
STRUCTURAL
COMPONENT ONLY

Disclosure

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Boise Cascade® ENGINEERED WOOD PRODUCTS

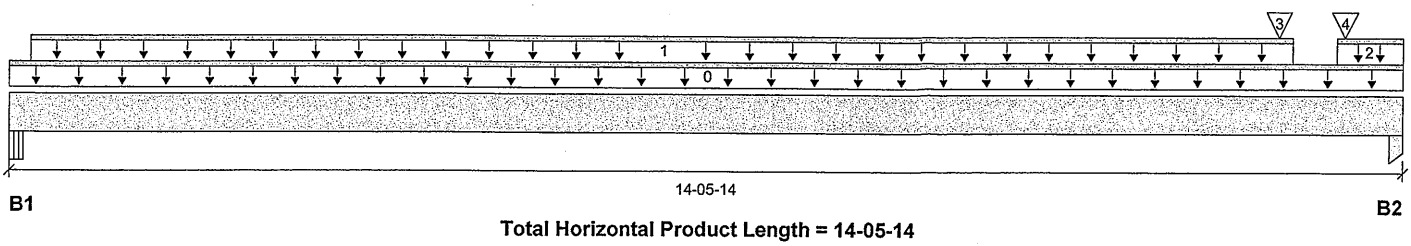
Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B4A(i2997) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 15:30:10

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B4A(i2997)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 14-05-14

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/4"	350 / 0	276 / 0		
B2, 4-1/4"	5269 / 0	3273 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	14-05-14	Top		12			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-02-10	13-04-06	Top	27	13			n\a
2	5(i323)	Unf. Lin. (lb/ft)	L	13-09-10	14-05-14	Top		81			n\a
3	B5(i3056)	Conc. Pt. (lbs)	L	13-02-10	13-02-10	Top	897	475			n\a
4	5(i323)	Conc. Pt. (lbs)	L	13-10-10	13-10-10	Top	4350	2658			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	5104 ft-lbs	35392 ft-lbs	14.4%	1	12-02-12
End Shear	4421 lbs	14464 lbs	30.6%	1	13-01-12
Total Load Deflection	L/999 (0.119")	n\a	n\a	4	08-00-04
Live Load Deflection	L/999 (0.07")	n\a	n\a	5	08-00-04
Max Defl.	0.119"	n\a	n\a	4	08-00-04
Span / Depth	14.0				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 3-1/2"	870 lbs	8.9%	3.9%	Unspecified
B2	Column	4-1/4" x 3-1/2"	11995 lbs	99.4%	66.1%	Unspecified

Cautions

Concentrated side load(s) 2 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 12-07-10.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM17900-21
STRUCTURAL
COMPONENT ONLY

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B4A(i2997) (Flush Beam)

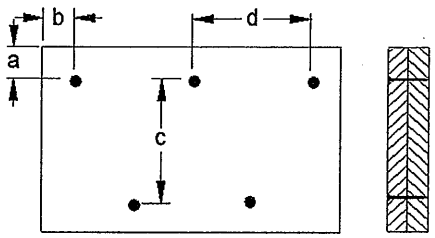
BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 15:30:10

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B4A(i2997)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8

Connectors are: 1 , Nails
3½" ARDOX SPIRAL

DWG NO. TAM17900-2L
STRUCTURAL
COMPONENT ONLY

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

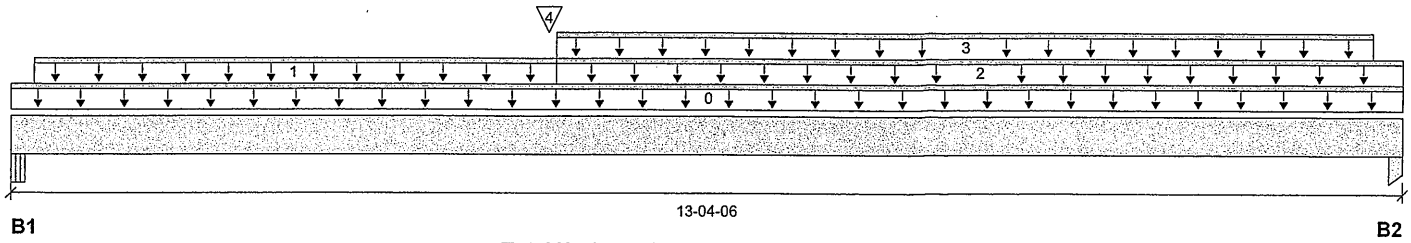
Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

1ST FLR FRAMING\Flush Beams\B6A(i3019) (Flush Beam)

BC CALC® Member Report
Build 7773
Dry | 1 span | No cant.
July 19, 2021 15:30:10

Job name:		File name:	4504 EL A OPT..mmdl
Address:		Description:	1ST FLR FRAMING\Flush Beams\B6A(i3019)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 13-04-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/4"	760 / 0	547 / 0		
B2, 3-1/2"	480 / 0	591 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	13-04-06	Top		6			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-02-10	05-02-10	Top	27	13			n\a
2	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	05-02-10	13-04-06	Top	16	8			n\a
3	WALL	Unf. Lin. (lb/ft)	L	05-02-10	13-00-14	Top		60			n\a
4	B1A(i3048)	Conc. Pt. (lbs)	L	05-01-12	05-01-12	Top	978	456			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	7918 ft-lbs	17696 ft-lbs	44.7%	1	05-01-12
End Shear	1745 lbs	7232 lbs	24.1%	1	01-05-02
Total Load Deflection	L/521 (0.294")	n\a	46.1%	4	06-06-01
Live Load Deflection	L/951 (0.161")	n\a	37.8%	5	06-03-08
Max Defl.	0.294"	n\a	n\a	4	06-06-01
Span / Depth	12.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 1-3/4"	1824 lbs	37.2%	16.3%	Unspecified
B2	Column	3-1/2" x 1-3/4"	1460 lbs	29.3%	19.5%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 07-10-04.

CONFORMS TO OBC 2012
AMENDED 2020

DWG NO. TAM 17901-21
STRUCTURAL
COMPONENT ONLY

Disclosure

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Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

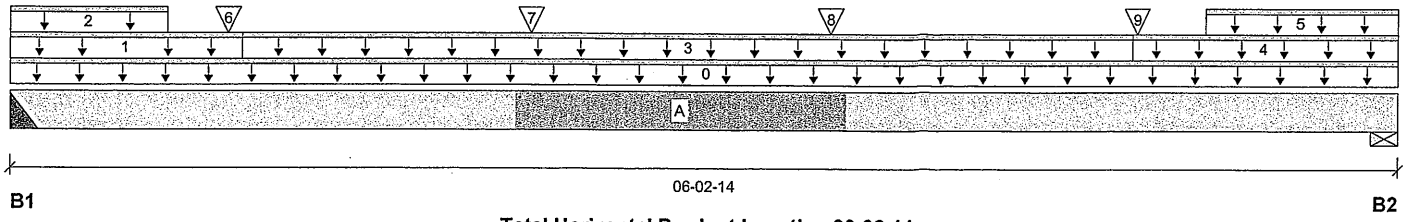
2ND FLR FRAMING\Flush Beams\B19B(i1817) (Flush Beam)

BC CALC® Member Report
Build 7773

Dry | 1 span | No cant.

July 19, 2021 16:05:31

Job name:		File name:	4504 EL B.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B19B(i1817)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 06-02-14

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	451 / 0	640 / 0	243 / 0	
B2, 4-3/8"	418 / 0	627 / 0	243 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	06-02-14	Top		12			00-00-00
1	E15(i1159)	Unf. Lin. (lb/ft)	L	00-00-00	01-00-08	Top		81			n\a
2	E15(i1159)	Unf. Lin. (lb/ft)	L	00-00-00	00-08-08	Top		42	78		n\a
3	E16(i1162)	Unf. Lin. (lb/ft)	L	01-00-08	05-00-08	Top		61			n\a
4	E17(i1163)	Unf. Lin. (lb/ft)	L	05-00-08	06-02-14	Top		81			n\a
5	E17(i1163)	Unf. Lin. (lb/ft)	L	05-04-08	06-02-14	Top		42	78		n\a
6	-	Conc. Pt. (lbs)	L	00-11-12	00-11-12	Top	210	239	184		n\a
7	J2(i1847)	Conc. Pt. (lbs)	L	02-04-00	02-04-00	Top	225	113			n\a
8	J2(i1781)	Conc. Pt. (lbs)	L	03-08-00	03-08-00	Top	225	113			n\a
9	-	Conc. Pt. (lbs)	L	05-00-12	05-00-12	Top	209	236	180		n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2070 ft-lbs	35392 ft-lbs	5.8%	1	03-07-00
End Shear	1414 lbs	14464 lbs	9.8%	1	04-10-10
Total Load Deflection	L/999 (0.01")	n\a	n\a	35	03-01-00
Live Load Deflection	L/999 (0.005")	n\a	n\a	51	03-01-00
Max Defl.	0.01"	n\a	n\a	35	03-01-00
Span / Depth	5.7				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	1720 lbs	n\a	10.1%	HGUS410
B2	Wall/Plate	4-3/8" x 3-1/2"	1654 lbs	17.6%	8.9%	Spruce-Pine-Fir

Cautions

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

)069

P64

DWG NO. TAM17502-2L
STRUCTURAL
COMPONENT ONLY

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B19B(i1817) (Flush Beam)

Dry | 1 span | No cant.

July 19, 2021 16:05:31

BC CALC® Member Report
Build 7773

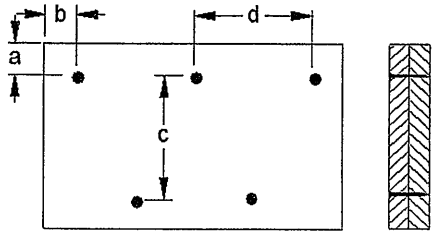
Job name:		File name:	4504 EL B.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B19B(i1817)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Unbalanced snow loads determined from building geometry were used in selected product's verification.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

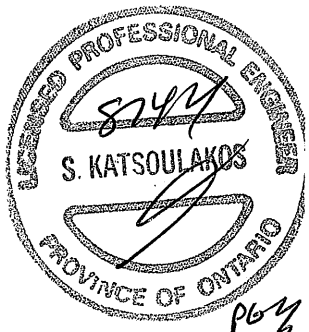
CONFORMS TO OBC 2012
AMENDED 2020

Connection Diagram: Full Length of Member



a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

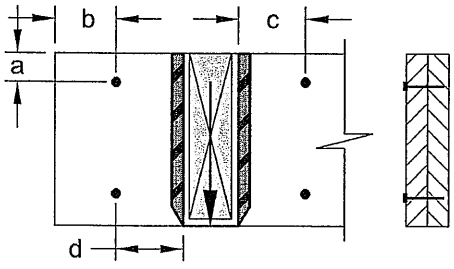
Calculated Side Load = 223.1 lb/ft
Connectors are: 1 : Nails
3½" ARDOX SPIRAL



DWG NO. TAM17902-2L
STRUCTURAL
COMPONENT ONLY

Connection Diagrams: Concentrated Side Loads

Connection Tag: A Applies to load tag(s): 14+15



a minimum = 2"
b minimum = 4"
c minimum = 4"
d maximum = 12"
Connectors are 1
Nails
3½" ARDOX SPIRAL

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

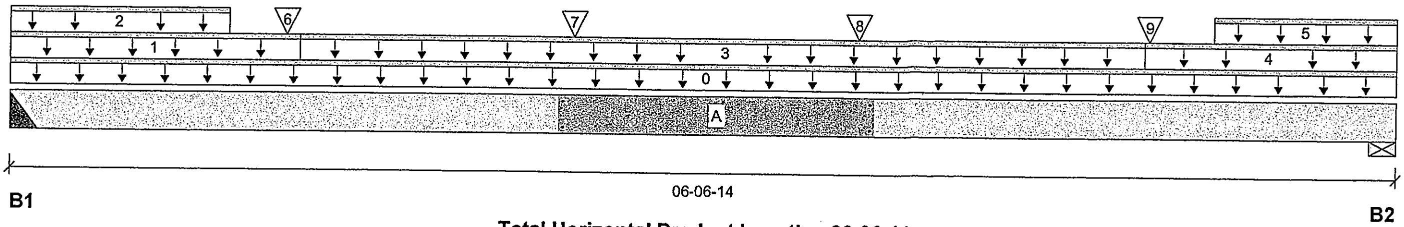
2ND FLR FRAMING\Flush Beams\B19C(i3157) (Flush Beam)

Dry | 1 span | No cant.

BC CALC® Member Report
Build 7773

July 19, 2021 16:24:27

Job name:		File name:	4504 EL C OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B19C(i3157)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	



Total Horizontal Product Length = 06-06-14

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	449 / 0	662 / 0	257 / 0	
B2, 4-3/8"	448 / 0	664 / 0	256 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	06-06-14	Top		12			00-00-00
1	E15(i1159)	Unf. Lin. (lb/ft)	L	00-00-00	01-04-08	Top		81			n\a
2	E15(i1159)	Unf. Lin. (lb/ft)	L	00-00-00	01-00-08	Top		42	78		n\a
3	E16(i1162)	Unf. Lin. (lb/ft)	L	01-04-08	05-04-08	Top		61			n\a
4	E17(i1163)	Unf. Lin. (lb/ft)	L	05-04-08	06-06-14	Top		81			n\a
5	E17(i1163)	Unf. Lin. (lb/ft)	L	05-08-08	06-06-14	Top		42	78		n\a
6	-	Conc. Pt. (lbs)	L	01-03-12	01-03-12	Top	238	253	184		n\a
7	J3(i3186)	Conc. Pt. (lbs)	L	02-08-00	02-08-00	Top	225	113			n\a
8	J3(i3135)	Conc. Pt. (lbs)	L	04-00-00	04-00-00	Top	225	113			n\a
9	-	Conc. Pt. (lbs)	L	05-04-12	05-04-12	Top	209	236	180		n\a

Controls Summary

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2378 ft-lbs	35392 ft-lbs	6.7%	1	02-09-00
End Shear	1549 lbs	14464 lbs	10.7%	1	01-03-14
Total Load Deflection	L/999 (0.012")	n\a	n\a	35	03-03-00
Live Load Deflection	L/999 (0.006")	n\a	n\a	51	03-03-00
Max Defl.	0.012"	n\a	n\a	35	03-03-00
Span / Depth	6.1				

Bearing Supports

Bearing Supports		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	1757 lbs	n\a	10.3%	HGUS410
B2	Wall/Plate	4-3/8" x 3-1/2"	1758 lbs	18.7%	9.4%	Spruce-Pine-Fir

Cautions

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17903-21
STRUCTURAL
COMPONENT ONLY

PASSED

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

2ND FLR FRAMING\Flush Beams\B19C(i3157) (Flush Beam)

Dry | 1 span | No cant.

July 19, 2021 16:24:27

BC CALC® Member Report
Build 7773

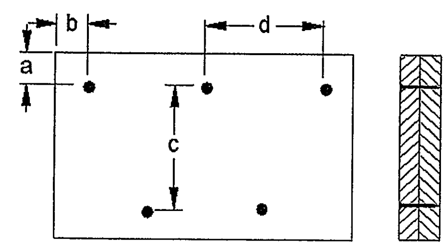
Job name:		File name:	4504 EL C OPT..mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B19C(i3157)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Unbalanced snow loads determined from building geometry were used in selected product's verification.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-02-12.

CONFORMS TO OBC 2012
AMENDED 2020

Connection Diagram: Full Length of Member

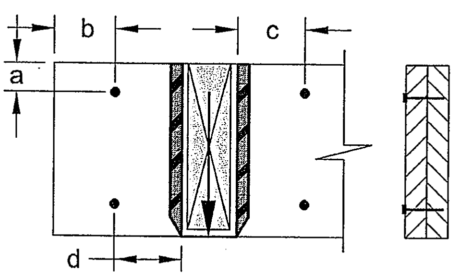


a minimum = 2"
b minimum = 3"
c = 7-7/8"
d = 8"

Calculated Side Load = 252.9 lb/ft
Connectors are: 1 Nails
3½" ARDOX SPIRAL

Connection Diagrams: Concentrated Side Loads

Connection Tag: A Applies to load tag(s): 14+15



a minimum = 2"
b minimum = 4"
c minimum = 4"
d maximum = 12"
Connectors are: 1
Nails
3½" ARDOX SPIRAL

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

P6 ½

DWG NO. TAM 17903-21
STRUCTURAL
COMPONENT ONLY

Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

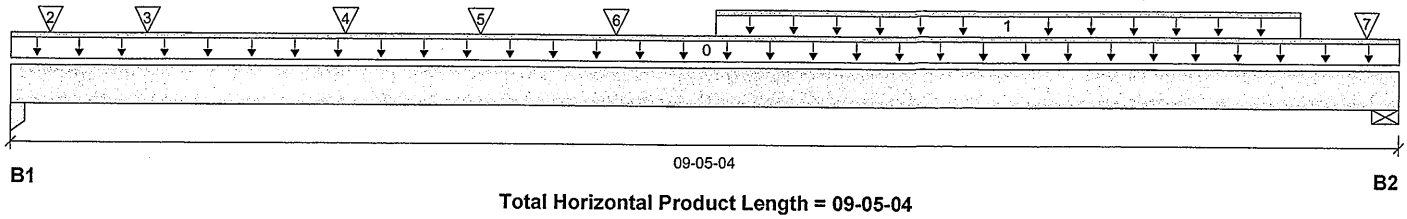
1ST FLR FRAMING\Flush Beams\B3(i1761) (Flush Beam)

Dry | 1 span | No cant.

August 9, 2021 16:35:03

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B3(i1761)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 09-05-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 3-1/2"	1529 / 0	792 / 0		
B2, 5-1/2"	1354 / 0	732 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-05-04	Top		6			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	04-09-04	08-09-04	Top	327	164			n\a
2	J3DJ(i1767)	Conc. Pt. (lbs)	L	00-03-04	00-03-04	Top	229	114			n\a
3	J4(i1775)	Conc. Pt. (lbs)	L	00-11-04	00-11-04	Top	307	153			n\a
4	J4(i1774)	Conc. Pt. (lbs)	L	02-03-04	02-03-04	Top	345	173			n\a
5	J3DJ(i1770)	Conc. Pt. (lbs)	L	03-02-04	03-02-04	Top	318	159			n\a
6	J3(i1759)	Conc. Pt. (lbs)	L	04-01-04	04-01-04	Top	366	183			n\a
7	E7(i314)	Conc. Pt. (lbs)	L	09-02-08	09-02-08	Top		30			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	6749 ft-lbs	17696 ft-lbs	38.1%	1	04-01-04
End Shear	2775 lbs	7232 lbs	38.4%	1	07-11-14
Total Load Deflection	L/773 (0.137")	n\a	31.0%	4	04-07-04
Live Load Deflection	L/999 (0.09")	n\a	n\a	5	04-07-04
Max Defl.	0.137"	n\a	n\a	4	04-07-04
Span / Depth	8.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	3-1/2" x 1-3/4"	3284 lbs	66.0%	43.9%	Unspecified
B2	Wall/Plate	5-1/2" x 1-3/4"	2946 lbs	49.7%	25.1%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO
DWG NO. TAM 17904-21
STRUCTURAL
COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

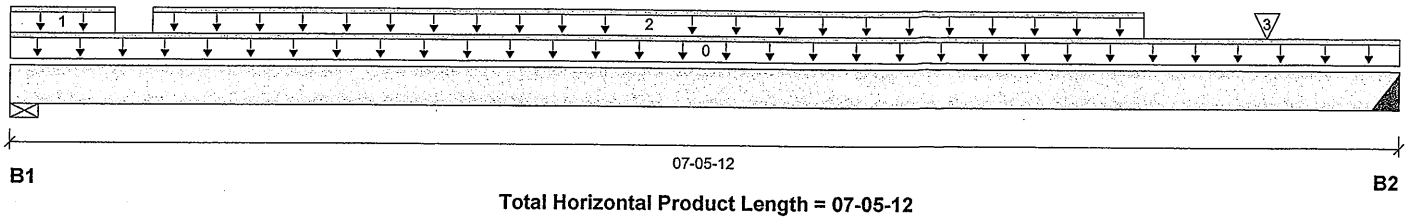
1ST FLR FRAMING\Flush Beams\B8(i1819) (Flush Beam)

Dry | 1 span | No cant.

August 9, 2021 16:35:03

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 1ST FLR FRAMING\Flush Beams\B8(i1819)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 07-05-12

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 6-3/4"	888 / 0	513 / 0		
B2, 2"	639 / 0	341 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	07-05-12	Top		6			00-00-00
1	E11(i306)	Unf. Lin. (lb/ft)	L	00-00-00	00-06-12	Top	488	325			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	00-09-04	06-01-04	Top	195	98			n\a
3	J5(i1949)	Conc. Pt. (lbs)	L	06-09-04	06-09-04	Top	213	107			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2541 ft-lbs	17696 ft-lbs	14.4%	1	04-01-04
End Shear	1259 lbs	7232 lbs	17.4%	1	01-06-10
Total Load Deflection	L/999 (0.031")	n\a	n\a	4	03-11-04
Live Load Deflection	L/999 (0.02")	n\a	n\a	5	03-11-04
Max Defl.	0.031"	n\a	n\a	4	03-11-04
Span / Depth	6.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	6-3/4" x 1-3/4"	1974 lbs	27.2%	13.7%	Spruce-Pine-Fir
B2	Hanger	2" x 1-3/4"	1385 lbs	n\a	32.4%	HUS1.81/10

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 17905 -21
STRUCTURAL
COMPONENT ONLY

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

OK

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
CONFORMS TO OBC 2012
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
AMENDED 2020
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

Disclosure

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

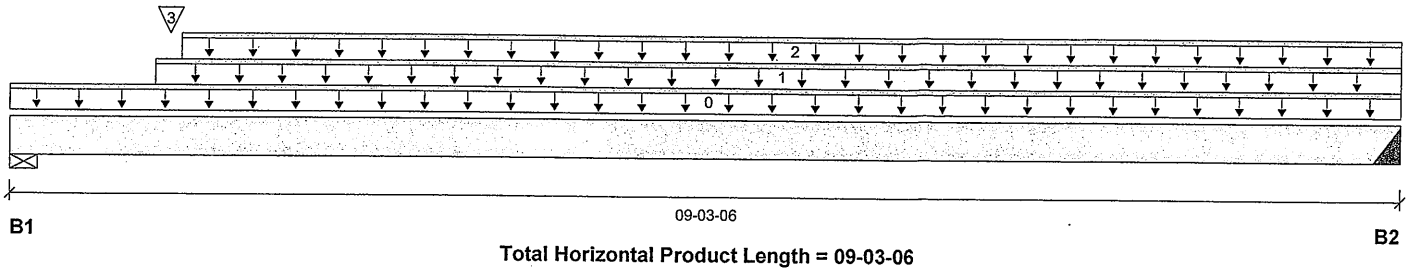
2ND FLR FRAMING\Flush Beams\B14(i1968) (Flush Beam)

Dry | 1 span | No cant.

August 9, 2021 16:35:03

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 2ND FLR FRAMING\Flush Beams\B14(i1968)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 09-03-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	192 / 0	732 / 0		
B2, 2"	110 / 0	382 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-03-06	Top		6			00-00-00
1	WALL	Unf. Lin. (lb/ft)	L	00-11-11	09-03-06	Top		60			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	01-01-12	09-03-06	Top	23	11			n\a
3	B15(i1982)	Conc. Pt. (lbs)	L	01-00-14	01-00-14	Top	115	466			

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1266 ft-lbs	11502 ft-lbs	11.0%	0	04-04-07
End Shear	765 lbs	4701 lbs	16.3%	0	01-05-06
Total Load Deflection	L/999 (0.034")	n\a	n\a	4	04-08-03
Live Load Deflection	L/999 (0.007")	n\a	n\a	5	04-08-03
Max Defl.	0.034"	n\a	n\a	4	04-08-03
Span / Depth	8.9				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 1-3/4"	1025 lbs	26.6%	13.4%	Spruce-Pine-Fir
B2	Hanger	2" x 1-3/4"	535 lbs	n\a	19.3%	HUS1.81/10

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 08-01-10.

CONFORMS TO OBC 2012
AMENDED 2020

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO
DWG NO. TRM 179062
STRUCTURAL COMPONENT ONLY

Disclosure

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BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

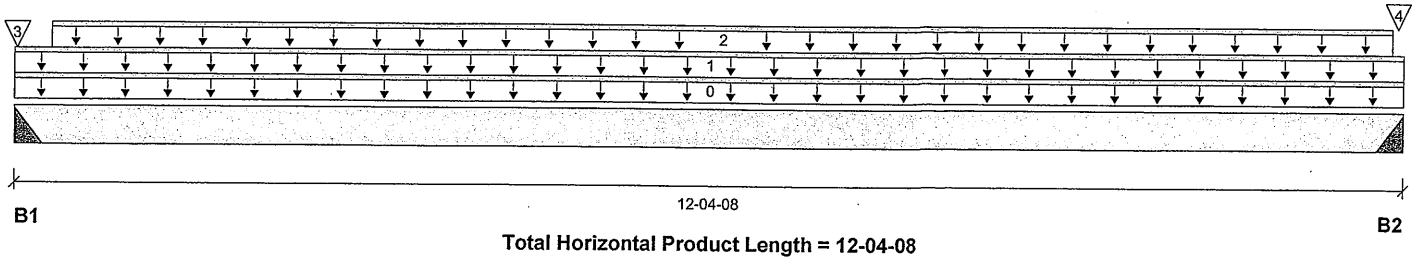
2ND FLR FRAMING\Flush Beams\B15(i1982) (Flush Beam)

Dry | 1 span | No cant.

August 9, 2021 16:35:03

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A.mmdl
Description: 2ND FLR FRAMING\Flush Beams\B15(i1982)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 12-04-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2"	126 / 0	472 / 0		
B2, 2"	115 / 0	466 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	12-04-08	Top		6			00-00-00
1	WALL	Unf. Lin. (lb/ft)	L	00-00-00	12-04-08	Top		60			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-04-00	12-03-04	Top	18	9			n\a
3	FC2 Floor Decking (Plan View Fill)	Conc. Pt. (lbs)	L	00-00-04	00-00-04	Top	19	10			n\a
4	FC2 Floor Decking (Plan View Fill)	Conc. Pt. (lbs)	L	12-03-14	12-03-14	Top	4				n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1947 ft-lbs	11502 ft-lbs	16.9%	0	06-03-04
End Shear	540 lbs	4701 lbs	11.5%	0	01-01-14
Total Load Deflection	L/999 (0.094")	n\a	n\a	4	06-03-04
Live Load Deflection	L/999 (0.018")	n\a	n\a	5	06-03-04
Max Defl.	0.094"	n\a	n\a	4	06-03-04
Span / Depth	12.3				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	660 lbs	n\a	23.8%	HUS1.81/10
B2	Hanger	2" x 1-3/4"	653 lbs	n\a	23.5%	HUS1.81/10

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.
Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.
Header for the hanger HUS1.81/10 is a Single 1-3/4" x 11-7/8" LVL Beam.

)0129

LICENSED PROFESSIONAL ENGINEER
S. KATSOULAKOS
PROVINCE OF ONTARIO

DWG NO. TAM 1790-21
STRUCTURAL
COMPONENT ONLY

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B15(i1982) (Flush Beam)

Dry | 1 span | No cant.

August 9, 2021 16:35:03

BC CALC® Member Report
Build 7773

Job name:		File name:	4504 EL A.mmdl
Address:		Description:	2ND FLR FRAMING\Flush Beams\B15(i1982)
City, Province, Postal Code:	BRAMPTON	Specifier:	
Customer:		Designer:	AJ
Code reports:	CCMC 12472-R	Company:	

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 12-04-08.

CONFORMS TO OBC 2012
AMENDED 2020

DWG NO. TAM 12907-21
STRUCTURAL
COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

Boise Cascade® ENGINEERED WOOD PRODUCTS

Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

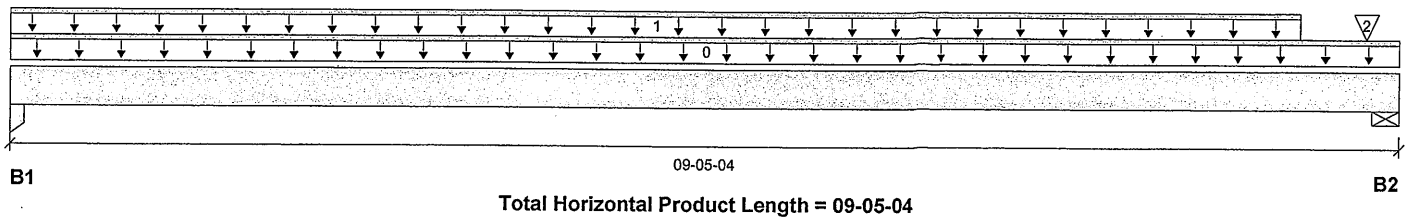
1ST FLR FRAMING\Flush Beams\B3A(i3191) (Flush Beam)

Dry | 1 span | No cant.

August 9, 2021 17:14:53

BC CALC® Member Report
Build 7773
Job name:
Address:
City, Province, Postal Code: BRAMPTON
Customer:
Code reports: CCMC 12472-R

File name: 4504 EL A OPT..mmdl
Description: 1ST FLR FRAMING\Flush Beams\B3A(i3191)
Specifier:
Designer: AJ
Company:



Total Horizontal Product Length = 09-05-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2-5/8"	1669 / 0	863 / 0		
B2, 5-1/2"	1362 / 0	736 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-05-04	Top		6			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-00-00	08-09-04	Top	345	172			n\a
2	E7(i314)	Conc. Pt. (lbs)	L	09-02-08	09-02-08	Top		30			n\a

Controls Summary

	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	6886 ft-lbs	17696 ft-lbs	38.9%	1	04-01-04
End Shear	2795 lbs	7232 lbs	38.6%	1	07-11-14
Total Load Deflection	L/755 (0.141")	n\a	31.8%	4	04-07-04
Live Load Deflection	L/999 (0.093")	n\a	n\a	5	04-07-04
Max Defl.	0.141"	n\a	n\a	4	04-07-04
Span / Depth	9.0				

Bearing Supports

		Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	2-5/8" x 1-3/4"	3581 lbs	96.0%	63.9%	Unspecified
B2	Wall/Plate	5-1/2" x 1-3/4"	2964 lbs	50.1%	25.2%	Spruce-Pine-Fir

DWG NO. TAM 17908-21
STRUCTURAL
COMPONENT ONLY

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9
Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

CONFORMS TO OBC 2012
AMENDED 2020

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER® , AJS™, ALLJOIST® , BC RIM BOARD™, BCI® , BOISE GLULAM™, BC FloorValue® , VERSA-LAM®, VERSA-RIM PLUS® ,

NORDIC
STRUCTURES

Maximum Floor Spans – S2.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

Maximum Floor Spans

Joist depth	Joist series	Bare				1/2 in. gypsum ceiling			
		On centre spacing				On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	15'-1"	14'-3"	13'-10"	-	15'-7"	14'-9"	14'-3"	-
	NI-40x	16'-2"	15'-3"	14'-8"	-	16'-7"	15'-8"	15'-1"	-
	NI-60	16'-4"	15'-4"	14'-10"	-	16'-9"	15'-9"	15'-3"	-
	NI-80	17'-3"	16'-3"	15'-8"	-	17'-8"	16'-7"	16'-0"	-
11-7/8"	NI-20	17'-0"	16'-0"	15'-6"	-	17'-6"	16'-7"	16'-0"	-
	NI-40x	18'-2"	17'-1"	16'-6"	-	18'-9"	17'-6"	16'-11"	-
	NI-60	18'-5"	17'-3"	16'-8"	-	19'-0"	17'-8"	17'-1"	-
	NI-80	19'-9"	18'-3"	17'-7"	-	20'-4"	18'-10"	18'-0"	-
	NI-90	20'-2"	18'-8"	17'-10"	-	20'-9"	19'-2"	18'-4"	-
14"	NI-40x	20'-1"	18'-8"	17'-10"	-	20'-10"	19'-4"	18'-6"	-
	NI-60	20'-6"	18'-11"	18'-2"	-	21'-2"	19'-8"	18'-9"	-
	NI-80	21'-11"	20'-3"	19'-4"	-	22'-7"	20'-11"	20'-0"	-
	NI-90	22'-5"	20'-8"	19'-9"	-	23'-0"	21'-4"	20'-4"	-
16"	NI-60	22'-4"	20'-8"	19'-9"	-	23'-1"	21'-5"	20'-6"	-
	NI-80	23'-11"	22'-1"	21'-1"	-	24'-8"	22'-10"	21'-9"	-
	NI-90	24'-5"	22'-6"	21'-6"	-	25'-1"	23'-2"	22'-2"	-

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling			
		On centre spacing				On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-8"	15'-3"	14'-5"	-	16'-8"	15'-3"	14'-5"	-
	NI-40x	17'-11"	17'-0"	16'-1"	-	18'-5"	17'-1"	16'-1"	-
	NI-60	18'-2"	17'-1"	16'-4"	-	18'-8"	17'-4"	16'-4"	-
	NI-80	19'-5"	18'-0"	17'-5"	-	19'-10"	18'-5"	17'-8"	-
11-7/8"	NI-20	19'-7"	18'-2"	17'-3"	-	19'-11"	18'-3"	17'-3"	-
	NI-40x	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-2"	-
	NI-60	21'-4"	19'-9"	18'-11"	-	21'-11"	20'-5"	19'-6"	-
	NI-80	22'-9"	21'-1"	20'-2"	-	23'-3"	21'-8"	20'-8"	-
	NI-90	23'-3"	21'-6"	20'-6"	-	23'-9"	22'-0"	21'-0"	-
14"	NI-40x	23'-8"	21'-11"	20'-11"	-	24'-4"	22'-8"	21'-8"	-
	NI-60	24'-0"	22'-3"	21'-3"	-	24'-8"	22'-11"	21'-11"	-
	NI-80	25'-7"	23'-9"	22'-7"	-	26'-2"	24'-4"	23'-3"	-
	NI-90	26'-1"	24'-2"	23'-0"	-	26'-8"	24'-9"	23'-7"	-
16"	NI-60	26'-5"	24'-6"	23'-5"	-	27'-2"	25'-3"	24'-2"	-
	NI-80	28'-2"	26'-1"	24'-10"	-	28'-10"	26'-9"	25'-6"	-
	NI-90	28'-8"	26'-6"	25'-3"	-	29'-3"	27'-2"	25'-11"	-

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – S4.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

Maximum Floor Spans

Joist depth	Joist series	Bare				1/2 in. gypsum ceiling			
		On centre spacing				On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	15'-11"	15'-0"	14'-6"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"
	NI-40x	17'-0"	16'-0"	15'-5"	14'-10"	17'-5"	16'-5"	15'-10"	15'-2"
	NI-60	17'-2"	16'-2"	15'-7"	14'-11"	17'-7"	16'-7"	16'-0"	15'-4"
	NI-80	18'-3"	17'-1"	16'-5"	15'-9"	18'-8"	17'-5"	16'-9"	16'-1"
11-7/8"	NI-20	17'-11"	16'-11"	16'-3"	15'-8"	18'-7"	17'-5"	16'-10"	16'-2"
	NI-40x	19'-4"	17'-11"	17'-3"	16'-7"	19'-11"	18'-6"	17'-9"	17'-0"
	NI-60	19'-7"	18'-2"	17'-6"	16'-9"	20'-2"	18'-9"	17'-11"	17'-2"
	NI-80	21'-1"	19'-6"	18'-6"	17'-7"	21'-7"	20'-0"	19'-0"	18'-0"
	NI-90	21'-6"	19'-10"	18'-11"	17'-11"	22'-0"	20'-4"	19'-5"	18'-4"
14"	NI-40x	21'-5"	19'-11"	18'-11"	18'-0"	22'-1"	20'-7"	19'-7"	18'-7"
	NI-60	21'-10"	20'-2"	19'-3"	18'-3"	22'-6"	20'-10"	19'-11"	18'-10"
	NI-80	23'-5"	21'-7"	20'-7"	19'-5"	24'-0"	22'-3"	21'-2"	20'-0"
	NI-90	23'-10"	22'-1"	21'-0"	19'-10"	24'-5"	22'-7"	21'-6"	20'-4"
16"	NI-60	23'-9"	22'-0"	21'-0"	19'-10"	24'-6"	22'-9"	21'-8"	20'-7"
	NI-80	25'-6"	23'-7"	22'-5"	21'-2"	26'-2"	24'-3"	23'-1"	21'-10"
	NI-90	26'-0"	24'-0"	22'-10"	21'-6"	26'-7"	24'-8"	23'-5"	22'-2"

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling			
		On centre spacing				On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-10"	15'-5"	14'-6"	13'-5"	16'-10"	15'-5"	14'-6"	13'-5"
	NI-40x	18'-8"	17'-2"	16'-3"	15'-2"	18'-10"	17'-2"	16'-3"	15'-2"
	NI-60	18'-11"	17'-6"	16'-6"	15'-5"	19'-2"	17'-6"	16'-6"	15'-5"
	NI-80	20'-3"	18'-10"	17'-11"	16'-10"	20'-8"	19'-3"	18'-2"	16'-10"
11-7/8"	NI-20	20'-1"	18'-5"	17'-5"	16'-2"	20'-1"	18'-5"	17'-5"	16'-2"
	NI-40x	21'-10"	20'-4"	19'-4"	17'-8"	22'-5"	20'-6"	19'-4"	17'-8"
	NI-60	22'-1"	20'-7"	19'-8"	18'-4"	22'-8"	20'-10"	19'-8"	18'-4"
	NI-80	23'-8"	22'-0"	20'-11"	19'-10"	24'-1"	22'-6"	21'-6"	20'-0"
	NI-90	24'-1"	22'-5"	21'-4"	20'-2"	24'-7"	22'-11"	21'-10"	20'-7"
14"	NI-40x	24'-5"	22'-9"	21'-9"	19'-5"	25'-1"	23'-2"	21'-9"	19'-5"
	NI-60	24'-10"	23'-2"	22'-1"	20'-10"	25'-6"	23'-8"	22'-4"	20'-10"
	NI-80	26'-6"	24'-8"	23'-6"	22'-2"	27'-1"	25'-3"	24'-1"	22'-9"
	NI-90	27'-0"	25'-1"	23'-11"	22'-7"	27'-6"	25'-8"	24'-6"	23'-2"
16"	NI-60	27'-3"	25'-5"	24'-3"	22'-11"	28'-0"	26'-2"	24'-9"	23'-1"
	NI-80	29'-1"	27'-1"	25'-9"	24'-4"	29'-8"	27'-9"	26'-5"	25'-0"
	NI-90	29'-7"	27'-6"	26'-2"	24'-9"	30'-2"	28'-2"	26'-10"	25'-5"

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – S6.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

Joist depth	Joist series	Bare, On centre spacing				1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	14'-11"	14'-1"	13'-7"	-	15'-4"	14'-6"	14'-1"	-
	NI-40x	15'-11"	15'-0"	14'-6"	-	16'-4"	15'-5"	14'-11"	-
	NI-60	16'-1"	15'-2"	14'-8"	-	16'-6"	15'-7"	15'-1"	-
	NI-80	17'-1"	16'-1"	15'-6"	-	17'-5"	16'-5"	15'-10"	-
11-7/8"	NI-20	16'-9"	15'-10"	15'-4"	-	17'-4"	16'-4"	15'-10"	-
	NI-40x	17'-10"	16'-10"	16'-3"	-	18'-6"	17'-4"	16'-9"	-
	NI-60	18'-1"	17'-0"	16'-5"	-	18'-9"	17'-6"	16'-11"	-
	NI-80	19'-6"	18'-0"	17'-4"	-	20'-1"	18'-7"	17'-9"	-
	NI-90	19'-11"	18'-4"	17'-8"	-	20'-5"	18'-11"	18'-1"	-
14"	NI-40x	19'-10"	18'-4"	17'-8"	-	20'-6"	19'-1"	18'-3"	-
	NI-60	20'-2"	18'-8"	17'-11"	-	20'-10"	19'-4"	18'-6"	-
	NI-80	21'-8"	20'-0"	19'-1"	-	22'-4"	20'-8"	19'-9"	-
	NI-90	22'-1"	20'-5"	19'-6"	-	22'-9"	21'-0"	20'-1"	-
16"	NI-60	22'-0"	20'-4"	19'-6"	-	22'-9"	21'-1"	20'-2"	-
	NI-80	23'-7"	21'-10"	20'-10"	-	24'-4"	22'-6"	21'-6"	-
	NI-90	24'-1"	22'-2"	21'-2"	-	24'-9"	22'-11"	21'-10"	-

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap, On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-6"	15'-1"	14'-3"	-	16'-6"	15'-1"	14'-3"	-
	NI-40x	17'-9"	16'-10"	15'-11"	-	18'-2"	16'-11"	15'-11"	-
	NI-60	17'-11"	16'-11"	16'-2"	-	18'-5"	17'-2"	16'-2"	-
	NI-80	19'-3"	17'-10"	17'-3"	-	19'-8"	18'-3"	17'-7"	-
11-7/8"	NI-20	19'-4"	18'-0"	17'-1"	-	19'-9"	18'-1"	17'-1"	-
	NI-40x	20'-10"	19'-4"	18'-6"	-	21'-5"	19'-11"	19'-0"	-
	NI-60	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-3"	-
	NI-80	22'-6"	20'-10"	19'-11"	-	23'-1"	21'-5"	20'-5"	-
	NI-90	23'-0"	21'-3"	20'-4"	-	23'-6"	21'-10"	20'-10"	-
14"	NI-40x	23'-5"	21'-8"	20'-9"	-	24'-0"	22'-5"	21'-5"	-
	NI-60	23'-9"	22'-0"	21'-0"	-	24'-5"	22'-8"	21'-8"	-
	NI-80	25'-4"	23'-6"	22'-5"	-	25'-11"	24'-1"	23'-0"	-
	NI-90	25'-10"	23'-11"	22'-9"	-	26'-5"	24'-6"	23'-4"	-
16"	NI-60	26'-2"	24'-3"	23'-2"	-	26'-11"	25'-0"	23'-11"	-
	NI-80	27'-11"	25'-10"	24'-7"	-	28'-7"	26'-6"	25'-3"	-
	NI-90	28'-5"	26'-3"	25'-0"	-	29'-0"	26'-11"	25'-8"	-

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – S7.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

Joist depth	Joist series	Bare, On centre spacing				1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	15'-10"	15'-0"	14'-5"	13'-5"	16'-4"	15'-5"	14'-6"	13'-5"
	NI-40x	16'-11"	15'-11"	15'-4"	14'-9"	17'-4"	16'-4"	15'-9"	15'-1"
	NI-60	17'-1"	16'-1"	15'-6"	14'-10"	17'-6"	16'-6"	15'-11"	15'-3"
	NI-80	18'-1"	17'-0"	16'-4"	15'-8"	18'-7"	17'-4"	16'-8"	16'-0"
11-7/8"	NI-20	17'-10"	16'-10"	16'-2"	15'-7"	18'-5"	17'-4"	16'-9"	16'-1"
	NI-40x	19'-3"	17'-10"	17'-2"	16'-6"	19'-10"	18'-5"	17'-8"	16'-11"
	NI-60	19'-6"	18'-1"	17'-4"	16'-8"	20'-1"	18'-8"	17'-10"	17'-1"
	NI-80	20'-11"	19'-4"	18'-5"	17'-7"	21'-5"	19'-10"	18'-11"	17'-11"
	NI-90	21'-4"	19'-9"	18'-9"	17'-10"	21'-10"	20'-3"	19'-3"	18'-3"
14"	NI-40x	21'-4"	19'-9"	18'-10"	17'-11"	22'-0"	20'-5"	19'-6"	18'-6"
	NI-60	21'-8"	20'-1"	19'-2"	18'-2"	22'-4"	20'-9"	19'-9"	18'-9"
	NI-80	23'-3"	21'-6"	20'-5"	19'-4"	23'-10"	22'-1"	21'-0"	19'-11"
	NI-90	23'-9"	21'-11"	20'-10"	19'-8"	24'-3"	22'-6"	21'-5"	20'-3"
16"	NI-60	23'-7"	21'-10"	20'-10"	19'-9"	24'-4"	22'-7"	21'-7"	20'-5"
	NI-80	25'-4"	23'-5"	22'-3"	21'-1"	26'-0"	24'-1"	22'-11"	21'-8"
	NI-90	25'-10"	23'-10"	22'-8"	21'-5"	26'-5"	24'-6"	23'-4"	22'-0"

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap, On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-10"	15'-5"	14'-6"	13'-5"	16'-10"	15'-5"	14'-6"	13'-5"
	NI-40x	18'-7"	17'-2"	16'-3"	15'-2"	18'-10"	17'-2"	16'-3"	15'-2"
	NI-60	18'-10"	17'-6"	16'-6"	15'-5"	19'-1"	17'-6"	16'-6"	15'-5"
	NI-80	20'-2"	18'-9"	17'-11"	16'-10"	20'-7"	19'-2"	18'-2"	16'-10"
11-7/8"	NI-20	20'-1"	18'-5"	17'-5"	16'-2"	20'-1"	18'-5"	17'-5"	16'-2"
	NI-40x	21'-9"	20'-3"	19'-4"	17'-8"	22'-4"	20'-5"	19'-4"	17'-8"
	NI-60	22'-0"	20'-6"	19'-7"	18'-4"	22'-7"	20'-10"	19'-8"	18'-4"
	NI-80	23'-6"	21'-10"	20'-10"	19'-9"	24'-0"	22'-5"	21'-4"	20'-0"
	NI-90	24'-0"	22'-4"	21'-3"	20'-1"	24'-6"	22'-10"	21'-9"	20'-7"
14"	NI-40x	24'-4"	22'-8"	21'-8"	19'-5"	25'-0"	23'-2"	21'-9"	19'-5"
	NI-60	24'-9"	23'-0"	22'-0"	20'-9"	25'-5"	23'-8"	22'-4"	20'-10"
	NI-80	26'-5"	24'-6"	23'-4"	22'-1"	27'-0"	25'-2"	24'-0"	22'-8"
	NI-90	26'-11"	25'-0"	23'-10"	22'-6"	27'-5"	25'-7"	24'-5"	23'-1"
16"	NI-60	27'-2"	25'-4"	24'-2"	22'-10"	27'-11"	26'-1"	24'-9"	23'-1"
	NI-80	29'-0"	26'-11"	25'-8"	24'-3"	29'-7"	27'-7"	26'-4"	24'-11"
	NI-90	29'-6"	27'-5"	26'-1"	24'-8"	30'-1"	28'-1"	26'-9"	25'-4"

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – M2.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

Maximum Floor Spans

Joist depth	Joist series	Bare, On centre spacing				1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	15'-1"	14'-3"	13'-10"	-	15'-7"	14'-9"	14'-3"	-
	NI-40x	16'-2"	15'-3"	14'-8"	-	16'-7"	15'-8"	15'-1"	-
	NI-60	16'-4"	15'-4"	14'-10"	-	16'-9"	15'-9"	15'-3"	-
	NI-80	17'-3"	16'-3"	15'-8"	-	17'-8"	16'-7"	16'-0"	-
11-7/8"	NI-20	17'-0"	16'-0"	15'-6"	-	17'-6"	16'-7"	16'-0"	-
	NI-40x	18'-2"	17'-1"	16'-6"	-	18'-9"	17'-6"	16'-11"	-
	NI-60	18'-5"	17'-3"	16'-8"	-	19'-0"	17'-8"	17'-1"	-
	NI-80	19'-9"	18'-3"	17'-7"	-	20'-4"	18'-10"	18'-0"	-
	NI-90	20'-2"	18'-8"	17'-10"	-	20'-9"	19'-2"	18'-4"	-
14"	NI-40x	20'-1"	18'-8"	17'-10"	-	20'-10"	19'-4"	18'-6"	-
	NI-60	20'-6"	18'-11"	18'-2"	-	21'-2"	19'-8"	18'-9"	-
	NI-80	21'-11"	20'-3"	19'-4"	-	22'-7"	20'-11"	20'-0"	-
	NI-90	22'-5"	20'-8"	19'-9"	-	23'-0"	21'-4"	20'-4"	-
16"	NI-60	22'-4"	20'-8"	19'-9"	-	23'-1"	21'-5"	20'-6"	-
	NI-80	23'-11"	22'-1"	21'-1"	-	24'-8"	22'-10"	21'-9"	-
	NI-90	24'-5"	22'-6"	21'-6"	-	25'-1"	23'-2"	22'-2"	-

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap, On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-8"	15'-3"	14'-5"	-	16'-8"	15'-3"	14'-5"	-
	NI-40x	17'-11"	17'-0"	16'-1"	-	18'-5"	17'-1"	16'-1"	-
	NI-60	18'-2"	17'-1"	16'-4"	-	18'-8"	17'-4"	16'-4"	-
	NI-80	19'-5"	18'-0"	17'-5"	-	19'-10"	18'-5"	17'-8"	-
11-7/8"	NI-20	19'-7"	18'-2"	17'-3"	-	19'-11"	18'-3"	17'-3"	-
	NI-40x	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-0"	-
	NI-60	21'-4"	19'-9"	18'-11"	-	21'-11"	20'-5"	19'-6"	-
	NI-80	22'-9"	21'-1"	20'-2"	-	23'-3"	21'-8"	20'-8"	-
	NI-90	23'-3"	21'-6"	20'-6"	-	23'-9"	22'-0"	21'-0"	-
14"	NI-40x	23'-8"	21'-11"	20'-11"	-	24'-4"	22'-8"	20'-11"	-
	NI-60	24'-0"	22'-3"	21'-3"	-	24'-8"	22'-11"	21'-11"	-
	NI-80	25'-7"	23'-9"	22'-7"	-	26'-2"	24'-4"	23'-3"	-
	NI-90	26'-1"	24'-2"	23'-0"	-	26'-8"	24'-9"	23'-7"	-
16"	NI-60	26'-5"	24'-6"	23'-5"	-	27'-2"	25'-3"	24'-2"	-
	NI-80	28'-2"	26'-1"	24'-10"	-	28'-10"	26'-9"	25'-6"	-
	NI-90	28'-8"	26'-6"	25'-3"	-	29'-3"	27'-2"	25'-11"	-

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – M4.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

Maximum Floor Spans

Joist depth	Joist series	Bare, On centre spacing				1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	15'-11"	15'-0"	14'-6"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"
	NI-40x	17'-0"	16'-0"	15'-5"	14'-10"	17'-5"	16'-5"	15'-10"	14'-11"
	NI-60	17'-2"	16'-2"	15'-7"	14'-11"	17'-7"	16'-7"	16'-0"	15'-4"
	NI-80	18'-3"	17'-1"	16'-5"	15'-9"	18'-8"	17'-5"	16'-9"	16'-1"
11-7/8"	NI-20	17'-11"	16'-11"	16'-3"	15'-8"	18'-7"	17'-5"	16'-10"	16'-1"
	NI-40x	19'-4"	17'-11"	17'-3"	16'-7"	19'-11"	18'-6"	17'-9"	17'-0"
	NI-60	19'-7"	18'-2"	17'-6"	16'-9"	20'-2"	18'-9"	17'-11"	17'-2"
	NI-80	21'-1"	19'-6"	18'-6"	17'-7"	21'-7"	20'-0"	19'-0"	18'-0"
	NI-90	21'-6"	19'-10"	18'-11"	17'-11"	22'-0"	20'-4"	19'-5"	18'-4"
14"	NI-40x	21'-5"	19'-11"	18'-11"	18'-0"	22'-1"	20'-7"	19'-7"	18'-7"
	NI-60	21'-10"	20'-2"	19'-3"	18'-3"	22'-6"	20'-10"	19'-11"	18'-10"
	NI-80	23'-5"	21'-7"	20'-7"	19'-5"	24'-0"	22'-3"	21'-2"	20'-0"
	NI-90	23'-10"	22'-1"	21'-0"	19'-10"	24'-5"	22'-7"	21'-6"	20'-4"
16"	NI-60	23'-9"	22'-0"	21'-0"	19'-10"	24'-6"	22'-9"	21'-8"	20'-7"
	NI-80	25'-6"	23'-7"	22'-5"	21'-2"	26'-2"	24'-3"	23'-1"	21'-10"
	NI-90	26'-0"	24'-0"	22'-10"	21'-6"	26'-7"	24'-8"	23'-5"	22'-2"

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap, On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-10"	15'-5"	14'-6"	13'-5"	16'-10"	15'-5"	14'-6"	13'-5"
	NI-40x	18'-8"	17'-2"	16'-3"	14'-11"	18'-10"	17'-2"	16'-3"	14'-11"
	NI-60	18'-11"	17'-6"	16'-6"	15'-5"	19'-2"	17'-6"	16'-6"	15'-5"
	NI-80	20'-3"	18'-10"	17'-11"	16'-10"	20'-8"	19'-3"	18'-2"	16'-10"
11-7/8"	NI-20	20'-1"	18'-5"	17'-5"	16'-1"	20'-1"	18'-5"	17'-5"	16'-1"
	NI-40x	21'-10"	20'-4"	19'-0"	17'-0"	22'-5"	20'-6"	19'-0"	17'-0"
	NI-60	22'-1"	20'-7"	19'-8"	18'-4"	22'-8"	20'-10"	19'-8"	18'-4"
	NI-80	23'-8"	22'-0"	20'-11"	19'-10"	24'-1"	22'-6"	21'-6"	20'-0"
	NI-90	24'-1"	22'-5"	21'-4"	20'-2"	24'-7"	22'-11"	21'-10"	20'-7"
14"	NI-40x	24'-5"	22'-9"	20'-11"	18'-8"	25'-1"	22'-11"	20'-11"	18'-8"
	NI-60	24'-10"	23'-2"	22'-1"	20'-10"	25'-6"	23'-8"	22'-4"	20'-10"
	NI-80	26'-6"	24'-8"	23'-6"	22'-2"	27'-1"	25'-3"	24'-1"	22'-9"
	NI-90	27'-0"	25'-1"	23'-11"	22'-7"	27'-6"	25'-8"	24'-6"	23'-2"
16"	NI-60	27'-3"	25'-5"	24'-3"	22'-11"	28'-0"	26'-2"	24'-9"	23'-1"
	NI-80	29'-1"	27'-1"	25'-9"	24'-4"	29'-8"	27'-9"	26'-5"	25'-0"
	NI-90	29'-7"	27'-6"	26'-2"	24'-9"	30'-2"	28'-2"	26'-10"	25'-5"

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – M6.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

Joist depth	Joist series	Bare				1/2 in. gypsum ceiling			
		On centre spacing				On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	14'-11"	14'-1"	13'-7"	-	15'-4"	14'-6"	14'-1"	-
	NI-40x	15'-11"	15'-0"	14'-6"	-	16'-4"	15'-5"	14'-11"	-
	NI-60	16'-1"	15'-2"	14'-8"	-	16'-6"	15'-7"	15'-1"	-
	NI-80	17'-1"	16'-1"	15'-6"	-	17'-5"	16'-5"	15'-10"	-
11-7/8"	NI-20	16'-9"	15'-10"	15'-4"	-	17'-4"	16'-4"	15'-10"	-
	NI-40x	17'-10"	16'-10"	16'-3"	-	18'-6"	17'-4"	16'-9"	-
	NI-60	18'-1"	17'-0"	16'-5"	-	18'-9"	17'-6"	16'-11"	-
	NI-80	19'-6"	18'-0"	17'-4"	-	20'-1"	18'-7"	17'-9"	-
	NI-90	19'-11"	18'-4"	17'-8"	-	20'-5"	18'-11"	18'-1"	-
14"	NI-40x	19'-10"	18'-4"	17'-8"	-	20'-6"	19'-1"	18'-3"	-
	NI-60	20'-2"	18'-8"	17'-11"	-	20'-10"	19'-4"	18'-6"	-
	NI-80	21'-8"	20'-0"	19'-1"	-	22'-4"	20'-8"	19'-9"	-
	NI-90	22'-1"	20'-5"	19'-6"	-	22'-9"	21'-0"	20'-1"	-
16"	NI-60	22'-0"	20'-4"	19'-6"	-	22'-9"	21'-1"	20'-2"	-
	NI-80	23'-7"	21'-10"	20'-10"	-	24'-4"	22'-6"	21'-6"	-
	NI-90	24'-1"	22'-2"	21'-2"	-	24'-9"	22'-11"	21'-10"	-

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling			
		On centre spacing				On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-6"	15'-1"	14'-3"	-	16'-6"	15'-1"	14'-3"	-
	NI-40x	17'-9"	16'-10"	15'-11"	-	18'-2"	16'-11"	15'-11"	-
	NI-60	17'-11"	16'-11"	16'-2"	-	18'-5"	17'-2"	16'-2"	-
	NI-80	19'-3"	17'-10"	17'-3"	-	19'-8"	18'-3"	17'-7"	-
11-7/8"	NI-20	19'-4"	18'-0"	17'-1"	-	19'-9"	18'-1"	17'-1"	-
	NI-40x	20'-10"	19'-4"	18'-6"	-	21'-5"	19'-11"	19'-0"	-
	NI-60	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-3"	-
	NI-80	22'-6"	20'-10"	19'-11"	-	23'-1"	21'-5"	20'-5"	-
	NI-90	23'-0"	21'-3"	20'-4"	-	23'-6"	21'-10"	20'-10"	-
14"	NI-40x	23'-5"	21'-8"	20'-9"	-	24'-0"	22'-5"	20'-11"	-
	NI-60	23'-9"	22'-0"	21'-0"	-	24'-5"	22'-8"	21'-8"	-
	NI-80	25'-4"	23'-6"	22'-5"	-	25'-11"	24'-1"	23'-0"	-
	NI-90	25'-10"	23'-11"	22'-9"	-	26'-5"	24'-6"	23'-4"	-
16"	NI-60	26'-2"	24'-3"	23'-2"	-	26'-11"	25'-0"	23'-11"	-
	NI-80	27'-11"	25'-10"	24'-7"	-	28'-7"	26'-6"	25'-3"	-
	NI-90	28'-5"	26'-3"	25'-0"	-	29'-0"	26'-11"	25'-8"	-

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

NORDIC
STRUCTURES

Maximum Floor Spans – M7.1

Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

Joist depth	Joist series	Bare, On centre spacing				1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	15'-10"	15'-0"	14'-5"	13'-5"	16'-4"	15'-5"	14'-6"	13'-5"
	NI-40x	16'-11"	15'-11"	15'-4"	14'-9"	17'-4"	16'-4"	15'-9"	14'-11"
	NI-60	17'-1"	16'-1"	15'-6"	14'-10"	17'-6"	16'-6"	15'-11"	15'-3"
	NI-80	18'-1"	17'-0"	16'-4"	15'-8"	18'-7"	17'-4"	16'-8"	16'-0"
11-7/8"	NI-20	17'-10"	16'-10"	16'-2"	15'-7"	18'-5"	17'-4"	16'-9"	16'-1"
	NI-40x	19'-3"	17'-10"	17'-2"	16'-6"	19'-10"	18'-5"	17'-8"	16'-11"
	NI-60	19'-6"	18'-1"	17'-4"	16'-8"	20'-1"	18'-8"	17'-10"	17'-1"
	NI-80	20'-11"	19'-4"	18'-5"	17'-7"	21'-5"	19'-10"	18'-11"	17'-11"
	NI-90	21'-4"	19'-9"	18'-9"	17'-10"	21'-10"	20'-3"	19'-3"	18'-3"
14"	NI-40x	21'-4"	19'-9"	18'-10"	17'-11"	22'-0"	20'-5"	19'-6"	18'-6"
	NI-60	21'-8"	20'-1"	19'-2"	18'-2"	22'-4"	20'-9"	19'-9"	18'-9"
	NI-80	23'-3"	21'-6"	20'-5"	19'-4"	23'-10"	22'-1"	21'-0"	19'-11"
	NI-90	23'-9"	21'-11"	20'-10"	19'-8"	24'-3"	22'-6"	21'-5"	20'-3"
16"	NI-60	23'-7"	21'-10"	20'-10"	19'-9"	24'-4"	22'-7"	21'-7"	20'-5"
	NI-80	25'-4"	23'-5"	22'-3"	21'-1"	26'-0"	24'-1"	22'-11"	21'-8"
	NI-90	25'-10"	23'-10"	22'-8"	21'-5"	26'-5"	24'-6"	23'-4"	22'-0"

Joist depth	Joist series	Mid-span blocking with 1x4 inch strap, On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling, On centre spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	16'-10"	15'-5"	14'-6"	13'-5"	16'-10"	15'-5"	14'-6"	13'-5"
	NI-40x	18'-7"	17'-2"	16'-3"	14'-11"	18'-10"	17'-2"	16'-3"	14'-11"
	NI-60	18'-10"	17'-6"	16'-6"	15'-5"	19'-1"	17'-6"	16'-6"	15'-5"
	NI-80	20'-2"	18'-9"	17'-11"	16'-10"	20'-7"	19'-2"	18'-2"	16'-10"
11-7/8"	NI-20	20'-1"	18'-5"	17'-5"	16'-1"	20'-1"	18'-5"	17'-5"	16'-1"
	NI-40x	21'-9"	20'-3"	19'-0"	17'-0"	22'-4"	20'-5"	19'-0"	17'-0"
	NI-60	22'-0"	20'-6"	19'-7"	18'-4"	22'-7"	20'-10"	19'-8"	18'-4"
	NI-80	23'-6"	21'-10"	20'-10"	19'-9"	24'-0"	22'-5"	21'-4"	20'-0"
	NI-90	24'-0"	22'-4"	21'-3"	20'-1"	24'-6"	22'-10"	21'-9"	20'-7"
14"	NI-40x	24'-4"	22'-8"	20'-11"	18'-8"	25'-0"	22'-11"	20'-11"	18'-8"
	NI-60	24'-9"	23'-0"	22'-0"	20'-9"	25'-5"	23'-8"	22'-4"	20'-10"
	NI-80	26'-5"	24'-6"	23'-4"	22'-1"	27'-0"	25'-2"	24'-0"	22'-8"
	NI-90	26'-11"	25'-0"	23'-10"	22'-6"	27'-5"	25'-7"	24'-5"	23'-1"
16"	NI-60	27'-2"	25'-4"	24'-2"	22'-10"	27'-11"	26'-1"	24'-9"	23'-1"
	NI-80	29'-0"	26'-11"	25'-8"	24'-3"	29'-7"	27'-7"	26'-4"	24'-11"
	NI-90	29'-6"	27'-5"	26'-1"	24'-8"	30'-1"	28'-1"	26'-9"	25'-4"

Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.