



FROM PLAN DATED: FEB 2016

BUILDER: GREENPARK

SITE: STARTIME HOMES LTD

MODEL: ELMBROOK 4B

ELEVATION: 1B, 2A, 1A & 2B

LOT:

CITY: VAUGHAN

SALESMAN: M D

DESIGNER: CF

REVISION: -

NOTES:

CERAMIC TILE APPLICATION

AS PER O.B.C. 9.30.6.

SQUASH BLOCKS

2x4 OR 2x6 #2 S.P.F. REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS.

MULTIPLE SQUASH BLOCKS REQ'D UNDER CONCENTRATED LOADS.

CANTILEVERED JOISTS

REQUIRE I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS.

REFER TO THE NORDIC INSTALLATION GUIDE FOR PROPER STORAGE AND INSTALLATION.

LOADING:

DESIGN LOADS: L#60.000

LIVE LOAD: 40.0 lb/ft²

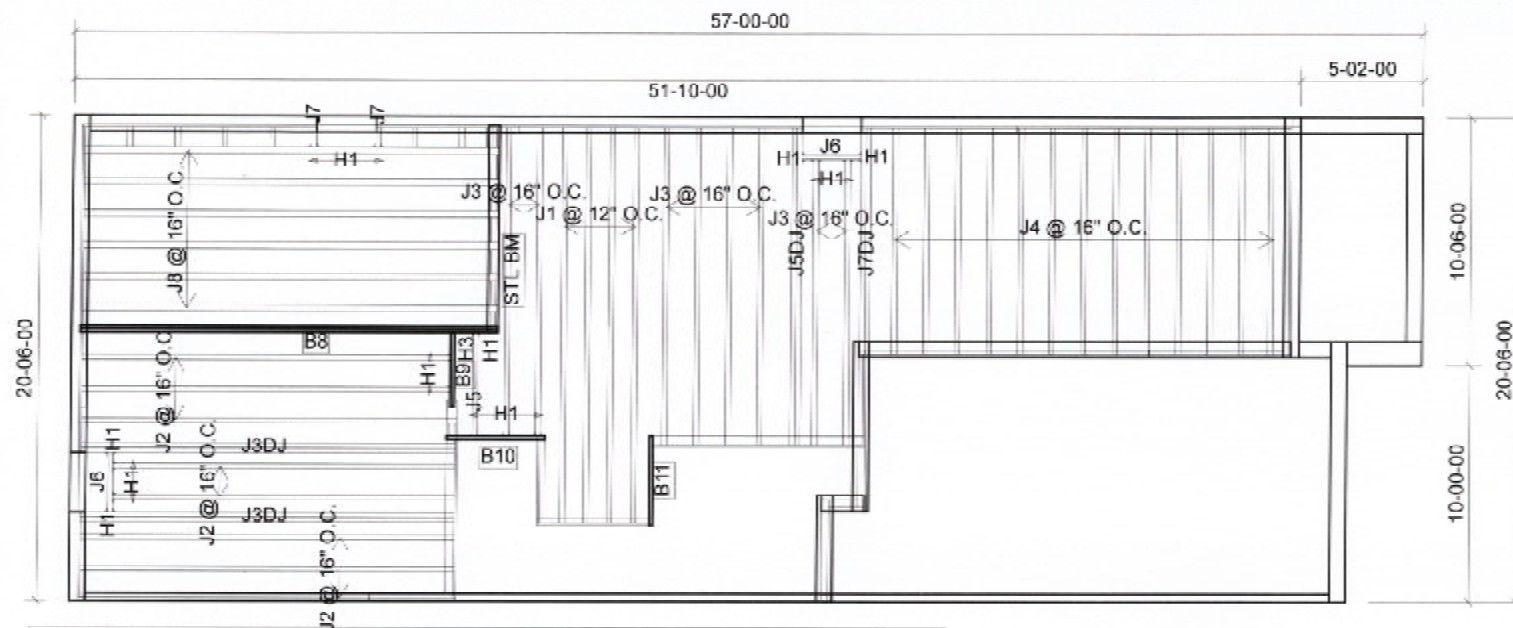
DEAD LOAD: 15.0 lb/ft²

TILED AREAS: 20 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2016-10-31

1st FLOOR



Products

PictID	Length	Product	Plies	Net Qty
J1	18-00-00	9 1/2" NI-40x	1	4
J2	16-00-00	9 1/2" NI-40x	1	8
J3DJ	16-00-00	9 1/2" NI-40x	2	4
J3	14-00-00	9 1/2" NI-40x	1	8
J5DJ	14-00-00	9 1/2" NI-40x	2	2
J4	10-00-00	9 1/2" NI-40x	1	13
J7DJ	10-00-00	9 1/2" NI-40x	2	2
J5	6-00-00	9 1/2" NI-40x	1	1
J6	4-00-00	9 1/2" NI-40x	1	2
J7	2-00-00	9 1/2" NI-40x	1	2
J8	18-00-00	9 1/2" NI-80	1	6
B8	18-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B10	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B11	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B9	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary

Qty	Manuf	Product
5	H1	IUS2.56/9.5
1	H1	IUS2.56/9.5
4	H1	IUS2.56/9.5
4	H1	IUS2.56/9.5
2	H1	IUS2.56/9.5
1	H3	HUS1.81/10



FROM PLAN DATED: OCT 2016

BUILDER:
GREENPARK

SITE:
STARTIME HOMES LTD

MODEL: ELMBROOK 4B

ELEVATION: 3

LOT:
CITY: VAUGHAN

SALESMAN: M D
DESIGNER: LBV
REVISION:

NOTES:
CERAMIC TILE APPLICATION
AS PER O.B.C. 9.30.6.

SQUASH BLOCKS
2x4 OR 2x6 #2 S.P.F. REQ'D UNDER
INTERIOR UNIFORM LOAD BEARING
WALLS.

MULTIPLE SQUASH BLOCKS REQ'D
UNDER CONCENTRATED LOADS.
CANTILEVERED JOISTS
REQUIRE I-JOIST BLOCKING ALONG
BEARING AND RIMBOARD CLOSURE AT
ENDS.

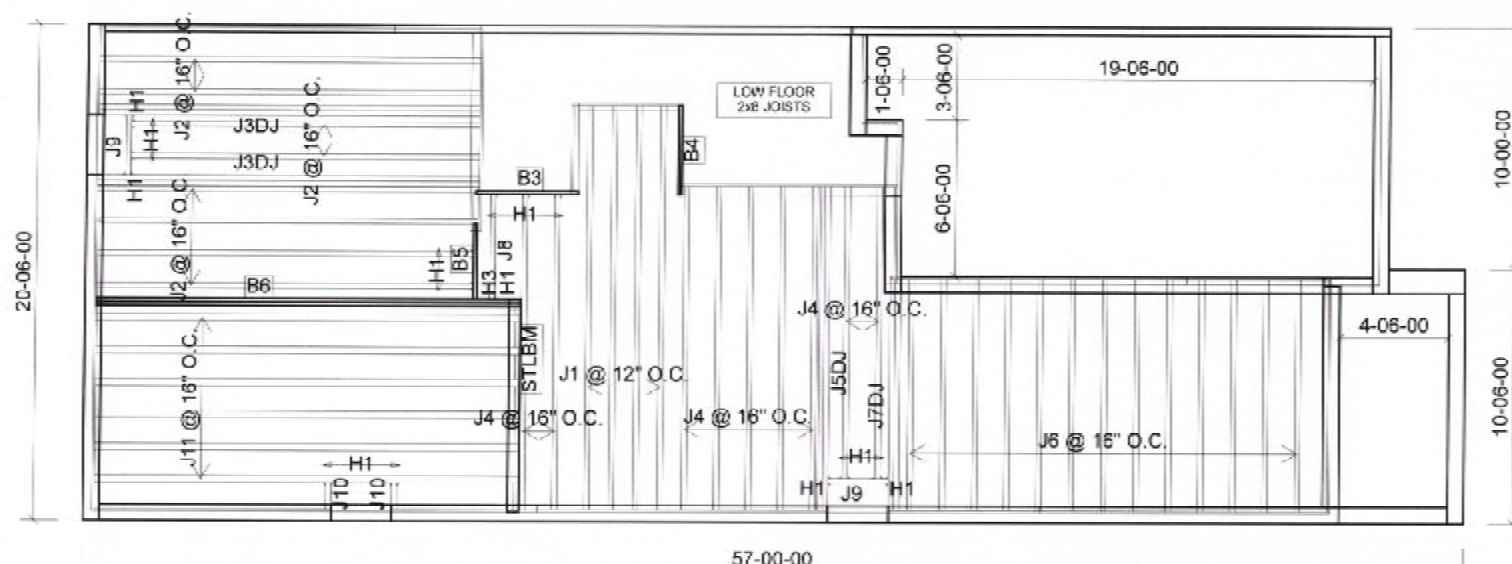
REFER TO THE NORDIC
INSTALLATION GUIDE FOR PROPER
STORAGE AND INSTALLATION.

LOADING:
DESIGN LOADS: L480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 15.0 lb/ft²
TILED AREAS: 20 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2016-10-31

1st FLOOR



Products					Connector Summary		
PlotID	Length	Product	Plies	Net Qty	Qty	Manuf	Product
J1	18-00-00	9 1/2" NI-40x	1	4	5	H1	IUS2.56/9.5
J2	16-00-00	9 1/2" NI-40x	1	8	1	H1	IUS2.56/9.5
J3DJ	16-00-00	9 1/2" NI-40x	2	4	4	H1	IUS2.56/9.5
J4	14-00-00	9 1/2" NI-40x	1	9	4	H1	IUS2.56/9.5
J5DJ	14-00-00	9 1/2" NI-40x	2	2	2	H1	IUS2.56/9.5
J6	10-00-00	9 1/2" NI-40x	1	13	1	H3	HUS1.81/10
J7DJ	10-00-00	9 1/2" NI-40x	2	2			
J8	6-00-00	9 1/2" NI-40x	1	1			
J9	4-00-00	9 1/2" NI-40x	1	2			
J10	2-00-00	9 1/2" NI-40x	1	2			
J11	18-00-00	9 1/2" NI-80	1	6			
B6	18-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2			
B3	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1			
B4	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1			
B5	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1			



FROM PLAN DATED: FEB 2016

BUILDER:
GREENPARK

SITE:
STARTIME

MODEL: ELMBROOK 4B

ELEVATION: 1A, 2A, 1B, 2B & 3

LOT:
CITY: VAUGHAN

SALESMAN: M/D
DESIGNER: CF
REVISION:

NOTES:
CERAMIC TILE APPLICATION
AS PER O.B.C. 9.30.6.
SQUASH BLOCKS
2x4 OR 2x6 #2 S.P.F. REQ'D UNDER
INTERIOR UNIFORM LOAD BEARING
WALLS.
MULTIPLE SQUASH BLOCKS REQ'D
UNDER CONCENTRATED LOADS.
CANTILEVERED JOISTS
REQUIRE I-JOIST BLOCKING ALONG
BEARING AND RIMBOARD CLOSURE AT
ENDS.
REFER TO THE NORDIC
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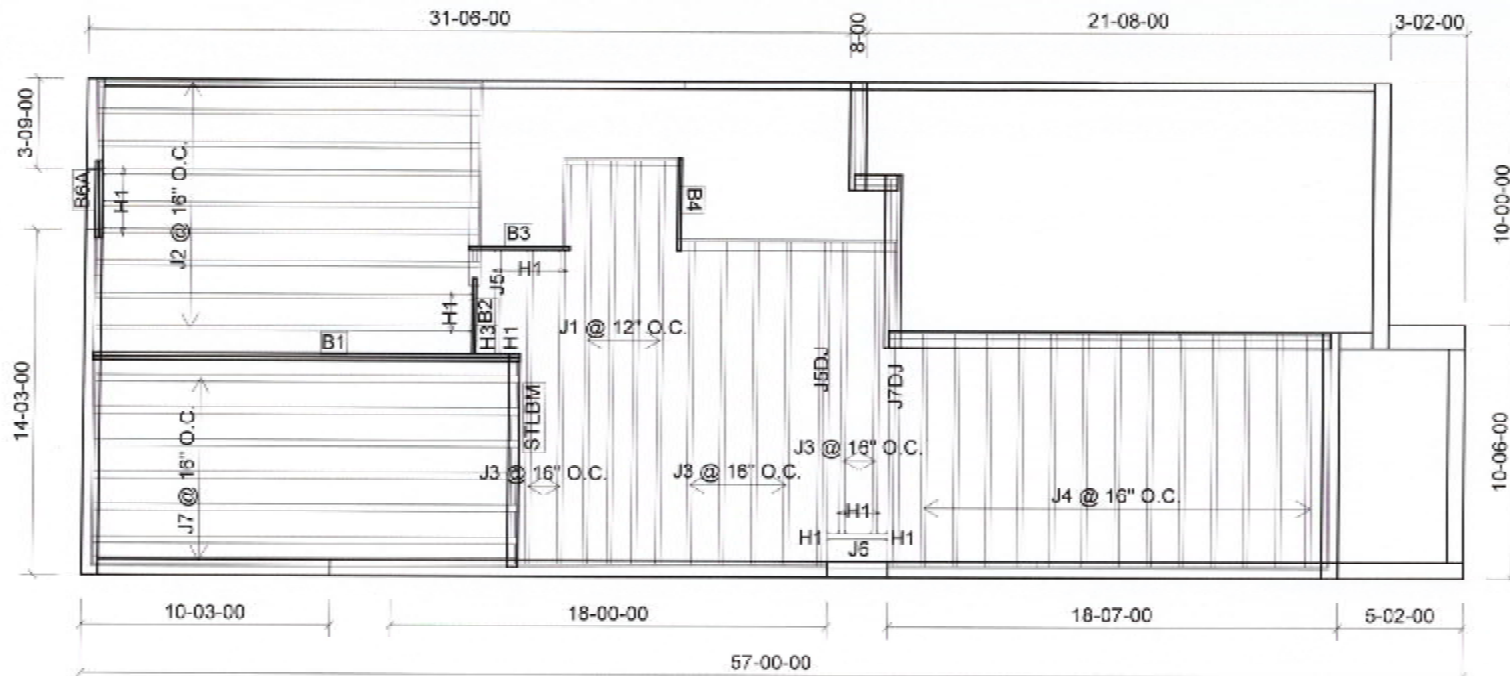
LOADING:
DESIGN LOADS: L480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 15.0 lb/ft²
TILED AREAS: 20 lb/ft²

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2016-10-31

1st FLOOR

DECK OPTION



Products				
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	9 1/2" NI-40x	1	4
J2	16-00-00	9 1/2" NI-40x	1	9
J3	14-00-00	9 1/2" NI-40x	1	8
J5DJ	14-00-00	9 1/2" NI-40x	2	2
J4	10-00-00	9 1/2" NI-40x	1	13
J7DJ	10-00-00	9 1/2" NI-40x	2	2
J5	6-00-00	9 1/2" NI-40x	1	1
J6	4-00-00	9 1/2" NI-40x	1	1
J7	18-00-00	9 1/2" NI-80	1	7
B1	18-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B3	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B2	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B6A	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
5	H1	IUS2.56/9.5
4	H1	IUS2.56/9.5
2	H1	IUS2.56/9.5
2	H1	IUS2.56/9.5
1	H3	HUS1.81/10



FROM PLAN DATED: FEB 2016

BUILDER: GREENPARK

SITE: STARTIME HOMES LTD

MODEL: ELMBROOK 4B

ELEVATION: 1A, 2B

LOT:

CITY: VAUGHAN

SALESMAN: M D

DESIGNER: CF

REVISION: -

NOTES:

CERAMIC TILE APPLICATION
AS PER O.B.C. 9.30.8.

SQUASH BLOCKS

2x4 OR 2x6 #2 S.P.F. REQ'D UNDER
INTERIOR UNIFORM LOAD BEARING
WALLS.

MULTIPLE SQUASH BLOCKS REQ'D
UNDER CONCENTRATED LOADS.

CANTILEVERED JOISTS

REQUIRE JOIST BLOCKING ALONG
BEARING AND RIMBOARD CLOSURE AT
ENDS.

REFER TO THE NORDIC
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STORAGE AND INSTALLATION.

LOADING:

DESIGN LOADS: L480.000

LIVE LOAD: 40.0 lb/ft²

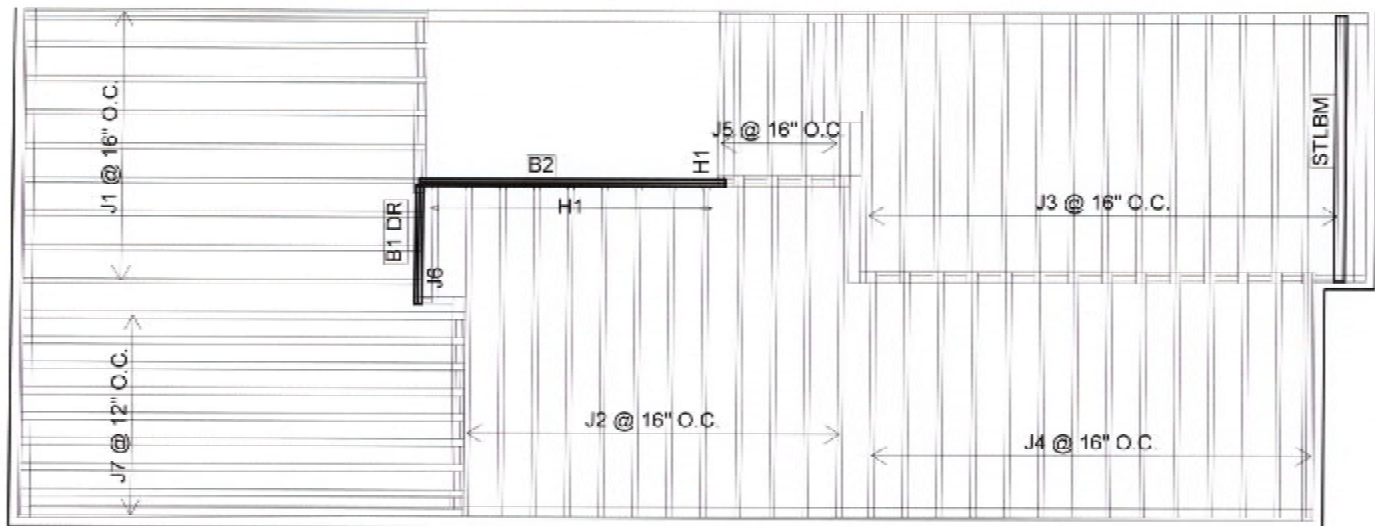
DEAD LOAD: 15.0 lb/ft²

TILED AREAS: 20 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

DATE: 2016-10-31

2nd FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J1	16-00-00	9 1/2" NI-40x	1	9
J2	14-00-00	9 1/2" NI-40x	1	12
J3	12-00-00	9 1/2" NI-40x	1	15
J4	10-00-00	9 1/2" NI-40x	1	14
J5	8-00-00	9 1/2" NI-40x	1	5
J6	6-00-00	9 1/2" NI-40x	1	1
J7	18-00-00	9 1/2" NI-80	1	9
B2	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
10	H1	IUS2.56/9.5



FROM PLAN DATED: FEB 2016

BUILDER: STARTIME

SITE:
AURORA

MODEL: ELMBROOK 4B

ELEVATION: 1B, 2A

LOT:
CITY: VAUGHAN

SALESMAN: M D
DESIGNER: CF
REVISION: -

NOTES:
CERAMIC TILE APPLICATION
AS PER O.B.C. 9.30.8.
SQUASH BLOCKS
2x4 OR 2x6 #2 S.P.F. REQ'D UNDER
INTERIOR UNIFORM LOAD BEARING
WALLS.

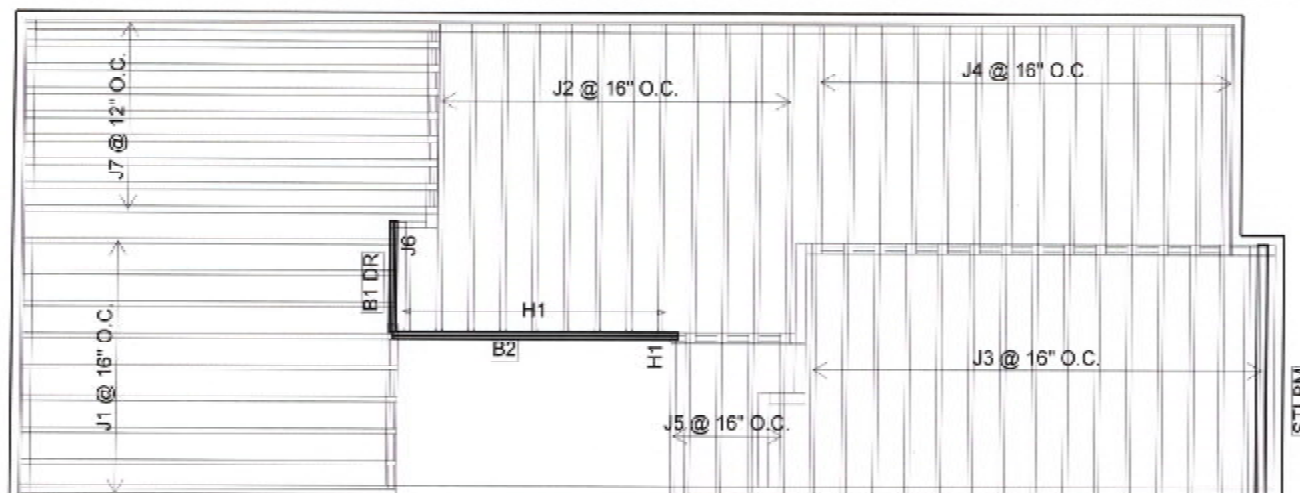
MULTIPLE SQUASH BLOCKS REQ'D
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REQUIRE I-JOIST BLOCKING ALONG
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ENDS.
REFER TO THE NORDIC
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LOADING:
DESIGN LOADS: L/480,000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 15.0 lb/ft²
TILED AREAS: 20 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

DATE: 2016-10-31

2nd FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J1	16-00-00	9 1/2" NI-40x	1	9
J2	14-00-00	9 1/2" NI-40x	1	12
J3	12-00-00	9 1/2" NI-40x	1	16
J4	10-00-00	9 1/2" NI-40x	1	14
J5	8-00-00	9 1/2" NI-40x	1	5
J6	6-00-00	9 1/2" NI-40x	1	1
J7	18-00-00	9 1/2" NI-80	1	9
B2	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary		
Qty	Manuf	Product
10	H1	IUS2.56/9.5



FROM PLAN DATED: OCT 2016

BUILDER:
GREENPARK

SITE:
STARTIME HOMES LTD

MODEL: ELMBROOK 4B

ELEVATION: 3

LOT:
CITY: VAUGHAN

SALESMAN: M/D
DESIGNER: LBV
REVISION:

NOTES:
CERAMIC TILE APPLICATION
AS PER O.B.C. 9.30.6.
SQUASH BLOCKS
2x4 OR 2x6 #2 S.P.F. REQ'D UNDER
INTERIOR UNIFORM LOAD BEARING
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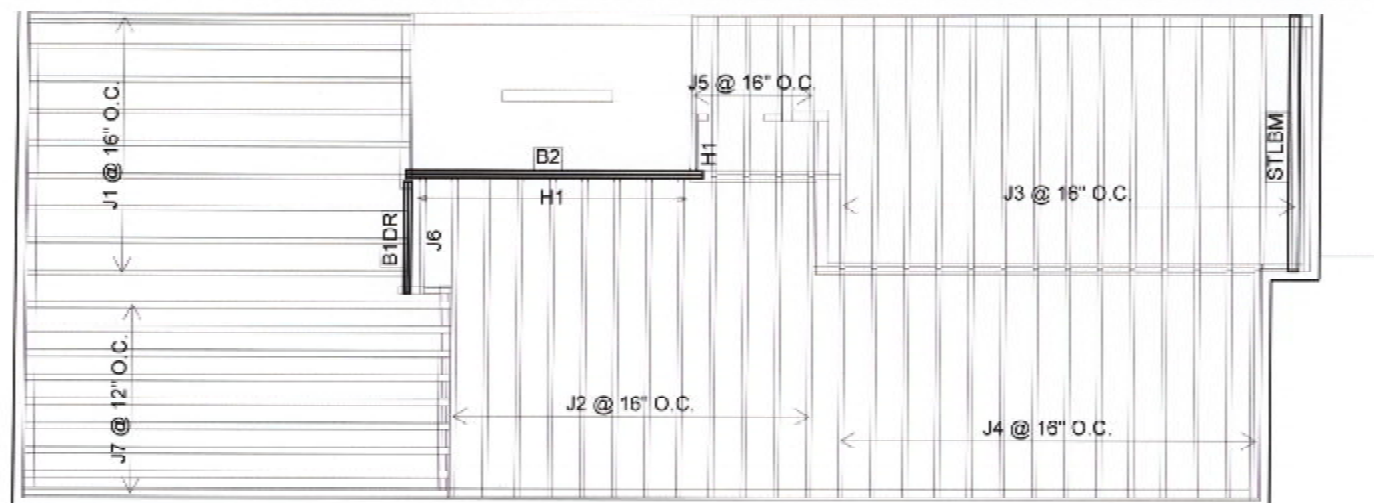
REFER TO THE NORDIC
INSTALLATION GUIDE FOR PROPER
STORAGE AND INSTALLATION.

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.00 lb/ft²
DEAD LOAD: 15.0 lb/ft²
TILE AREA: 20.00 lb/ft²

SUBFLOOR: 5/8" GLUED AND NAILED

DATE: 2016-10-31

2nd FLOOR



Products					Connector Summary		
PlotID	Length	Product	Plies	Net Qty	Qty	Manuf	Product
J1	16-00-00	9 1/2" NI-40x	1	9	10	H1	IUS2.56/9.5
J2	14-00-00	9 1/2" NI-40x	1	12			
J3	12-00-00	9 1/2" NI-40x	1	15			
J4	10-00-00	9 1/2" NI-40x	1	14			
J5	8-00-00	9 1/2" NI-40x	1	5			
J6	6-00-00	9 1/2" NI-40x	1	1			
J7	18-00-00	9 1/2" NI-80	1	9			
B2	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2			
B1DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2			



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

Floor Beam B01

BC CALC® Design Report



Dry | 1 span | No cantilevers | 0/12 slope (deg)

March-02-15

Build 3272

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

MODEL-ELMBROOK 4A/4B

GreenPoint Home

CCMC 12472-R

File Name: ELMBROOK 4

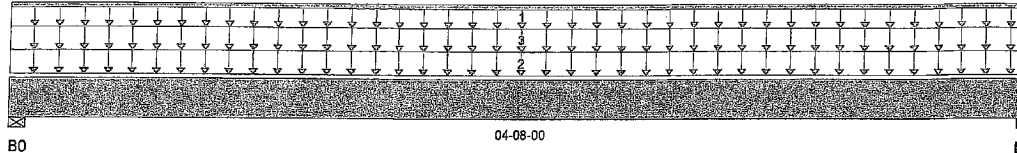
Description: Designs\B01

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



B0

B1

Total Horizontal Product Length = 04-08-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	793 / 0	480 / 0		
B1, 3-1/2"	793 / 0	480 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	WALL ABOVE	Unf. Lin. (lb/ft)	L	00-00-00	04-08-00	0	60			n/a
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	04-08-00	40	15			00-08-00
3	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	04-08-00	40	15			07-10-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	1,675 ft-lbs	25,408 ft-lbs	0.07	1	02-04-00
End Shear	946 lbs	11,571 lbs	0.08	1	01-01-00
Total Load Defl.	L/999 (0.008")	n/a	n/a	4	02-04-00
Live Load Defl.	L/999 (0.005")	n/a	n/a	5	02-04-00
Max Defl.	0.008"	n/a	n/a	4	02-04-00
Span / Depth	5.3	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B0 Wall/Plate	3-1/2" x 3-1/2"	1,765 lbs	0.23	0.12	Spruce Pine Fir
B1 Wall/Plate	3-1/2" x 3-1/2"	1,765 lbs	0.23	0.12	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum total load deflection criteria.

Calculations assume Member is Fully Braced.

Resistance Factor phi has been applied to all presented results per CSA 086. *03/02/15*

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.

Design based on Dry Service Condition.

Importance Factor : Normal Part code : Part 4

Deflections less than 1/8" were ignored in the results.

User NotesDESIGNER B.C.I.N. *26064*

NAIL 1 PLY 2 ANOTHER WITH 3 1/2" SPIRAL NAILS

@ 8" O.C. STAGGERED IN TWO ROWS.



16

HWB NO. TAM 7642-15

STRUCTURAL
COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

Floor Beam\B01

Dry | 1 span | No cantilevers | 0/12 slope (deg)

March-02-15

BC CALC® Design Report



Build 3272

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

MODEL-ELMBROOK 4A/4B

Green Park Home

CCMC 12472-R

File Name: ELMBROOK 4

Description: Designs\B01

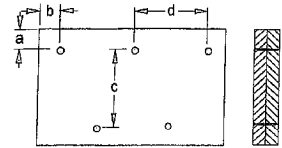
Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,

Connection Diagram



a minimum = 2" c = 5-1/2"
b minimum = 3" d = 2" @ "

Member has no side loads.

Connectors are: 16d @ 12" Nails

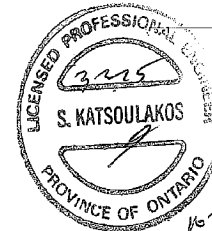
(3 1/2" x 10" x 12" x 12")

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation. BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Prod



Boise Cascade



DWG NO. TAM 2642 - 15
STRUCTURAL
COMPONENT ONLY

**Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP****Floor Beam\B02**

Dry | 1 span | No cantilevers | 0/12 slope (deg)

May-15-14

BC CALC® Design Report - CA

Build 2627

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

MODEL-ELMBROOK 4A-14B

GREENPARK HOME

CCMC 12472-R

File Name: ELMBROOK 4.bcc

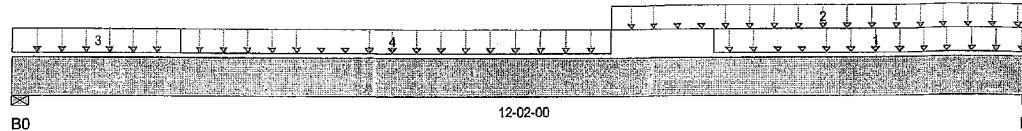
Description: Designs\B02

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 12-02-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	1,418 / 0	701 / 0		
B1, 3-1/2"	1,834 / 0	810 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
1	STAIRS	Unf. Area (lb/ft²)	L	08-04-00	12-02-00	40	15			01-02-00
2	FLOOR	Unf. Area (lb/ft²)	L	07-01-00	12-02-00	40	15			07-00-00
3	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	02-00-00	40	15			02-10-00
4	TILED FLOOR	Unf. Area (lb/ft²)	L	02-00-00	07-01-00	40	20			07-00-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	10,148 ft-lbs	25,408 ft-lbs	0.4	1	06-02-02
End Shear	3,054 lbs	11,571 lbs	0.26	1	11-01-00
Total Load Defl.	L/400 (0.352")	0.585"	0.6	4	06-01-07
Live Load Defl.	L/592 (0.238")	0.39"	0.61	5	06-01-09
Max Defl.	0.352"	1"	0.35	4	06-01-07
Span / Depth	14.8	n/a	n/a		00-00-00

Bearing Supports

B0	Wall/Plate	3-1/2" x 3-1/2"	3,004 lbs	0.4	0.2	Spruce Pine Fir
B1	Wall/Plate	3-1/2" x 3-1/2"	3,764 lbs	0.5	0.25	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets User specified (1") Maximum total load deflection criteria.
Calculations assume Member is Fully Braced.
Resistance Factor phi has been applied to all presented results per CSA 086.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086. 06/22/14
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes

DESIGNER B.C.I.N. 26064
NAIL 1 PLY 2 ANOTHER WITH 3 1/2" SPIRAL NAILS
@ 12" O.C. STAGGERED IN 3 ROWS.

THREE

PROVIDE NAILING
DETAIL # LA SEE
DWG #TAMN1001-14



DWG NO. TAM 51600-14
STRUCTURAL
COMPONENT ONLY



Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

Floor Beam\B03

Dry | 1 span | No cantilevers | 0/12 slope (deg)

May-15-14

BC CALC® Design Report - CA

Build 2627

Job Name:

Address:

MODEL-ELMBROOK 4A\H6

City, Province, Postal Code:

Customer:

GREENPARK HOME

Code reports:

CCMC 12472-R

File Name: ELMBROOK 4.bcc

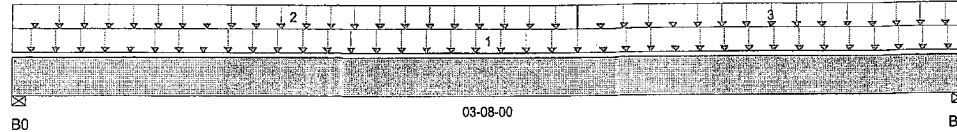
Description: Designs\B03

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 03-08-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	330 / 0	132 / 0		
B1, 3-1/2"	499 / 0	196 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
1	STAIRS	Unf. Area (lb/ft²)	L	00-00-00	03-08-00	40	15			01-06-00
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	02-02-00	40	15			02-05-00
3	FLOOR	Unf. Area (lb/ft²)	L	02-02-00	03-08-00	40	15			06-08-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	550 ft-lbs	12,704 ft-lbs	0.04	1	02-01-03
End Shear	320 lbs	5,785 lbs	0.06	1	01-01-00
Total Load Defl.	L/999 (0.003")	n/a	n/a	4	01-10-09
Live Load Defl.	L/999 (0.002")	n/a	n/a	5	01-10-09
Max Defl.	0.003"	n/a	n/a	4	01-10-09
Span / Depth	4.1	n/a	n/a		00-00-00

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-8999 before installation. In BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.

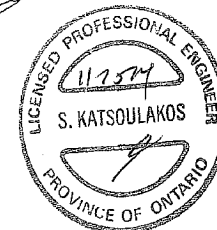
Bearing Supports

	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0	Wall/Plate 3-1/2" x 1-3/4"	660 lbs	0.18	0.09	Spruce Pine Fir
B1	Wall/Plate 3-1/2" x 1-3/4"	994 lbs	0.26	0.13	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets User specified (1") Maximum total load deflection criteria.
Calculations assume Member is Fully Braced.
Resistance Factor phi has been applied to all presented results per CSA 086.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes



DWG NO. TAM51602-14
STRUCTURAL
COMPONENT ONLY



Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

Floor Beam\B04

BC CALC® Design Report - CA

Dry | 1 span | No cantilevers | 0/12 slope (deg)

May-15-14

Build 2627

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

MODEL-ELMBROOK 4A/4B

GREENPARK HOME

CCMC 12472-R

File Name: ELMBROOK 4.bcc

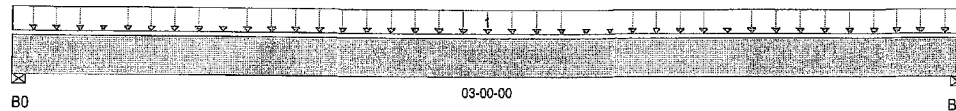
Description: Designs\B04

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 03-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	40 / 0	22 / 0		
B1, 3-1/2"	40 / 0	22 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
1	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-00-00	40	15			00-08-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	47 ft-lbs	12,704 ft-lbs	0	1	01-06-00
End Shear	24 lbs	5,785 lbs	0	1	01-01-00
Total Load Defl.	L/999 (0")	n/a	n/a	4	01-06-00
Live Load Defl.	L/999 (0")	n/a	n/a	5	01-06-00
Max Defl.	0"	n/a	n/a	4	01-06-00
Span / Depth	3.2	n/a	n/a		00-00-00

Disclosure

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Bearing Supports

	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	3-1/2" x 1-3/4"	88 lbs	0.02	0.01	Spruce Pine Fir
B1 Wall/Plate	3-1/2" x 1-3/4"	88 lbs	0.02	0.01	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets User specified (1") Maximum total load deflection criteria.
Calculations assume Member is Fully Braced.
Resistance Factor phi has been applied to all presented results per CSA 086.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes

DWG NO. TAM 91603-14
STRUCTURAL
COMPONENT ONLY

BC CALC® Design Report - CA

Build 2627

Job Name:

Address: MODEL-ELMBROOK 4A | 4B

City, Province, Postal Code:

Customer: GREENPARK HOME

Code reports: CCMC 12472-R

File Name: ELMBROOK 4.bcc

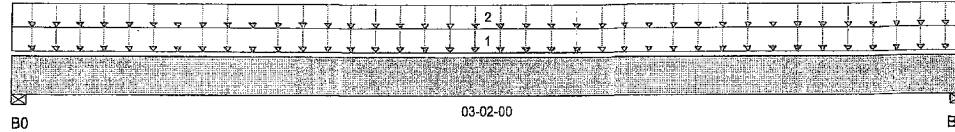
Description: Designs\B05

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 03-02-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	549 / 0	213 / 0		
B1, 3-1/2"	549 / 0	213 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
1	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-02-00	40	15			00-08-00
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-02-00	40	15			08-00-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	631 ft-lbs	12,704 ft-lbs	0.05	1	01-07-00
End Shear	344 lbs	5,785 lbs	0.06	1	01-01-00
Total Load Defl.	L/999 (0.002")	n/a	n/a	4	01-07-00
Live Load Defl.	L/999 (0.002")	n/a	n/a	5	01-07-00
Max Defl.	0.002"	n/a	n/a	4	01-07-00
Span / Depth	3.4	n/a	n/a		00-00-00

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation. n/n BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCi®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.

Bearing Supports

	Dim. (L x W)	Demand	Demand/Resistance Support	Demand/Resistance Member	Material
B0 Wall/Plate	3-1/2" x 1-3/4"	1,090 lbs	0.29	0.15	Spruce Pine Fir
B1 Wall/Plate	3-1/2" x 1-3/4"	1,090 lbs	0.29	0.15	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets User specified (1") Maximum total load deflection criteria.
Calculations assume Member is Fully Braced.
Resistance Factor phi has been applied to all presented results per CSA 086.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086. 04/02/14
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes



DWG NO. TAM 5160414
STRUCTURAL
COMPONENT ONLY

Dry | 1 span | No cantilevers | 0/12 slope (deg)

May-15-14

BC CALC® Design Report - CA

Build 2627

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

MODEL-ELMBROOK 4A/4B

GREENPARK HOME

CCMC 12472-R

File Name: FLMBROOK 4.bcc

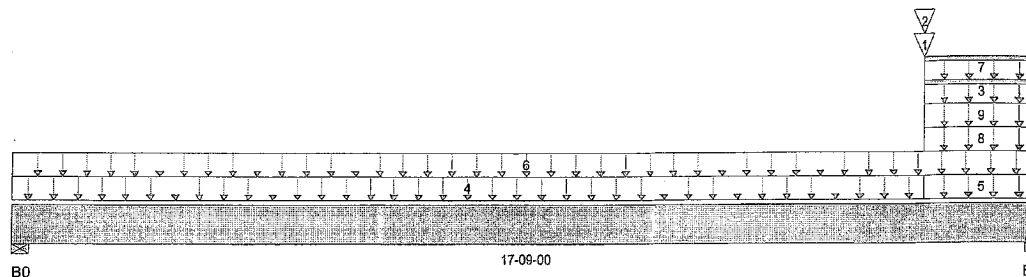
File Name: LEMBRUCK
Description: Designs\B06

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON.



B0

17-09-00

B.

Total Horizontal Product Length = 17-09-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	621 / 0	372 / 0		
B1, 3-1/2"	2,009 / 0	1,231 / 0		

Load Summary

Load Summary						Live	Dead	Snow	Wind	Trib.
Tag	Description	Load Type	Ref.	Start	End	1.00	0.65	1.00	1.15	
1	FROM B5	Conc. Pt. (lbs)	L	15-09-00	15-09-00	549	213			n/a
2	FROM B1	Conc. Pt. (lbs)	L	15-09-00	15-09-00	708	410			n/a
3	WALL ABOVE	Unf. Lin. (lb/ft)	L	15-09-00	17-09-00	0	60			n/a
4	FLOOR	Unf. Area (lb/ft^2)	L	00-00-00	15-09-00	40	15			00-08-00
5	FLOOR	Unf. Area (lb/ft^2)	L	15-09-00	17-09-00	40	15			02-06-00
6	TILED FLOOR	Unf. Area (lb/ft^2)	L	00-00-00	17-09-00	40	20			00-08-00
7	2ND FLOOR WALL...	Unf. Lin. (lb/ft)	L	15-09-00	17-09-00	0	60			n/a
8	2ND FLOOR ABOVE...	Unf. Area (lb/ft^2)	L	15-09-00	17-09-00	40	15			02-10-00
9	2ND FLOOR ABOVE...	Unf. Area (lb/ft^2)	L	15-09-00	17-09-00	40	15			00-08-00

Controls Summary

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	7,757 ft-lbs	25,408 ft-lbs	0.31	1	11-06-11
End Shear	3,804 lbs	11,571 lbs	0.33	1	16-08-00
Total Load Defl.	L/345 (0.602")	0.865"	0.7	4	09-04-12
Live Load Defl.	L/547 (0.379")	0.576"	0.66	5	09-04-15
Max Defl.	0.602"	1"	0.6	4	09-04-12
Span / Depth	21.8	n/a	n/a		00-00-00

Bearing Supports

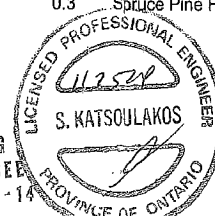
Bearing Supports				Demand/ Resistance Support	Demand/ Resistance Member	Material
B0	Wall/Plate	3-1/2" x 3-1/2"	1,397 lbs	0.19	0.09	Spruce Pine Fir
B1	Wall/Plate	3-1/2" x 3-1/2"	4,552 lbs	0.6	0.3	Spruce Pine Fir

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-954-6999 before installation. n/nBC CALC®, BC FRAMER®, AJSTM®, ALLJOIST®, BC RIM BOARD®, BCIO®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.

Products L.L.C.
conforms to drawing
DWG NO. TAM 51605-14
STRUCTURAL
COMPONENT ONLY

PROVIDE NAILING
DETAIL #1A SEE
DWG #TAMN1001-1





Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

Floor Beam B06A

BC CALC® Design Report



Dry | 1 span | No cantilevers | 0/12 slope (deg)

February-27-15

Build 3272

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

MODEL-ELMBROOK 4A148

GreenPark Home

CCMC 12472-R

File Name: ELMBROOK 4

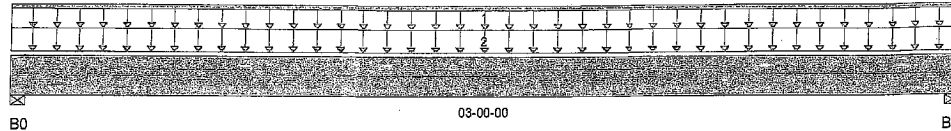
Description: Designs B06A

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 03-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	470 / 0	341 / 0		
B1, 3-1/2"	470 / 0	341 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
1	WALL	Unf. Lin. (lb/ft)	L	00-00-00	03-00-00	0	100			n/a
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-00-00	40	15			07-10-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	609 ft-lbs	25,408 ft-lbs	0.02	1	01-06-00
End Shear	314 lbs	11,571 lbs	0.03	1	01-01-00
Total Load Defl.	L/999 (0.001")	n/a	n/a	4	01-06-00
Live Load Defl.	L/999 (0.001")	n/a	n/a	5	01-06-00
Max Defl.	0.001"	n/a	n/a	4	01-06-00
Span / Depth	3.2	n/a	n/a		00-00-00

Bearing Supports

B0	Wall/Plate	3-1/2" x 3-1/2"	1,131 lbs	0.15	0.08	Spruce Pine Fir
B1	Wall/Plate	3-1/2" x 3-1/2"	1,131 lbs	0.15	0.08	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum total load deflection criteria.

Calculations assume Member is Fully Braced.

Resistance Factor phi has been applied to all presented results per CSA 086.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.

Design based on Dry Service Condition.

Importance Factor : Normal Part code : Part 4

Deflections less than 1/8" were ignored in the results.

User Notes

NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS

@ 8" O.C., STAGGERED IN TWO ROWS.



DESIGN: TAM 7643-15
STRUCTURAL
COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

Floor Beam B06A

BC CALC® Design Report



Dry | 1 span | No cantilevers | 0/12 slope (deg)

February-27-15

Build 3272

Job Name:

Address:

MODEL-ELMBROOK 4A14B

City, Province, Postal Code:

Customer:

Green Park Lane

Code reports:

CCMC 12472-R

File Name: ELMBROOK 4

Description: Designs\B06A

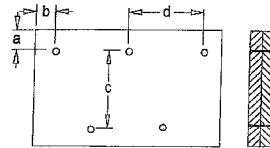
Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,

Connection Diagram



a minimum = 2" c = 5-1/2"

b minimum = 3" d = 8"

Member has no side loads.

Connectors are: 16d ~~Common~~ Nails (3 1/2" ANCHOR SPACER NAILS)

Disclosure

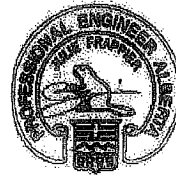
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Boise Cascade



DATE: TAM 7643-15
STRUCTURAL
COMPONENT ONLY



Maximum Floor Spans

Live Load = 40 psf, Dead Load = 15 psf
Simple Spans, L/360 Deflection Limit
5/8" OSB G&N Sheathing

Depth	Series	Bare				1/2" 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'-2"	13'-9"	N/A	15'-7"	14'-8"	14'-2"	N/A
	NI-40x	16'-1"	15'-2"	14'-8"	N/A	16'-7"	15'-7"	15'-1"	N/A
	NI-60	16'-3"	15'-4"	14'-10"	N/A	16'-8"	15'-9"	15'-3"	N/A
	NI-70	17'-1"	16'-1"	15'-6"	N/A	17'-5"	16'-5"	15'-10"	N/A
	NI-80	17'-3"	16'-3"	15'-8"	N/A	17'-8"	16'-7"	16'-0"	N/A
11-7/8"	NI-20	16'-11"	16'-0"	15'-5"	N/A	17'-6"	16'-6"	16'-0"	N/A
	NI-40x	18'-1"	17'-0"	16'-5"	N/A	18'-9"	17'-6"	16'-11"	N/A
	NI-60	18'-4"	17'-3"	16'-7"	N/A	19'-0"	17'-8"	17'-1"	N/A
	NI-70	19'-6"	18'-0"	17'-4"	N/A	20'-1"	18'-7"	17'-9"	N/A
	NI-80	19'-9"	18'-3"	17'-6"	N/A	20'-4"	18'-10"	17'-11"	N/A
14"	NI-90x	20'-4"	18'-9"	17'-11"	N/A	20'-10"	19'-3"	18'-5"	N/A
	NI-40x	20'-1"	18'-7"	17'-10"	N/A	20'-10"	19'-4"	18'-6"	N/A
	NI-60	20'-5"	18'-11"	18'-1"	N/A	21'-2"	19'-7"	18'-9"	N/A
	NI-70	21'-7"	20'-0"	19'-1"	N/A	22'-3"	20'-7"	19'-8"	N/A
	NI-80	21'-11"	20'-3"	19'-4"	N/A	22'-7"	20'-11"	20'-0"	N/A
16"	NI-90x	22'-7"	20'-11"	19'-11"	N/A	23'-3"	21'-6"	20'-6"	N/A
	NI-60	22'-3"	20'-8"	19'-9"	N/A	23'-1"	21'-5"	20'-6"	N/A
	NI-70	23'-6"	21'-9"	20'-9"	N/A	24'-3"	22'-5"	21'-5"	N/A
	NI-80	23'-11"	22'-1"	21'-1"	N/A	24'-8"	22'-10"	21'-9"	N/A
	NI-90x	24'-8"	22'-9"	21'-9"	N/A	25'-4"	23'-5"	22'-4"	N/A

Depth	Series	Mid-Span Blocking				Mid-Span Blocking and 1/2" 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"	N/A	17'-1"	15'-5"	14'-6"	N/A
	NI-40x	17'-11"	16'-11"	16'-4"	N/A	18'-5"	17'-4"	16'-7"	N/A
	NI-60	18'-2"	17'-1"	16'-6"	N/A	19'-7"	17'-6"	16'-10"	N/A
	NI-70	19'-2"	17'-10"	17'-2"	N/A	19'-7"	18'-3"	17'-7"	N/A
	NI-80	19'-5"	18'-0"	17'-4"	N/A	19'-10"	18'-5"	17'-8"	N/A
11-7/8"	NI-20	19'-6"	18'-1"	17'-5"	N/A	20'-2"	18'-8"	17'-6"	N/A
	NI-40x	21'-0"	19'-6"	18'-8"	N/A	21'-7"	20'-2"	19'-3"	N/A
	NI-60	21'-4"	19'-9"	18'-11"	N/A	21'-11"	20'-4"	19'-6"	N/A
	NI-70	22'-6"	20'-10"	19'-11"	N/A	23'-0"	21'-5"	20'-5"	N/A
	NI-80	22'-9"	21'-1"	20'-1"	N/A	23'-3"	21'-7"	20'-8"	N/A
14"	NI-90x	23'-4"	21'-8"	20'-8"	N/A	23'-10"	22'-2"	21'-2"	N/A
	NI-40x	23'-7"	21'-11"	20'-11"	N/A	24'-3"	22'-7"	21'-7"	N/A
	NI-60	24'-0"	22'-3"	21'-3"	N/A	24'-8"	22'-11"	21'-11"	N/A
	NI-70	25'-3"	23'-4"	22'-3"	N/A	25'-10"	24'-0"	22'-11"	N/A
	NI-80	25'-7"	23'-8"	22'-7"	N/A	26'-2"	24'-4"	23'-2"	N/A
16"	NI-90x	26'-4"	24'-4"	23'-3"	N/A	26'-10"	24'-11"	23'-9"	N/A
	NI-60	26'-5"	24'-6"	23'-4"	N/A	27'-2"	25'-3"	24'-2"	N/A
	NI-70	27'-9"	25'-8"	24'-6"	N/A	28'-5"	26'-5"	25'-2"	N/A
	NI-80	28'-2"	26'-1"	24'-10"	N/A	28'-10"	26'-9"	25'-6"	N/A
	NI-90x	29'-0"	26'-10"	25'-7"	N/A	29'-7"	27'-5"	26'-2"	N/A

- Maximum clear span applicable to simple-span residential floor construction with a design live load of 40 psf and dead load of 15 psf. The ultimate limit states are based on the factored loads of 1.50L + 1.25D. The serviceability limit states include the consideration for floor vibration, a live load deflection limit of L/360 and a total load deflection limit of L/240.
- Spans are based on a composite floor with glued-nailed oriented strand board (OSB) sheathing with a minimum thickness of 5/8 inch for a joist spacing of 19.2 inches or less. The composite floor may include 1/2 inch gypsum ceiling and/or one row of blocking at mid-span with strapping. Strapping shall be minimum 1x4 inch strap applied to underside of joists at blocking line or 1/2 inch gypsum ceiling attached to joists.
- Minimum bearing length shall be 1-3/4 inches for the end bearings.
- Bearing stiffeners are not required when I-joists are used with the spans and spacings given in this table, except as required for hangers.
- This span chart is based on uniform loads. For applications with other than uniformly distributed loads an engineering analysis may be required based on the use of the design properties. Tables are based on Limit States Design per CSA O86-09, NBC 7010, and OBC 2012.
- Joists shall be laterally supported at supports and continuously along the compression edge. Refer to technical documentation for installation guidelines and construction details. Nordic I-joists are listed in CCMC evaluation report 13032-R and APA Product Report PR-L274C.

Maximum Floor Spans

Live Load = 40 psf, Dead Load = 15 psf
Simple Spans, L/360 Deflection Limit
3/4" OSB G&N Sheathing



Depth	Series	Bare				1/2" Gypsum Ceiling			
		On Centre Spacing				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	17'-0"	16'-0"	15'-5"	14'-9"	17'-5"	16'-5"	15'-10"	15'-2"
	NI-60	17'-2"	16'-2"	15'-7"	14'-11"	17'-6"	16'-7"	15'-11"	15'-3"
	NI-70	18'-0"	16'-11"	16'-3"	15'-7"	18'-5"	17'-3"	16'-7"	15'-11"
	NI-80	18'-3"	17'-1"	16'-5"	15'-9"	18'-8"	17'-5"	16'-9"	16'-1"
11-7/8"	NI-20	17'-10"	16'-10"	16'-2"	15'-6"	18'-6"	17'-4"	16'-9"	16'-1"
	NI-40x	19'-4"	17'-11"	17'-3"	16'-6"	19'-11"	18'-6"	17'-9"	17'-0"
	NI-60	19'-7"	18'-2"	17'-5"	16'-9"	20'-2"	18'-9"	17'-11"	17'-2"
	NI-70	20'-9"	19'-2"	18'-3"	17'-5"	21'-4"	19'-9"	18'-10"	17'-10"
	NI-80	21'-1"	19'-5"	18'-6"	17'-7"	21'-7"	20'-0"	19'-0"	18'-0"
14"	NI-90x	21'-8"	20'-0"	19'-1"	18'-0"	22'-2"	20'-6"	19'-6"	18'-6"
	NI-40x	21'-5"	19'-10"	18'-11"	17'-11"	22'-1"	20'-6"	19'-7"	18'-7"
	NI-60	21'-10"	20'-2"	19'-3"	18'-2"	22'-5"	20'-10"	19'-11"	18'-10"
	NI-70	23'-0"	21'-3"	20'-3"	19'-2"	23'-8"	21'-11"	20'-10"	19'-9"
	NI-80	23'-5"	21'-7"	20'-7"	19'-5"	24'-0"	22'-3"	21'-2"	20'-0"
16"	NI-90x	24'-1"	22'-3"	21'-2"	20'-0"	24'-8"	22'-10"	21'-9"	20'-7"
	NI-60	23'-9"	22'-0"	20'-11"	19'-10"	24'-6"	22'-9"	21'-8"	20'-6"
	NI-70	25'-1"	23'-2"	22'-0"	20'-10"	25'-9"	23'-10"	22'-9"	21'-6"
	NI-80	25'-6"	23'-6"	22'-4"	21'-2"	26'-1"	24'-2"	23'-1"	21'-10"
	NI-90x	26'-4"	24'-3"	23'-1"	21'-10"	26'-11"	24'-11"	23'-8"	22'-5"

Depth	Series	Mid-Span Blocking				Mid-Span Blocking and 1/2" Gypsum Ceiling			
		On Centre Spacing				On Centre Spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
9-1/2"	NI-20	17'-1"	15'-5"	14'-6"	13'-5"	17'-1"	15'-5"	14'-6"	13'-5"
	NI-40x	18'-8"	17'-6"	16'-7"	15'-3"	19'-2"	17'-8"	16'-7"	15'-3"
	NI-60	18'-11"	17'-8"	16'-10"	15'-7"	19'-4"	18'-0"	16'-10"	15'-7"
	NI-70	20'-0"	18'-7"	17'-9"	17'-0"	20'-5"	19'-0"	18'-2"	17'-0"
	NI-80	20'-3"	18'-10"	17'-11"	17'-2"	20'-8"	19'-3"	18'-4"	17'-5"
11-7/8"	NI-20	20'-2"	18'-8"	17'-6"	16'-2"	20'-7"	18'-8"	17'-6"	16'-2"
	NI-40x	21'-10"	20'-4"	19'-5"	17'-8"	22'-5"	20'-11"	19'-9"	17'-8"
	NI-60	22'-1"	20'-7"	19'-7"	18'-7"	22'-8"	21'-2"	20'-3"	18'-8"
	NI-70	23'-4"	21'-8"	20'-8"	19'-7"	23'-10"	22'-3"	21'-3"	20'-1"
	NI-80	23'-7"	21'-11"	20'-11"	19'-9"	24'-1"	22'-6"	21'-5"	20'-4"
14"	NI-90x	24'-3"	22'-6"	21'-6"	20'-4"	24'-8"	23'-0"	22'-0"	20'-9"
	NI-40x	24'-5"	22'-9"	21'-8"	19'-5"	25'-1"	23'-6"	22'-9"	19'-5"
	NI-60	24'-10"	23'-1"	22'-0"	20'-10"	25'-6"	23'-10"	22'-9"	21'-4"
	NI-70	26'-1"	24'-3"	23'-2"	21'-10"	26'-8"	24'-11"	23'-9"	22'-6"
	NI-80	26'-6"	24'-7"	23'-5"	22'-2"	27'-1"	25'-3"	24'-1"	22'-9"
16"	NI-90x	27'-3"	25'-4"	24'-1"	22'-9"	27'-9"	25'-11"	24'-8"	23'-4"
	NI-60	27'-3"	25'-5"	24'-2"	22'-10"	28'-0"	26'-2"	25'-0"	23'-8"
	NI-70	28'-8"	26'-8"	25'-4"	23'-11"	29'-3"	27'-4"	26'-1"	24'-8"
	NI-80	29'-1"	27'-0"	25'-9"	24'-4"	29'-8"	27'-9"	26'-5"	25'-0"
	NI-90x	29'-11"	27'-10"	26'-6"	25'-0"	30'-6"	28'-5"	27'-2"	25'-8"

- Maximum clear span applicable to simple-span residential floor construction with a design live load of 40 psf and dead load of 15 psf. The ultimate limit states are based on the factored loads of 1.50L + 1.25D. The serviceability limit states include the consideration for floor vibration, a live load deflection limit of L/360 and a total load deflection limit of L/240.
- Spans are based on a composite floor with glued-nailed oriented strand board (OSB) sheathing with a minimum thickness of 3/4 inch for a joist spacing of 24 inches or less. The composite floor may include 1/2 inch gypsum ceiling and/or one row of blocking at mid-span with strapping. Strapping shall be minimum 1x4 inch strap applied to underside of joists at blocking line or 1/2 inch gypsum ceiling attached to joists.
- Minimum bearing length shall be 1-3/4 inches for the end bearings.
- Bearing stiffeners are not required when I-joists are used with the spans and spacings given in this table, except as required for hangers.
- This span chart is based on uniform loads. For applications with other than uniformly distributed loads, an engineering analysis may be required based on the use of the design properties. Tables are based on Limit States Design per CSA O86-09, NBC 2010, and CBC 2012.
- Joists shall be laterally supported at supports and continuously along the compression edge. Refer to technical documentation for installation guidelines and construction details. Nordic I-joists are listed in CCMC evaluation report 13032-R and APA Product Report PR-L274C.

Do not walk on broken
wood, but, if necessary,
to get to other areas:

- [illegible]

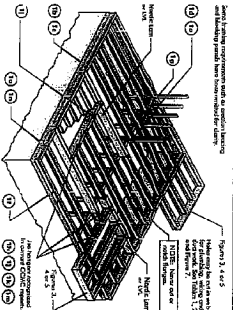
1. Adults are first pass specialists in vertebrate or invertebrate zoology, with a preference for a degree in zoology. They are also interested in a degree in biology, but not in a degree in ecology or in a degree in environmental science.
2. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
3. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
4. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
5. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
6. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
7. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
8. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
9. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.
10. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology. The curriculum is based on the following subjects: Zoology, Botany, Microbiology, and Cell Biology.

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69																															

1. Release the spring. Flipping the sheet most accurately reveals what the behavior is against the victim.
2. A. G. will move from the larger "monocentric" to "multicentric" as the victim's behavior changes.
3. Narcissus should be released based on the victim's behavior, not on the victim's behavior.
4. While releasing the spring, the victim's behavior should be observed and recorded. The victim's behavior should be observed and recorded.

[illegible][illegible][illegible][illegible]

- [illegible]

[illegible]

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(a) This figure shows the proposed composite beam. The beam is made of 100mm concrete slab, 10mm reinforcement, and 100mm steel section. The beam is shown in a cross-section view.

(b) This figure shows the proposed composite beam. The beam is made of 100mm concrete slab, 10mm reinforcement, and 100mm steel section. The beam is shown in a cross-section view.

(c) This figure shows the proposed composite beam. The beam is made of 100mm concrete slab, 10mm reinforcement, and 100mm steel section. The beam is shown in a cross-section view.

- [illegible]

[illegible]

- [illegible]

Range Width	Net Depth	Final Block Size
2	0.1/2"	1.50" x 6"
2.1/2"	0.1-2/8"	2.10" x 6"
3.1/2"	1.1-7/8"	2.10" x 8"
4	1 1/4"	2.1/2" x 10"
4.1/2"	1 1/2"	2.1/2" x 12"
5.1/2"	1 3/4"	3" x 10"
6	1 7/8"	3" x 12"

Range width	Net area	Flow stock flow
2	0.1/2	1.5/0.5
2.1/2	0.1/2	2.0/0.5
2.1/2	0.1/2	2.1/0.5
2.1/2	0.1/2	2.2/0.5
2.1/2	0.1/2	2.3/0.5
2.1/2	0.1/2	2.4/0.5
2.1/2	0.1/2	2.5/0.5
2.1/2	0.1/2	2.6/0.5
2.1/2	0.1/2	2.7/0.5
2.1/2	0.1/2	2.8/0.5
2.1/2	0.1/2	2.9/0.5
2.1/2	0.1/2	3.0/0.5
2.1/2	0.1/2	3.1/0.5
2.1/2	0.1/2	3.2/0.5
2.1/2	0.1/2	3.3/0.5
2.1/2	0.1/2	3.4/0.5
2.1/2	0.1/2	3.5/0.5
2.1/2	0.1/2	3.6/0.5
2.1/2	0.1/2	3.7/0.5
2.1/2	0.1/2	3.8/0.5
2.1/2	0.1/2	3.9/0.5
2.1/2	0.1/2	4.0/0.5
2.1/2	0.1/2	4.1/0.5
2.1/2	0.1/2	4.2/0.5
2.1/2	0.1/2	4.3/0.5
2.1/2	0.1/2	4.4/0.5
2.1/2	0.1/2	4.5/0.5
2.1/2	0.1/2	4.6/0.5
2.1/2	0.1/2	4.7/0.5
2.1/2	0.1/2	4.8/0.5
2.1/2	0.1/2	4.9/0.5
2.1/2	0.1/2	5.0/0.5
2.1/2	0.1/2	5.1/0.5
2.1/2	0.1/2	5.2/0.5
2.1/2	0.1/2	5.3/0.5
2.1/2	0.1/2	5.4/0.5
2.1/2	0.1/2	5.5/0.5
2.1/2	0.1/2	5.6/0.5
2.1/2	0.1/2	5.7/0.5
2.1/2	0.1/2	5.8/0.5
2.1/2	0.1/2	5.9/0.5
2.1/2	0.1/2	6.0/0.5
2.1/2	0.1/2	6.1/0.5
2.1/2	0.1/2	6.2/0.5
2.1/2	0.1/2	6.3/0.5
2.1/2	0.1/2	6.4/0.5
2.1/2	0.1/2	6.5/0.5
2.1/2	0.1/2	6.6/0.5
2.1/2	0.1/2	6.7/0.5
2.1/2	0.1/2	6.8/0.5
2.1/2	0.1/2	6.9/0.5
2.1/2	0.1/2	7.0/0.5
2.1/2	0.1/2	7.1/0.5
2.1/2	0.1/2	7.2/0.5
2.1/2	0.1/2	7.3/0.5
2.1/2	0.1/2	7.4/0.5
2.1/2	0.1/2	7.5/0.5
2.1/2	0.1/2	7.6/0.5
2.1/2	0.1/2	7.7/0.5
2.1/2	0.1/2	7.8/0.5
2.1/2	0.1/2	7.9/0.5
2.1/2	0.1/2	8.0/0.5
2.1/2	0.1/2	8.1/0.5
2.1/2	0.1/2	8.2/0.5
2.1/2	0.1/2	8.3/0.5
2.1/2	0.1/2	8.4/0.5
2.1/2	0.1/2	8.5/0.5
2.1/2	0.1/2	8.6/0.5
2.1/2	0.1/2	8.7/0.5
2.1/2	0.1/2	8.8/0.5
2.1/2	0.1/2	8.9/0.5
2.1/2	0.1/2	9.0/0.5
2.1/2	0.1/2	9.1/0.5
2.1/2	0.1/2	9.2/0.5
2.1/2	0.1/2	9.3/0.5
2.1/2	0.1/2	9.4/0.5
2.1/2	0.1/2	9.5/0.5
2.1/2	0.1/2	9.6/0.5
2.1/2	0.1/2	9.7/0.5
2.1/2	0.1/2	9.8/0.5
2.1/2	0.1/2	9.9/0.5
2.1/2	0.1/2	10.0/0.5

Diagram illustrating a truss assembly using 2x4 lumber. The assembly consists of two main horizontal members (labeled "2x4") connected by a vertical member (labeled "2x4"). The vertical member is secured with a "1/2\"/>

-
- Diagram illustrating a truss assembly. A 2x4 beam is shown with a 1/2 inch thick plywood gusset attached to its end. The gusset is labeled "1/2 inch thick plywood". The beam is labeled "2x4 beam". The assembly is labeled "Lumber 2x4 attached to end of beam". The gusset is labeled "1/2 inch thick plywood". The beam is labeled "2x4 beam". The assembly is labeled "Lumber 2x4 attached to end of beam".

-

Diagram illustrating the full block joint. The diagram shows a cross-section of a joint between two fiber blocks. A label points to the gap between the top flange and the fiber block, stating: "1/8" gap between top flange and fiber block". Another label points to the fiber block itself, stating: "Fiber block". A third label points to the central core of the fiber block, stating: "Optical paths from opposite faces by 2°".

-
- Diagram illustrating the full block joint. The diagram shows a cross-section of a joint between two fiber blocks. A label points to the gap between the top flange and the fiber block, stating: "1/8" gap between top flange and fiber block". Another label points to the fiber block itself, stating: "Fiber block". A third label points to the central core of the fiber block, stating: "Optical paths from opposite faces by 2°".

[illegible]

- [illegible]

Range Width	Net Depth	Final Block Size
2	0.1/2"	1.50" x 6"
2.1/2"	0.1-2/8"	1.60" x 6"
3.1/2"	1.1-7/8"	2.10" x 6"
4	1 1/4"	2.10" x 10"
5.1/2"	1 1/2"	2.10" x 17"
6	1 3/4"	3" x 6"
7	1 7/8"	3" x 10"
8	2"	3" x 12"

- | Range Width | Net Depth | Final Block Size |
|-------------|-----------|------------------|
| 2 | 0.1/2" | 1.50" x 6" |
| 2.1/2" | 0.1-2/8" | 2.10" x 6" |
| 3.1/2" | 1.1-7/8" | 2.10" x 8" |
| 4 | 1 1/4" | 2.1/2" x 10" |
| 4.1/2" | 1 1/2" | 2.1/2" x 12" |
| 5.1/2" | 1 3/4" | 3" x 10" |
| 6 | 1 7/8" | 3" x 12" |

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- [illegible]

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Technical drawing of a roof truss system. The drawing shows a cross-section of the truss with various components labeled and dimensioned.

- Chord:** The main structural member of the truss, shown as a double-flange I-beam.
- Web:** The vertical member of the truss, shown as a single-flange I-beam.
- Top Chord:** The uppermost member of the truss, shown as a double-flange I-beam.
- Bottom Chord:** The lowermost member of the truss, shown as a double-flange I-beam.
- Diagonal:** The member connecting the top and bottom chords, shown as a single-flange I-beam.
- Vertical:** The member connecting the top and bottom chords, shown as a single-flange I-beam.
- Dimensions:**
 - Top Chord: 14'-0" x 14'-0" (14' x 14')
 - Bottom Chord: 14'-0" x 14'-0" (14' x 14')
 - Diagonal: 14'-0" x 14'-0" (14' x 14')
 - Vertical: 14'-0" x 14'-0" (14' x 14')
 - Web: 14'-0" x 14'-0" (14' x 14')
 - Chord: 14'-0" x 14'-0" (14' x 14')
- Notes:**
 - 1. The chord is to be made of 14' x 14' I-beam.
 - 2. The web is to be made of 14' x 14' I-beam.
 - 3. The diagonal is to be made of 14' x 14' I-beam.
 - 4. The vertical is to be made of 14' x 14' I-beam.
 - 5. The top chord is to be made of 14' x 14' I-beam.
 - 6. The bottom chord is to be made of 14' x 14' I-beam.

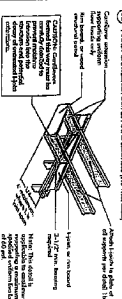
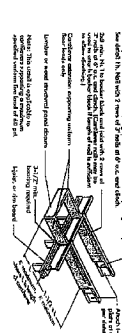
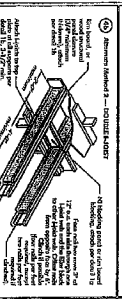
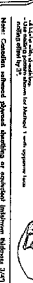
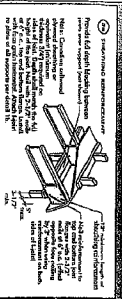


Figure 10: A technical diagram showing a cross-section of a roof assembly. A 2x6 joist is shown with a 1/2 inch gap between it and the roof sheathing. The roof sheathing is labeled "Roof sheathing (1/2 inch gap between joists)". Below the sheathing is a layer of "Insulation (1/2 inch gap between joists)". The insulation is labeled "Insulation (1/2 inch gap between joists)". The bottom layer is labeled "Roof sheathing (1/2 inch gap between joists)". The entire assembly is labeled "Roof assembly".

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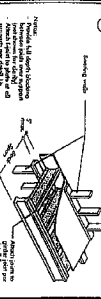
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Note: Considered a second generation or enriched enrichment. 2/6/91

[illegible]

The diagram illustrates a 3D printed component with several labeled features:

- Bearing width**: Indicated by a dimension line at the top right.
- Pin**: A vertical feature on the left side.
- Pin hole**: A circular feature on the left side.
- Slot**: A rectangular cutout on the left side.
- Mounting holes for guide pins**: Two circular features at the bottom left.
- Notches**: Small indentations on the top surface.
- Provide full depth shoulders**: A note pointing to the base of the pin.
- Provide full depth shoulders and chamfers for all parts**: A general note for the entire assembly.
- Actual length for plate or all**: A note indicating the overall length of the part.

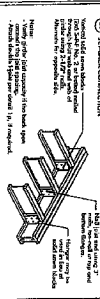


Vertical steel beam holds deck and steel joist, so no braced metal joists are needed. Joists are spaced every 24" (2" o.c.) and are attached by snap-on clips.

Features:

- Versatile joist capacity: 1 to two loads, spans over 100' and 1000'.
- Versatile deck spans: from 6' to 10' if required.

10' x 10' x 8 3/4" deck and joist system. Joists are spaced every 24" (2" o.c.) and are attached by snap-on clips. Vertical steel beam holds deck and steel joist, so no braced metal joists are needed. Joists are spaced every 24" (2" o.c.) and are attached by snap-on clips.



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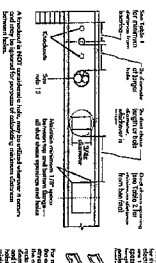
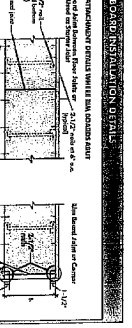
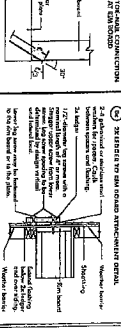
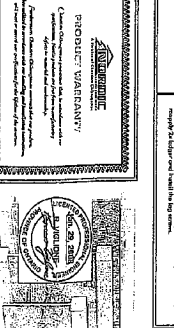
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Figure 1 consists of two cross-sectional diagrams of building details. The top diagram shows a wall assembly with insulation (Insulation) and a concrete slab (Concrete Slab). The bottom diagram shows a floor assembly with insulation (Insulation) and a concrete slab (Concrete Slab). Dimensions are given in inches.

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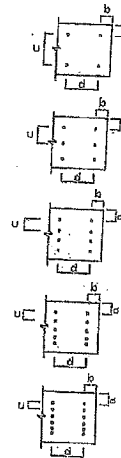


MICRO CITY ENGINEERING SERVICES INC.

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R.R. #1, P.O. BOX 61, GLENCOE, ONTARIO, N0L 1M0

LVL HEADER AND CONVENTIONAL LUMBER NAILING DETAILS		
DETAIL NUMBER	NUMBER OF ROWS	SPACING (INCHES o/c) "d"
A	2	12
B	2	8
C	2	6
D	2	4
1A	3	12
1B	3	8
1C	3	6
1D	3	4
2A	4	12
2B	4	8
2C	4	6
2D	4	4
3A	5	12
3B	5	8
3C	5	6
3D	5	4
4A	6	12
4B	6	8
4C	6	6
4D	6	4



NOTES:

- (1) MINIMUM LUMBER EDGE DISTANCE "a" = 1"
- (2) MINIMUM LUMBER END DISTANCE "b" = 2"
- (3) MINIMUM NAIL ROW SPACING "c" = 2"
- (4) STAGGER NAILS "d/2" BETWEEN PLIES FOR MULTI-PLY MEMBERS (3 PLY OR MORE)
- (5) ALL NAILS ARE 3-1/2" ARDOX SPIRAL NAILS
- (6) DO NOT USE AIR-DRIVEN NAILS



DWG NO TAMN1001-14

STRUCTURAL
COMPONENT ONLY
TO BE USED ONLY
WITH BEAM CLES
BEARING THE
STAMP BELOWS

PROVIDE NAILING
DETAIL # X SEE
DWG #TAMN1001-14