

FROM PLAN DATED: FEB 2016

BUILDER:
GREENPARK

SITE:
STARTIME

MODEL: ELMBROOK 10A

ELEVATION: 1

LOT:
CITY: VAUGHAN

SALESMAN: MARIO
DESIGNER: AJ PL
REVISION:

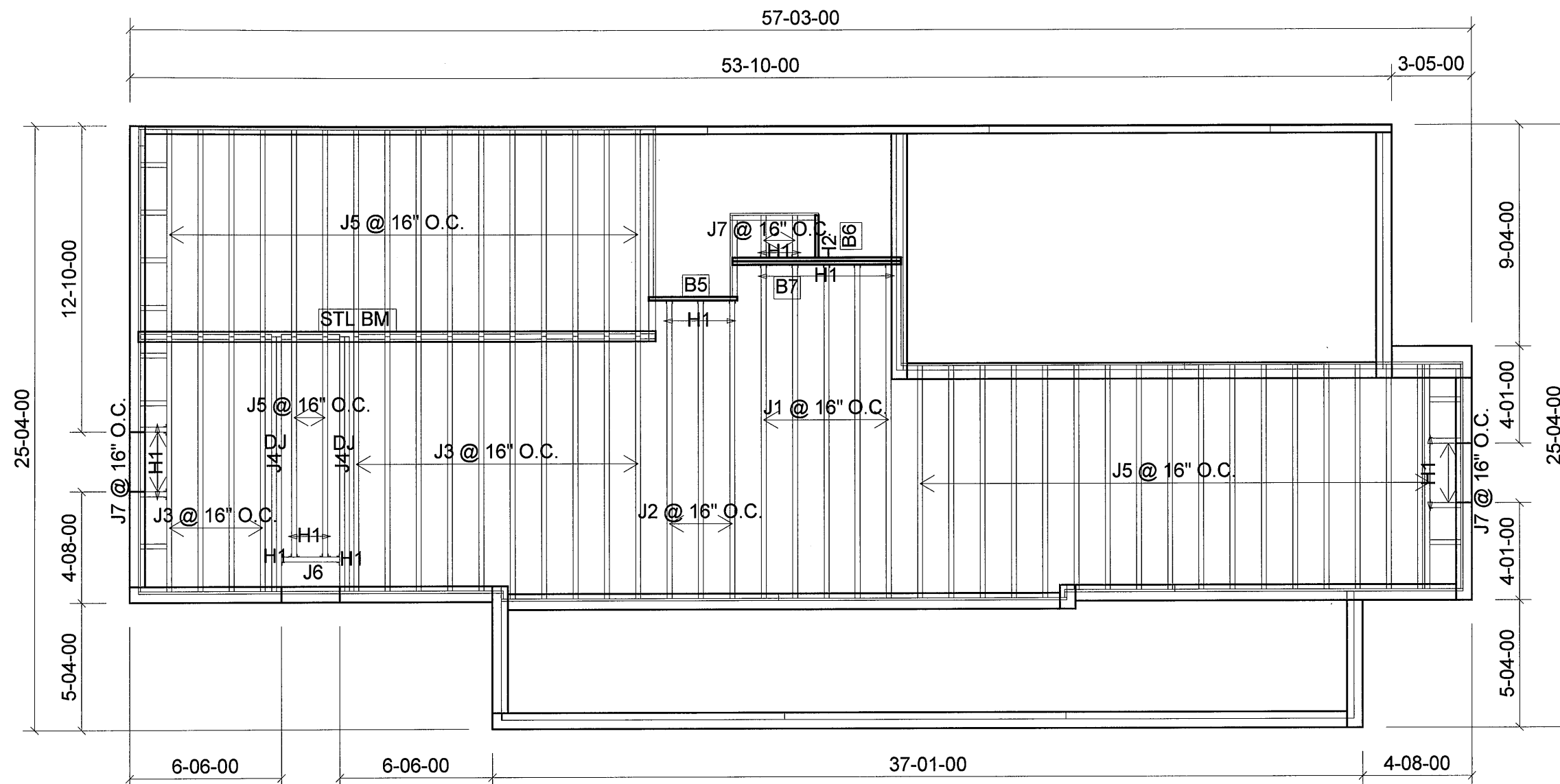
NOTES:
CERAMIC TILE APPLICATION
AS PER O.B.C. 9.30.6.
SQUASH BLOCKS
2x4 OR 2x6 #2 S.P.F. REQ'D UNDER
INTERIOR UNIFORM LOAD BEARING
WALLS.
MULTIPLE SQUASH BLOCKS REQ'D
UNDER CONCENTRATED LOADS.
CANTILEVERED JOISTS
REQUIRE I-JOIST BLOCKING ALONG
BEARING AND RIMBOARD CLOSURE
AT

ENDS.
REFER TO THE NORDIC
INSTALLATION GUIDE FOR PROPER
STORAGE AND INSTALLATION.
LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/ft²
DEAD LOAD: 15.0 lb/ft
TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

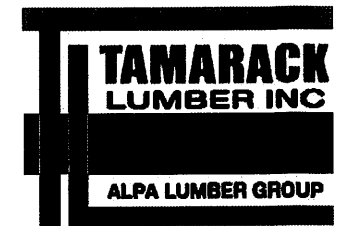
DATE: 5/10/2016

1st FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J1	16-00-00	9 1/2" NI-40x	1	5
J2	14-00-00	9 1/2" NI-40x	1	3
J3	12-00-00	9 1/2" NI-40x	1	14
J4	12-00-00	9 1/2" NI-40x	2	4
J5	10-00-00	9 1/2" NI-40x	1	36
J6	4-00-00	9 1/2" NI-40x	1	1
J7	2-00-00	9 1/2" NI-40x	1	6
B7	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B5	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B6	2-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
3	H1	IUS2.56/9.5
7	H1	IUS2.56/9.5
2	H1	IUS2.56/9.5
6	H1	IUS2.56/9.5
1	H2	HUS1.81/9.5



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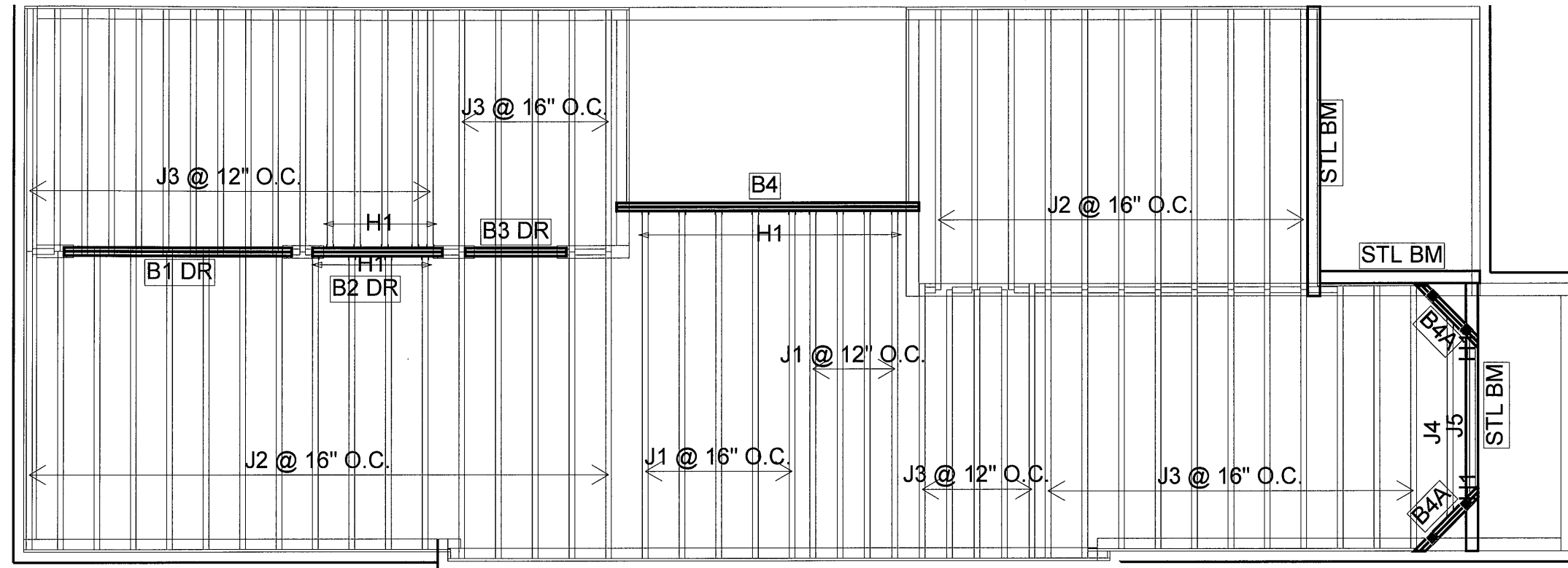
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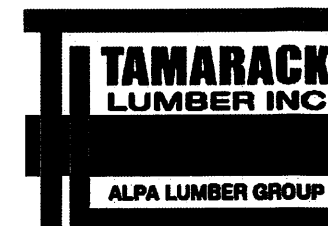
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2nd FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J1	14-00-00	9 1/2" NI-40x	1	9
J2	12-00-00	9 1/2" NI-40x	1	28
J3	10-00-00	9 1/2" NI-40x	1	37
J4	8-00-00	9 1/2" NI-40x	1	1
J5	6-00-00	9 1/2" NI-40x	1	1
B4	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 DR	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B2 DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B3 DR	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B4A	4-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	4

Connector Summary		
Qty	Manuf	Product
18	H1	IUS2.56/9.5
1	H1	IUS2.56/9.5
1	H1	IUS2.56/9.5



FROM PLAN DATED:

BUILDER:
GREENPARK

SITE:
STARTIME

MODEL: ELMBROOK 10A

ELEVATION: 2

LOT:
CITY: VAUGHAN

SALESMAN: MARIO
DESIGNER: AJ
REVISION:

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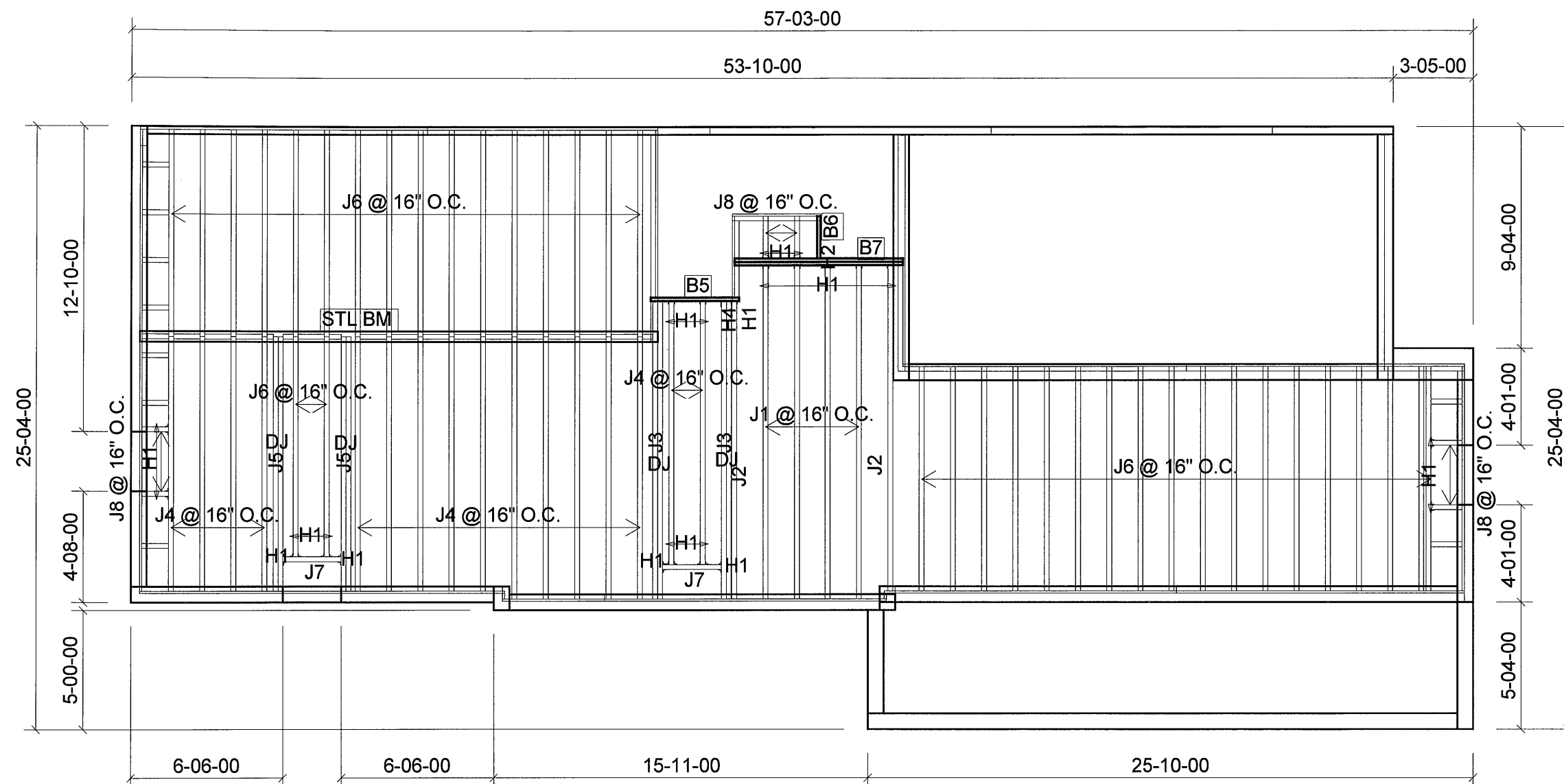
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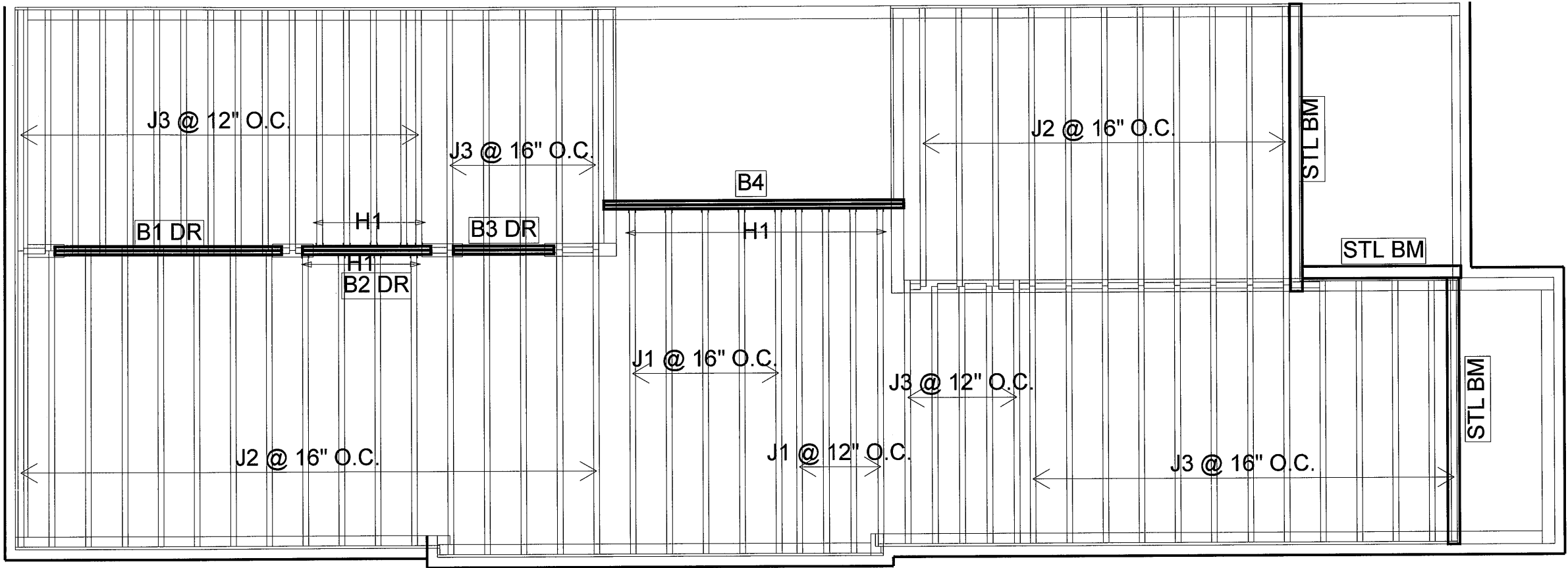
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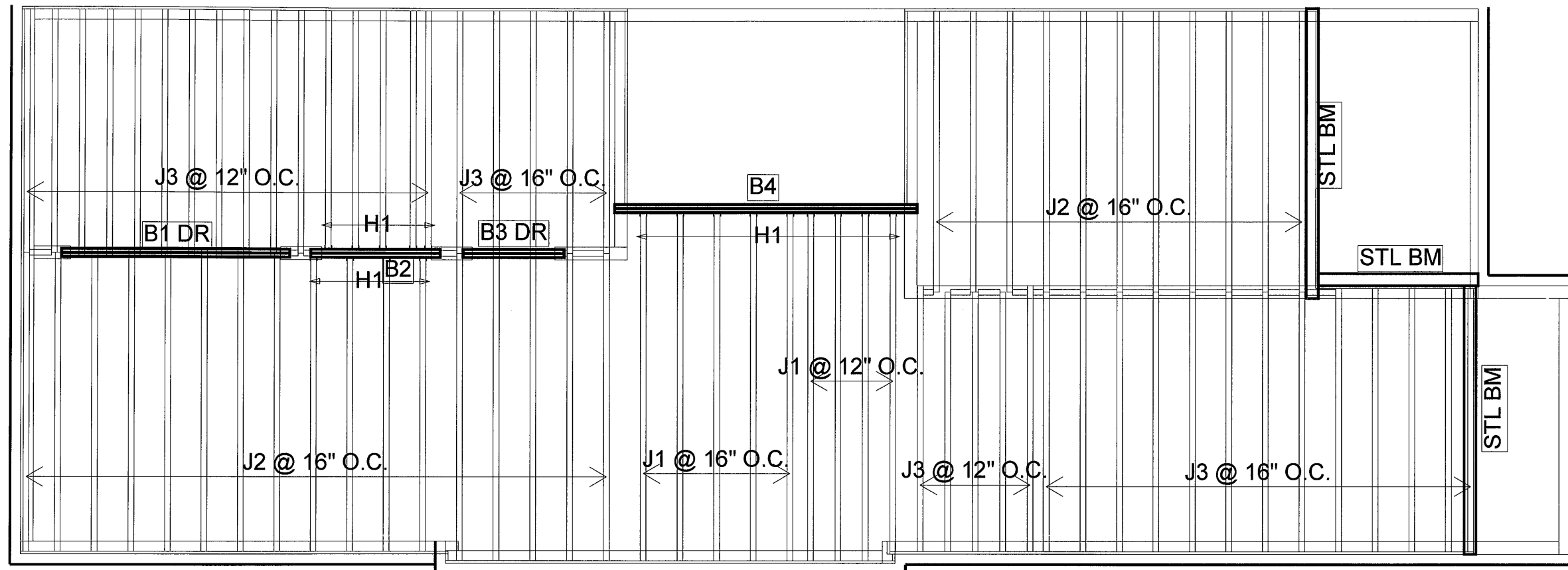
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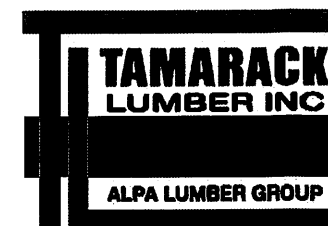
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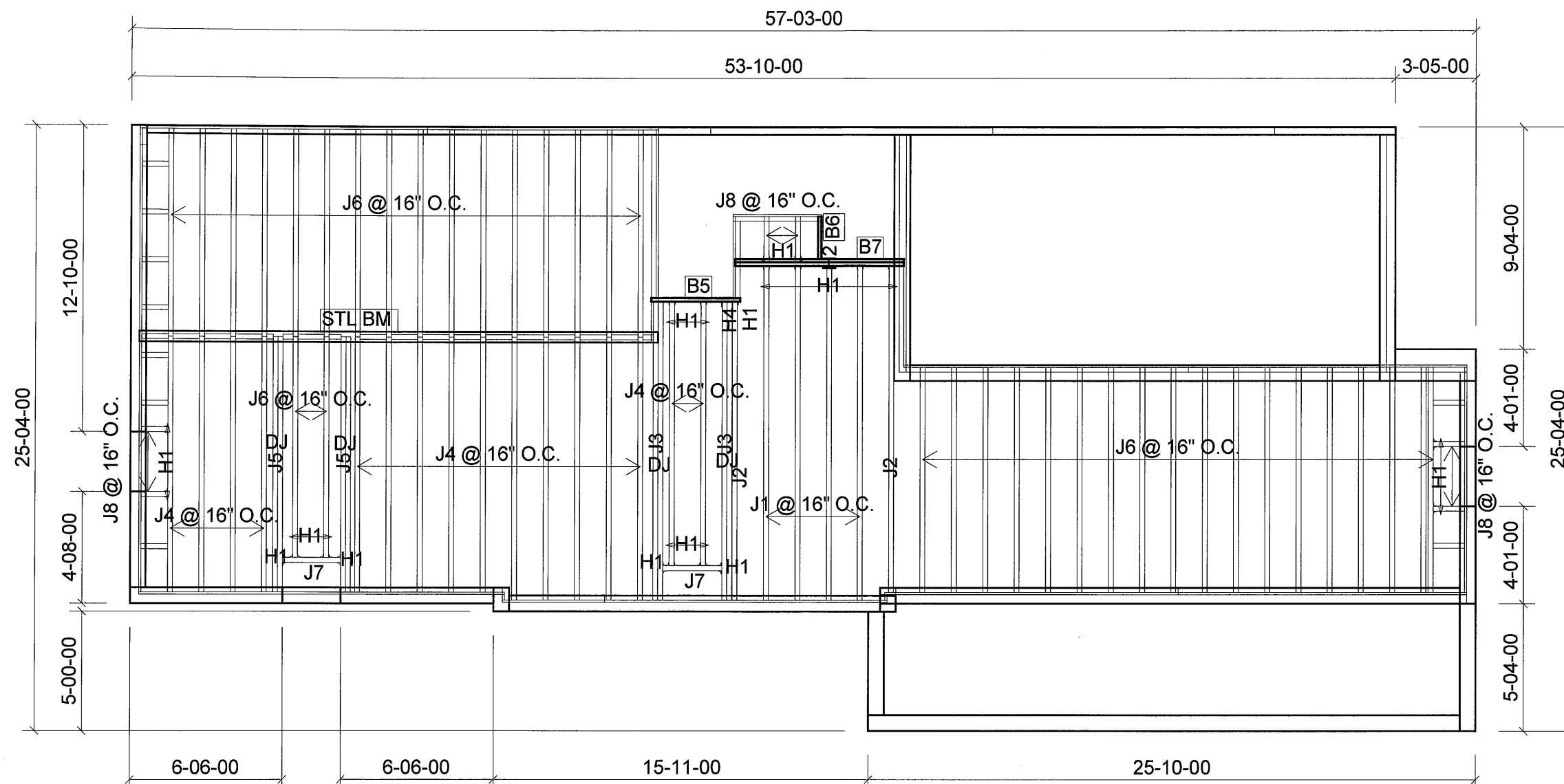
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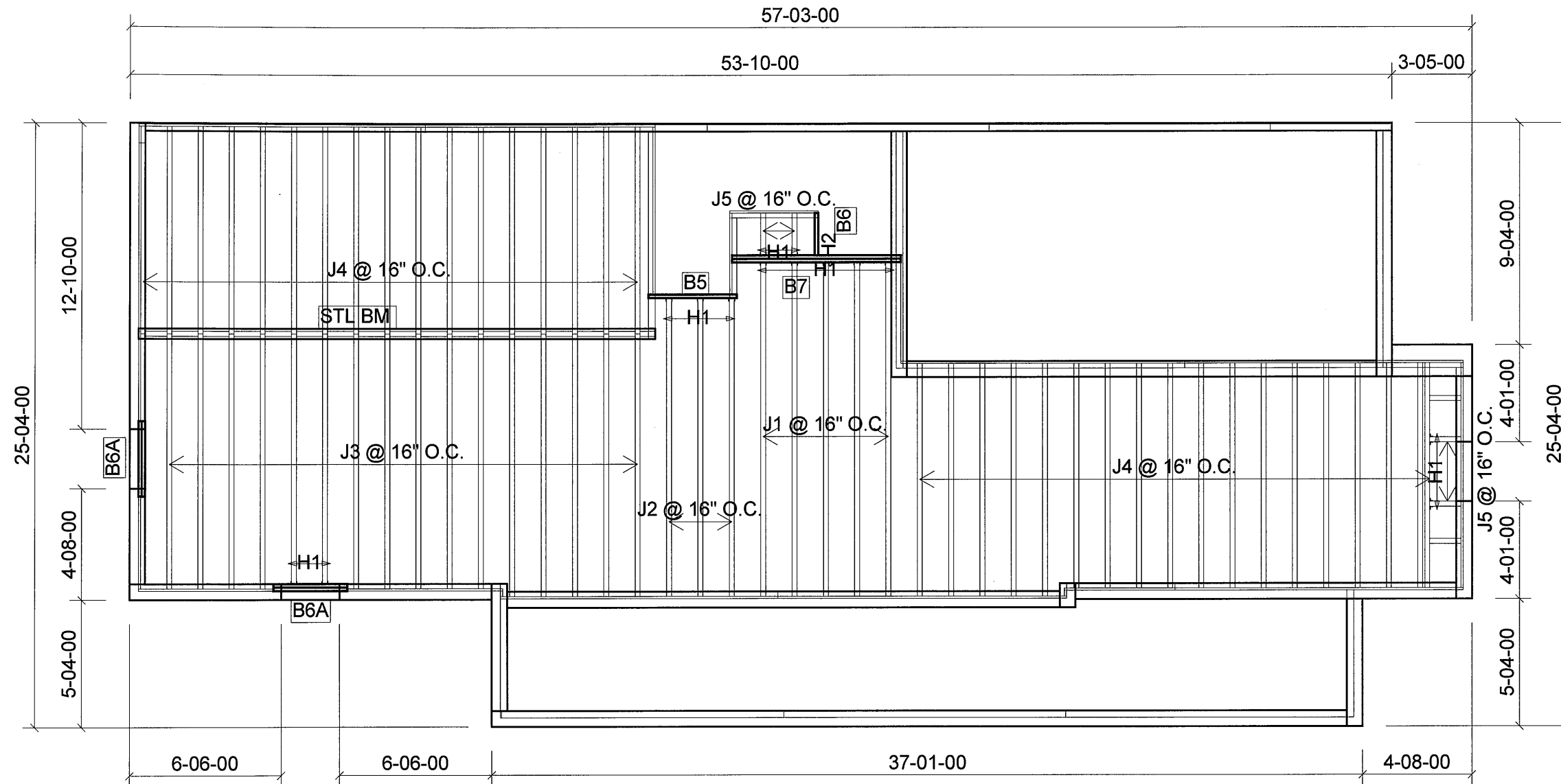
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WITH DECK CONDITION



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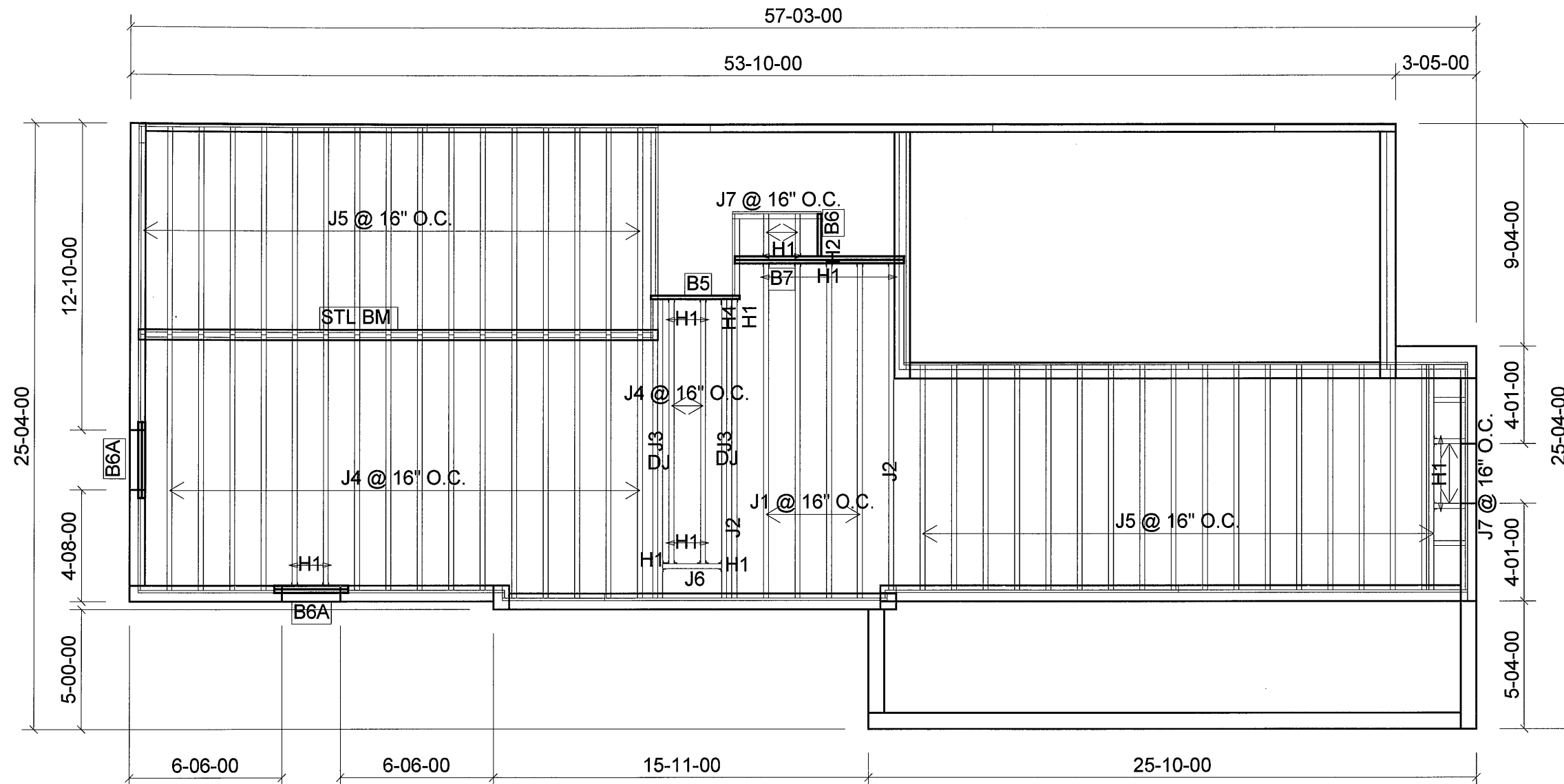
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Boise Cascade

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)

May-16-14

BC CALC® Design Report - CA

Build 2627

Job Name:

Address:

MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GREENPARK HOME

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10.bcc

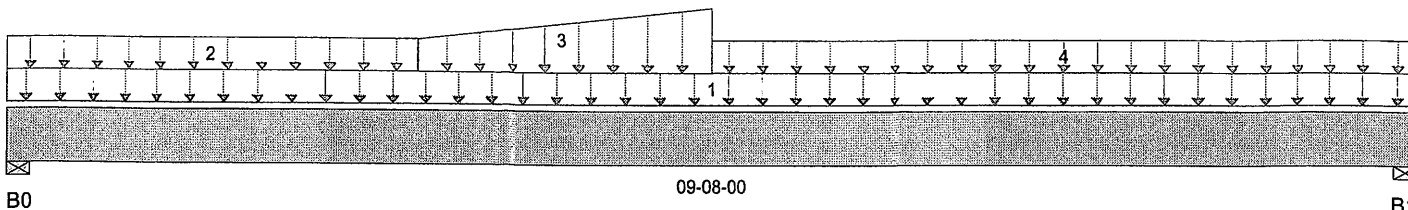
Description: Designs\B01

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 09-08-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	2,017 / 0	913 / 0		
B1, 3-1/2"	2,113 / 0	948 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	TILED FLOOR	Unf. Area (lb/ft ²)	L	00-00-00	09-08-00	40	20			04-06-00
2	FLOOR	Unf. Area (lb/ft ²)	L	00-00-00	02-10-00	40	15			05-07-00
3	FLOOR	Trapezoidal (lb/ft)	L	02-10-00		223	88			n/a
					04-10-00	261	98			n/a
4	FLOOR	Unf. Area (lb/ft ²)	L	04-10-00	09-08-00	40	15			06-07-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	9,412 ft-lbs	25,408 ft-lbs	0.37	1	04-10-12
End Shear	3,365 lbs	11,571 lbs	0.29	1	08-07-00
Total Load Defl.	L/548 (0.202")	0.46"	0.44	4	04-10-02
Live Load Defl.	L/795 (0.139")	0.307"	0.45	5	04-10-04
Max Defl.	0.202"	1"	0.2	4	04-10-02
Span / Depth	11.6	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\nBC 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 3-1/2"	4,167 lbs	0.55	0.28	Spruce Pine Fir
B1 Wall/Plate	3-1/2" x 3-1/2"	4,354 lbs	0.58	0.29	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

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

THREE

PROVIDE NAILING
 DETAIL # 1B SEE
 DWG # TAMN1001-14

DWG NO. TAM 5160614
 STRUCTURAL



BC CALC® Design Report - CA

Build 2627

Job Name:

Address: MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer: GREENPARK HOME

Code reports: CCMC 12472-R

File Name: ELMBROOK 10.bcc

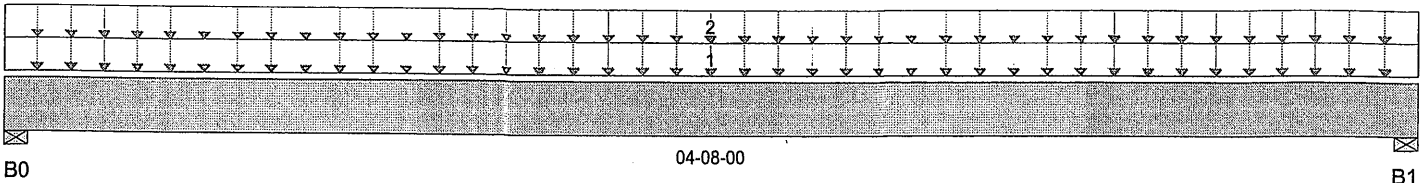
Description: Designs\B02

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 04-08-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	1,034 / 0	410 / 0		
B1, 3-1/2"	1,034 / 0	410 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	04-08-00	40	15			04-06-00
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	04-08-00	40	15			06-07-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	1,958 ft-lbs	25,408 ft-lbs	0.08	1	02-04-00
End Shear	1,106 lbs	11,571 lbs	0.1	1	01-01-00
Total Load Defl.	L/999 (0.009")	n/a	n/a	4	02-04-00
Live Load Defl.	L/999 (0.006")	n/a	n/a	5	02-04-00
Max Defl.	0.009"	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"	2,064 lbs	0.27	0.14	Spruce Pine Fir
B1	Wall/Plate 3-1/2" x 3-1/2"	2,064 lbs	0.27	0.14	Spruce Pine Fir

Notes

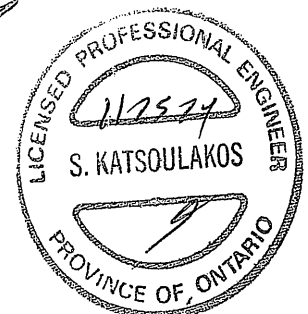
Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Design meets User specified (1") Maximum total load deflection criteria.
 Calculations assume Member is Fully Braced.
 Resistance Factor phi has been applied to all presented results per CSA 086.
 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086. *08/02/12*
 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
 @ 8" O.C. STAGGERED IN *THREE* ROWS.

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\nBC 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.



PROVIDE NAILING
 DETAIL #13 SEE
 DWG #TAMN1001-14

DWG NO. TAM 51607-14
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report - CA

Build 2627

Job Name:

Address:

MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GREENPARK HOME

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10.bcc

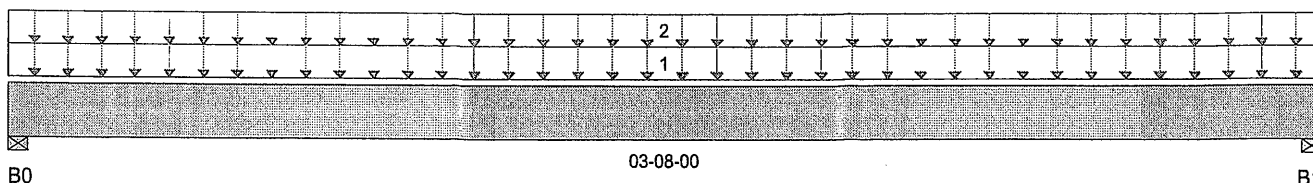
Description: Designs\B03

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"	739 / 0	294 / 0		
B1, 3-1/2"	739 / 0	294 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-08-00	40	15			04-06-00
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-08-00	40	15			05-07-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	1,037 ft-lbs	25,408 ft-lbs	0.04	1	01-10-00
End Shear	604 lbs	11,571 lbs	0.05	1	01-01-00
Total Load Defl.	L/999 (0.003")	n/a	n/a	4	01-10-00
Live Load Defl.	L/999 (0.002")	n/a	n/a	5	01-10-00
Max Defl.	0.003"	n/a	n/a	4	01-10-00
Span / Depth	4.1	n/a	n/a		00-00-00

Disclosure

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Bearing Supports

		Dim. (L x W)	Demand	Support	Member	Material
B0	Wall/Plate	3-1/2" x 3-1/2"	1,477 lbs	0.2	0.1	Spruce Pine Fir
B1	Wall/Plate	3-1/2" x 3-1/2"	1,477 lbs	0.2	0.1	Spruce Pine Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 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. *09/20/14*
 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
 @ 8" O.C. STAGGERED IN ~~THREE~~ ROWS.

THREE

PROVIDE NAILING
 DETAIL #13 SEE
 DWG #TAMN1001-14



DWG NO. TAM 5160B14
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report - CA

Build 2627

Job Name:

Address:

MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GREENPARK HOME

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10.bcc

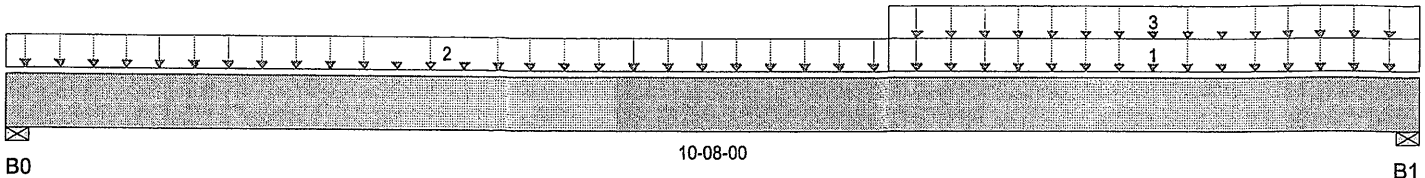
Description: Designs\B04

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 10-08-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	1,453 / 0	618 / 0		
B1, 3-1/2"	1,636 / 0	772 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	STAIRS	Unf. Area (lb/ft²)	L	06-08-00	10-08-00	40	15			01-09-00
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	06-08-00	40	15			06-07-00
3	TILED FLOOR	Unf. Area (lb/ft²)	L	06-08-00	10-08-00	40	20			06-07-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	7,557 ft-lbs	25,408 ft-lbs	0.3	1	05-06-13
End Shear	2,650 lbs	11,571 lbs	0.23	1	09-07-00
Total Load Defl.	L/612 (0.2")	0.51"	0.39	4	05-04-10
Live Load Defl.	L/882 (0.139")	0.34"	0.41	5	05-04-08
Max Defl.	0.2"	1"	0.2	4	05-04-10
Span / Depth	12.9	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. 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

B0	Wall/Plate	3-1/2" x 3-1/2"	2,952 lbs	0.39	0.2	Spruce Pine Fir
B1	Wall/Plate	3-1/2" x 3-1/2"	3,419 lbs	0.45	0.23	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

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

THREE



PROVIDE NAILING
 DETAIL #1A SEE
 DWG #TAMN1001-14

DWG NO. TAM 51609-14
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report


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

February-27-15

Build 3272

Job Name:

Address: MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GreenPark Home

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10

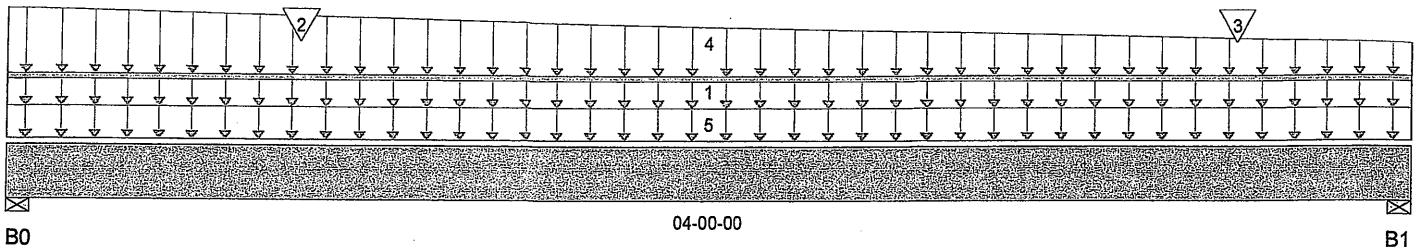
Description: Designs\B04A

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 04-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	471 / 0	475 / 0	457 / 0	
B1, 3-1/2"	425 / 0	464 / 0	495 / 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	Unf. Lin. (lb/ft)	L	00-00-00	04-00-00	0	100			n/a
2	WINDOW	Conc. Pt. (lbs)	L	00-10-00	00-10-00	66	60	204		n/a
3	WINDOW	Conc. Pt. (lbs)	L	03-06-00	03-06-00	66	60	204		n/a
4	FLOOR	Trapezoidal (lb/ft)	L	00-00-00	04-00-00	187	70			n/a
5	ROOF	Unf. Area (lb/ft^2)	L	00-00-00	04-00-00	11	10	34		04-00-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	1,079 ft-lbs	25,408 ft-lbs	0.04	1	01-11-05
End Shear	988 lbs	11,571 lbs	0.09	1	01-01-00
Total Load Defl.	L/999 (0.004")	n/a	n/a	11	01-11-11
Live Load Defl.	L/999 (0.002")	n/a	n/a	15	01-11-11
Max Defl.	0.004"	n/a	n/a	11	01-11-11
Span / Depth	4.5	n/a	n/a		00-00-00

Bearing Supports

	Dim. (L x W)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B0	3-1/2" x 3-1/2"	1,529 lbs	0.2	0.1	Spruce Pine Fir
B1	3-1/2" x 3-1/2"	1,535 lbs	0.2	0.1	Spruce Pine Fir

Notes

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

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

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. TAM2645 -15
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report



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

February-27-15

Build 3272

Job Name:

Address:

MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GreenPark Home

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10

Description: Designs\B04A

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

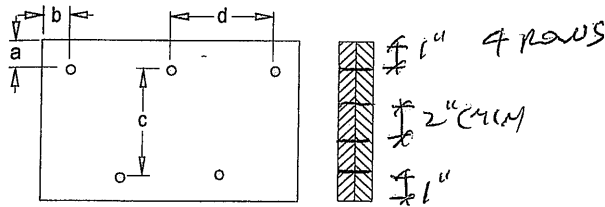
Misc: BURLINGTON ON,

NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS
 @ 8" O.C., STAGGERED IN 4 ROWS.

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 Products L.L.C.

Connection Diagram



a minimum = 1/2" c = 1-1/2"
 b minimum = 3" d = 8"

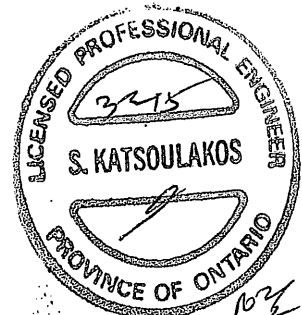
Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Member has no side loads.

Connectors are: 16d ~~Common~~ Nails (3 1/2" ARD + SPIRAL)



Boise Cascade



DRAWN: TAM 2645-15
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report - CA

Build 2627

Job Name:

Address: MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer: GREENPARK HOME

Code reports: CCMC 12472-R

File Name: ELMBROOK 10.bcc

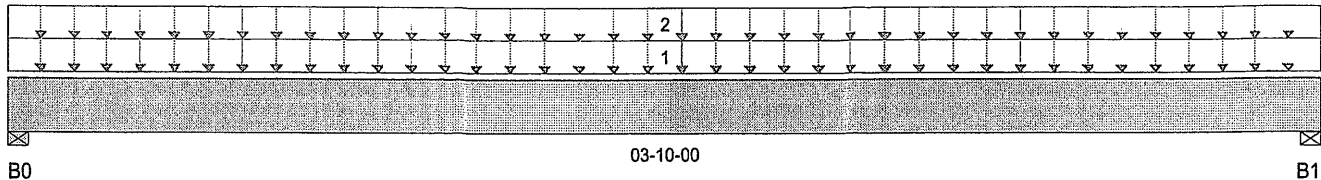
Description: Designs\B05

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 03-10-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	645 / 0	251 / 0		
B1, 3-1/2"	645 / 0	251 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	STAIRS	Unf. Area (lb/ft²)	L	00-00-00	03-10-00	40	15			01-11-00
2	FLOOR	Unf. Area (lb/ft²)	L	00-00-00	03-10-00	40	15			06-06-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	952 ft-lbs	12,704 ft-lbs	0.07	1	01-11-00
End Shear	557 lbs	5,785 lbs	0.1	1	01-01-00
Total Load Defl.	L/999 (0.005")	n/a	n/a	4	01-11-00
Live Load Defl.	L/999 (0.004")	n/a	n/a	5	01-11-00
Max Defl.	0.005"	n/a	n/a	4	01-11-00
Span / Depth	4.3	n/a	n/a		00-00-00

Disclosure

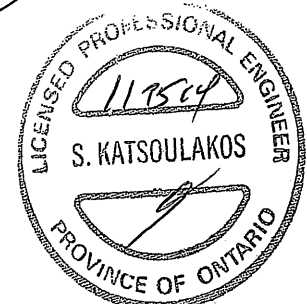
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Bearing Supports

	Dim. (L x W)	Demand	Demand/Resistance Support	Demand/Resistance Member	Material
B0	Wall/Plate 3-1/2" x 1-3/4"	1,282 lbs	0.34	0.17	Spruce Pine Fir
B1	Wall/Plate 3-1/2" x 1-3/4"	1,282 lbs	0.34	0.17	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 51610-14
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report - CA

Build 2627

Job Name:

Address: MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer: GREENPARK HOME

Code reports: CCMC 12472-R

File Name: ELMBROOK 10.bcc

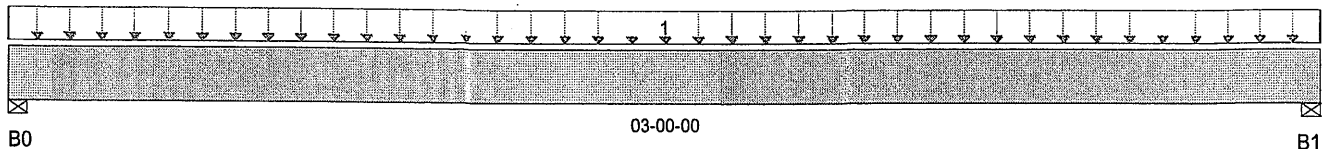
Description: Designs\B06

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 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
1	FLOOR	Unf. Area (lb/ft^2)	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

				Demand/ Resistance Support	Demand/ Resistance Member	Material
Bearing Supports		Dim. (L x W)	Demand			
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. *03/02/14*

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

1. The design is based on the following assumptions:
 a. The beam is supported by a continuous wall.
 b. The beam is braced against lateral movement.
 c. The beam is braced against rotation.



DWG NO. TAM 51611-14
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report



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

February-27-15

Build 3272

Job Name:

Address:

MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GreenPark Home

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10

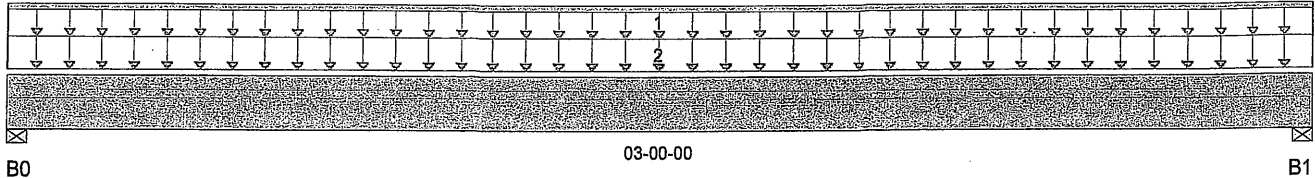
Description: Designs\B06A

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"	330 / 0	288 / 0		
B1, 3-1/2"	330 / 0	288 / 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	Unf. Lin. (lb/ft)	L	00-00-00	03-00-00	0	100			n/a
2	FLOOR	Unf. Area (lb/ft^2)	L	00-00-00	03-00-00	40	15			05-06-00

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	460 ft-lbs	25,408 ft-lbs	0.02	1	01-06-00
End Shear	238 lbs	11,571 lbs	0.02	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")	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"	855 lbs	0.11	0.06	Spruce Pine Fir
B1	Wall/Plate	3-1/2" x 3-1/2"	855 lbs	0.11	0.06	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. *AWAIS*
 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.



DWG NO. TAM7644-15
 STRUCTURAL
 COMPONENT ONLY

BC CALC® Design Report



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

February-27-15

Build 3272

Job Name:

Address:

MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer:

GreenPark Home

Code reports:

CCMC 12472-R

File Name: ELMBROOK 10

Description: Designs\B06A

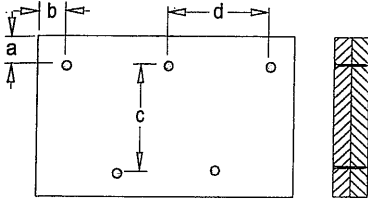
Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,

Connection Diagram



a minimum = 2" c = 5-1/2"
b minimum = 3" d = 6"

Member has no side loads.

Connectors are: 16d ~~Steel~~ Nails (3 1/2" LAMP SPINAC)

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 2644-15
STRUCTURAL
COMPONENT ONLY

BC CALC® Design Report - CA

Build 2627

Job Name:

Address: MODEL-ELMBROOK 10A

City, Province, Postal Code:

Customer: GREENPARK HOME

Code reports: CCMC 12472-R

File Name: ELMBROOK 10.bcc

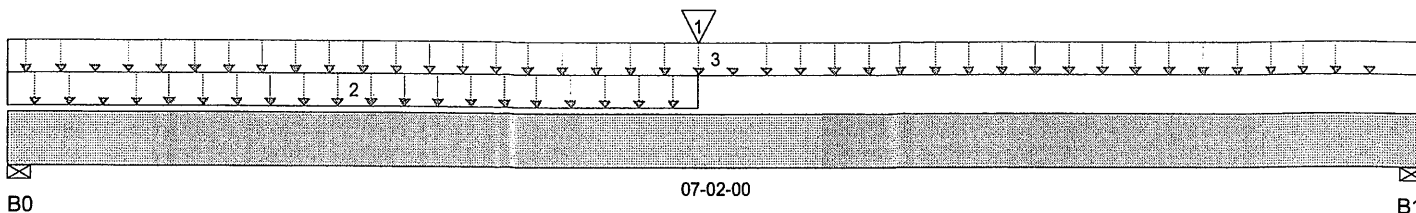
Description: Designs\B07

Specifier:

Designer: AWAIS HAMID

Company: TAMARACK LUMBER INC

Misc: BURLINGTON ON,



Total Horizontal Product Length = 07-02-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	1,186 / 0	481 / 0		
B1, 3-1/2"	1,071 / 0	437 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
1	FROM B6	Conc. Pt. (lbs)	L	03-06-00	03-06-00	40	20			n/a
2	FLOOR	Unf. Area (lb/ft^2)	L	00-00-00	03-06-00	40	15			01-06-00
3	FLOOR	Unf. Area (lb/ft^2)	L	00-00-00	07-02-00	40	15			07-00-00

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	3,631 ft-lbs	25,408 ft-lbs	0.14	1	03-05-15
End Shear	1,642 lbs	11,571 lbs	0.14	1	01-01-00
Total Load Defl.	L/999 (0.041")	n/a	n/a	4	03-06-11
Live Load Defl.	L/999 (0.029")	n/a	n/a	5	03-06-11
Max Defl.	0.041"	n/a	n/a	4	03-06-11
Span / Depth	8.5	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. 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 3-1/2"	2,380 lbs	0.32	0.16	Spruce Pine Fir
B1 Wall/Plate	3-1/2" x 3-1/2"	2,153 lbs	0.29	0.14	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.

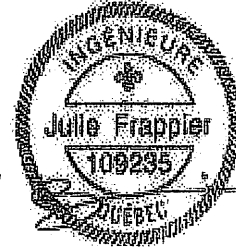
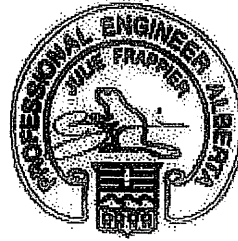
User Notes

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 #1A SEE
 DWG #TAMN1001-14

DWG NO. TAM51612-14
 STRUCTURAL
 COMPONENT ONLY



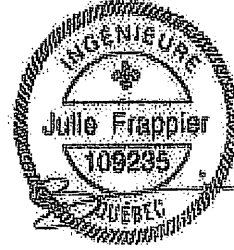
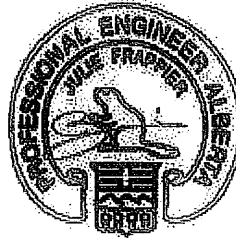
Maximum Floor Spans

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
	NI-90x	20'-4"	18'-9"	17'-11"	N/A	20'-10"	19'-3"	18'-5"	N/A
14"	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
	NI-90x	22'-7"	20'-11"	19'-11"	N/A	23'-3"	21'-6"	20'-6"	N/A
16"	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	18'-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
	NI-90x	23'-4"	21'-8"	20'-8"	N/A	23'-10"	22'-2"	21'-2"	N/A
14"	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
	NI-90x	26'-4"	24'-4"	23'-3"	N/A	26'-10"	24'-11"	23'-9"	N/A
16"	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 2010, 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"	21'-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 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.

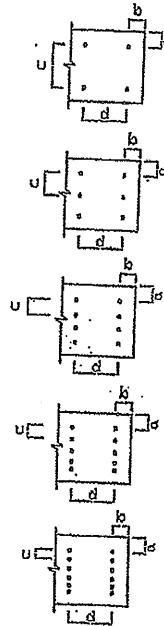
MICRO CITY

ENGINEERING SERVICES INC.

TEL: (519) 287-2242

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 PLYS 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 BELOW

PROVIDE NAILING
DETAIL # X SEE
DWG # TAMN1001-14