Engineering Note Page (ENP-2)

REVISION 2018-10-17

Please read all notes prior to installation of the component

DESIGN INFORMATION

This building component is certified as an individual component for the loads and conditions shown on the calculation and drawing page.

The responsibility of the undersigned engineer is <u>only</u> limited to the calculation of this building component for the loads and conditions shown on this drawing.

The responsibility of the undersigned is limited to the verification of the structural capacity of the floor joists and LVL beams based on placement as shown on the layout. The loads applied are limited to the gravity effects of the specified loads. The structural integrity of the building and the effect of wind, uplift, seismic, lateral or other forces, calculation of adequate support and anchorage of components, as well as the dimensions and design loads used to calculate components are the responsibility of the overall building designer.

Floor joists and OSB rim board are designed to carry uniformly distributed loads only. Point loads should be transferred through the floor cavity with transfer blocks. Structural elements such as walls, posts, connectors, and transfer blocks are the responsibility of the overall building designer.

The undersigned engineer disclaims any responsibility for damages as a result of being furnished faulty or incorrect information, specifications and/or designs.

Installation of floor joists is to be carried out in accordance with the current edition of the manufacturer's literature available at http://www.kottgroup.com.

<u>CODE</u>

This building component is designed in accordance with the National Building Code of Canada, the Ontario Building Code, CCMC and Canadian Standards Association guidelines.

COMPONENT

- 1. The building component used in construction must be the same as indicated on the drawings.
- 2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
- 3. Members consisting of multiple plies must be connected as per the document "Multi-ply Connection Details".
- 4. Pass-thru transfer block framing is required at all point loads over bearings.

HANDLING AND INSTALLATION

Do not drill any hole, cut or notch a certified building component without a written preauthorization.

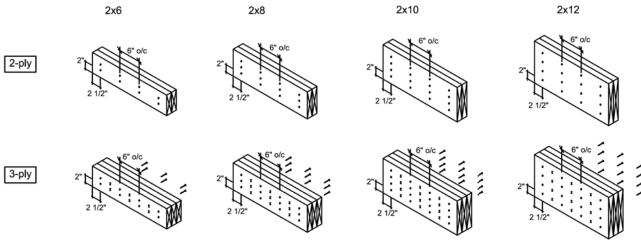


CITY OF RICHMOND HILL BUILDING DIVISION

09/22/2022

RECEIVED
Per: joshua.nabua

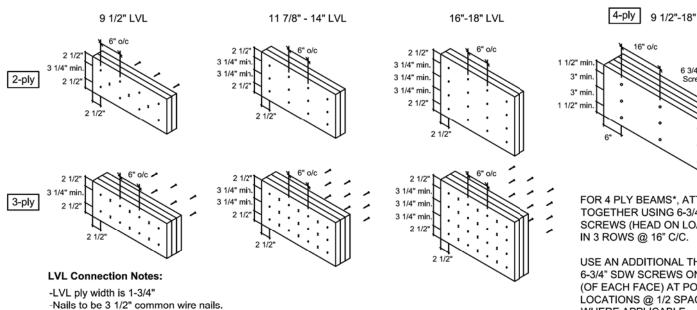
Conventional Connections



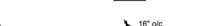
Conventional Connection Notes:

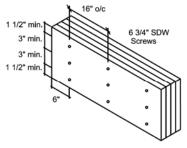
- -Nails to be 3" long wire nails.
- -Nails to be located 2" min. from the top and bottom of the member. Start all nails 2 1/2" min. from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections



- -Nails to be located 2 1/2" min. from the top and bottom of the member. Start all nails 2 1/2" min. from ends.
- -Minimum 3 1/4" spacing between rows.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.
- Head of all specified screws must be on the loaded side.





FOR 4 PLY BEAMS*, ATTACH PLIES TOGETHER USING 6-3/4" SDW SCREWS (HEAD ON LOADED SIDE)

USE AN ADDITIONAL THREE (3) 6-3/4" SDW SCREWS ON EACH SIDE (OF EACH FACE) AT POINT LOAD LOCATIONS @ 1/2 SPACING, WHERE APPLICABLE.

*UNLESS NOTED OTHERWISE ON LAYOUT OR CALCULATION SHEET OF BEAM IN THE FLOOR PACKAGE

Multiple Member Connections

All connections are for uniformly distributed loads.

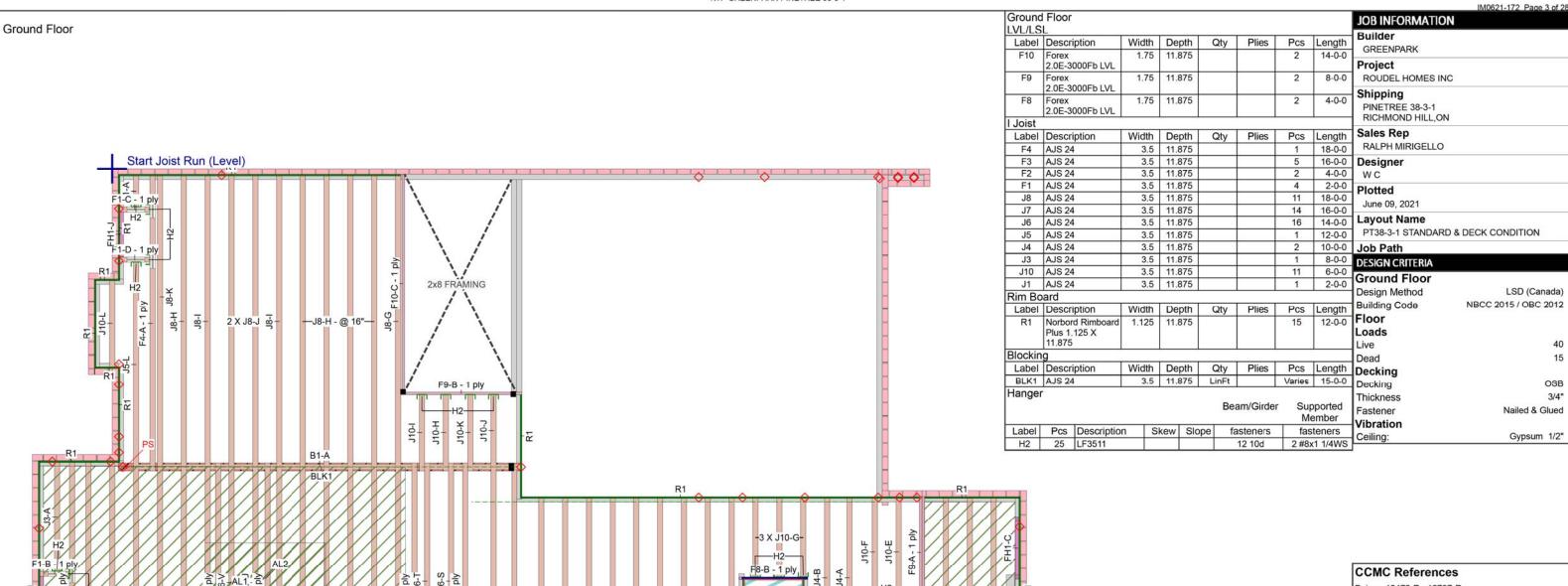
For multi-ply connections of I-joists, refer to Manufacturer's Installation Guide

KOT1

KOTTY INF. RICHMOND HILL 3228 Moodle Brive ISION Ottawa, ON K2H7V1/ZZ 613-838-2775

RECEIVED joshua.nabua

Last revised: February 19, 2021



F8-A - 1 ply a

Boise - 12472-R , 12787-R LP - 12412-R Forex - 14056-R

Kott Inc.

3228 Moodie Dr, Ottawa

613-838-2775 / 905-642-4400

14 Anderson Blvd, Uxbridge Ontario

1. All blocking to be cut from 12' joists

2. 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length

3. Ends of joists to be laterally supported

4. Packing of Steel beams and attachment by others

5. Shower and water closet flange locations are approximate only, consult architectural drawing for exact locations

6. Beams identified as "B" are dropped and supplied by others

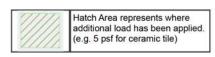
7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls

8. Load transfer blocks to be installed under all point loads

9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting

10. Hangers and Fasteners to be installed as per manufacturer

11. Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction.



AJS140 I-Joists can be substituted with LP20 I-Joists for 9.5" and 11.875" depths shown on this layout.

F2-A - 1 ply

Legend CITY OF RICHMOND HILL Rad from Above DIVISION 0 Wall WallOpening / 1011 Norbord Rimboard Plus 1,125 X 11,875 AJS 24 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875 1.75 X 9.25 (Dropped) 5.25 X 8 (Dropped)

Version 21.20.293 Powered by iStruct™ Dataset: embedded

This layout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them



Project: Address:

Client: GREENPARK

RICHMOND HILL, ON

PINETREE 38-3-1

6/28/2021

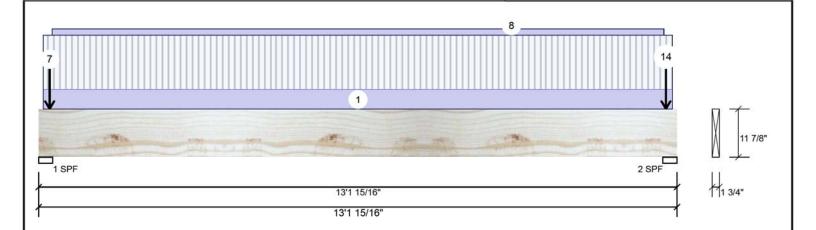
Project #:

WC Input by:

Job Name: PT38-3-1 STANDARD & DECK CONDITION ROUDEL HOMES INC

F10-B Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor



Member Inforn	nation			Unfa	ctored Rea	action	s UNP	ATTERNED I	b (Upl	ift)
Type:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead		Sno
Plies:	1	Design Method:	LSD	1	Vertical		168	171		:
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical		168	167		1
Deflection LL:	480	Load Sharing:	No	-						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load						115				
Floor Live:	40 PSF			Bear	ings and F	actore	d Read	ctions		
Dead:	15 PSF			Bea	ring Length	Dir.	Сар.	React D/L lb	Total	Ld.
				1 - 8	SPF 3.446"	Vert	13%	214 / 279	493	L
Analysis Result	s			2-8	SPF 3.500"	Vert	13%	209 / 279	488	L

6'7" 0.635 (L/240) 0.089 (9%) D+L+0.5S L

ľ							
Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	1222 ft-lb	6'6 15/16"	17130 ft-lb	0.071 (7%)	1.25D+1.5L	L
l	Unbraced	1222 ft-lb	6'6 15/16"	17130 ft-lb	0.071 (7%)	1.25D+1.5L	L
l	Shear	327 lb	1'3 5/16"	5798 lb	0.056 (6%)	1.25D+1.5L	L
l	Perm Defl in.	0.023 (L/6655)	6'7"	0.424 (L/360)	0.054 (5%)	D	Uniform
	LL Defl inch	0.034 (L/4495)	6'7"	0.318 (L/480)	0.107 (11%)	L+0.5S	L

Design Notes

TL Defl inch 0.057 (L/2683)

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.446196660483.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam
- 3 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top must be continuously laterally braced.

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	168	171	28	0
2	Vertical	168	167	28	0

Bearing	s and Fa	actore	d Read	ctions			
Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.446"	Vert	13%	214 / 279	493	L	1.25D+1.5L +S
2-SPF	3.500"	Vert	13%	209 / 279	488	L	1.25D+1.5L +S

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

June 29, 2021

o Bottom	must be laterally braced a	at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-1-2 to 13-0-13	0-7-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Point	0-2-11		Тор	7 lb	0 lb	18 lb	0 lb		
	Bearing Length	0-5-8								
3	Point	0-2-11		Тор	29 lb	0 lb	0 lb	0 lb	Wall Self Weight	
l	Bearing Length	0-5-8								

Continued on page 2...

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation equirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex

Manufacturer Info APA: PR-L318

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400





Continued from page 1

Client: Project: Address:

GREENPARK

6/28/2021

Input by: WC

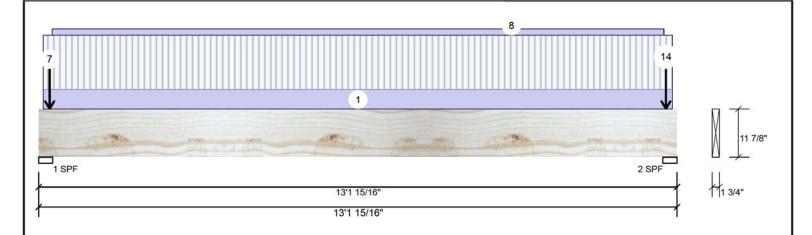
Job Name: PT38-3-1 STANDARD & DECK CONDITION

PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

1.750" X 11.875" - PASSED F10-B Forex 2.0E-3000Fb LVL

Level: Ground Floor



ŀ	Continued from page	age 1								
l	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	4	Point	0-2-11		Тор	2 lb	0 lb	5 lb	0 lb	
l		Bearing Length	0-5-8							
l	5	Point	0-2-11		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
l	6	Point	0-2-11		Тор	2 lb	0 lb	5 lb	0 lb	
l		Bearing Length	0-5-8							
l	7	Point	0-2-11		Тор	11 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
l	8	Part. Uniform	0-3-5 to 12-10-11		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
l	9	Point	12-11-3		Тор	2 lb	0 lb	5 lb	0 lb	
l		Bearing Length	0-5-8							
l	10	Point	12-11-3		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
l	11	Point	12-11-3		Тор	2 lb	0 lb	5 lb	0 lb	
l		Bearing Length	0-5-8							
l	12	Point	12-11-3		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
l	13	Point	12-11-3		Тор	7 lb	0 lb	18 lb	0 lb	
l		Bearing Length	0-5-8							
l	14	Point	12-11-3		Тор	29 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
1									READ ALL	NOTES ON THIS PAGE AND ON THE



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, it is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. LVL beams must not be cutor drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 3. Damaged Beams must not be used
 4. Design assumes top edge is laterally restrained
 5. Provide lateral support at bearing points to avoid lateral displacement and roiation

- For flat roofs provide proper drainage to prevent ponding

This design is valid until 5/24/2024

5 PLF

Forex

APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 618-838-8775 DI \905-63244400

joshua.nabua



GREENPARK

PINETREE 38-3-1

RICHMOND HILL, ON

WC Input by:

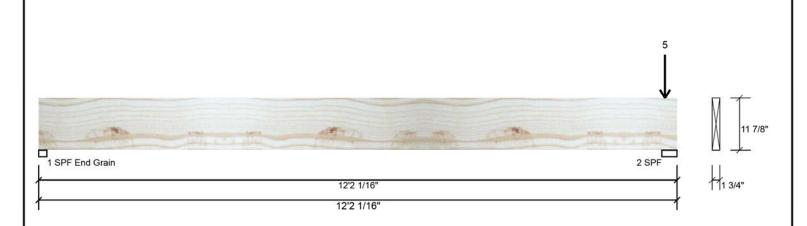
Project #:

Job Name: PT38-3-1 STANDARD & DECK CONDITION ROUDEL HOMES INC

F10-C Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor

6/28/2021



Member Inforn	nation			Unfa	ctore	ed Rea	ctions	UNP	ATTERNED II	b (Upl	ift)
Type:	Girder	Application:	Floor (Residential)	Brg	Direc	tion		Live	Dead		Sno
Plies:	1	Design Method:	LSD	1	Vertica	al		0	29		
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertica	al		47	94		•
Deflection LL:	480	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked	1							
Importance:	Normal - II	Vibration:	Not Checked	1							
General Load						17-7-17-1-17	115		- Name of		
Floor Live:	40 PSF			Bear	ings a	and Fa	ctore	d Read	ctions		
Dead:	15 PSF			Bea	ring L	ength	Dir.	Cap.	React D/L lb	Total	Ld.
Analysis Result	s			1 - S End Grai		1.875"	Vert	3%	40 / 0	40	Unif
Analysis results		All	" 0 1	2-5	SPF 3	3.500"	Vert	7%	118 / 140	258	L

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	117 ft-lb	6' 3/16"	11135 ft-lb	0.011 (1%)	1.4D	Uniform
Unbraced	117 ft-lb	6' 3/16"	11135 ft-lb	0.011 (1%)	1.4D	Uniform
Shear	39 lb	1'1 3/4"	3769 lb	0.010 (1%)	1.4D	Uniform
Perm Defl in.	0.005 (L/29701)	6' 1/4"	0.395 (L/360)	0.012 (1%)	D	Uniform
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.005 (L/29701)	6' 1/4"	0.592 (L/240)	0.008 (1%)	D+S+0.5L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
- 2 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.

5 Bottom must be laterally braced at bearings.

	Uniactor	ed Reaction	SUNPAI	I EKINED ID	(Opint)
1		V2 10 10 10 10 10 10 10 1	10000000	2202000000	

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	0	29	0	0
2	Vertical	47	94	62	0
-					

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	1.875"	Vert	3%	40 / 0	40	Uniform	1.4D
2 - SPF	3.500"	Vert	7%	118 / 140	258	L	1.25D+1.5S

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



+L

June 29, 2021

o Dottoili	made be laterally braces at b	ournigo.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	11-11-5		Тор	18 lb	47 lb	0 lb	0 lb	J8
	Bearing Length	0-5-8							
2	Point	11-11-5		Тор	11 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
3	Point	11-11-5		Тор	25 lb	0 lb	62 lb	0 lb	

Continued on page 2...

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Manufacturer Info Forex APA: PR-L318

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400

oshua.nabua



GREENPARK

6/28/2021 WC Input by:

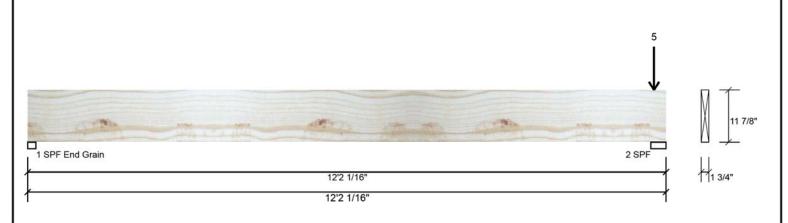
Job Name: PT38-3-1 STANDARD & DECK CONDITION

PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

F10-C Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor



11 lb

0 lb

0 lb

0 lb

.Continued from page 1

Point

5

Location Trib Width Side Wind ID Load Type Dead Live Snow Comments Bearing Length 0-5-8

Top

0-5-8 Bearing Length

Self Weight 5 PLF

11-11-5

READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

Wall Self Weight

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 Damaged Beams must not be used

Handling & Installation

- - Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- For flat roofs provide proper drainage to prevent ponding

This design is valid until 5/24/2024

Forex

APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400

oshua.nabua



GREENPARK

PINETREE 38-3-1

RICHMOND HILL, ON

Date

Project #:

WC Input by:

PT38-3-1 STANDARD & DECK CONDITION Job Name:

ROUDEL HOMES INC

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Floor (Residential)

NBCC 2015 / OBC 2012

LSD

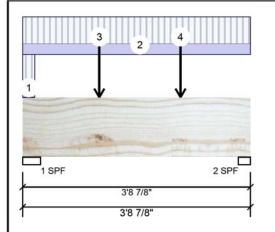
No

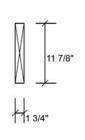
Not Checked

Not Checked

Level: Ground Floor

6/28/2021





Member Information Type:

Plies: 1 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 240 Importance: General Load

Normal - II

40 PSF Floor Live: 15 PSF Dead:

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	267	111	0	0
2	Vertical	248	104	0	0

Bearings and Factored Reactions

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.500" Vert 14% 139 / 401 540 L 1.25D+1.5L 130 / 372 1.25D+1.5L 2 - SPF 2.394" Vert 19% 502 1

Analysis Results

Analysis Actual Location Allowed Capacity Comb. Case Moment 468 ft-lb 1'10 1/16" 17130 ft-lb 0.027 (3%) 1.25D+1.5L L Unbraced 468 ft-lb 1'10 1/16" 17130 ft-lb 0.027 (3%) 1.25D+1.5L L 0.067 (7%) 1.25D+1.5L L 387 lb 1'3 3/8" 5798 lb Shear Perm Defl in. 0.001 1'10 3/4" 0.112 (L/360) 0.008 (1%) D Uniform (L/42975) 0.002 1'10 11/16" 0.084 (L/480) 0.027 (3%) L LL Defl inch (L/17585) TL Defl inch 0.003 1'10 11/16" 0.169 (L/240) 0.019 (2%) D+L (L/12479)

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Vibration:

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT **CONTAINS SPECIFICATIONS AND CRITERIA USED** IN THE DESIGN OF THIS COMPONENT.



Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top must be continuously laterally braced.
- 4 Bottom must have sheathing attached or be continuously braced

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-6	1-5-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-8-14		Тор	20 PLF	50 PLF	0 PLF	0 PLF	
3	Point	1-3-1		Far Face	61 lb	164 lb	0 lb	0 lb	J10
4	Point	2-7-1		Far Face	57 lb	153 lb	0 lb	0 lb	J10
	Self Weight				5 PLF				

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-plifastening details, beam strength values, and code approvals
- naged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontari 618-838-2775 D/\905-642-4400



shua.nabua



Project: Address:

Client: GREENPARK

RICHMOND HILL, ON

PINETREE 38-3-1

6/28/2021

Project #:

WC Input by:

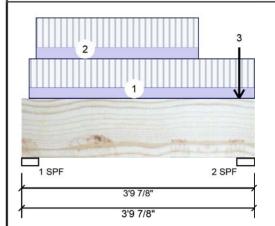
PT38-3-1 STANDARD & DECK CONDITION Job Name:

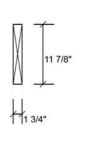
ROUDEL HOMES INC

Forex 2.0E-3000Fb LVL F8-B

1.750" X 11.875" - PASSED

Level: Ground Floor





0

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Member	Information
Turno	Cirdor

ijpo.	Ollder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal - II
General Load	

40 PSF

15 PSF

Application: Floor (Residential) Design Method: LSD

NBCC 2015 / OBC 2012

Load Sharing: No Deck: Not Checked

Building Code:

Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Direction Live Dead Snow Wind 292 119 0 1 Vertical 0 2 Vertical 314 127

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.313"	Vert	16%	148 / 438	586		1.25D+1.5L 1.25D+1.5L
2-SPF	3.500"	Vert	17%	159 / 471	630	L	1.25D+1.5L

Analysis Results

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	475 ft-lb	1'10 7/16"	17130 ft-lb	0.028 (3%)	1.25D+1.5L	L
Unbraced	475 ft-lb	1'10 7/16"	17130 ft-lb	0.028 (3%)	1.25D+1.5L	L
Shear	407 lb	2'6 1/2"	5798 lb	0.070 (7%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/43582)	1'10 9/16"	0.113 (L/360)	0.008 (1%)	D	Uniform
LL Defl inch	0.002 (L/17633)	1'10 9/16"	0.084 (L/480)	0.027 (3%)	L	L
TL Defl inch	0.003 (L/12554)	1'10 9/16"	0.169 (L/240)	0.019 (2%)	D+L	L

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED



Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top must be continuously laterally braced.
- 4 Bottom must have sheathing attached or be continuously braced.

טו	Load Type	Location	mbivv ani	Side	Dead	
1	Part. Uniform	0-1-8 to 3-9-14		Тор	32 PLF	
2	Part. Uniform	0-2-13 to 2-10-13		Far Face	33 PLF	
3	Point	3-6-13		Far Face	21 lb	
	Self Weight				5 PLF	

IN THE DESIGN OF THIS COMPONENT.

ľ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Part. Uniform	0-1-8 to 3-9-14		Тор	32 PLF	85 PLF	0 PLF	0 PLF	
l	2	Part. Uniform	0-2-13 to 2-10-13		Far Face	33 PLF	88 PLF	0 PLF	0 PLF	
l	3	Point	3-6-13		Far Face	21 lb	57 lb	0 lb	0 lb	J10
l		Self Weight				5 PLF				

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. UVL beams must not be cutor drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ph fastening details, beam stength values, and codi approvals
 3. Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400

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Page 26 of 74



Client: Project:

GREENPARK

6/28/2021

WC Input by:

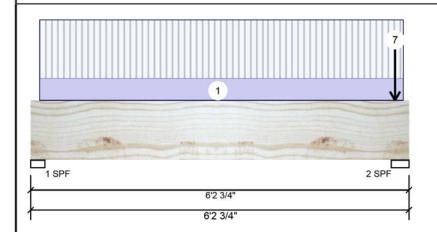
PT38-3-1 STANDARD & DECK CONDITION Job Name:

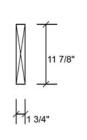
Address: PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor





Member Information

Type: Plies: 1 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 240 Importance: Normal - II

General Load 40 PSF Floor Live:

15 PSF

Application: Floor (Residential) Design Method: LSD Building Code: NBCC 2015 / OBC 2012

Load Sharing: No Deck: Not Checked Vibration:

Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

_	Direction	Live	Dead	Snow	Wind
1	Vertical	72	42	0	0
2	Vertical	196	782	636	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.813"	Vert	7%	52 / 109	161	L	1.25D+1.5L
2 - SPF	3.500"	Vert	67%	978 / 1150	2128	L	1.25D+1.5S

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	231 ft-lb	3'1 1/16"	13019 ft-lb	0.018 (2%)	1.25D+1.5L	L
Unbraced	231 ft-lb	3'1 1/16"	13019 ft-lb	0.018 (2%)	1.25D+1.5L	L
Shear	107 lb	1'2 11/16"	4406 lb	0.024 (2%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/65188)	3'1 1/16"	0.194 (L/360)	0.006 (1%)	D	Uniform
LL Defl inch	0.002 (L/37062)	3'1 1/16"	0.146 (L/480)	0.013 (1%)	L+0.5S	L
TL Defl inch	0.003 (L/23629)	3'1 1/16"	0.291 (L/240)	0.010 (1%)	D+L+0.5S	L

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS. PROFESSIONA I.MATIJEVIC 100528832 NCE OF ON

June 29, 2021

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
- 2 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

5 Bottom must be laterally braced at bearings.										
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
ı	1	Tie-In	0-1-12 to 6-1-10	0-7-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	2	Point	6-0-0		Тор	689 lb	121 lb	636 lb	0 lb	F18 F18 B2 B2
ı		Bearing Length	0-5-8							
ı	3	Point	6-0-0		Тор	2 lb	0 lb	0 lb	0 lb	Wall Self Weight
k	Continued on page	2								

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. UVL beams must not be cutor drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ph fastening details, beam stength values, and codi approvals
 3. Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontari 613-838-2775 D/\905-642-4400



This design is valid until 5/24/2024

Version 21.40.338 Powered by iStruct™ Dataset: 21060301.1545

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Page 27 of 74



Client: Project: Address: GREENPARK

PINETREE 38-3-1

RICHMOND HILL, ON

6/28/2021

Live

0 lb

0 lb

0 lb

0 lb

Snow

0 lb

0 lb

0 lb

0 lb

WC Input by:

Job Name: PT38-3-1 STANDARD & DECK CONDITION

Wind

0 lb

0 lb

0 lb

Comments

Wall Self Weight

Wall Self Weight

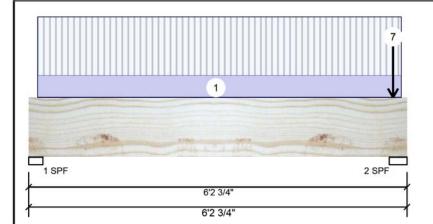
Wall Self Weight

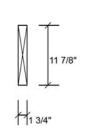
Wall Self Weight

Project #: ROUDEL HOMES INC

F9-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor





Continued f	rom page 1				
ID	Load Type	Location	Trib Width	Side	Dead
	Bearing Length	0-5-8			
4	Point	6-0-0		Тор	14 lb
	Bearing Length	0-5-8			
5	Point	6-0-0		Тор	22 lb
	Bearing Length	0-5-8			
6	Point	6-0-0		Тор	6 lb
	Bearing Length	0-5-8			
7	Point	6-0-0		Тор	6 lb
	Bearing Length	0-5-8			
	Self Weight				5 PLF

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 Damaged Beams must not be used

Handling & Installation

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318 3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400



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This design is valid until 5/24/2024

Page 28 of 74



F9-B

Client: Project:

Forex 2.0E-3000Fb LVL

GREENPARK

6/28/2021 Date

WC Input by:

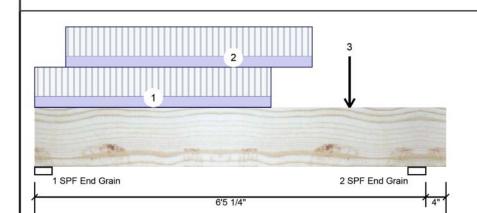
PT38-3-1 STANDARD & DECK CONDITION Job Name: ROUDEL HOMES INC

Address: PINETREE 38-3-1

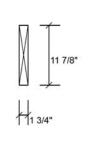
RICHMOND HILL, ON Project #:

1.750" X 11.875" - PASSED

Level: Ground Floor



6'9 1/4"



Member Information Type: Plies: 1

Moisture Condition: Dry Deflection LL: 480 Deflection TL: 240 Importance: Normal - II

General Load 40 PSF Floor Live:

15 PSF

Application: Floor (Residential)

Load Sharing:

Design Method: LSD Building Code:

NBCC 2015 / OBC 2012 No

Deck: Not Checked Not Checked

Vibration:

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	432	177	0	0
2	Vertical	299	128	0	0

Bearings and Factored Reactions

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.438" Vert 19% 221 / 648 869 L 1.25D+1.5L End Grain 2 - SPF 3.500" Vert 13% 160 / 448 608 L 1.25D+1.5L

End Grain

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



June 29, 2021

Analysis Results

Dead:

Analysis Case Actual Location Allowed Capacity Comb. 3' 1/2" 17130 ft-lb Moment 1229 ft-lb 0.072 (7%) 1.25D+1.5L L_ Unbraced 1229 ft-lb 3' 1/2" 17130 ft-lb 0.072 (7%) 1.25D+1.5L L_ 0.123 (12%) 1.25D+1.5L L_ 712 lb 5'1 7/8" 5798 lb Shear Perm Defl in. 0.005 3'1 15/16" 0.202 (L/360) 0.023 (2%) D Uniform (L/15434) LL Defl inch 0.012 (L/6322) 3'1 13/16" 0.152 (L/480) 0.076 (8%) L TL Defl inch 0.016 (L/4485) 3'1 7/8" 0.303 (L/240) 0.054 (5%) D+L LL LL Cant -0.001 Rt Cant 0.200 0.007 (1%) L LL (2L/5804) (2L/480)TL Cant -0.002 Rt Cant 0.300 0.006 (1%) D+L LL (2L/4116) (2L/240)

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top must be continuously laterally braced.
- 4 Rottom must have sheathing attached or be continuously braced

i must have sheatining atte	defica of be continued	oly bracea.						
Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
Tie-In	0-0-0 to 3-10-12	1-11-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
Part. Uniform	0-6-2 to 4-6-14		Near Face	29 PLF	78 PLF	0 PLF	0 PLF	
Point	5-2-4		Near Face	42 lb	112 lb	0 lb	0 lb	J10
Self Weight				5 PLF				
	Load Type Tie-In Part. Uniform Point	Load Type Location Tie-In 0-0-0 to 3-10-12 Part. Uniform 0-6-2 to 4-6-14 Point 5-2-4	Tie-In 0-0-0 to 3-10-12 1-11-4 Part. Uniform 0-6-2 to 4-6-14 Point 5-2-4	Load Type Location Trib Width Side Tie-In 0-0-0 to 3-10-12 1-11-4 Top Part. Uniform 0-6-2 to 4-6-14 Near Face Point 5-2-4 Near Face	Load Type Location Trib Width Side Dead Tie-In 0-0-0 to 3-10-12 1-11-4 Top 15 PSF Part. Uniform 0-6-2 to 4-6-14 Near Face 29 PLF Point 5-2-4 Near Face 42 lb	Load Type Location Trib Width Side Dead Live Tie-In 0-0-0 to 3-10-12 1-11-4 Top 15 PSF 40 PSF Part. Uniform 0-6-2 to 4-6-14 Near Face 29 PLF 78 PLF Point 5-2-4 Near Face 42 lb 112 lb	Load Type Location Trib Width Side Dead Live Snow Tie-In 0-0-0 to 3-10-12 1-11-4 Top 15 PSF 40 PSF 0 PSF Part. Uniform 0-6-2 to 4-6-14 Near Face 29 PLF 78 PLF 0 PLF Point 5-2-4 Near Face 42 lb 112 lb 0 lb	Load Type Location Trib Width Side Dead Live Snow Wind Tie-In 0-0-0 to 3-10-12 1-11-4 Top 15 PSF 40 PSF 0 PSF 0 PSF Part. Uniform 0-6-2 to 4-6-14 Near Face 29 PLF 78 PLF 0 PLF 0 PLF Point 5-2-4 Near Face 42 lb 112 lb 0 lb 0 lb

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-p details, beam strength values, and co
- naged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

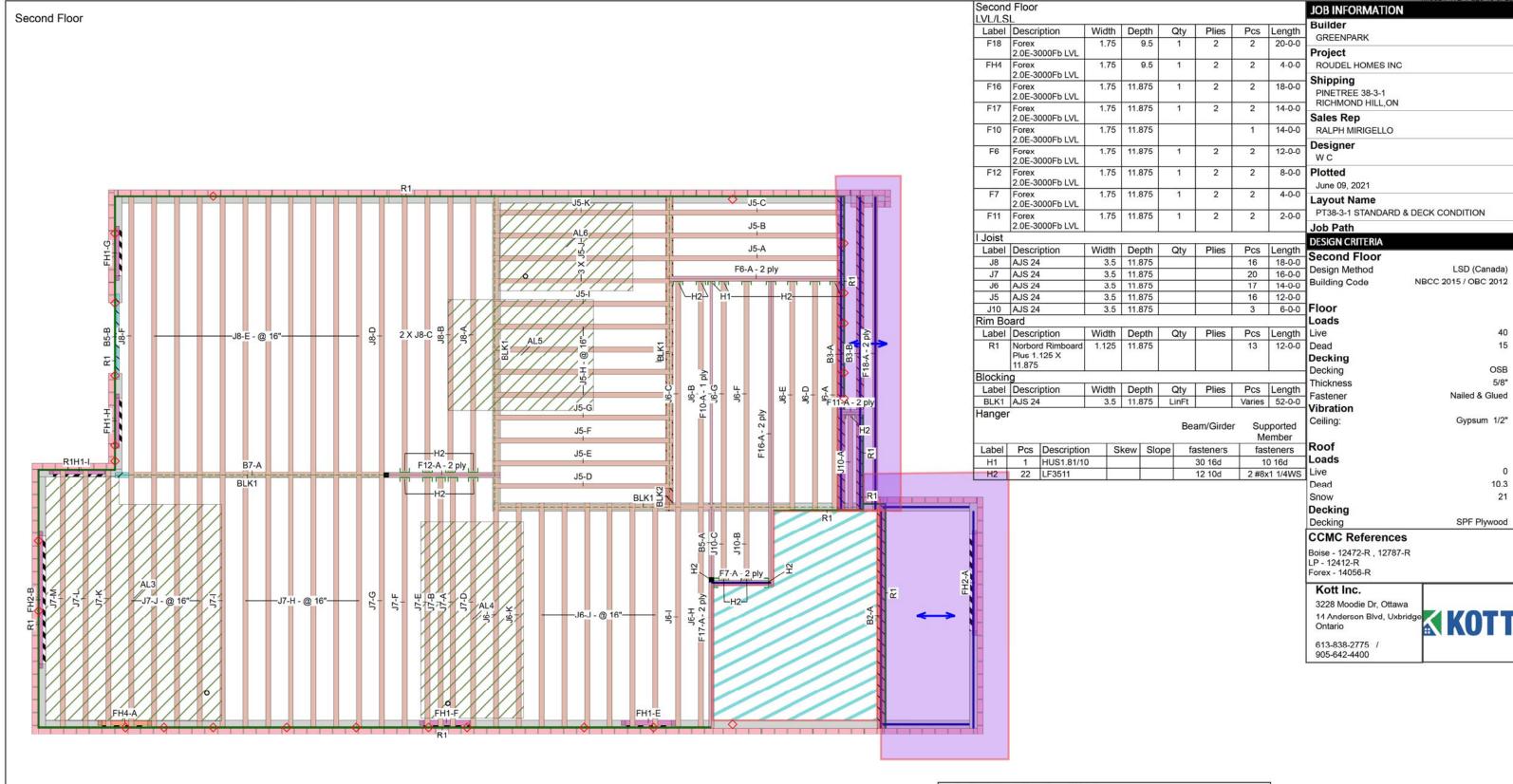
This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontari 618-838-2775 D/\905-642-4400







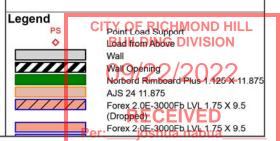
(e.g. 5 psf for ceramic tile)

AJS140 I-Joists can be substituted with LP20 I-Joists for 9.5" and 11.875" depths shown on this layout.

This layout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them

1. All blocking to be cut from 12' joists

- 2. 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length
- 3. Ends of joists to be laterally supported
- 4. Packing of Steel beams and attachment by others
- 5. Shower and water closet flange locations are approximate only, consult architectural drawing for exact locations
- 6. Beams identified as "B" are dropped and supplied by others
- 7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls
- 8. Load transfer blocks to be installed under all point loads
- 9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting
- 10. Hangers and Fasteners to be installed as per manufacturer
- 11. Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction.



Page 42 of 74



Client: Project: Address:

GREENPARK

6/28/2021 Date

WC Input by:

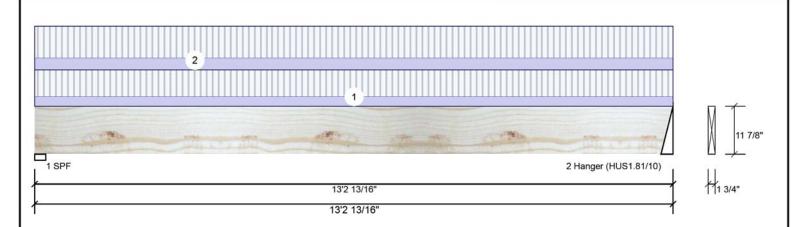
PT38-3-1 STANDARD & DECK CONDITION Job Name:

PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

F10-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Second Floor



Member Information Unfactored Reactions UNPATTERNED Ib (Uplift) Type: Application: Floor (Residential) Brg Direction Live Dead Snow Wind Plies: 1 Design Method: LSD 176 98 0 1 Vertical 0 Moisture Condition: Dry Building Code: NBCC 2015 / OBC 2012 QR 0 0 2 Vertical 177 Deflection LL: 480 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** 40 PSF Floor Live: 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.750" Vert 13% 122 / 264 386 1 1.25D+1.5L 2 -3.000" Vert 10% 122 / 265 387 1 1.25D+1.5L **Analysis Results** Hanger

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	1212 ft-lb	6'7 5/16"	17130 ft-lb	0.071 (7%)	1.25D+1.5L	L	
Unbraced	1212 ft-lb	6'7 5/16"	17130 ft-lb	0.071 (7%)	1.25D+1.5L	L	
Shear	321 lb	1'2 5/8"	5798 lb	0.055 (6%)	1.25D+1.5L	L	
Perm Defl in.	0.020 (L/7571)	6'7 5/16"	0.429 (L/360)	0.048 (5%)	D	Uniform	
LL Defl inch	0.037 (L/4191)	6'7 5/16"	0.322 (L/480)	0.115 (11%)	L	L	
TL Defl inch	0.057 (L/2698)	6'7 5/16"	0.644 (L/240)	0.089 (9%)	D+L	L	

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.

0-0-0 to 13-2-13 0-4-5

- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.

Tie-In

Self Weight

IN THE DESIGN OF THIS COMPONENT. 5 Bottom must be laterally braced at bearings. ID Trib Width Load Type Location Side Dead Live Snow Wind 15 PSF 40 PSF 0 PSF 0 PSF Tie-In 0-0-0 to 13-2-13 0-3-11 1 Top

Top

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.**

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED

0 PSF

Comments

2

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-plifastening details, beam strength values, and code approvals
- naged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

15 PSF

5 PLF

40 PSF

Forex

Manufacturer Info

0 PSF

APA: PR-L318

3228 Moodie Dr. Ottawa, Ontari 618-838-2775 D/\905-642-4400

oshua.nabua

This design is valid until 5/24/2024

Page 43 of 74



F11-A Forex 2.0E-3000Fb LVL

Client: Project:

GREENPARK

6/28/2021

WC Input by:

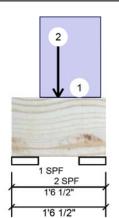
Job Name: PT38-3-1 STANDARD & DECK CONDITION

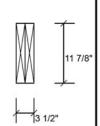
PINETREE 38-3-1 Address:

1.750" X 11.875"

RICHMOND HILL, ON

Project #: ROUDEL HOMES INC Level: Second Floor 2-Ply - PASSED





Member Info	rmation			Unfa	actored Rea	actions UNPA	ATTERNED I	b (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical	38	47	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	37	76	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal - II	Vibration:	Not Checked						
General Load					(LC) \$500pm	112 200000 1	141000		
Floor Live:	40 PSF			Bear	rings and F	actored Read	tions		
Dead:	15 PSF			Bea	aring Length	Dir. Cap.	React D/L lb	Total Ld. Case	Ld. Comb.
				1 - 3	SPF 5.250"	Vert 1%	58 / 58	116 L	1.25D+1.5L
				2-5	SPF 5.250"	Vert 1%	95 / 55	149 L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	38 ft-lb	9 1/8"	30492 ft-lb	0.001 (0%)	1.25D+1.5L	L
Unbraced	38 ft-lb	9 1/8"	30492 ft-lb	0.001 (0%)	1.25D+1.5L	L
Shear	48 lb	1 3/8"	10320 lb	0.005 (0%)	0.9D+1.5L	L
Perm Defl in.	0.000 (L/266682)	9 3/16"	0.026 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/224686)	9 3/16"	0.020 (L/480)	0.002 (0%)	L	L
TL Defl inch	0.000 (L/121945)	9 3/16"	0.040 (L/240)	0.002 (0%)	D+L	L

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

CONTAINS SPECIFICATIONS AND CRITERIA USED

IS AN INTEGRAL PART OF THIS DRAWING AS IT

IN THE DESIGN OF THIS COMPONENT.

PROFESSIONAL I.MATIJEVIC 100528832 VINCE OF June 29, 2021

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-5-9 to 1-5-8		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Point	0-9-2		Near Face	28 lb	75 lb	0 lb	0 lb	J10
	Solf Weight				10 DI E				

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400

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Page 44 of 74



Client: Project: Address:

GREENPARK

Project #:

6/28/2021

WC Input by:

PT38-3-1 STANDARD & DECK CONDITION

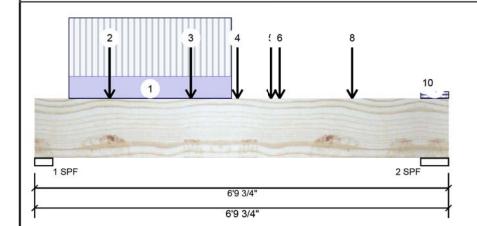
ROUDEL HOMES INC

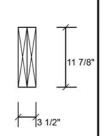
F12-A Forex 2.0E-3000Fb LVL

RICHMOND HILL, ON 1.750" X 11.875"

PINETREE 38-3-1

2-Ply - PASSED Level: Second Floor





Member Information Type: Plies: 2 Moisture Condition: Dry

Deflection LL: 480 Deflection TL: 240 Importance: Normal - II

40 PSF Floor Live: 15 PSF Dead:

Application: Floor (Residential) Design Method: LSD

Building Code: NBCC 2015 / OBC 2012

Load Sharing: No Deck: Not Checked

Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1653	698	0	0
2	Vertical	1520	685	0	0

Rearings and Factored Reactions

Ľ	bearing.	and re	ctore	u nead	LLIOIIS			
Γ	Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
l	1 - SPF	3.563"	Vert	44%	873 / 2479	3352	L	1.25D+1.5L
L	2 - SPF	5.500"	Vert	26%	857 / 2279	3136	L	1.25D+1.5L

Analysis Results

General Load

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	5855 ft-lb	3'3 15/16"	34261 ft-lb	0.171 (17%)	1.25D+1.5L	L	
Unbraced	5855 ft-lb	3'3 15/16"	34261 ft-lb	0.171 (17%)	1.25D+1.5L	L	
Shear	3520 lb	5'4 3/8"	11596 lb	0.304 (30%)	1.25D+1.5L	L	
Perm Defl in.	0.012 (L/6097)	3'3 15/16"	0.206 (L/360)	0.059 (6%)	D	Uniform	
LL Defl inch	0.028 (L/2658)	3'3 15/16"	0.155 (L/480)	0.181 (18%)	L	L	
TL Defl inch	0.040 (L/1851)	3'3 15/16"	0.309 (L/240)	0.130 (13%)	D+L	L	

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width.

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY **NAILING OR BOLTING REQUIREMENTS.**

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



June 29, 2021

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-6-12 to 3-2-12		Far Face	119 PLF	318 PLF	0 PLF	0 PLF	
2	Point	1-2-12		Near Face	144 lb	384 lb	0 lb	0 lb	J7
3	Point	2-6-12		Near Face	133 lb	302 lb	0 lb	0 lb	J7
4	Point	3-3-15		Near Face	99 lb	212 lb	0 lb	0 lb	J7
5	Point	3-10-12		Far Face	174 lb	424 lb	0 lb	0 lb	J8

Continued on page 2...

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-pl
- regarding installation requirements, multi-fastening details, beam strength values, and co approvals Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Manufacturer Info APA: PR-L318

3228 Moodie Dr. Ottawa, Ontari 618-838-2775 D/\905-642-4400

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Page 45 of 74



Client: Project: Address:

GREENPARK

6/28/2021

Input by: WC

Job Name: PT38-3-1 STANDARD & DECK CONDITION

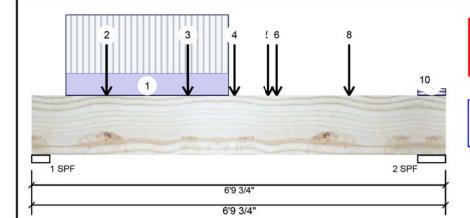
PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

F12-A Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



.Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	4-0-7		Near Face	127 lb	274 lb	0 lb	0 lb	J7
7	Point	5-2-12		Far Face	169 lb	391 lb	0 lb	0 lb	J8
8	Point	5-2-12		Near Face	151 lb	325 lb	0 lb	0 lb	J7
9	Tie-In	6-4-4 to 6-9-12	0-4-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
10	Tie-In	6-4-4 to 6-9-12	0-3-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				10 PLF				



Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, it is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. IVI, beams must not be cutor drilled

 2. Refer to manufacturer's product information regarding installation equirements, multi-ply fastering details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rolation

- For flat roofs provide proper drainage to prevent ponding

This design is valid until 5/24/2024

Manufacturer Info Forex

APA: PR-L318

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400

CSD BUILD joshua.nabua

Page 46 of 74



Client: Project: Address:

GREENPARK

6/28/2021

WC Input by:

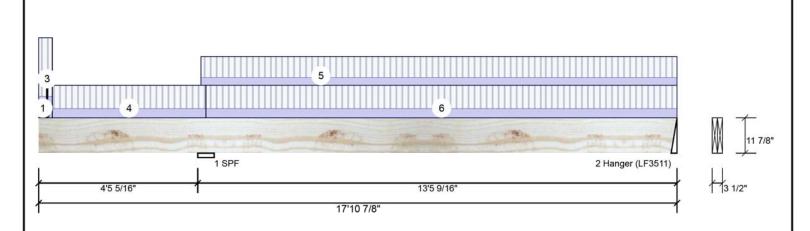
Job Name: PT38-3-1 STANDARD & DECK CONDITION PINETREE 38-3-1

RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

F16-A Forex 2.0E-3000Fb LVL 1.750" X 11.875"

2-Ply - PASSED Level: Second Floor



Member Inform	nation		
Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED Ib (Uplift)

Br	g Direction	Live	Dead	Snow	Wind
	1 Vertical	834	449	0	0
:	2 Vertical	255	147	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	Vert	15%	561 / 1251	1812	LL	1.25D+1.5L
2 - Hanger	2.000"	Vert	14%	184 / 534 717	(-10)	_L	1.25D+1.5L (0.9D+1.5L)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-2802 ft-lb	4'8 1/16"	31177 ft-lb	0.090 (9%)	1.25D+1.5L	L_
Unbraced	-2802 ft-lb	4'8 1/16"	25133 ft-lb	0.111 (11%)	1.25D+1.5L	L_
Pos Moment	2125 ft-lb	11'9 1/4"	34261 ft-lb	0.062 (6%)	1.25D+1.5L	_L
Unbraced	2125 ft-lb	11'9 1/4"	34261 ft-lb	0.062 (6%)	1.25D+1.5L	_L
Shear	850 lb	5'10 11/16"	11596 lb	0.073 (7%)	1.25D+1.5L	LL
Perm Defl in.	0.010 (L/16161)	12'2 7/16"	0.438 (L/360)	0.022 (2%)	D	Uniform
LL Defl inch	0.040 (L/3969)	11'2 7/8"	0.328 (L/480)	0.121 (12%)	L	L
TL Defl inch	0.049 (L/3202)	11'5 9/16"	0.657 (L/240)	0.075 (7%)	D+L	_L
LL Cant	0.065 (2L/1653)	Lt Cant	0.222 (2L/480)	0.290 (29%)	L	L_
TL Cant	0.075	Lt Cant	0.444	0.168 (17%)	D+L	L_

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Tie-down connection required at bearing 2 for uplift 10 lb (Combination 0.9D+1.5L, Load Case L).

Handling & Installation

- 7 Top must be continuously laterally braced.
- 8 Bottom must be laterally braced at a maximum of 17'8 1/16" o.c.
- 9 Lateral slenderness ratio based on full section width.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- I. IVI, beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-plicate fastening details, beam stength values, and codiapprovals
 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

This design is valid until 5/24/2024

For flat roofs provide proper drainage to prevent ponding

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400



Page 47 of 74

isDesign

Client: Project: Address:

0-2-13

0-4-9 to 4-8-1 0-8-9

4-8-1 to 17-10-14 0-8-9

4-6-7 to 17-10-14

GREENPARK

PINETREE 38-3-1

Date: 6/28/2021

Project #:

WC Input by:

PT38-3-1 STANDARD & DECK CONDITION ROUDEL HOMES INC

F16-A Forex 2.0E-3000Fb LVL

Bearing Length

Point

Tie-In

Tie-In

Tie-In

Self Weight

RICHMOND HILL, ON 1.750" X 11.875"

Far Face

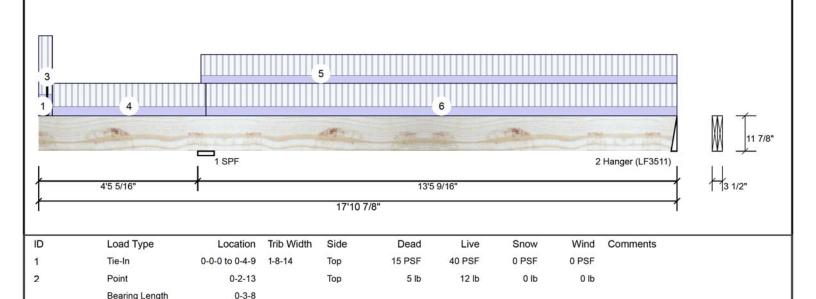
Top

Top

Top

2-Ply - PASSED

Level: Second Floor



98 lb

15 PSF

15 PSF

15 PSF

10 PLF

219 lb

40 PSF

40 PSF

40 PSF

0 lb

0 PSF

0 PSF

0 PSF

0 lb F7

0 PSF

0 PSF

0 PSF

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



Notes

3

5

6

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400



This design is valid until 5/24/2024 oshua.nabua



GREENPARK

Date: 6/28/2021

WC Input by:

Job Name: PT38-3-1 STANDARD & DECK CONDITION

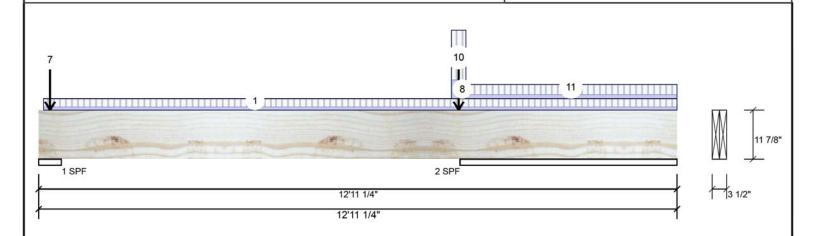
PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

Forex 2.0E-3000Fb LVL F17-A

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor



Member Infori	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	De	ad	Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical	57		33	118	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	447	2	265	0	0
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load					1607 2009	115 151,500	* 9-8927			
Floor Live:	40 PSF			Bear	rings and F	actored R	eactions			
Dead:	15 PSF			Bea	aring Length	Dir. C	ap. React D/L	. lb Total	Ld. Case	Ld. Comb.
				1-	SPF 5.500"	Vert	4% 167 / 1	77 344	L	1.25D+1.5S
Amalusia Dasul	•			2 -	SPF 52.901"	Vert	1% 331/6	71 1002	L	1.25D+1.5L

Analysis Results

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	329 ft-lb	4'8 1/16"	34261 ft-lb	0.010 (1%)	1.25D+1.5L	L
l	Unbraced	329 ft-lb	4'8 1/16"	34261 ft-lb	0.010 (1%)	1.25D+1.5L	L
l	Shear	634 lb	7'6 7/16"	11596 lb	0.055 (5%)	1.25D+1.5L	L
	Perm Defl in.	0.002 (L/51982)	4'6 7/16"	0.273 (L/360)	0.007 (1%)	D	Uniform
	LL Defl inch	0.002 (L/55236)	4'7 3/16"	0.205 (L/480)	0.009 (1%)	L+0.5S	L
l	TL Defl inch	0.004 (L/26782)	4'6 13/16"	0.410 (L/240)	0.009 (1%)	D+L+0.5S	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must be laterally braced at a maximum of 8'6" o.c.
- 8 Lateral slenderness ratio based on full section width

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400



Page 49 of 74



Client: Project: GREENPARK

6/28/2021

Input by: WC

Job Name: PT38-3-1 STANDARD & DECK CONDITION

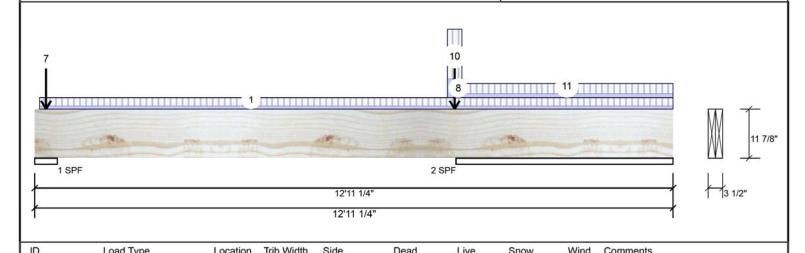
ROUDEL HOMES INC

Address: PINETREE 38-3-1

RICHMOND HILL, ON Project #:

F17-A Forex 2.0E-3000Fb LVL 1.750" X 11.875"

2-Ply - PASSED Level: Second Floor



ı	טו	Load Type	Location	IIID VVIQUI	Side	Dead	Live	Snow	vvina	Comments
ı	1	Tie-In	0-1-3 to 12-11-4	0-3-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	2	Point	0-2-12		Тор	17 lb	0 lb	42 lb	0 lb	
l		Bearing Length	0-5-8							
ı	3	Point	0-2-12		Тор	8 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
ı	4	Point	0-2-12		Тор	6 lb	0 lb	16 lb	0 lb	
l		Bearing Length	0-5-8							
l	5	Point	0-2-12		Тор	3 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
ı	6	Point	0-2-12		Тор	24 lb	0 lb	60 lb	0 lb	
l		Bearing Length	0-5-8							
ı	7	Point	0-2-12		Тор	11 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		Bearing Length	0-5-8							
ı	8	Tie-In	8-4-4 to 8-7-12	1-8-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	9	Point	8-6-0		Тор	5 lb	12 lb	0 lb	0 lb	
l		Bearing Length	0-3-8							
ı	10	Point	8-6-0		Near Face	111 lb	253 lb	0 lb	0 lb	F7
	11	Tie-In	8-7-12 to 12-11-4	0-4-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı										



Self Weight

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- For flat roofs provide proper drainage to prevent ponding

10 PLF

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400



This design is valid until 5/24/2024

Version 21.40.338 Powered by iStruct™ Dataset: 21060301.1545

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Page 50 of 74

Wind

Ld. Comb.

1.25D+1.5S +L

1.25D+1.5S

+L

0

0



F18-A

Forex 2.0E-3000Fb LVL

Client: Project: Address:

GREENPARK

6/28/2021

WC Input by:

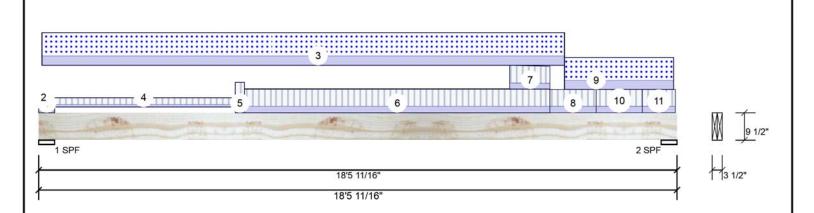
PT38-3-1 STANDARD & DECK CONDITION Job Name:

ROUDEL HOMES INC

PINETREE 38-3-1 1.750" X 9.500"

RICHMOND HILL, ON Project #:

> Level: Second Floor 2-Ply - PASSED



Member Information Unfactored Reactions UNPATTERNED Ib (Uplift) Type: Application: Floor (Residential) Brg Direction Live Dead Snow Plies: 2 Design Method: LSD 243 344 448 1 Vertical Moisture Condition: Dry **Building Code:** NBCC 2015 / OBC 2012 351 385 2 Vertical 448 Deflection LL: 480 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** 40 PSF Floor Live: 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case 1 - SPF 5.500" Vert 11% 430 / 915 1345 L 2 - SPF 5.563" Vert 13% 481 / 1023 1504 L Analysis Results Analysis Actual Location Allowed Capacity Comb Case

6226 ft-lb 9'5 5/8" 22724 ft-lb 0.274 (27%) 1.25D+1.5S L Moment Unbraced 6226 ft-lb 9'5 5/8" 16554 ft-lb 0.376 (38%) 1.25D+1.5S L Shear 1322 lb 17'2 5/8" 9277 lb 0.143 (14%) 1.25D+1.5S L

Perm Defl in. 0.184 (L/1153) 9'3 11/16" 0.589 (L/360) 0.312 (31%) D Uniform LL Defl inch 0.300 (L/706) 9'3 1/2" 0.442 (L/480) 0.680 (68%) S+0.5L TL Defl inch 0.484 (L/438) 9'3 9/16" 0.884 (L/240) 0.548 (55%) D+S+0.5L

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 18'5 11/16' o.c.
- 6 Bottom must be laterally braced at bearings.
- 7 Lateral slenderness ratio based on full section width.

ID Load Type Location Trib Width Side Dead Live Snow Wind Comments 15 PSF 40 PSF 0 PSF 0 PSF 0-0-0 to 0-5-8 0-2-10 1 Tie-In Top 2 15 PSF 40 PSF 0 PSF 0 PSF Tie-In 20 PLF 0 PLF 49 PLF 0 PLF 3 Part, Uniform 0-1-2 to 15-2-11 Top 15 PSF 40 PSF 0 PSF 0 PSF 4 Tie-In 0-4-15 to 5-7-10 0-4-5 Top

Continued on page 2..

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-pl details, beam strength
- naged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info



Version 21.40.338 Powered by iStruct™ Dataset: 21060301.1545

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Page 51 of 74



Forex 2.0E-3000Fb LVL

F18-A

Client: Project:

GREENPARK

6/28/2021

WC Input by:

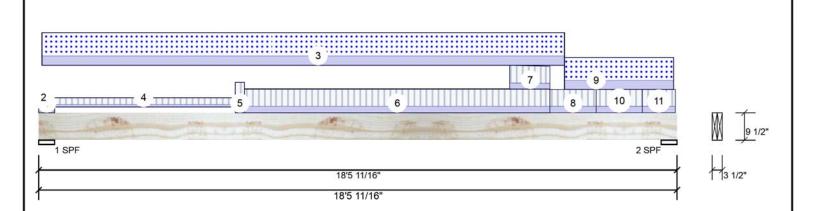
Job Name: PT38-3-1 STANDARD & DECK CONDITION

PINETREE 38-3-1 Address:

RICHMOND HILL, ON 1.750" X 9.500"

Project #: ROUDEL HOMES INC

Level: Second Floor 2-Ply - PASSED



Continued	from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Tie-In	5-8-0 to 5-11-2	1-2-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	5-11-2 to 14-9-10	0-10-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Tie-In	13-7-5 to 14-9-10	0-11-4 to 0-10-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
8	Tie-In	14-9-10 to 16-1-10	0-10-12 to 0-10-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
9	Part. Uniform	15-2-11 to 18-4-8		Тор	20 PLF	0 PLF	49 PLF	0 PLF	
10	Tie-In	16-1-10 to 17-5-10	0-10-12 to 0-10-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
11	Tie-In	17-5-10 to 18-5-1	0-10-12 to 0-10-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				8 PLF				

READ ALL NOTES ON THIS PAGE AND ON THE **ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE** IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



Notes

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400

CSDT joshua.nabua

Page 52 of 74



Client: Project: Address:

GREENPARK

PINETREE 38-3-1

6/28/2021 Input by:

WC

PT38-3-1 STANDARD & DECK CONDITION Job Name:

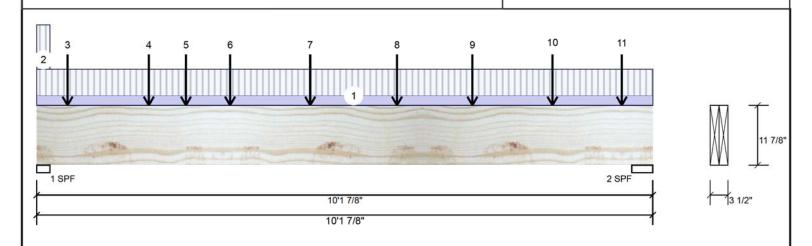
RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

F6-A Forex 2.0E-3000Fb LVL 1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor



Member Information Unfactored Reac							NP	ATTERNED IL	(Upl	ift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Liv	e	Dead		Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical	131	6	586		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	136	5	598		0	0
Deflection LL:	480	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II	Vibration:	Not Checked								
General Load					×10.07			5.55.0			
Floor Live:	40 PSF			Bear	rings and F	actored F	Rea	ctions			
Dead:	15 PSF			Bea	aring Length	Dir. C	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 -	SPF 2.625"	Vert	48%	732 / 1974	2706	L	1.25D+1.5L
				2 -	SPF 4.138"	Vert :	31%	748 / 2047	2795	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	6583 ft-lb	4'6 1/16"	34261 ft-lb	0.192 (19%)	1.25D+1.5L	L	
Unbraced	6583 ft-lb	4'6 1/16"	34261 ft-lb	0.192 (19%)	1.25D+1.5L	L	
Shear	2728 lb	8'9 7/8"	11596 lb	0.235 (24%)	1.25D+1.5L	L	
Perm Defl in	. 0.029 (L/4022)	4'11 13/16"	0.324 (L/360)	0.090 (9%)	D	Uniform	
LL Defl inch	0.064 (L/1821)	4'11 7/16"	0.243 (L/480)	0.264 (26%)	L	L	
TL Defl inch	0.093 (L/1253)	4'11 1/2"	0.486 (L/240)	0.191 (19%)	D+L	L	

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



June 29, 2021

/ Lateral	sienderness ratio based	on full section width.							
ID	Load Type	Location	Trib Width	Trib Width Side		Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-1-14	0-7-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-2-10	0-8-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-6-1		Near Face	80 <mark>l</mark> b	214 lb	0 lb	0 lb	J6
4	Point	1-10-1		Near Face	96 lb	256 lb	0 lb	0 lb	J6
5	Point	2-5-6		Near Face	98 lb	177 lb	0 lb	0 lb	F10

Continued on page 2...

Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Manufacturer Info Forex

APA: PR-L318



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Page 53 of 74



Client: Project: Address:

GREENPARK

6/28/2021

Input by: WC

Job Name: PT38-3-1 STANDARD & DECK CONDITION

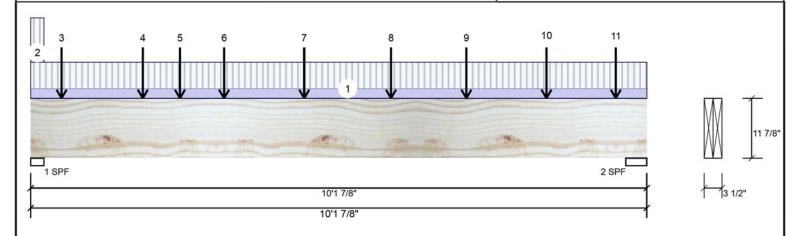
PINETREE 38-3-1 RICHMOND HILL, ON

Project #: ROUDEL HOMES INC

F6-A Forex 2.0E-3000Fb LVL 1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor



Continued fr	rom page 1								
ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments	
6	Point	3-2-1	Near Face	102 lb	271 lb	0 lb	0 lb	J6	
7	Point	4-6-1	Near Face	136 lb	364 lb	0 lb	0 lb	J6	
8	Point	5-11-3	Near Face	147 lb	255 lb	0 lb	0 lb	F16	
9	Point	7-2-1	Near Face	127 lb	339 lb	0 lb	0 lb	J6	
10	Point	8-6-1	Near Face	122 lb	326 lb	0 lb	0 lb	J6	
11	Point	9-7-12	Near Face	86 lb	230 lb	0 lb	0 lb	J6	
	Self Weight			10 PLF					

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. IVI, beams must not be cutor drilled

 2. Refer to manufacturer's product information regarding installation equirements, multi-ply fastering details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rolation

- For flat roofs provide proper drainage to prevent ponding

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 618-838-2775D/\905-642-4400

CSD BUILD joshua.nabua

Page 54 of 74



Client: Project: Address:

GREENPARK

6/28/2021 WC

Project #:

Input by:

Job Name: PT38-3-1 STANDARD & DECK CONDITION ROUDEL HOMES INC

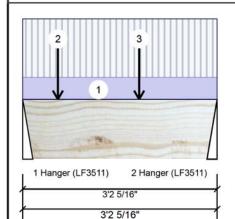
F7-A Forex 2.0E-3000Fb LVL

RICHMOND HILL, ON 1.750" X 11.875"

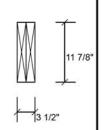
PINETREE 38-3-1

2-Ply - PASSED

Level: Second Floor



15 PSF



II A	ambar	Intorm'	3 T I O H
IIVI	ember	Informa	31101

Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	253	111	0	0
2	Vertical	219	98	0	0

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	385 ft-lb	1'10 15/16"	34261 ft-lb	0.011 (1%)	1.25D+1.5L	L
Unbraced	385 ft-lb	1'10 15/16"	34261 ft-lb	0.011 (1%)	1.25D+1.5L	L
Shear	325 lb	1'1 7/8"	11596 lb	0.028 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/100882)	1'8 13/16"	0.099 (L/360)	0.004 (0%)	D	Uniform
LL Defl inch	0.001 (L/43950)	1'9 1/8"	0.075 (L/480)	0.011 (1%)	L	L
TL Defl inch	0.001 (L/30615)	1'9"	0.149 (L/240)	0.008 (1%)	D+L	L

Bearings and Factored Reactions

-							
Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	10%	139 / 380	519	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	9%	123 / 328	451	L	1.25D+1.5L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must have sheathing attached or be continuously braced.
- 8 Lateral slenderness ratio based on full section width.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.**

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



o Lateral sienderness ratio based on full section width.										
ľ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
I	1	Part. Uniform	0-0-0 to 3-2-5		Тор	32 PLF	84 PLF	0 PLF	0 PLF	
I	2	Point	0-6-15		Far Face	33 lb	87 lb	0 lb	0 lb	J10
I	3	Point	1-10-15		Far Face	44 lb	117 lb	0 lb	0 lb	J10
١		Self Weight				10 PLF				

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Manufacturer Info APA: PR-L318

3228 Moodie Dr. Ottawa, Ontario 61B-838-2775 D/\905-642-4400



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Page 62 of 74



Client: Project: Address:

GREENPARK

6/28/2021

WC Input by:

Project #:

PT38-3-1 STANDARD & DECK CONDITION ROUDEL HOMES INC

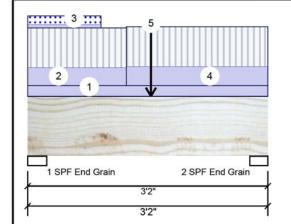
FH4-A Forex 2.0E-3000Fb LVL

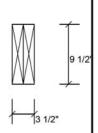
RICHMOND HILL, ON 1.750" X 9.500"

PINETREE 38-3-1

2-Ply - PASSED

Level: Second Floor





Type: Application: Plies: 2 Design Method: LSD Moisture Condition: Dry Building Code: Deflection LL: 480 Load Sharing: No Deflection TL: 240 Deck: Not Checked

Importance: Normal - II General Load

Member Information

40 PSF Floor Live: 15 PSF Dead:

Floor (Residential)

NBCC 2015 / OBC 2012

Vibration: Not Checked

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1594 ft-lb	1'7 7/16"	22724 ft-lb	0.070 (7%)	1.25D+1.5S +L	L
Unbraced	1594 ft-lb	1'7 7/16"	22724 ft-lb	0.070 (7%)	1.25D+1.5S +L	L
Shear	1077 lb	2'1 1/2"	9277 lb	0.116 (12%)	1.25D+1.5S +L	L
Perm Defl in.	0.003 (L/12122)	1'7 7/16"	0.093 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.004 (L/9103)	1'7 7/16"	0.070 (L/480)	0.053 (5%)	S+0.5L	L
TL Defl inch	0.006 (L/5199)	1'7 7/16"	0.140 (L/240)	0.046 (5%)	D+S+0.5L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must have sheathing attached or be continuously braced.
- 7 Lateral slenderness ratio based on full section width

Unfactored	Reactions	UNPATTERNED I	(Uplift)
Company of the Company	New-tensor States and		

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	474	543	386	0
2	Vertical	474	541	355	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	23%	679 / 1098	1777	L	1.25D+1.5L +S
2 - SPF End Grain	3.000"	Vert	22%	676 / 1066	1741	L	1.25D+1.5L +S

REFER TO MULTIPLE MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

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June 29, 2021

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-2-0		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 1-3-9		Тор	134 PLF	300 PLF	0 PLF	0 PLF	J7
3	Part. Uniform	0-0-0 to 0-11-9		Тор	26 PLF	0 PLF	64 PLF	0 PLF	
	ID 1 2 3	1 Part. Uniform 2 Part. Uniform	1 Part. Uniform 0-0-0 to 3-2-0 2 Part. Uniform 0-0-0 to 1-3-9	1 Part. Uniform 0-0-0 to 3-2-0 2 Part. Uniform 0-0-0 to 1-3-9	1 Part. Uniform 0-0-0 to 3-2-0 Top 2 Part. Uniform 0-0-0 to 1-3-9 Top	1 Part. Uniform 0-0-0 to 3-2-0 Top 80 PLF 2 Part. Uniform 0-0-0 to 1-3-9 Top 134 PLF	1 Part. Uniform 0-0-0 to 3-2-0 Top 80 PLF 0 PLF 2 Part. Uniform 0-0-0 to 1-3-9 Top 134 PLF 300 PLF	1 Part. Uniform 0-0-0 to 3-2-0 Top 80 PLF 0 PLF 0 PLF 2 Part. Uniform 0-0-0 to 1-3-9 Top 134 PLF 300 PLF 0 PLF	1 Part. Uniform 0-0-0 to 3-2-0 Top 80 PLF 0 PLF 0 PLF 0 PLF 2 Part. Uniform 0-0-0 to 1-3-9 Top 134 PLF 300 PLF 0 PLF 0 PLF

Continued on page 2...

Notes

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. UVL beams must not be cutor drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ph fastening details, beam stength values, and codi approvals
 3. Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation
- 6. For flat roofs provide proper drainage to prevent

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

3228 Moodie Dr. Ottawa, Ontario 618-838-2775 D/\905-642-4400



oshua.nabua

Page 63 of 74



Client: Project:

GREENPARK

Date: 6/28/2021

WC Input by:

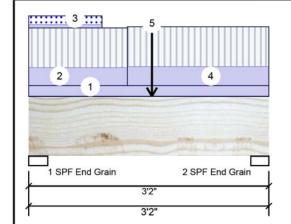
Job Name: PT38-3-1 STANDARD & DECK CONDITION

Address: PINETREE 38-3-1 RICHMOND HILL, ON

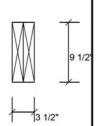
Project #: 1.750" X 9.500" 2-Ply - PASSED

Level: Second Floor

ROUDEL HOMES INC



FH4-A Forex 2.0E-3000Fb LVL



.Continued from page 1

Location Trib Width ID Load Type Side Dead Live Snow Wind Comments 144 PLF 299 PLF 0 PLF Part. Uniform 1-3-9 to 3-2-0 Тор 0 PLF J7 5 Point 1-7-7 Top 338 lb 0 lb 680 lb 0 lb Header Column

> Bearing Length 0-3-8

Self Weight 8 PLF

> READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS-THRU SQUASH BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- I. UVL beams must not be cutor drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam stength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rolation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 5/24/2024

Forex APA: PR-L318

Manufacturer Info

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