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.

CODE

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.

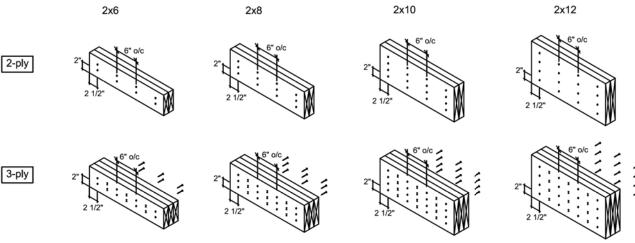


CITY OF RICHMOND HILL BUILDING DIVISION

09/22/2022

RECEIVED
Per: joshua.nabua

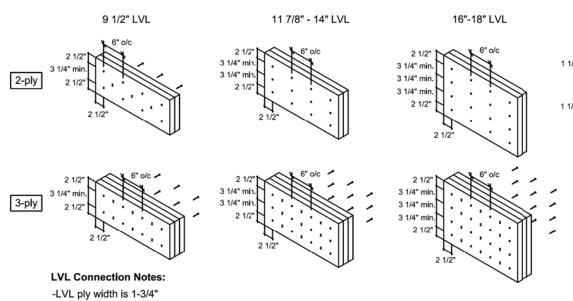
Conventional Connections



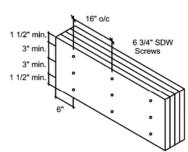
Conventional Connection Notes:

- -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 3 1/2" common wire nails.
- -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.



4-ply 9 1/2"-18"

FOR 4 PLY BEAMS*, ATTACH PLIES TOGETHER USING 6-3/4" SDW SCREWS (HEAD ON LOADED SIDE) IN 3 ROWS @ 16" C/C.

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.

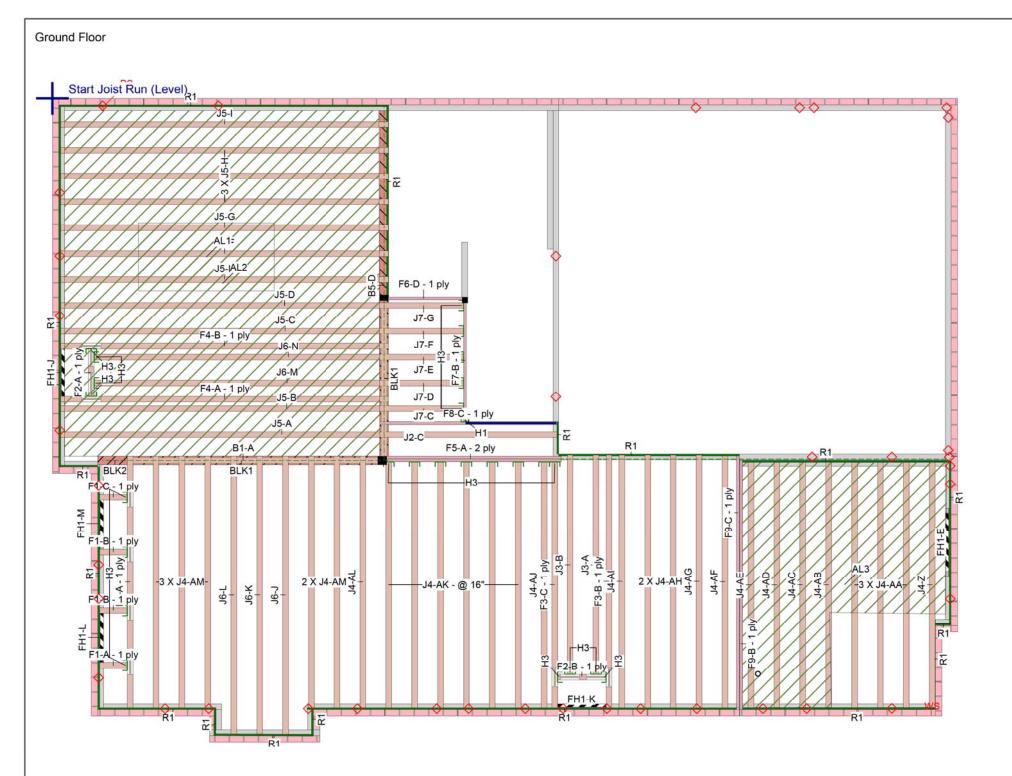
For multi-ply connections of I-joists, refer to Manufacturer's Installation Guide

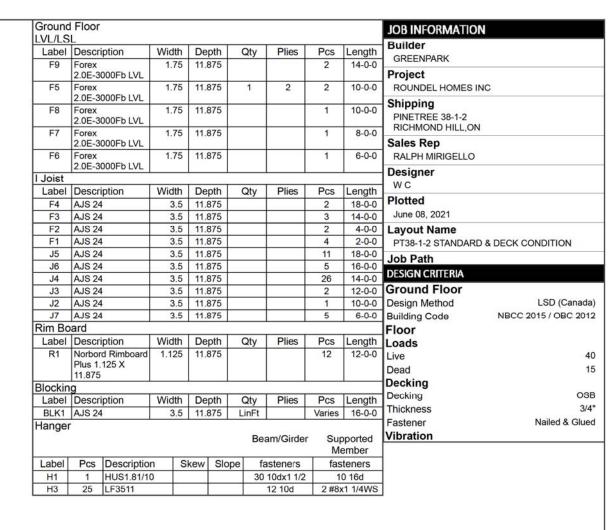


KOTTY INC. RICHMOND HILL 3228 Moodie Grive/ISION Ottawa, ON K2H 7V2/22/2022 613-838-2775

RECEIVED
Per:___joshua.nabua__

Last revised: February 19, 2021





CCMC References

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

Kott Inc.

3228 Moodie Dr, Ottawa 14 Anderson Blvd, Uxbridge Contario

613-838-2775 / 905-642-4400

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

4. Packing of Steel beams and attachment by others

5. Shower and water closet flange locations are approximate only, consult

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

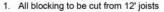
7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls

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.



3. Ends of joists to be laterally supported

architectural drawing for exact locations



-ws

PS

\Q

CITY OF RICHMOND HILL In Hanger Laber Denotes Web Stiffene Point Load Support Coad from Above 2 Wall Opening Norbord Rimboard Plus 1,125 X 11.875 AJS 24 11.875 L V L D

Forex 2:0E-3000Fb LVL 1.75 X 11.875

Version 21.20.293 Powered by iStruct™ Dataset: embedded

Hatch Area represents where

(e.g. 5 psf for ceramic tile)

additional load has been applied

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

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



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2

Date: 6/28/2021 WC Input by:

PT38-1-2 STANDARD & DECK CONDITION Job Name:

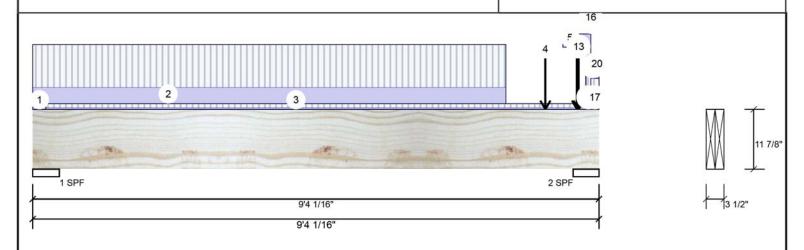
Project #: ROUNDEL HOMES INC

F5-A Forex 2.0E-3000Fb LVL

RICHMOND HILL, ON 1.750" X 11.875"

2-Ply - PASSED

Level: Ground Floor



Member Inform	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	Vertical	1327	540	0	0	
Moisture Condition	: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	2651	1105	0	0	
Deflection LL:	480	Load Sharing:	No	-						
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal - II	Vibration:	Not Checked	1						
General Load				_		105	Lacor I			
Floor Live:	40 PSF			Bear	rings and F	actored Rea	ctions			
Dead:	15 PSF			Bea	aring Length	Dir. Cap	. React D/L lb	Total Ld. Case	Ld. Comb.	
				1 -	SPF 5.250"	Vert 24%	675 / 1990	2665 L	1.25D+1.5L	
				2-	SPF 5.093"	Vert 49%	1381 / 3977	5358 L	1.25D+1.5L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5239 ft-lb	4'7 13/16"	34261 ft-lb	0.153 (15%)	1.25D+1.5L	L
Unbraced	5239 ft-lb	4'7 13/16"	34261 ft-lb	0.153 (15%)	1.25D+1.5L	L
Shear	2792 lb	7'11 1/16"	11596 lb	0.241 (24%)	1.25D+1.5L	L
Perm Defl in.	0.017 (L/5931)	4'8"	0.287 (L/360)	0.061 (6%)	D	Uniform
LL Defl inch	0.043 (L/2417)	4'8"	0.215 (L/480)	0.199 (20%)	L	L
TL Defl inch	0.060 (L/1717)	4'8"	0.430 (L/240)	0.140 (14%)	D+L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.73). 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 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.



Page 18 of 68

- maio	ordination ratio bacca c	minimum decement interest							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-10	0-7-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 7-9-7		Near Face	97 PLF	260 PLF	0 PLF	0 PLF	
3	Tie-In	0-2-10 to 9-1-5	0-7-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	8-5-7		Near Face	89 lb	238 lb	0 lb	0 lb	J4

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

APA: PR-L318

Manufacturer Info

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





GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2

Date: 6/28/2021 Input by: WC

Job Name: PT38-1-2 STANDARD & DECK CONDITION

Page 19 of 68

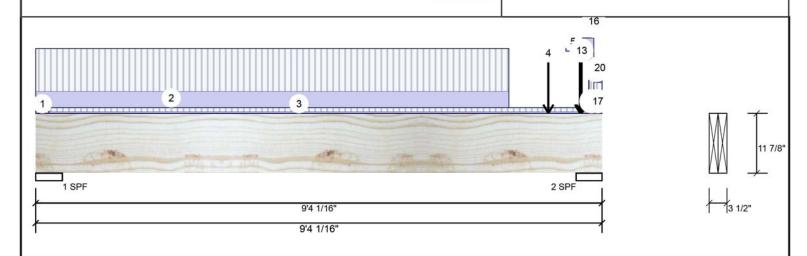
Project #: ROUNDEL HOMES INC

Forex 2.0E-3000Fb LVL F5-A

RICHMOND HILL, ON 1.750" X 11.875"

2-Ply - PASSED

Level: Ground Floor



Continu	ied from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Part. Uniform	8-8-15 to 9-2-7		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Point	8-11-11		Тор	489 lb	1242 lb	0 lb	0 lb	F8 F8
1	Bearing Length	0-5-8							
13	Point	9-0-0		Near Face	76 lb	203 lb	0 lb	0 lb	F3
14	Part. Uniform	9-1-7 to 9-2-7		Тор	118 PLF	258 PLF	0 PLF	0 PLF	J4
15	Tapered Start	9-2-6		Тор	8 PLF	21 PLF	0 PLF	0 PLF	
	End	9-2-7			8 PLF	21 PLF	0 PLF	0 PLF	
16	Tapered Start	9-2-6		Тор	0 PLF	1 PLF	0 PLF	0 PLF	
1	End	9-2-7			0 PLF	1 PLF	0 PLF	0 PLF	
17	Part. Uniform	9-2-7 to 9-4-1		Тор	59 PLF	129 PLF	0 PLF	0 PLF	J4
18	Tapered Start	9-2-7		Тор	4 PLF	11 PLF	0 PLF	0 PLF	
	End	9-4-1			4 PLF	11 PLF	0 PLF	0 PLF	
20	Part. Uniform	9-2-7 to 9-4-1		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				10 PLF				

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.



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 requirements, 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



joshua.nabua



Client: GREENPARK Project:

ROUNDEL HOMES INC PINETREE 38-1-2 Address:

Date: Input by:

PT38-1-2 STANDARD & DECK CONDITION Job Name:

ROUNDEL HOMES INC

RICHMOND HILL, ON Project #:

Floor (Residential)

NBCC 2015 / OBC 2012

LSD

No

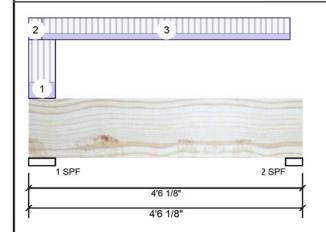
Not Checked

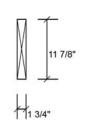
1.750" X 11.875" - PASSED Forex 2.0E-3000Fb LVL F6-D

Level: Ground Floor

6/28/2021

WC





Ld. Comb. 1.25D+1.5L 1.25D+1.5L

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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 Dead:

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	25	21	0	0
2	Vertical	14	16	0	0

Vibration: Not Checked

Deck:

Application:

Design Method:

Building Code:

Load Sharing:

Bearings and Factored Reactions												
Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld.						
1 - SPF	5.250"	Vert	1%	26 / 38	64	L						
2 - SPF	3.330"	Vert	1%	20 / 21	41	L						

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	39 ft-lb	2'4"	17130 ft-lb	0.002 (0%)	1.25D+1.5L	L
Unbraced	39 ft-lb	2'4"	17130 ft-lb	0.002 (0%)	1.25D+1.5L	L
Shear	16 lb	3'2 15/16"	3769 lb	0.004 (0%)	1.4D	Uniform
Perm Defl in.	0.000 (L/292759)	2'4 1/16"	0.131 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/303609)	2'4"	0.098 (L/480)	0.002 (0%)	L	L
TL Defl inch	0.000 (L/149043)	2'4"	0.196 (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.



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 be laterally braced at 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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-5-4	0-5-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-2-10	0-2-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-2-10 to 4-3-11	0-2-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	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 613-838-2775 D/\905-642-4400

oshua.nabua



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

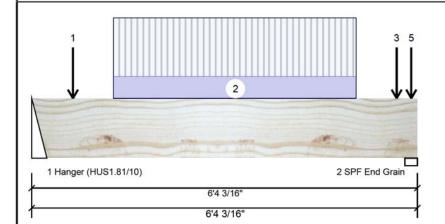
Date: 6/28/2021 WC Input by:

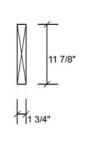
PT38-1-2 STANDARD & DECK CONDITION Job Name:

Project #: ROUNDEL HOMES INC

Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED F7-B

Level: Ground Floor





Page 21 of 68

Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	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	234	103	0	0
2	Vertical	391 (-47)	172	0	0

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	718 ft-lb	3'2 1/4"	17130 ft-lb	0.042 (4%)	1.25D+1.5L	L
Unbraced	718 ft-lb	3'2 1/4"	17130 ft-lb	0.042 (4%)	1.25D+1.5L	L
Shear	497 lb	1'2 7/8"	5798 lb	0.086 (9%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/25187)	3'2 3/8"	0.201 (L/360)	0.014 (1%)	D	Uniform
LL Defl inch	0.007 (L/10903)	3'2 3/8"	0.151 (L/480)	0.044 (4%)	L	L
TL Defl inch	0.009 (L/7609)	3'2 3/8"	0.301 (L/240)	0.032 (3%)	D+L	L

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	12%	128 / 350	479	L	1.25D+1.5L
2 - SPF End Grain	2.468"	Vert	25%	215 / 587	802	L	1.25D+1.5L

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.

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 Top must be continuously laterally braced.

15 PSF

5 Bottom must have sheathing attached or be continuously 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.



June 28, 2021

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-8-2		Far Face	32 lb	84 lb	0 lb	0 lb	J7
2	Part. Uniform	1-4-2 to 5-4-2		Far Face	30 PLF	81 PLF	0 PLF	0 PLF	
3	Point	6-0-2		Far Face	26 lb	68 lb	0 lb	0 lb	J7
4	Point	6-3-0		Тор	66 lb	149 lb	0 lb	0 lb	C1
	Bearing Length	0-3-8							
5	Point	6-3-0		Тор	0 lb	-47 lb	0 lb	0 lb	C1
	Self Weight				5 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

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

For flat roofs provide proper drainage to prevent ponding

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



oshua.nabua



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL,ON Date: 6/28/2021

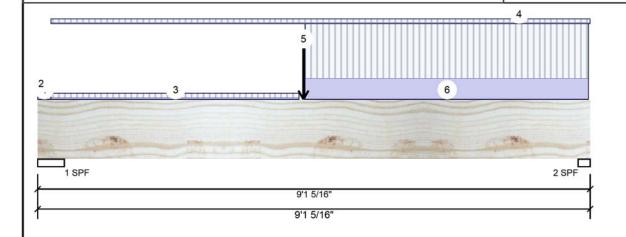
Project #:

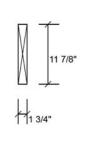
WC Input by:

PT38-1-2 STANDARD & DECK CONDITION ROUNDEL HOMES INC

1.750" X 11.875" - PASSED F8-C Forex 2.0E-3000Fb LVL

Level: Ground Floor





Page 22 of 68

Member Inform	Member Information								
Type:	Girder								
Plies:	1								
Moisture Condition:	Dry								
Deflection LL:	480								

Deflection TL: 240 Importance: Normal - II

General Load 40 PSF Floor Live: 15 PSF Dead:

Floor (Residential) Application: 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
Vertical	454	202	0	0
Vertical	811	336	0	0
	Vertical	Vertical 454	Vertical 454 202	Vertical 454 202 0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	Vert	17%	252 / 681	933	L	1.25D+1.5L
2 - SPF	2.375"	Vert	64%	420 / 1216	1636	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3237 ft-lb	4'10 15/16"	17130 ft-lb	0.189 (19%)	1.25D+1.5L	L
Unbraced	3237 ft-lb	4'10 15/16"	17130 ft-lb	0.189 (19%)	1.25D+1.5L	L
Shear	1187 lb	7'11 1/16"	5798 lb	0.205 (20%)	1.25D+1.5L	L
Perm Defl in.	0.021 (L/4874)	4'9 11/16"	0.287 (L/360)	0.074 (7%)	D	Uniform
LL Defl inch	0.050 (L/2070)	4'10 1/16"	0.215 (L/480)	0.232 (23%)	L	L
TL Defl inch	0.071 (L/1453)	4'10"	0.430 (L/240)	0.165 (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.

PROFESSIONA I.MATIJEVIC 100528832 NCE OF ON June 28, 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 Top must be continuously laterally braced.
- 4 Bottom must be laterally braced at a maximum of 4'8 3/4" o.c.

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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-10	0-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-2-10	0-3-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-2-10 to 4-3-11	0-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	0-2-10 to 9-1-5	0-3-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	4-4-9		Far Face	103 lb	234 lb	0 lb	0 lb	F7
6	Part. Uniform	4-4-14 to 9-0-15		Тор	70 PLF	184 PLF	0 PLF	0 PLF	
	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
- 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

APA: PR-L318

Manufacturer Info

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

shua.nabua



GREENPARK

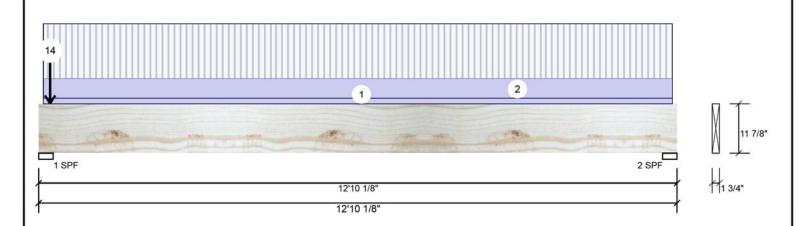
ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON Date: 6/28/2021 WC Input by:

Job Name: PT38-1-2 STANDARD & DECK CONDITION

Project #: ROUNDEL HOMES INC

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

Level: Ground Floor



Member Inform	nation			Unfa	actored Rea	actions UN	PATTERNED I	b (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	126	146	52	0
Moisture Condition	: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	64	61	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal - II	Vibration:	Not Checked						
General Load					11.02	115 575242	* Sange 2		
Floor Live:	40 PSF			Bear	rings and Fa	actored Re	actions		
Dead:	15 PSF			Bea	aring Length	Dir. Ca	p. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - 8	SPF 3.500"	Vert 11	% 182 / 241	424 L	1.25D+1.5L +S
Analysis Result	s			2 - 5	SPF 3.500"	Vert 5	% 76 / 96	172 L	1.25D+1.5L
Analysis Asi	hual Lago	tion Allowed Conce	ity Comb Coco	7					

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	521 ft-lb	6'5 1/16"	16788 ft-lb	0.031 (3%)	1.25D+1.5L	L
	Unbraced	521 ft-lb	6'5 1/16"	16788 ft-lb	0.031 (3%)	1.25D+1.5L	L
	Shear	146 lb	11'6 3/4"	5682 lb	0.026 (3%)	1.25D+1.5L	L
	Perm Defl in.	0.011 (L/13059)	6'5 1/16"	0.413 (L/360)	0.028 (3%)	D	Uniform
	LL Defl inch	0.012 (L/12320)	6'5 1/16"	0.310 (L/480)	0.039 (4%)	L+0.5S	L
	TL Defl inch	0.023 (L/6339)	6'5 1/16"	0.619 (L/240)	0.038 (4%)	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.

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

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.



Page 23 of 68

O DOLLOTTI	lust be luterally bruced a	t bearings.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-1-2 to 12-9-0		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
2	Tie-In	0-1-2 to 12-9-0	0-3-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-2-12		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
4	Point	0-2-12		Тор	9 lb	24 lb	0 lb	0 lb	J4

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 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

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 ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

Date: Input by:

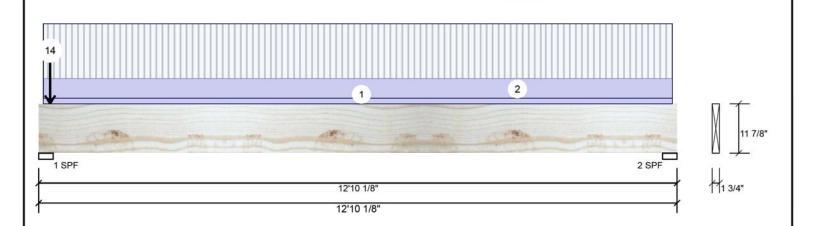
6/28/2021 WC

Job Name: PT38-1-2 STANDARD & DECK CONDITION ROUNDEL HOMES INC

Page 24 of 68

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

Project #: Level: Ground Floor



Continued	from page 1		**************************************	See Miller					
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	Bearing Length	0-5-8							
5	Point	0-2-12		Тор	8 lb	0 lb	20 lb	0 lb	
	Bearing Length	0-5-8							
6	Point	0-2-12		Тор	9 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
7	Point	0-2-12		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
8	Point	0-2-12		Тор	7 lb	19 lb	0 lb	0 lb	J4
	Bearing Length	0-5-8							
9	Point	0-2-12		Тор	6 lb	0 lb	16 lb	0 lb	
	Bearing Length	0-5-8							
10	Point	0-2-12		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
11	Point	0-2-12		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
12	Point	0-2-12		Тор	7 lb	19 lb	0 lb	0 lb	J4
	Bearing Length	0-5-8							
13	Point	0-2-12		Тор	6 lb	0 lb	16 lb	0 lb	
	Bearing Length	0-5-8							
14	Point	0-2-12		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
	Self Weight				5 PLF				OROFESSIO

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.



June 28, 2021

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

APA: PR-L318

Manufacturer Info

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





GREENPARK

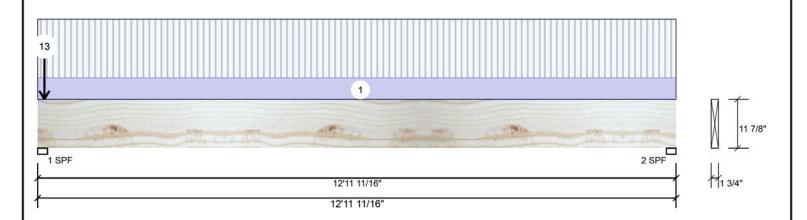
ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON Date: 6/28/2021

WC Input by:

Job Name: PT38-1-2 STANDARD & DECK CONDITION Project #: ROUNDEL HOMES INC

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

Level: Ground Floor



Member Inforn	nation			Unfa	actored Rea	actions UN	IPATTERNED	b (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	139	150	61	0
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	86	63	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal - II	Vibration:	Not Checked	1					
General Load					11.5.7 Western	116 90.000	F Sange 2		
Floor Live:	40 PSF			Bear	rings and F	actored R	eactions		
Dead:	15 PSF			Bea	aring Length	Dir. Ca	p. React D/L lb	Total Ld. Case	Ld. Comb.
				1-	SPF 2.375"	Vert 1	188 / 270	458 L	1.25D+1.5L +S
Analysis Result	alysis Results 2 - SPF 2.375" Vert 8% 79 / 130 209 L 1.25D+1.5L								
Analysis Act	ual Loc	ation Allowed Canac	ity Comb Case						

Analysis Capacity Moment 649 ft-lb 6'5 7/8" 17130 ft-lb 0.038 (4%) 1.25D+1.5L L Unbraced 649 ft-lb 6'5 7/8" 17130 ft-lb 0.038 (4%) 1.25D+1.5L L 177 lb 1'2 1/4" 5798 lb 0.030 (3%) 1.25D+1.5L L Shear Perm Defl in. 0.013 6'5 7/8" 0.423 (L/360) 0.030 (3%) D Uniform (L/11906) LL Defl inch 0.017 (L/8719) 6'5 7/8" 0.318 (L/480) 0.055 (6%) L+0.5S TL Defl inch 0.030 (L/5033) 6'5 7/8" 0.635 (L/240) 0.048 (5%) 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.



Page 25 of 68

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 2.375.
- 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

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 Dottom ma	of be laterally braced	at bearings.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-11-11	0-4-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-1-10		Тор	6 lb	0 lb	16 lb	0 lb	
	Bearing Length	0-5-8							
3	Point	0-1-10		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
5	Point	0-1-10		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
Continued on pa	age 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

Forex APA: PR-L318

Manufacturer Info

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

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Continued from page 1

Client: Project: Address: GREENPARK ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

Date: Input by:

6/28/2021 WC

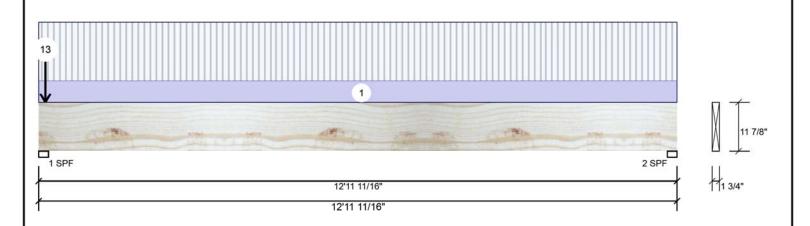
Job Name: PT38-1-2 STANDARD & DECK CONDITION

Page 26 of 68

Project #: ROUNDEL HOMES INC

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

Level: Ground Floor



Continued from	page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	Bearing Length	0-5-8							
6	Point	0-1-10		Тор	6 lb	0 lb	16 lb	0 lb	
	Bearing Length	0-5-8							
7	Point	0-1-10		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
8	Point	0-1-10		Тор	7 lb	19 lb	0 lb	0 lb	J4
	Bearing Length	0-5-8							
9	Point	0-1-10		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
10	Point	0-1-10		Тор	11 lb	0 lb	29 lb	0 lb	
5,000	Bearing Length	0-5-8							
11	Point	0-1-10		Тор	10 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
12	Point	0-1-10		Тор	13 lb	34 lb	0 lb	0 lb	J4
	Bearing Length	0-5-8							
13	Point	0-1-10		Тор	10 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
	Self Weight				5 PLF				

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.



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

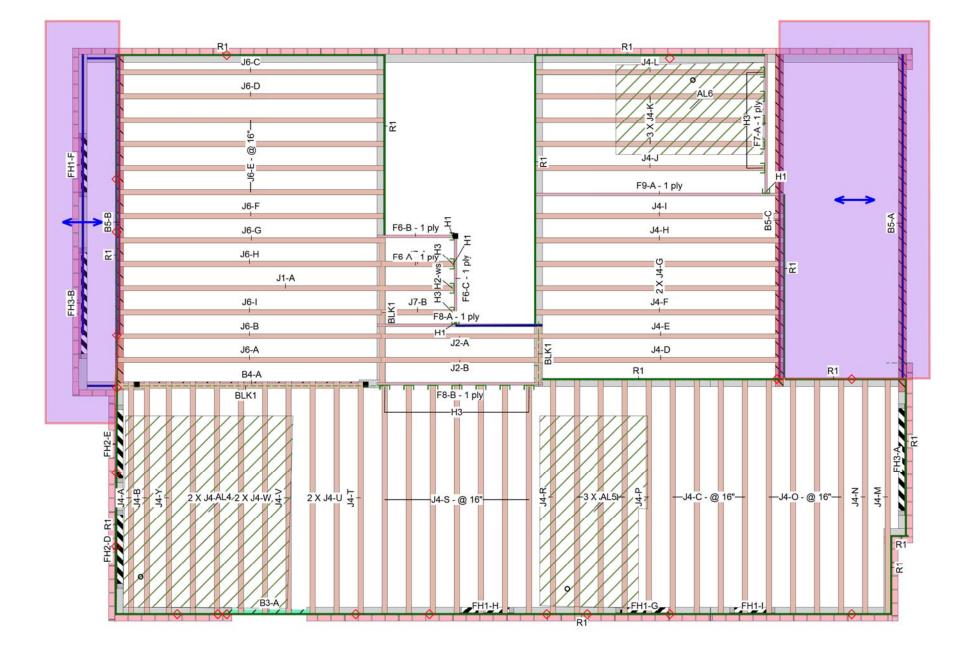
APA: PR-L318

Manufacturer Info



CSD Build joshua.nabua

Second Floor



Second LVL/LS											JOB INFORMATION
Label	_	intion	Wid	th	Depth	Τ.	Qty	Plies	Pcs	Length	Builder
B4	Forex	000Fb LVL	1.		11.875		1	2	2	14-0-0	GREENPARK Project
F9	Forex	000Fb LVL	1.	75	11.875	T			1	14-0-0	ROUNDEL HOMES INC
F8	Forex	000Fb LVL	1.	75	11.875				2	10-0-0	Shipping PINETREE 38-1-2
F7	Forex	000Fb LVL	1.	75	11.875	T			1	8-0-0	RICHMOND HILL,ON Sales Rep
F6	Forex		1.	75	11.875				3	6-0-0	RALPH MIRIGELLO
I Joist	2.0E-3	000Fb LVL				_					Designer
Label	Descr	intion	Wid	th	Depth	1	Qty	Plies	Pcs	Length	wc
J1	AJS 24				11.875		aty.	1 1103	1	20-0-0	Plotted
J6	AJS 24				11.875	+			12	16-0-0	June 08, 2021
J4	AJS 24			_	11.875	\vdash			45	14-0-0	Layout Name
J2	AJS 24	1	3	.5	11.875	\top			2	10-0-0	PT38-1-2 STANDARD 8
J7	AJS 24	1	3	.5	11.875				2	6-0-0	Job Path
Rim Bo	ard										
Label	Descr	iption	Wid	th	Depth		Qty	Plies	Pcs	Length	DESIGN CRITERIA
R1		d Rimboard	1.13	25	11.875				15	12-0-0	Second Floor
	Plus 1.										Design Method
Blockin	11.875			- //							Building Code
Label		intion	Wid	th	Depth	Τ,	Qty	Plies	Pcs	Length	
BLK1	AJS 24		10000		11.875	_	inFt	Files	Varies	20-0-0	Floor
Hanger		'			11.070				varies	20-0-0	Loads
langer							Ro	am/Girder	Sur	ported	Live
							Dec	ani/Gildei		ember	Dead
Label	Pcs	Descriptio	n	Ske	w SI	оре	fa	asteners	_	teners	Decking
H1	4	HUS1.81/1			-	- 42		10dx1 1/2		0 16d	Decking
H2	1	MIU3.56/9	_					10dx1 1/2	_	dx1 1/2	Thickness
НЗ	14	LF3511	, ,					10dx1 1/2	-	1 1/4WS	Fastener
		•							•		Vibration
											Ceiling:



40 ad 15 cking OSB cking 5/8" ickness Nailed & Glued

eiling: Gypsum 1/2"

Roof Loads Live

Dead 10.3 Snow 21

Decking Decking

SPF Plywood

CCMC References

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

Kott Inc.

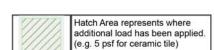
Legend

3228 Moodie Dr, Ottawa

613-838-2775 / 905-642-4400

14 Anderson Blvd, Uxbridge Contario

- 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
- 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.



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2

Date: 6/28/2021 WC Input by:

Job Name: PT38-1-2 STANDARD & DECK CONDITION

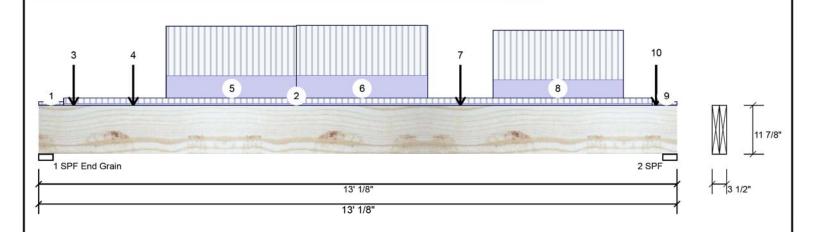
Project #: ROUNDEL HOMES INC

B4-A Forex 2.0E-3000Fb LVL

RICHMOND HILL, ON 1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor



Member Inforn	nation			Unfa	actored Rea	ections	UNP	ATTERNED II	(Upli	ift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead		Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical	10	1781	850		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	9	1733	773		0	0
Deflection LL:	480	Load Sharing:	No	-							
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II	Vibration:	Not Checked								
General Load						1115					
Floor Live:	40 PSF			Bear	rings and F	actore	d Read	ctions			
Dead:	15 PSF			Bea	aring Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - End	SPF 3.500"	Vert	41%	1062 / 2672	3734	L	1.25D+1.5L
Analysis Result	S			Gra	ain						
Analysis Act	ial Local	tion Allowed Canaci	ity Comb Case	2 -	SPF 3.500"	Vert	47%	966 / 2599	3566	L	1.25D+1.5L

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11663 ft-lb	6'5 11/16"	34261 ft-lb	0.340 (34%)	1.25D+1.5L	L
Unbraced	11663 ft-lb	6'5 11/16"	34261 ft-lb	0.340 (34%)	1.25D+1.5L	L
Shear	3350 lb	1'3 3/8"	11596 lb	0.289 (29%)	1.25D+1.5L	L
Perm Defl in	. 0.083 (L/1820)	6'5 11/16"	0.418 (L/360)	0.198 (20%)	D	Uniform
LL Defl inch	0.178 (L/847)	6'6 1/16"	0.314 (L/480)	0.567 (57%)	L	L
TL Defl inch	0.261 (L/578)	6'5 15/16"	0.628 (L/240)	0.415 (42%)	D+L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.73). Assumed point load size: beam width X 3.5.
- 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 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must be laterally braced at bearings.
- 9 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.

Manufacturer Info



Page 33 of 68

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

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



oshua.nabua

This design is valid until 5/24/2024



Client: GREENPARK

Project: ROUNDEL HOMES INC Address: PINETREE 38-1-2

Date: 6/28/2021 Input by: WC

Job Name: PT38-1-2 STANDARD & DECK CONDITION Project #: ROUNDEL HOMES INC

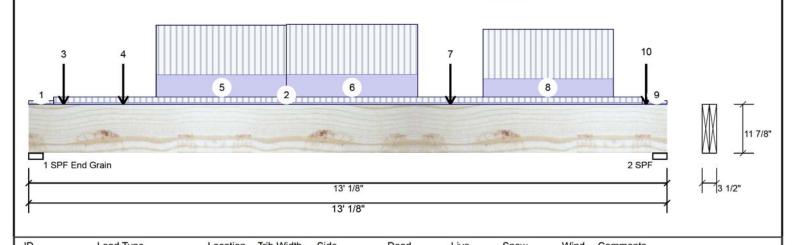
Page 34 of 68

B4-A Forex 2.0E-3000Fb LVL

RICHMOND HILL, ON 1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor



ı	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
ı	1	Tapered Start	0-0-0		Тор	5 PLF	14 PLF	0 PLF	0 PLF	
ı		End	0-6-1			5 PLF	14 PLF	0 PLF	0 PLF	
ı	2	Tapered Start	0-6-1		Тор	11 PLF	29 PLF	0 PLF	0 PLF	
ı		End	12-6-1			11 PLF	29 PLF	0 PLF	0 PLF	
ı	3	Point	0-8-8		Тор	124 lb	268 lb	0 lb	0 lb	J4
ı		Bearing Length	0-3-8							
ı	4	Point	1-11-1		Тор	150 lb	326 lb	0 lb	0 lb	J4
ı		Bearing Length	0-3-8							
ı	5	Part. Uniform	2-7-1 to 5-3-1		Тор	117 PLF	256 PLF	0 PLF	0 PLF	
ı	6	Part. Uniform	5-3-1 to 7-11-1		Тор	118 PLF	259 PLF	0 PLF	0 PLF	
ı	7	Point	8-7-1		Тор	146 lb	346 lb	0 lb	0 lb	J4
ı		Bearing Length	0-3-8							
ı	8	Part. Uniform	9-3-1 to 11-11-1		Тор	96 PLF	256 PLF	0 PLF	0 PLF	
ı	9	Tapered Start	12-6-1		Тор	5 PLF	14 PLF	0 PLF	0 PLF	
ı		End	13-0-2			5 PLF	14 PLF	0 PLF	0 PLF	
ı	10	Point	12-7-1		Тор	59 lb	156 lb	0 lb	0 lb	J4
I		Bearing Length	0-3-8							
ı		Self Weight				10 PLF				

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
- Handling & Installation

 1. IVI, beams must not be cutor drilled

 2. Refer to manufacturer's product information regarding installation requirements, 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



joshua.nabua



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON Date: 6/28/2021

Project #:

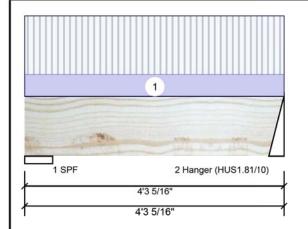
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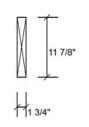
Job Name: PT38-1-2 STANDARD & DECK CONDITION ROUNDEL HOMES INC

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor





Page 39 of 68

Member Info	rmation			Unfactored Reactions UNPATTERNED Ib (Uplift)					
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	56	32	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	51	29	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal - II	Vibration:	Not Checked						
General Load					15.5 Section	100 000000	* 9400.7		
Floor Live:	40 PSF			Bear	rings and F	actored Re	eactions		
Dead:	15 PSF			Bea	aring Length	Dir. Ca	p. React D/L lb	Total Ld. Case	Ld. Comb.
				1-	SPF 5.500"	Vert :	2% 40 / 84	124 L	1.25D+1.5L
	• 10000			2 -	3.000"	Vert :	36 / 76	112 L	1.25D+1.5L
Analysis Resu	Analysis Results				nger				

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	94 ft-lb	2'2 7/8"	17130 ft-lb	0.005 (1%)	1.25D+1.5L	L
Unbraced	94 ft-lb	2'2 7/8"	17130 ft-lb	0.005 (1%)	1.25D+1.5L	L
Shear	50 lb	1'5 3/8"	5798 lb	0.009 (1%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/173844)	2'2 15/16"	0.123 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/98197)	2'2 15/16"	0.092 (L/480)	0.005 (0%)	L	L
TL Defl inch	0.001 (L/62751)	2'2 15/16"	0.185 (L/240)	0.004 (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

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 Top must be continuously laterally braced.
- 5 Bottom must be laterally braced at bearings.

ID Load Type Trib Width Wind Comments Location Side Dead Live Snow 15 PSF 40 PSF 0 PSF 0 PSF 0-0-0 to 4-3-5 0-7-8 1 Tie-In Top 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

- 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

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





GREENPARK

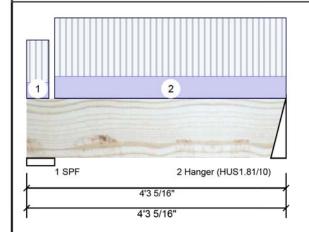
ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON Date: 6/28/2021 WC Input by:

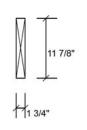
Job Name: PT38-1-2 STANDARD & DECK CONDITION

Project #: ROUNDEL HOMES INC

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

Level: Second Floor





Page 40 of 68

Member Inform	nation		
Type:	Girder	Application:	Floor (Residential)
Plies:	1	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	vvina
1	Vertical	63	34	0	0
2	Vertical	63	33	0	0
ı					

Bearings and Factored Reactions Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 43 / 95 1 - SPF 5.500" Vert 2% 138 L 1.25D+1.5L 3.000" 2 -Vert 3% 42 / 94 136 L 1.25D+1.5L Hanger

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	114 ft-lb	2'2 7/8"	17130 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	114 ft-lb	2'2 7/8"	17130 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	59 lb	1'5 3/8"	5798 lb	0.010 (1%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/150554)	2'2 15/16"	0.123 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.001 (L/79640)	2'2 15/16"	0.092 (L/480)	0.006 (1%)	L	L
TL Defl inch	0.001 (L/52087)	2'2 15/16"	0.185 (L/240)	0.005 (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 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 Top must be continuously laterally braced.

15 PSF

5 Bottom must be laterally braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-6	0-6-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-5-8 to 4-3-5	0-9-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	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
- 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





F6-C

Client: Project:

Address:

GREENPARK

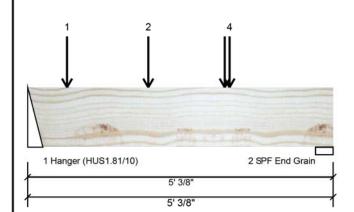
ROUNDEL HOMES INC PINETREE 38-1-2

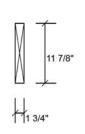
Date: 6/28/2021 WC Input by:

Job Name: PT38-1-2 STANDARD & DECK CONDITION

Project #: ROUNDEL HOMES INC Level: Second Floor

RICHMOND HILL, ON Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED





Page 41 of 68

Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	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)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	112 (-74)	30	0	0
2	Vertical	86 (-47)	33	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-196 ft-lb	1'11 3/4"	17130 ft-lb	0.011 (1%)	0.9D+1.5L	L
Pos Moment	247 ft-lb	3'2 13/16"	17130 ft-lb	0.014 (1%)	1.25D+1.5L	L
Unbraced	247 ft-lb	3'2 13/16"	17130 ft-lb	0.014 (1%)	1.25D+1.5L	L
Shear	204 lb	1'2 7/8"	5798 lb	0.035 (4%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/129099)	3'2 13/16"	0.154 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch	0.002 (L/36033)	3' 1/8"	0.115 (L/480)	0.013 (1%)	L	L
TL Defl inch	0.002 (L/28325)	3'2 13/16"	0.231 (L/240)	0.008 (1%)	D+L	L

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	5%	37 / 168 206	(-84)	L	1.25D+1.5L (0.9D+1.5L)
2 - SPF End	3.500"	Vert	4%	41 / 129 170	(-41)	L	1.25D+1.5L (0.9D+1.5L)

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.

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 Tie-down connection required at bearing 1 for uplift 84 lb (Combination 0.9D+1.5L, Load Case L).
- 5 Tie-down connection required at bearing 2 for uplift 41 lb (Combination 0.9D+1.5L, Load Case L).
- 6 Top must be continuously laterally braced.
- 7 Bottom must have sheathing attached or be continuously 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.



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

APA: PR-L318

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

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Client: GREENPARK

Project: ROUNDEL HOMES INC Address: PINETREE 38-1-2

RICHMOND HILL, ON

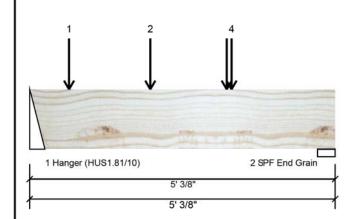
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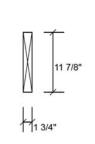
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Job Name: PT38-1-2 STANDARD & DECK CONDITION ROUNDEL HOMES INC

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

Project #: Level: Second Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-7-12		Far Face	31 lb	82 lb	0 lb	0 lb	J7
2	Point	1-11-12		Far Face	-45 lb	-121 lb	0 lb	0 lb	J1
3	Point	3-2-13		Far Face	29 lb	51 lb	0 lb	0 lb	F6
4	Point	3-3-12		Far Face	24 lb	65 lb	0 lb	0 lb	J7
	Self Weight				5 PLF				

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.



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 requirements, 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

Manufacturer Info

APA: PR-L318

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

CSD Build joshua.nabua



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

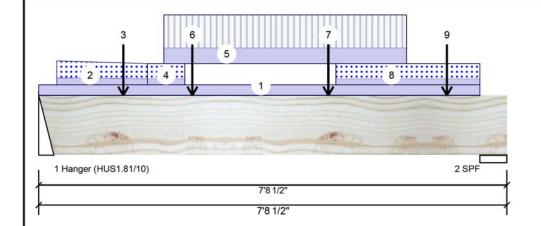
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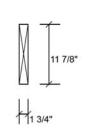
Job Name: PT38-1-2 STANDARD & DECK CONDITION

Project #: ROUNDEL HOMES INC

F7-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Second Floor





Page 43 of 68

Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	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)

Direction	Live	Dead	Snow	Wind
Vertical	772	829	404	0
Vertical	841	866	400	0
	Vertical	Vertical 772	Vertical 772 829	Vertical 772 829 404

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4942 ft-lb	3'9 7/16"	17130 ft-lb	0.288 (29%)	1.25D+1.5L +S	L
Unbraced	4942 ft-lb	3'9 7/16"	17130 ft-lb	0.288 (29%)	1.25D+1.5L +S	L
Shear	2473 lb	6'3 5/16"	5798 lb	0.426 (43%)	1.25D+1.5L +S	L
Perm Defl in	0.038 (L/2256)	3'9 1/4"	0.238 (L/360)	0.160 (16%)	D	Uniform
LL Defl inch	0.046 (L/1848)	3'9 1/16"	0.178 (L/480)	0.260 (26%)	L+0.5S	L
TL Defl inch	0.084 (L/1016)	3'9 1/8"	0.357 (L/240)	0.236 (24%)	D+L+0.5S	L

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.		
1 - Hanger	3.000"	Vert	67%	1037 / 1562	2598	L	1.25D+1.5L +S		
2 - SPF	5.340"	Vert	48%	1082 / 1662	2744	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.

PROFESSIONA I.MATIJEVIC 100528832 INCE OF June 28, 2021

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 Top must be continuously laterally braced.
- 5 Bottom must have sheathing attached or be continuously braced.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 7-3-3		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Tapered Start	0-3-9		Тор	52 PLF	0 PLF	129 PLF	0 PLF	
	End	1-9-7			46 PLF	0 PLF	114 PLF	0 PLF	
3	Point	1-4-11		Far Face	131 lb	350 lb	0 lb	0 lb	J4

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

1-9-7 to 2-4-12

- 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

0 PLF

46 PLF

Forex APA: PR-L318

114 PLF

0 PLF

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



oshua.nabua

Version 21.40.338 Powered by iStruct™ Dataset: 21060301.1545

Part. Uniform



Client: GREENPARK Project:

ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

Date: 6/28/2021 WC Input by:

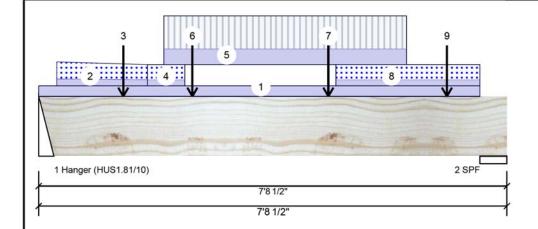
Job Name: PT38-1-2 STANDARD & DECK CONDITION

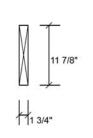
Project #: ROUNDEL HOMES INC

1.750" X 11.875" - PASSED F7-A Forex 2.0E-3000Fb LVL

Address:

Level: Second Floor





Page 44 of 68

Continued from p	page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Part. Uniform	2-0-11 to 6-0-11		Far Face	119 PLF	250 PLF	0 PLF	0 PLF	
6	Point	2-6-4		Тор	67 lb	0 lb	142 lb	0 lb	Header Column
	Bearing Length	0-5-8							
7	Point	4-9-4		Тор	67 lb	0 lb	142 lb	0 lb	Header Column
	Bearing Length	0-5-8							
8	Part. Uniform	4-10-12 to 7-3-3		Тор	46 PLF	0 PLF	114 PLF	0 PLF	
9	Point	6-8-11		Far Face	126 lb	263 lb	0 lb	0 lb	J4
	Self Weight				5 PLF				

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.



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 requirements, 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

APA: PR-L318

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





GREENPARK

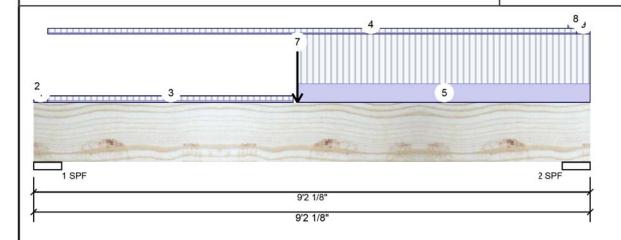
ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON

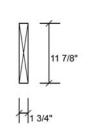
6/28/2021 WC Input by:

Job Name: PT38-1-2 STANDARD & DECK CONDITION Project #: ROUNDEL HOMES INC

F8-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Second Floor





Page 45 of 68

Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	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)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	340 (-39)	144	0	0
2	Vertical	676 (-35)	272	0	0
l					

Bearings and Factored Reactions

ŀ								
l	Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
l	1 - SPF	5.500"	Vert	12%	180 / 510	690	L	1.25D+1.5L
ł	2-SPF	5.500"	Vert	23%	341 / 1014	1354	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2261 ft-lb	5' 11/16"	17130 ft-lb	0.132 (13%)	1.25D+1.5L	L
Unbraced	2261 ft-lb	5' 11/16"	17130 ft-lb	0.132 (13%)	1.25D+1.5L	L
Shear	877 lb	7'8 3/4"	5798 lb	0.151 (15%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/7425)	4'9 7/8"	0.279 (L/360)	0.048 (5%)	D	Uniform
LL Defl inch	0.034 (L/2956)	4'9 11/16"	0.210 (L/480)	0.162 (16%)	L	L
TL Defl inch	0.048 (L/2114)	4'9 3/4"	0.419 (L/240)	0.114 (11%)	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.

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 be laterally braced at a maximum of 4'9 15/16" o.c.

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 28, 2021

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-12	0-4-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-2-12	0-3-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-2-12 to 4-3-5	0-4-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	0-2-12 to 8-11-6	0-3-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Part. Uniform	4-4-3 to 9-2-2		Тор	57 PLF	150 PLF	0 PLF	0 PLF	
6	Point	4-4-3		Far Face	30 lb	112 lb	0 lb	0 lb	F6
7	Point	4-4-3		Far Face	0 lb	-74 lb	0 lb	0 lb	F6
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
- For flat roofs provide proper drainage to prevent ponding

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





Client: GREENPARK Project:

ROUNDEL HOMES INC

PINETREE 38-1-2

Date: 6/28/2021 Input by: WC

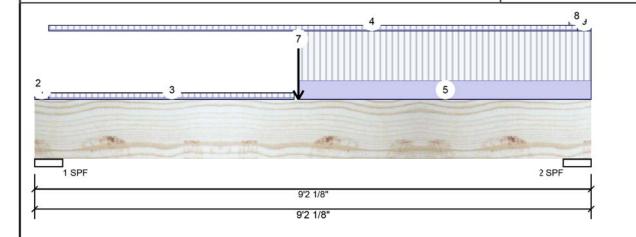
Job Name: PT38-1-2 STANDARD & DECK CONDITION

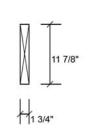
RICHMOND HILL, ON Project #: ROUNDEL HOMES INC

1.750" X 11.875" - PASSED F8-A Forex 2.0E-3000Fb LVL

Address:

Level: Second Floor





Page 46 of 68

.Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
8	Tie-In	8-9-12 to 9-2-2	0-4-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
9	Tie-In	8-11-6 to 9-2-2	0-3-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

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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- 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 requirements, 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

APA: PR-L318

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

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GREENPARK

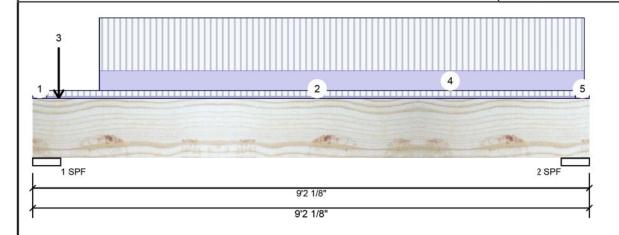
ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON Date: 6/28/2021 WC Input by:

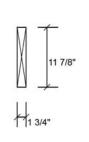
Job Name: PT38-1-2 STANDARD & DECK CONDITION

Project #: ROUNDEL HOMES INC

Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED F8-B

Level: Second Floor





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Member Information

Type:	Girder	Applica
Plies:	1	Design
Moisture Condition	on: Dry	Buildin
Deflection LL:	480	Load S
Deflection TL:	240	Deck:
Importance:	Normal - II	Vibratio
General Load		

40 PSF 15 PSF

ation: Floor (Residential) LSD n Method: ng Code: NBCC 2015 / OBC 2012

Sharing: No Not Checked Not Checked ion:

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1181	466	0	0
2	Vertical	1242	489	0	0

Bearings and Factored Reactions

		5 P. P. S.	ne 7 January	Valla die Keide 18 17.			
Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	Vert	40%	582 / 1771	2353	L	1.25D+1.5L
2-SPF	5.563"	Vert	41%	611 / 1863	2474	L	1.25D+1.5L

Analysis Results

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4778 ft-lb	4'7 3/8"	17130 ft-lb	0.279 (28%)	1.25D+1.5L	L
Unbraced	4778 ft-lb	4'7 3/8"	17130 ft-lb	0.279 (28%)	1.25D+1.5L	L
Shear	2237 lb	1'5 3/8"	5798 lb	0.386 (39%)	1.25D+1.5L	L
Perm Defl in.	0.030 (L/3397)	4'7 3/16"	0.279 (L/360)	0.106 (11%)	D	Uniform
LL Defl inch	0.075 (L/1336)	4'7 3/16"	0.210 (L/480)	0.359 (36%)	L	L
TL Defl inch	0.105 (L/959)	4'7 3/16"	0.419 (L/240)	0.250 (25%)	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.

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.

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.



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-12	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-2-12 to 8-11-6	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-5-2		Near Face	67 lb	178 lb	0 lb	0 lb	J4
4	Part. Uniform	1-1-2 to 9-1-2		Near Face	94 PLF	250 PLF	0 PLF	0 PLF	
5	Tie-In	8-11-6 to 9-2-2	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	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
- For flat roofs provide proper drainage to prevent ponding

Forex

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



oshua.nabua

This design is valid until 5/24/2024



GREENPARK

ROUNDEL HOMES INC PINETREE 38-1-2 RICHMOND HILL, ON Date: 6/28/2021 WC Input by:

PT38-1-2 STANDARD & DECK CONDITION Job Name:

Page 48 of 68

Wind

Ld. Comb.

1.25D+1.5L +S

1.25D+1.5L

+S

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I.MATIJEVIC 100528832

VINCE OF

June 28, 2021

ON

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Snow

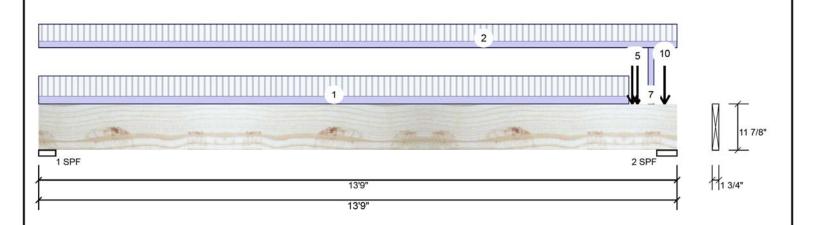
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449

Project #: ROUNDEL HOMES INC

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 Plies: Design Method: LSD 1 399 207 1 Vertical Moisture Condition: Dry Building Code: NBCC 2015 / OBC 2012 2 Vertical 1076 1077 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 4.375" Vert 19% 259 / 616 875 L 2 - SPF 5.250" Vert 60% 1347 / 2063 3410 L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3192 ft-lb	7'10 5/8"	17130 ft-lb	0.186 (19%)	1.25D+1.5L +S	L
Unbraced	3192 ft-lb	7'10 5/8"	17130 ft-lb	0.186 (19%)	1.25D+1.5L +S	L
Shear	3103 lb	12'3 7/8"	5798 lb	0.535 (54%)	1.25D+1.5L +S	L
Perm Defl in.	0.056 (L/2782)	7'2 13/16"	0.436 (L/360)	0.129 (13%)	D	Uniform
LL Defl inch	0.101 (L/1552)	7'1"	0.327 (L/480)	0.309 (31%)	L+0.5S	L
TL Defl inch	0.157 (L/996)	7'1 5/8"	0.654 (L/240)	0.241 (24%)	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.

READ ALL NOTES ON THIS PAGE AND ON THE

IN THE DESIGN OF THIS COMPONENT.

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 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 Top must be continuously laterally braced.
- 5 Bottom must be laterally braced at a maximum of 12'9 7/16" o.c.

ID Trib Width Comments Load Type Location Side Dead Live Snow Wind 0-0-0 to 12-8-9 15 PSF 40 PSF 0 PSF 0 PSF Tie-In 0-8-12 Top 2 0-0-0 to 13-9-0 15 PSF 40 PSF 0 PSF 0 PSF Tie-In 0-7-4 Top Point 12-9-7 829 lb 772 lb 404 lb 0 lb F7 3 Far Face Point 12-10-12 Top 6 lb 0 lb 0 lb 0 lb Wall Self Weight

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 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



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F9-A

Client: Project:

Address:

GREENPARK ROUNDEL HOMES INC

PINETREE 38-1-2

Date: 6/28/2021

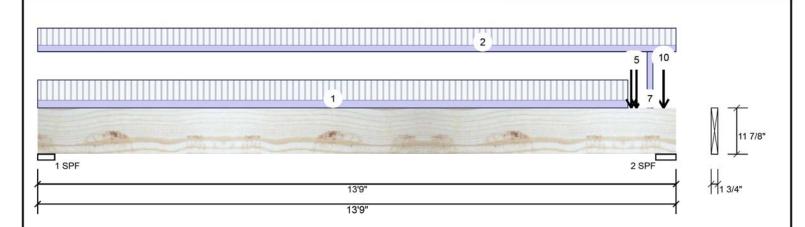
WC Input by:

Job Name: PT38-1-2 STANDARD & DECK CONDITION

Page 49 of 68

RICHMOND HILL, ON Project #: Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

ROUNDEL HOMES INC Level: Second Floor



.Continued	from page 1									_
ID	Load Type	Location Tr	rib Width	Side	Dead	Live	Snow	Wind	Comments	
	Bearing Length	0-5-8								
5	Point	12-10-12		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight	
	Bearing Length	0-5-8								
6	Part. Uniform	13-1-8 to 13-1-9		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
7	Part. Uniform	13-1-9 to 13-3-1		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
8	Point	13-5-12		Тор	30 lb	0 lb	0 lb	0 lb	Wall Self Weight	
	Bearing Length	0-5-8								
9	Point	13-5-12		Тор	25 lb	0 lb	63 lb	0 lb		
	Bearing Length	0-5-8								
10	Point	13-5-12		Тор	48 lb	0 lb	0 lb	0 lb	Wall Self Weight	
	Bearing Length	0-5-8								
	Self Weight				5 PLF					

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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- 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

Forex APA: PR-L318

Manufacturer Info

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



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This design is valid until 5/24/2024



Client: GREENPARK Project:

ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

6/8/2021 WC Input by:

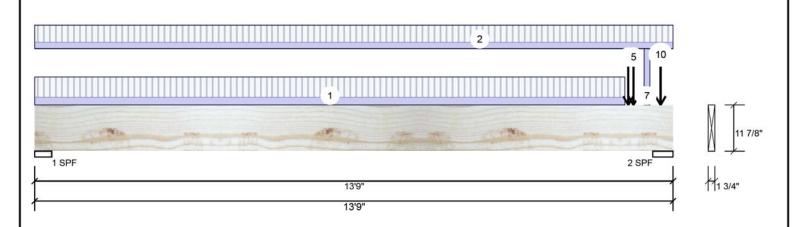
Project #:

PT38-1-2 STANDARD & DECK CONDITION Job Name: ROUNDEL HOMES INC

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

Address:

Level: Second Floor



Member Information Unfactored Reactions UNPATTERNED Ib (Uplift) Type: Application: Floor (Residential) Brg Direction Live Wind Dead Snow Plies: Design Method: LSD 1 399 207 1 Vertical 18 0 Moisture Condition: Dry Building Code: NBCC 2015 / OBC 2012 0 2 Vertical 1076 1077 449 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 Bearing Length Dead: Dir. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 4.375" Vert 19% 259 / 616 875 L 1.25D+1.5L +S 2 - SPF 5.250" Vert 60% 1347 / 2063 3410 L 1.25D+1.5L Analysis Results +S Analysis Actual Location Allowed Capacity Comb Case

3192 ft-lb 7'10 5/8" 17130 ft-lb 0.186 (19%) 1.25D+1.5L L Moment +5 Unbraced 3192 ft-lb 7'10 5/8" 17130 ft-lb 0.186 (19%) 1.25D+1.5L L +S Shear 3103 lb 12'3 7/8" 5798 lb 0.535 (54%) 1.25D+1.5L L Perm Defl in. 0.056 (L/2782) 7'2 13/16" 0.436 (L/360) 0.129 (13%) D Uniform LL Defl inch 0.101 (L/1552) 7'1" 0.327 (L/480) 0.309 (31%) 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.

READ ALL NOTES ON THIS PAGE AND ON THE

IS AN INTEGRAL PART OF THIS DRAWING AS IT

IN THE DESIGN OF THIS COMPONENT.

CONTAINS SPECIFICATIONS AND CRITERIA USED

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

PROFESSIONA ENGINEER I.MATIJEVIC 100528832 SOUNCE OF ONTHE

June 28, 2021

Design Notes

TL Defl inch 0.157 (L/996)

1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.

7'1 5/8" 0.654 (L/240) 0.241 (24%) D+L+0.5S

- 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 a maximum of 12'9 7/16" o.c.

ID Trib Width Live Load Type Location Side Dead Snow Wind Comments 0-0-0 to 12-8-9 15 PSF 40 PSF 0 PSF 0 PSF 1 Tie-In 0-8-12 Top 2 0-0-0 to 13-9-0 15 PSF 40 PSF 0 PSF 0 PSF Tie-In 0-7-4 Top Point 12-9-7 829 lb 772 lb 404 lb 0 lb F7 3 Far Face Point 12-10-12 Top 6 lb 0 lb 0 lb 0 lb Wall Self Weight

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 3/25/2024

Forex APA: PR-L318

Manufacturer Info

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

Per: shua.nabua

Version 21.20.293 Powered by iStruct™ Dataset: embedded

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Client: GREENPARK Project:

Address:

ROUNDEL HOMES INC PINETREE 38-1-2

RICHMOND HILL, ON

6/8/2021 Input by:

Project #:

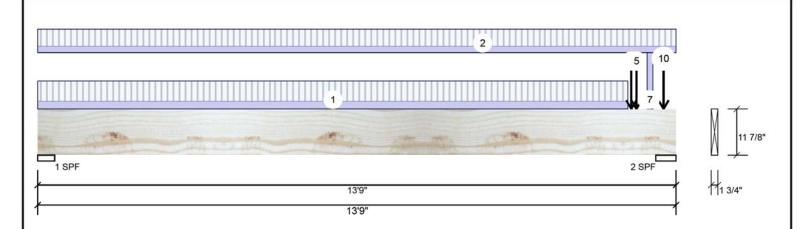
WC

Job Name: PT38-1-2 STANDARD & DECK CONDITION ROUNDEL HOMES INC

F9-A Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor



.Continued	from page 1								
ID	Load Type	Location T	rib Width	Side	Dead	Live	Snow	Wind	Comments
	Bearing Length	0-5-8							
5	Point	12-10-12		Тор	7 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
6	Part. Uniform	13-1-8 to 13-1-9		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
7	Part. Uniform	13-1-9 to 13-3-1		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
8	Point	13-5-12		Тор	30 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
9	Point	13-5-12		Тор	25 lb	0 lb	63 lb	0 lb	
	Bearing Length	0-5-8							
10	Point	13-5-12		Тор	48 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-5-8							
	Self Weight				5 PLF				

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.



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 3/25/2024

Manufacturer Info Forex

APA: PR-L318

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CSD joshua.nabua