Ground Floor

Layout Name

Design Method

Canada

K2H7V1

Job Path

905-642-4400

Ground Floor

Design Method

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Deck

Deflection Girder

Floor Loads

Live

Dead

S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS \MILLWOOD 2\FLOORS\ELEV 2 \MILLWOOD 2-ELEV 2.isl

Building Code NBCC 2010 / OBC

2012

40

15

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

LOT 006

Supported

Member

MILLWOOD 2-ELEV 2

Pcs Length

2

12-0-0

6-0-0

CITY O SPAMPTON BUILDING DIVISION REVIEWED All work shall conform to the Ontario Building Code O. Reg. 332/12 as amended DEC 0 7 /118 Engineered floor joists shall be installed in accordance with the supplier's layout and MARK DERKSEN specifications forming part of the permit drawings. 2"X8"@12"o/c LANDING ≡BLK1 = "≿ J7-AG - @ 16"-2 X J7-AG ■BLK1 ■BLK1 UNEXCAVATED BLK1 BLK1 BI K1

This certification is to confirm that:

1. The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.

2. The floor joists comply with the Nascor span table for the loads and spacing shown on this layout.

The floor system must be assembled in accordance to the Nascor Specifier Guide. Multi-ply members must be attached together as per the included multiple member connection detail.

All other components and structural elements supporting the floor system such as beams, walls, columns and foundation walls and footings including anchorage of components and bracing for lateral stability are the responsibility of others.



September 13, 2018 1. OBC 2012 O.Reg 332/12 as amende 2. Nascor CCMC - 13535-R

3. LVL CCMC -14056-R

4. CAN/CSA-O86-09

5. CCMC -12787-R APA PR-L310(C)

F3	2.0E-3000Fb LVL	1.79	11.075			1	4-0-0	Description
I Joist	(Flush)	-						Created
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	June 25, 2018
F12	NJ	1.5	11.875	3	2	6	16-0-0	
F11	NJ	1.5	11.875	2	2	4	14-0-0	Builder
F10	NJ	1.5	11.875	2	2	4	4-0-0	GREENPARK
F9	NJ	1.5	11.875	2	2	4	2-0-0	Sales Rep
J7	NJH	2.5	11.875			35	16-0-0	RM
J6	NJH	2.5	11.875			16	14-0-0	Designer
J5	NJH	2.5	11.875			2	12-0-0	RO
J4	NJH	2.5	11.875			1	10-0-0	
J3	NJH	2.5	11.875			1	8-0-0	Shipping
J2	NJH ,	2.5	11.875			3	6-0-0	Project
Rim Bo	ard							Builder's Project
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Kott Lumber Company
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			12	12	14 Anderson Blvd Stouffville, Ontario

Width Depth

11.875

11.875

1.75 11.875

1.75 11.875

1.75

1.75

Qty Plies

Beam/Girder

Label Pcs Description Skew Slope fasteners fasteners H3 6 LT2-151188 4 10dx1 1/2 2 10dx1 1/2 11 LT251188 4 10dx1 1/2 2 10dx1 1/2 H7 HUCQ1.81/9-

Blocking Label Description Width Depth Qty Plies Pcs Length BLK1 NJH 2.5 11.875 LinFt Varies 29-0-0

NOTES:

Ground Floor

F15

Hanger

VL/LSL (Flush)

Label Description

Forex

Forex

Forex

F3 Forex

.0E-3000Fb LVL

.0E-3000Fb LVL

2.0E-3000Fb LVL

- I. Framer to verify dimensions on the architectural drawings. 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- 3. Install 2x4 blocking @ 24"o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of
- rimboard/rimjoist.

 5. Refer to Nascor specifier guide for installation works.
- 5. Squash blocks recommended to be installed at end bearing on
- all first level joists which support loading from above exceeding . Load transfer blocks to be installed under all point loads.
- 3. It shall be the frame's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

Refer to Multiple Member Connection Detail to ply to ply nailing or

Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than rim depth @ 16"o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and foundation walls, and footings including anchorage of components and bracing for lateral stability are the responsibility of Others.

Hatch are represents ceramic tiled floor with an additional dead load

The framing shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and apporve the deviation prior to construction

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Millwood 2, Elevation 2

Legend

Point Load Support Load from Above

Wall Opening Norbord Rimboard Plus 1.125 X 11.875

NJ 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

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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

Second Floor

Job Path

Floor

Loads

Live

Dead

Deflection Joist

Deflection Girder

LL Span L/

TL Span L/

LL Cant 2L/ TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

40

POFESSIONAL

T.L. WISE

100083566

WCE OF ON

Deck

S:\CUSTOMERS\GREENPARK MINNISALE HOMES/MODELS \MILLWOOD 2\FLOORS\ELEV 2

Building Code NBCC 2010 / OBC

LSD

2012

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

\MILLWOOD 2-ELEV 2.isl Second Floor Design Method

R1 2"X8"@16"o/c LANDING PACING@16"o/ 6 2 X J9-E 6 6 2 X J9-B 6 -2 X J9-H-6 F15-A - 2 ply BLK1 F7-B - 2 ply 〒 F7-A - 2 ply F8-A - 2 ply J6-G - @ 16' 2 X J6-E J7-L - @ 12" R1 This certification is to confirm that:

1. The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.

2. The floor joists comply with the Nascor span table for the loads and spacing shown on this

The floor system must be assembled in accordance to the Nascor Specifier Guide. Multi-ply members must be attached together as per the included multiple member connection detail. All other components and structural elements supporting the floor system such as beams, walls, columns and foundation walls and footings including anchorage of components and bracing for lateral stability are the responsibility of others.

Legend



Point Load Support Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 NJ 11.875 NJ60U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped) Forex 2.0E-3000Fb LVL 1.75 X 11.875

	ia rioor							
	L (Flush)							NIASCO
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	NASCO
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	10-0-0	
F7	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	6-0-0	Layout Name MILLWOOD 2-ELEV 2
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	4-0-0	Design Method LSD
F15	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	2-0-0	Description
LVL/LS	L (Dropped)				5/1			Created
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	June 25, 2018
BBO4	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	8-0-0	Builder
I Joist ((Flush)							GREENPARK
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Sales Rep
J9	NJ60U	3.5	11.875			18	20-0-0	RM
J8	NJ60U	3.5	11.875			1	18-0-0	Designer
J10	NJ60U	3.5	11.875			- 1	8-0-0	RO
J7	NJH	2.5	11.875			40	16-0-0	Shipping
J6	NJH	2.5	11.875			20	14-0-0	
J2	NJH_	2.5	11.875			1	6-0-0	Project
J1	NJH	2.5	11.875			2	4-0-0	Builder's Project
Rim Bo	pard							Kott Lumber Company
Label		Width	Depth	Qty	Plies	Pcs	Length	14 Anderson Blvd
R1	Norbord Rimboard Plus 1.125 X	1.125	11.875			14	12	Stouffville, Ontario
	11.875							Canada
Hanger				Bea	am/Girdei	r Su	pported	K2H7V1 905-642-4400

					Beam/Girder	Supported Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H1	2	HGUS410			46 16d	16 16d
H2	1	HUC410 (Min)			14 16d	6 10d
H4	13	LT251188			4 10dx1 1/2	2 10dx1 1/2
H6	1	LT351188			4 10dx1 1/2	2 10dx1 1/2
Blockin	g					

Label Description Width Depth Qty Plies Pcs Length BLK1 NJH 2.5 11.875 LinFt

NOTES:

Second Floor

- I. Framer to verify dimensions on the architectural drawings. 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- 3. Install 2x4 blocking @ 24"o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of
- rimboard/rimjoist.
 5. Refer to Nascor specifier guide for installation works.
 6. Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- Load transfer blocks to be installed under all point loads. It shall be the frame's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

Refer to Multiple Member Connection Detail to ply to ply nailing or bolting requirements.

Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than rim depth @ 16"o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and foundation walls, and footings including anchorage of components and bracing for lateral stability are the responsibility of Others.

Hatch are represents ceramic tiled floor with an additional dead load

The framing shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Millwood 2, Elevation 2

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09 5. CCMC -12787-R APA PR-L310(C)

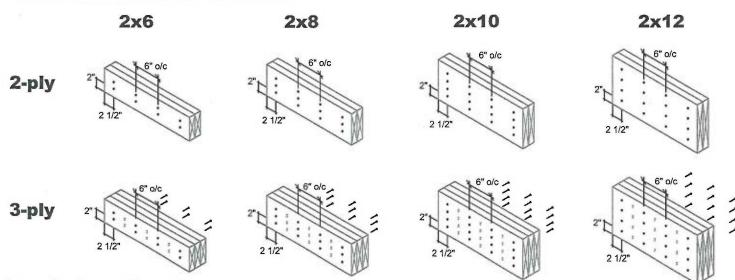
September 13, 2018

Version 18.40.162 Powered by iStruct™

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

MULTIPLE MEMBER CONNECTIONS

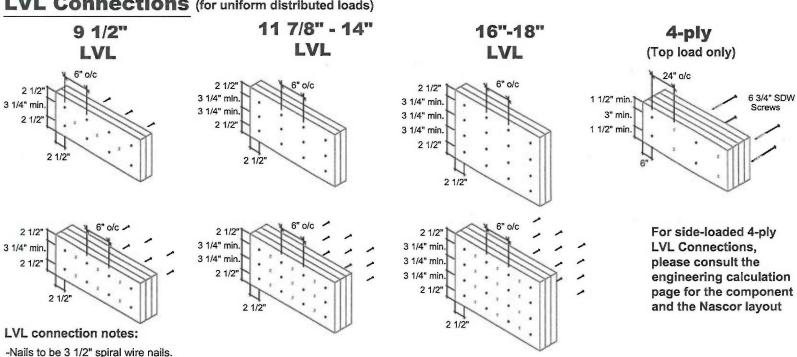
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

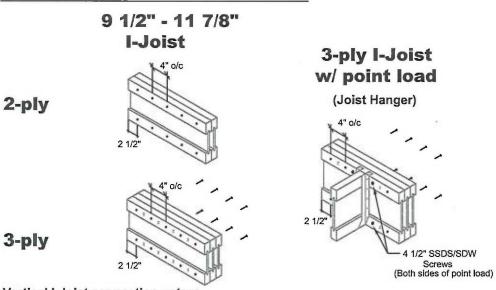
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



- -Nails to be located a minimum of 2 1/2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Minimum 3 1/4" spacing between rows.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail or screw driven from the opposite side.

Vertical I-Joist Connections (for uniform distributed loads)



Vertical I-Joist connection notes:

- -Nails to be 3" spiral wire nails.
- -Nails to be located at centre of top and bottom flanges. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.



MULTI-PLY CONNECTION **DETAILS**

Date: November 30, 2016 Scale: NTS

KOTT 3228 Moodie Drive Ottawa, ON **K2H 7V1** Ph: 613-838-2775

TW0918-058

Engineering Note Page (ENP-2)

REVISION 2009-10-09

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 NASCOR 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 squash blocks. Structural elements such as walls, posts, connectors, and squash 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 NASCOR joists is to be carried out in accordance with the current edition of the manufacturer's approved literature available at http://www.nascor.ca.

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 squash 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.



MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)

2x6 2x12

Conventional connection notes:

- -Nails to be 3" 10d spiral wire nails.
 -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
 "X" represents nall driven from the opposite side.

LVL Connections (for uniform distributed loads)

11 7/8" - 14" 16"-18" 4-ply LVL LVL LVL (Top load only) For side-loaded 4-ply LVL Connections, please consult the engineering calculation page for the component and the Nascor layout LVL connection notes:

- -Nails to be 3 1/2" spiral wire nails.
- -Nalis to be located a minimum of 2 1/2" from the top and bottom of the member. Start all nalls a minimum of 2 1/2" in from ends.
- -Minimum 3 1/4* spacing between rows.
 -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail or screw driven from the opposite side.

Vertical I-Joist Connections (for uniform distributed loads)

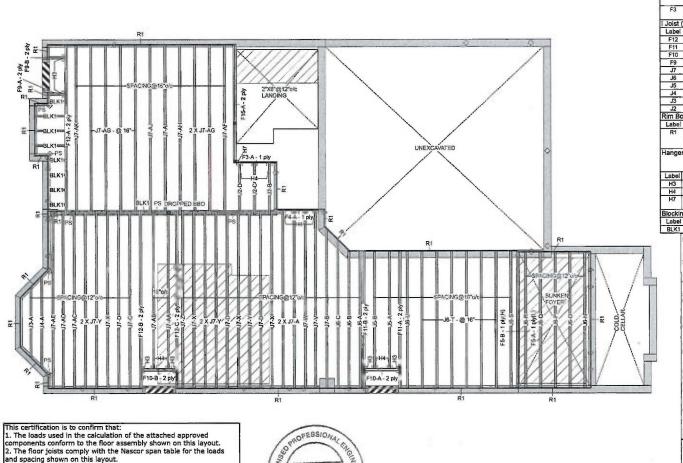
9 1/2" - 11 7/8" **I-Joist** 3-ply I-Joist w/ point load (Joist Hanger) 2-ply 3-ply 4 1/2" SSDS/SDW Screws (Both sides of point load)

Vertical I-Joist connection notes:

- -Nails to be 3" spiral wire nails
- -Nalls to be located at centre of top and bottom flanges. Start all nalls a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise
 "X" represents nail driven from the opposite side.

KOTT 3228 Moodle Drive Ottawa, ON K2H 7V1 Ground Floor





1. OBC 2012 O.Reg 332/12 as amende

- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-088-09
- 5 CCMC -12787-R APA PR-I 310(C)

LVL/LS	L (Flush)		NASC						
	Description	Width	Depth	Qty	Plios	Pcs	Length	NASC	
F5	Forex 2.0E-3000Fb LVL	1.75	11.875			2	14-0-0		
F15	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0	Layout Name MILLWOOD 2-ELEV 2	
F4	Forex 2.0E-3000Fb LVL	1.75	11.875			1	6-0-0	Design Method LSD	
F3	Forex 2.0E-3000Fb LVL	1.75	11.875			1	4-0-0	Description	
I Joist (Flush)		Created						
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	June 25, 2018	
F12	NJ	1.5	11.875	3	2	6	16-0-0		
F11	NJ	1.5	11,875	2	2	4	14-0-0	Builder	
F10	NJ	1.5	11.875	2	2	4	4-0-0	GREENPARK	
F9	NJ	1,5	11.875	2	2	4	2-0-0	Sales Rep	
J7	NJH	2.5	11.875			35	16-0-0	RM	
J6	NJH	2.5	11.875			16	14-0-0	Designer	
J5	NJH	2.5	11.875			2	12-0-0	RO	
J4	NJH	2.5	11.875			1	10-0-0		
J3	NJH	2.5	11.875			1	8-0-0	Shipping	
J2	NJH	25	11.875			3	6-0-0	Project	
Rim Bo	ard							Builder's Project	
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Kott Lumber Con	
R1	Norbord Rimboard Plus 1,125 X 11,875	1.125	11.875			12	12	14 Anderson Blvd Stouffville, Ontario	

Ground Floor

					Beam/Girder	Supported Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
НЗ	6	LT2-151188			4 10dx1 1/2	2 10dx1 1/2
H4	11	LT251188			4 10dx1 1/2	2 10dx1 1/2
Н7	1	HUCQ1.81/9-				

Biocking									
Label	Description	Width	Depth	Qty	Piles	Pcs	Length		
BLK1	NJH	2.5	11.875	Linft		Varies	29-0-0		

NOTES:

- 1. Framer to verify dimensions on the architectural drawings.
- 2. Double joil only require filler/backer ply when supporting another member using a face-mounted hanger.
 3. Install 244 blocking @ 474cu under parallel non-load bearing walls.
 4. Install single-ply flush window header along inside face of imboard/trimbist. rimboard/rimjoist.

 5. Refer to Nascor specifier guide for installation works.
- Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- No levels floor tool.

 Load transfer blocks to be installed under all point loads.

 It shall be the frame's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

Refer to Multiple Member Connection Detail to ply to ply nailing or

Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than mid plantial to justs. 1-10 illustration with 2 w cock (1/10 in rupe that mid depth @ 16/oc); All other components and structural elements supporting the floor system such as beams, walls, columns, and foundation walls, and foolings including anchorage of components and bracing for falteral stability are the responsibility of Others.

Hatch are represents ceramic tiled floor with an additional dead load

The framing shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Millwood 2, Elevation 2

111111

Point Load Support Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 NJ 11.875

NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

Fastener

Vibration

Version 18.40.162 Powered by IStruct™

The floor system must be assembled in accordance to the Nascor Specifier Guide. Multi-ply members must be attached together as per

All other components and structural elements supporting the floor

footings including anchorage of components and bracing for lateral

system such as beams, walls, columns and foundation walls and

the included multiple member connection detail.

stability are the responsibility of others.

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

T.L. WISE

100083566

YCE OF ON

September 13, 2018

June 25, 2018 Builder GREENPARK Sales Rep RM Designer RO Shipping rolect Builder's Project Kott Lumber Company 14 Anderson Blvd Stouffville, Ontario Canada

K2H7V1 905-842-4400 Job Path S:\CUSTOMERS\GREENPARK MINNISALE HOMES MODELS MILLWOOD 2/FLOORS/ELEV 2 MILLWOOD 2-ELEV 2.lsl

Ground Floor Design Method LSD Building Code NBCC 2010 / OBC 2012

Floor Loads 40 Live 15 Dead Deflection Joist LL Span L/ 480 360 TL Span L/ 480 LL Cant 2L/ 360 TL Cant 2L/ Deflection Girder 360 LL Span L/ 240 TL Span L/ 480 LL Cant 2L/ 240 TL Cant 2L/ Decking SPF Plywood Dock Thickness 3/4"

Nailed & Glued

Legend



Project:

GREENPARK

Address:

Date: 9/7/2018

Designer: RO

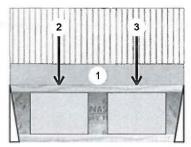
Job Name: MILLWOOD 2-ELEV 1

Project #

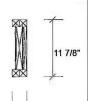
11.875" NJ

2-Ply - PASSED

Level: Ground Floor



1 Hanger (LT2-151188) 2 Hanger (LT2-151188)



Page 1 of 1

Member Information Girder Type: Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Deck: Importance: Normal Vibration: General Load Floor Live: 40 PSF Dead: 15 PSF

Floor (Residential) Application: Design Method: LSD **Building Code:** NBCC 2010 / OBC 2012 Load Sharing: No Not Checked Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Snow Wind Dead 282 106 0 0 2 287 108 0 0

Bearings and Factored Reactions Bearing Length Cap. React D/L lb

Total Ld. Case Ld. Comb. 2.000" 20% 132 / 423 555 L 1.25D+1.5L Hanger 2.000" 21% 135 / 431 1.25D+1.5L 566 L Hanger

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	401 ft-lb	1'4 1/2"	9020 ft-lb	0.044 (4%)	1.25D+1.5L	L
Unbraced	401 ft-lb	1'4 1/2"	5749 ft-lb	0.070 (7%)	1.25D+1.5L	L
Shear	558 lb	2'10 3/4"	3400 lb	0.164 (16%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/38142)	1'5 9/16"	0.093 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/14284)	1'5 1/2"	0.093 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.003 (L/10392)	1'5 9/16"	0.140 (L/240)	0.020 (2%)	D+L	L

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads
- 5 Top flange
- 6 Bottom fla

s must be supported equall ge braced at bearings. lange braced at bearings.	y by all plies.					
Load Type	Location	Trib Width	Side	Dead	Live	Snow
Tie-In	0-0-0 to 3-0-0	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF
Point	0.10.4		Ear Eaco	97 lb	233 lb	O Ib



September 13, 2018

Wind ID Comments 0 PSF 1 2 Point 0 - 10 - 4Far Face 87 lb 233 lb 0 lb Pass-Thru Framing Squash Block is 3 **Point** 2-2-4 Far Face 86 lb 229 lb 0 lb requ₩ed aball point loads over bearings

> Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Notes

Calcurated 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.

Lumber

Handling & Installation

Handling & Installation

1. Blots langes must not be cut or drifted

2. Refer to latest copy of the Ljoist product information
detais for framing details, stiffener tables, web hole
chart, bridging details, multi-ply fastening details and
handling/erection details

3. Damaged Ljoists must not be used

4. Design assumes top frange to be laterally restrained
by attached sheathing or as specified in engineering
notes.

7. For flat roofs

This design is

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 Inches

Manufacturer Info Nascor by Kott

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.

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GREENPARK

Project: Address:

Date: Designer:

9/7/2018 RO

Job Name: MILLWOOD 2-ELEV 1

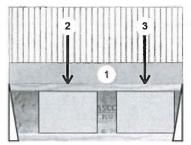
Project #

Brg

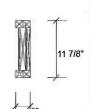
2

11.875" 2-Ply - PASSED F10-B NJ

Level: Ground Floor



1 Hanger (LT2-151188) 2 Hanger (LT2-151188) 3'



Wind

0

0

1.25D+1.5L

Page 1 of 1

Member Info	rmation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Bearings and Factored Reactions											
Bearing			React D/L lb	Total	Ld. Case	Ld. Comb.					
1 - Hanger	2.000"	25%	161 / 514	675	L	1.25D+1.5L					

189 / 606

29%

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

129

152

Snow

0

0

795 L

Live

343

404

2.000"

Hanger

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 583 ft-lb 1' 1/4" 9020 ft-lb 0.065 (6%) 1.25D+1.5L L Moment 583 ft-lb 1' 1/4" 5749 ft-lb 0.101 (10%) 1.25D+1.5L L Unbraced 788 lb 2'10 3/4" 3400 lb 0.232 (23%) 1.25D+1.5L L Shear Perm Defl in, 0.001 1'1 5/16" 0.093 (L/360) 0.010 (1%) D Uniform (L/27610)LL Defl inch 0.003 1'1 5/16" 0.093 (L/360) 0.030 (3%) L (L/10370) TL Defl inch 0.004 (L/7538) 1'1 5/16" 0.140 (L/240) 0.030 (3%) D+L

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top flange braced at bearings.

Ed ake	TER
T.L. V 10008	VISE 3566
Sul) 18 m
September	13, 2018

OFESSIONAL

e Rottom	flange braced at bearings	5.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-0-4		Far Face	130 lb	346 lb	0 lb	0 lb	J7
3	Point	2-4-4		Far Face	110 lb	293 lb	0 lb	Pass Th	rų,Framing Squash Block is

required at all point loads over bearings Refer to Multiple Member Connection

Detail for ply to ply nailing or bolting requirements

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.

Lumber

Handling & Installation

- Handling & Installation

 1. Noted frages must not be out or drilled

 2. Refer to latest copy of the Lioist product information
 defails for framing details, sittlener tables, web hole
 chart. bridging details, multi-py frastening details and
 handling/erection details

 3. Damaged Lioists must not be used

 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

This design is

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeness for point load as shown Minimum point load bearing length>= 3.5 inches
 Provide lateral periods in the point load bearing length>= 3.5 inches
 Real All NOTES ON THE POINT STATES ON THE POINT

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

Nascor by Kott



isDesign™

Client: **GREENPARK**

Project: Address:

Date: 9/7/2018

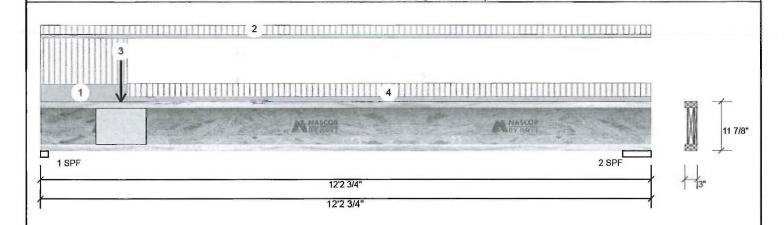
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #

11.875" 2-Ply - PASSED NJ

Level: Ground Floor



Member Inforn	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	W	Wind	
Plies:	2	Design Method:	LSD	1	512		192		0	0	
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	243		91		0	0	
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bearings	and Fact	tored l	Reactions				
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
				1 - SPF	1.875"	38%	240 / 767	1008	L	1.25D+1.5L	
				2-SPF	6.875"	14%	114 / 365	479	L	1.25D+1.5L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1602 ft-lb	4'6 5/8"	9020 ft-lb	0.178 (18%)	1.25D+1.5L	L
Unbraced	1602 ft-lb	4'6 5/8"	1617 ft-lb	0.991 (99%)	1.25D+1.5L	L
Shear	993 lb	1 1/8"	3400 lb	0.292 (29%)	1.25D+1.5L	L
Perm Defl in.	0.018 (L/7877)	5'6 5/16"	0.388 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.047 (L/2957)	5'6 5/16"	0.388 (L/360)	0.120 (12%)	L	L -
TL Defi inch	0.065 (L/2150)	5'6 5/16"	0.581 (L/240)	0.110 (11%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 5'7" o.c.

5 Bottom flange braced at bearings.



September 13, 2018

3 DOLLOTT	narige braced at bearing	ys.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-8-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-2-12	(Span)0-7-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-7-6		Far Face	108 lb	287 lb	0 lb	0 lb	F10
4	Tie-In	1-8-14 to 12-2-12	(Span)0-11-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
								Pass-Th	ru Framing Squash Block is

required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and leadings 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.

Lumber

Dry service conditions, unless noted otherwise
 Uoist not to be treated with fire relardant or continuous.

chemicals

Handling & Installation

andling & Installation.

Justiflanges must not be cut or drilled.
Refer to latest copy of the IJoist product information details for framing details, stifferent tables, web hole chart, bridging details, multi-phy fastering details and handling/erection details.

Damaged IJoist must not be used
Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing engibre 3.5 inches
 For flat roofs propositing

This design is

Manufacturer Info Nascor by Kott

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.



TW0918-058 Page 9 of 34 Client: **GREENPARK** Date: 9/7/2018 Project: Designer: RO isDesign[™] Address: Job Name: MILLWOOD 2-ELEV 1 Project #: Level: Ground Floor 11.875" 2-Ply - PASSED NJ 3 2 1 SPF 2 SPF 12'2 3/4' 12'2 3/4' **Unfactored Reactions UNPATTERNED Ib (Uplift) Member Information** Dead Type: Girder Application: Floor (Residential) Brg Live Snow Design Method: Plies: 2 LSD 471 177 0 NBCC 2010 / OBC 2012 **Building Code:** Moisture Condition: Dry 2 206 77 0 Deflection 11: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Vibration: Not Checked Importance: Normal General Load **Bearings and Factored Reactions** Floor Live: 40 PSF Dead: 15 PSF Cap. React D/L lb Total Ld. Case Bearing Length 1 - SPF 1.875" 35% 221 / 707 928 L 2-SPF 6.875" 12% 96 / 308 405 L **Analysis Results** PROFESSIONAL CHARLES 100083566

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1410 ft-lb	4'3 1/4"	9020 ft-lb	0.156 (16%)	1.25D+1.5L	L
Unbraced	1410 ft-lb	4'3 1/4"	1412 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	915 lb	1 1/8"	3400 lb	0.269 (27%)	1.25D+1.5L	L
Perm Defl in.	0.015 (L/9004)	5'5 11/16"	0.388 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.041 (L/3379)	5'5 11/16"	0.388 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.057 (L/2457)	5'5 11/16"	0.581 (L/240)	0.100 (10%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 5'11" o.c.
- 5 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-2-12	(Span)0-3-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-8-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-7-6		Near Face	106 lb	282 lb	0 lb	0 lb	F10
4	Tie-In	1-8-14 to 12-2-12	(Span) 0-11-12	Тор	15 PSF	40 PSF	0 PSF		ru Framing Squash Block is I at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Calculated Structured Designs is responsible only of the structural adequacy of this compowent 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. Lumber

Handling & Installation

landling & Installation

I Joist flanges must not be cut or drifted

Refer to latest copy of the IJoist product information detals for framing detals, stiffener tables, web hole chart, bridging detals, must hopy fasteling detals and handling/erection detals

Damaged IJoist must not be used

Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches

This design is

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 Nascor by Kott

Kott Lumber Company 14 Anderson Blvd, Ontario K2H7V1 905-642-4400

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September 13, 2018



Page 1 of 1

11 7/8"

Wind

0

0

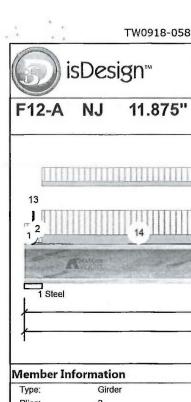
Ld. Comb.

1.25D+1.5L

1.25D+1.5L



Wind



GREENPARK

2-Ply - PASSED

Project: Address:

Client:

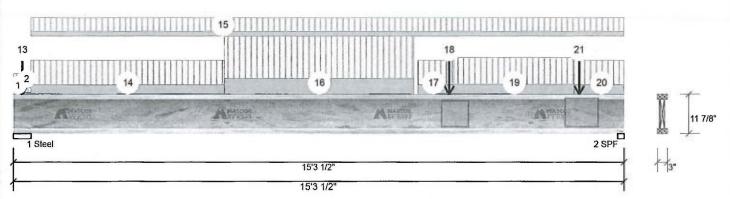
Date: 9/7/2018

Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

Level: Ground Floor



Member Infor	mation			Unfacto	red React	ions UNP
Type:	Girder	Application:	Floor (Residential)	Brg	Live	D
Plies:	2	Design Method:	LSD	1	641	
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	539	
Deflection LL:	360	Load Sharing:	No			
Deflection TL:	240	Deck:	Not Checked	1		
Importance:	Normal	Vibration:	Not Checked			
General Load						
Floor Live:	40 PSF			Bearing	s and Fact	ored Rea
Dead:	15 PSF			Bearing	Length	Cap. Rea

Unfactored	Reactions	UNPATTERNED	lb (Uplift)
Brg	Live	Dead	Snow

1	641	269	0	0
2	539	202	0	0

actions

Bearing Length	Cap. Re	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - Steel 5.250"	38%	337 / 961	1298	L	1.25D+1.5L
2 - SPF 1.875"	40%	253 / 809	1061	L	1.25D+1.5L

Analysis Results

,						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3724 ft-lb	8' 3/16"	9020 ft-lb	0.413 (41%)	1.25D+1.5L	L
Unbraced	3724 ft-lb	8' 3/16"	3737 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	1052 lb	15'2 3/8"	3400 lb	0.309 (31%)	1.25D+1.5L	L
Perm Defl in.	0.062 (L/2891)	7'10 3/8"	0.494 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.164 (L/1083)	7'10 3/8"	0.494 (L/360)	0.330 (33%)	L	L
TL Defl inch	0.226 (L/788)	7'10 3/8"	0.741 (L/240)	0.300 (30%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 3'9" o.c.

5 Bottom flange braced at bearings

	o pottom nango	bracoa at bearings.								
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
I	1	Tie-In	0-0-0 to 0-5-4	(Span)0-3-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
I	2	Tie-In	0-0-0 to 0-5-4	(Span)0-8-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
I	3	Point	0-2-10		Тор	1 lb	3 lb	0 lb	0 lb	J7
	4	Point	0-2-10		Тор	1 lb	4 lb	0 lb	0 lb	J7
l	5	Point	0-2-10		Тор	1 lb	3 lb	0 lb	0 lb	J7
I	6	Point	0-2-10		Тор	1 lb	0 lb	0 lb	0 lb	Wall Self Weight
	7	Point	0-2-10		Тор	21 lb	56 lb	0 lb	0 lb	J7

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. Lumber

Dry service conditions, unless noted otherwise
 Upist not to be treated with fire retardant or corrosive

Handling & Installation

- and ling & Installation.

 Lodst flanges must not be cut or drilled.

 Refer to latest copy of the Liotst product information details for framing details, sufferer tables, web hole chart. bridging details, must holy fastening details and handling/erection details.

 Damaged Liotst must not be used.

 Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

This design is v

 Provide lateral support at bearing points to avoid lateral displacement and rotation.
 Web stiffeness for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs possing READ ALL NOTES Of ponding. Nascor by Kott

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

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400

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100083566

WCE OF ON

September 13, 2018



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Page 2 of 2



Client:

Project: Address: **GREENPARK**

9/7/2018 Date: Designer:

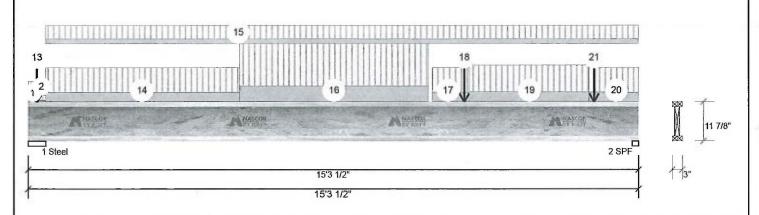
RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

2-Ply - PASSED 11.875" NJ

Level: Ground Floor



O I'									
	from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
8	Point	0-2-10		Тор	22 lb	59 lb	0 lb	0 lb	J7
9	Point	0-2-10		Тор	2 lb	5 lb	0 lb	0 lb	J7
10	Point	0-2-10		Тор	20 lb	0 lb	0 lb	0 lb	Wall Self Weight
11	Point	0-2-10		Тор	9 lb	25 lb	0 lb	0 lb	J7
12	Point	0-2-10		Тор	10 lb	26 lb	0 lb	0 lb	J7
13	Point	0-2-10		Тор	9 lb	0 ib	0 lb	0 lb	Wall Self Weight
14	Tie-In	0-5-4 to 5-3-10	(Span)1-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
15	Tie-In	0-5-4 to 15-3-8	(Span) 0-10-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	£.
16	Tie-In	5-3-10 to 10-0-8	(Span)2-9-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
17	Tie-In	10-1-10 to 11-0-10	(Span)1-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
18	Point	10-11-2		Far Face	18 lb	49 lb	0 lb	0 lb	F9
19	Tie-In	11-0-10 to 14-0-10	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
20	Tie-In	14-0-10 to 15-3-8	(Span)1-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
21	Point	14-2-2		Far Face	25 lb	66 lb	0 lb	0 lb	F9

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Notes

NOTES

Calculated Shuchared 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.

Lumber

Dry service conditions, unless noted otherwise
 Usolst not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

1. Libist flanges must not be cut or drilled

2. Refer to latest copy of the Libist product information
detals for framing details, stifferer tables, web hole
chart, bridging details, multi-py fastening details and
3. Daminged Libists must not be used

4. Design assumes top flange to be laterally restrained
by attached sheathing or as specified in engineering
notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 Inches
 For flat roofs provide proper drainage to prevent

This design is valid until 7/10/2021

Manufacturer Info Nascor by Kott



Client:

Project: Address: **GREENPARK**

Date: 9/7/2018

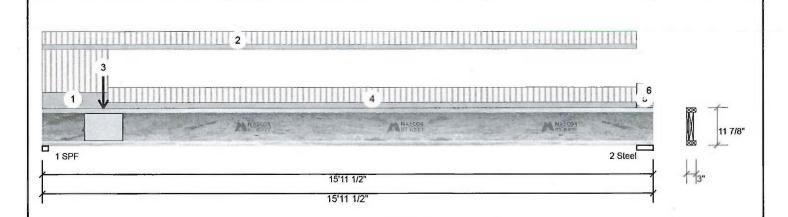
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #

F12-B 11.875" 2-Ply - PASSED NJ

Level: Ground Floor



Vlember Intol	mation			Unfactored	d Reaction	is unpattern	ED Ib (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	712	267	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	376	141	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	nd Factor	ed Reactions		
Dead:	15 PSF			Bearing Le	ength (Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 1.	.875"	53% 334 / 1068	1402 L	1.25D+1.5L
				2 - Steel 5.	250"	22% 176 / 563	739 L	1.25D+1.5L

Analysis Results

Actual	Location	Allowed	Capacity	Comb.	Case
3112 ft-lb	6'11 1/2"	9020 ft-lb	0.345 (34%)	1.25D+1.5L	L
3112 ft-lb	6'11 1/2"	3135 ft-lb	0.993 (99%)	1.25D+1.5L	L
1386 lb	1 1/8"	3400 lb	0.408 (41%)	1.25D+1.5L	L
0.057 (L/3233)	7'6 13/16"	0.516 (L/360)	0.110 (11%)	D	Uniform
0.153 (L/1213)	7'6 13/16"	0.516 (L/360)	0.300 (30%)	L	L
0.211 (L/882)	7'6 13/16"	0.774 (L/240)	0.270 (27%)	D+L	L
	3112 ft-lb 3112 ft-lb 1386 lb 0.057 (L/3233) 0.153 (L/1213)	3112 ft-lb 6'11 1/2" 3112 ft-lb 6'11 1/2" 1386 lb 1 1/8" 0.057 (L/3233) 7'6 13/16" 0.153 (L/1213) 7'6 13/16"	3112 ft-lb 6'11 1/2" 9020 ft-lb 3112 ft-lb 6'11 1/2" 3135 ft-lb 1386 lb 1 1/8" 3400 lb 0.057 (L/3233) 7'6 13/16" 0.516 (L/360) 0.153 (L/1213) 7'6 13/16" 0.516 (L/360)	3112 ft-lb 6'11 1/2" 9020 ft-lb 0.345 (34%) 3112 ft-lb 6'11 1/2" 3135 ft-lb 0.993 (99%) 1386 lb 1 1/8" 3400 lb 0.408 (41%) 0.057 (L/3233) 7'6 13/16" 0.516 (L/360) 0.110 (11%) 0.153 (L/1213) 7'6 13/16" 0.516 (L/360) 0.300 (30%)	3112 ft-lb 6'11 1/2" 9020 ft-lb 0.345 (34%) 1.25D+1.5L 3112 ft-lb 6'11 1/2" 3135 ft-lb 0.993 (99%) 1.25D+1.5L 1386 lb 1 1/8" 3400 lb 0.408 (41%) 1.25D+1.5L 0.057 (L/3233) 7'6 13/16" 0.516 (L/360) 0.110 (11%) D 0.153 (L/1213) 7'6 13/16" 0.516 (L/360) 0.300 (30%) L



- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 4'2" o.c.

5 Bottom	flange braced at bearings	S							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-8-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-ln	0-0-0 to 15-6-4	(Span) 0-11-12 to 0-11-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-7-6		Near Face	129 lb	343 lb	0 lb	0 lb	F10
4	Tie-In	1-8-14 to 15-6-4	(Span)1-1-12 to 1-1-12	Тор	15 PSF	40 PSF	0 PSF	required	ru Framing Squash Block is I at all point loads over bearings
5	Tie-In	15-6-4 to 15-11-8	(Span)0-5-4	Тор	15 PSF	40 PSF	0 PSF	Refersto	Multiple Member Connection
6	Tie-In	15-6-4 to 15-11-8	(Span) 0-10-12	Тор	15 PSF	40 PSF	0 PSF		r ply to ply nailing or bolting

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 inlended application, and to verify the dimensions and loads. Lumber

Dry service conditions, unless noted otherwise
 Upist not to be treated with fire retardant or correct

Handling & Installation

- Handling & Installation

 1. Joist langues must not be cut or drilled

 2. Refer to latest copy of the Lioist product information
 detals for framing detals, stifferer tables, web hole
 chart, bridging detals, multi-ply fastening detals and
 handling/erection detals

 3. Damaged Loists must not be used

 4. Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

This design is

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.6 inches
 For flat roofs pro

Nascor by Kott 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

DOPESSIONAL ENGINEERS 100083566 WCE OF ON

September 13, 2018



Project: Address: **GREENPARK**

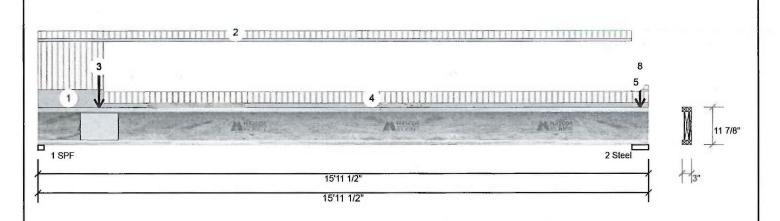
Date: 9/7/2018 Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

11.875" 2-Ply - PASSED NJ

Level: Ground Floor



Viember Infor	mation			Unfactored	d Reacti	ons UN	PATTERNI	D lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind
Plies:	2	Design Method:	LSD	1	649		244		0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	417		179	100	0	0
Deflection LL:	360	Load Sharing:	No	2.22						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings a	nd Fact	ored Re	actions			
Dead:	15 PSF			Bearing Le	ength	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF 1.	875"	48%	305 / 973	1278	L	1.25D+1.5L
				2 - Steel 5.3	250"	25%	223 / 625	849	L	1.25D+1.5L

Analysis Results

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	2271 ft-lb	6'1 5/8"	9020 ft-lb	0.252 (25%)	1.25D+1.5L	L
	Unbraced	2271 ft-lb	6'1 5/8"	2271 ft-lb	1.000 (100%)	1.25D+1.5L	L
	Shear	1264 lb	1 1/8"	3400 lb	0.372 (37%)	1.25D+1.5L	L
	Perm Defl in.	0.042 (L/4432)	7'4 5/8"	0.516 (L/360)	0.080 (8%)	D	Uniform
	LL Defl inch	0.112 (L/1664)	7'4 3/4"	0.516 (L/360)	0.220 (22%)	L	L
	TL Defl inch	0.154 (L/1210)	7'4 3/4"	0.774 (᠘/240)	0.200 (20%)	D+L	L

T.L. WISE 100083566 100083566 WCE OF ONE

September 13, 2018

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 4'10" o.c.

5 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-8-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	o o minorito
2	Tie-In	0-0-0 to 15-6-4	(Span)0-6-4 to 0-6-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-7-6		Far Face	152 lb	404 lb	0 lb	0 lb	F10
4	Tie-In	1-8-14 to 15-11-8	(Span)0-9-4 to 0-9-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	15-6-4 to 15-11-8	(Span)0-3-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Point	15-8-14		Тор	32 lb	85 lb	0 lb	0 lb	J7
Continued on page	2								

This design is

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

Lumber

Dry service conditions, unless noted otherwise
 Upoist not to be treated with fire retardant or continuous.

Handling & Installation

Handling & Installation

1. Joist flagges must not be cut or drilled

2. Refer to latest copy of the IJoist product information detals for framing detals, stifferent tables, web hole chart, bridging detals, multi-ply fastening detals and handling/erection details

3. Demaged Loists must not be used

4. Design assumes top flange to be laterally restrained by attached shealthing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 Inches

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

Nascor by Kott



Page 2 of 2



Client: **GREENPARK**

Project: Address:

Date: 9/7/2018 Designer:

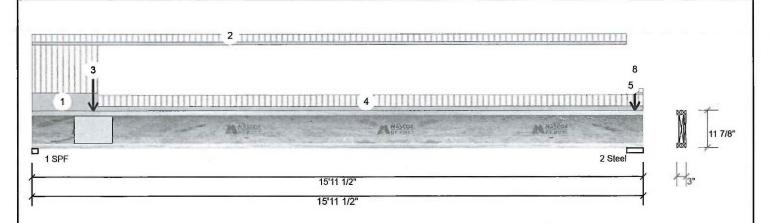
RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

11.875" 2-Ply - PASSED NJ

Level: Ground Floor



١	Continued from p	page 1							
I	ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
I	7	Point	15-8-14	Тор	30 lb	80 lb	0 lb	0 lb	J7
I	8	Point	15-8-14	Тор	22 lb	0 lb	0 lb	0 lb	Wall Self Weight

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Notes

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

Lumber

Handling & Installation

and liming & Installation.

Lioist langes must not be cut or drilled.

Refer to latest copy of the IJoist product information defails for framing details, stiffener tables, web note chart. bridging details, multi-ply fastening details and handling/erection details.

Damaged IJoist must not be used.

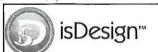
Design assumes top flange to be laterally restrained by attached shealthing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 Por flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Manufacturer Info

Nascor by Kott



GREENPARK

Project: Address:

Date: 9/10/2018 Designer:

RO

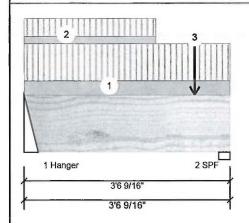
MILLWOOD 2-ELEV 1 Job Name:

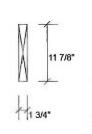
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 1

Member Inf	ormation						Unfacto	red React	ions U	NPATTERN	ED lb ((Uplift)	
Туре:	Girder		Applicatio	n: Fl	oor (Resident	ial)	Brg	Live		Dead	Sno	w	Wind
Plies:	1		Design M	ethod: LS	SD .		1	555		218		0	0
Moisture Cond	ition: Dry		Building C	Code: N	BCC 2010 / O	BC 2012	2	510		201		0	0
Deflection LL:	360		Load Sha	ring: No	0		1.5						
Deflection TL:	240		Deck:	No	ot Checked								
Importance:	Normal		Vibration:	No	ot Checked								
General Load													
Floor Live:	40 PSF						Bearing	s and Fact	tored l	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - Hanger	3.000"	28%	272 / 833	1106	L.	1.25D+1.5L
Analysis Res	ults						2 - SPF	2.375"	40%	251 / 765	1016	L	1.25D+1.5L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case						_	
Moment	785 ft-lb	1'9 5/16"	17130 ft-lb	0.046 (5%)	1.25D+1.5L	L					/	FESSIO	
Unbraced	785 ft-lb	1'9 5/16"	13259 ft-lb	0.059 (6%)	1.25D+1.5L	L					PAC	34.07	MAL
Shear	745 lb	2'5 1/16"	5798 lb	0.129 (13%)	1.25D+1.5L	L				/	01		18
Perm Defl in.	0.001 (L/26669)	1'9 7/16"	0.108 (L/360)	0.010 (1%)	D	Uniform				18	9/	I WIS	E CHOINEE

Design Notes

LL Defl inch 0.004

1 Fill all hanger nailing holes.

(L/10472) TL Defl inch 0.005 (L/7520)

- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings



September 13, 2018

ID	Load Type	Location Trib	b Width Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-6-9	Тор	79 PLF	210 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 2-3-3	Near Face	39 PLF	103 PLF	0 PLF	0 PLF	
3	Point	2-11-3	Near Face	33 lb	87 lb	0 lb	0 lb	J2
	Self Weight			5 PLF				ru Framing S

Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Notes

Colculated Structured Designs is responsible only of the structural edequacy 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.

Lumber

Handling & Installation

LVL beams must not be cut or drilled
Refer to manufacturer's product information
regarding installation requirements, mutti-ply
fastenting details, beam strength values, and code

1'9 3/8" 0.108 (L/360) 0.030 (3%) L

1'9 3/8" 0.161 (L/240) 0.030 (3%) D+L

- 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 rotation

For flat roofs provide proper drainage to prevent ponding

This design is va

Manufacturer Info Forex APA: PR-L318

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.





GREENPARK

Project: Address: Date: 9/7/2018

Designer: RO

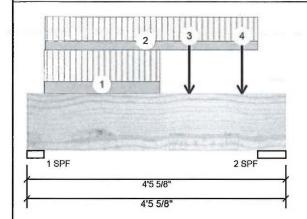
Job Name: MILLWOOD 2-ELEV 1

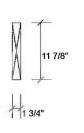
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 1

Member Info	rmation		Unfacto	factored Reactions UNPATTERNED lb (Uplift)					
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	1024		395	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1099		424	0	0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked	1					
General Load									
Floor Live:	40 PSF			Bearing	s and Fac	tored	Reactions		
Dead:	15 PSF	-		Bearing	Length	Сар.	React D/L lb	Total Ld. Ca	ase Ld. Comb.
				1 - SPF	3.500"	54%	493 / 1536	2029 L	1.25D+1.5L
	•-			2-SPF	5.875"	34%	529 / 1649	2178 L	1.25D+1.5L

Anal	vsis	Resu	ts
	,		

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2002 ft-lb	2'1 9/16"	17130 ft-lb	0.117 (12%)	1.25D+1.5L	L
Unbraced	2002 ft-lb	2'1 9/16"	11720 ft-lb	0.171 (17%)	1.25D+1.5L	L
Shear	2314 lb	3' 5/8"	5798 lb	0.399 (40%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/10769)	2'1 11/16"	0.127 (᠘/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.011 (L/4138)	2'1 11/16"	0.127 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.015 (L/2989)	2'1 11/16"	0.191 (L/240)	0.080 (8%)	D+L	L



Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top braced at bearings.
- 3 Bottom braced at bearings

September 13, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-3-8 to 2-3-8		Near Face	120 PLF	319 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-3-12 to 3-11-12		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
3	Point	2-9-8		Near Face	115 lb	305 lb	0 lb	0 lb	J7
4	Point	3-8-8		Near Face	112 lb	300 lb	0 lb	0 lb	J7
	Self Weight				5 PLF			Pass-Th	ru Framina

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

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. Lumber

chemicals

Handling & Installation

LVL beams must not be cut or drilled
Refer to manufacturer's product information
regarding installation requirements, multi-ply
fastening details, beam strength values, and code

populars period 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 rotation

For flat roofs provide proper drainage to prevent ponding

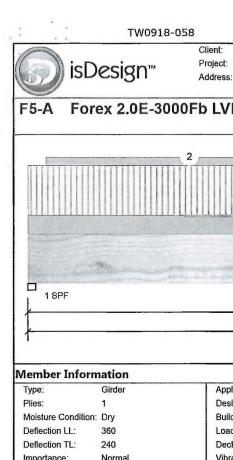
This design is

Manufacturer Info

Forex APA: PR-L318

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GREENPARK

Date:

9/7/2018

Designer: RO

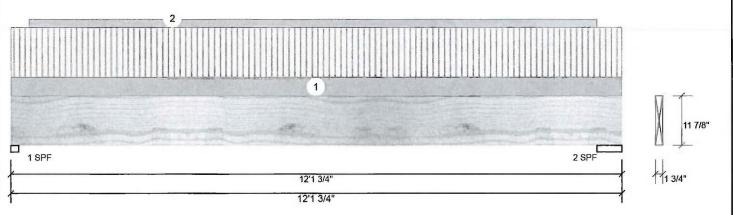
Job Name: MILLWOOD 2-ELEV 1

Unfactored Reactions UNPATTERNED Ib (Uplift)

Project #:

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

Level: Ground Floor



Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	W	Wind
Plies:	1	Design Method:	LSD	1	73		67		0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	77		70		0	0
Deflection LL:	360	Load Sharing:	No	1000						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	1.875"	10%	83 / 109	192	L	1.25D+1.5L
		L		2-SPF	5.875"	3%	88 / 115	203	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	553 ft-lb	5'10 7/8"	17130 ft-lb	0.032 (3%)	1.25D+1.5L	L	
Unbraced	553 ft-lb	5'10 7/8"	3868 ft-lb	0.143 (14%)	1.25D+1.5L	L	
Shear	158 lb	1'1"	5798 lb	0.027 (3%)	1.25D+1.5L	L	
Perm Defl in.	0.011 (L/13107)	5'10 7/8"	0.388 (L/360)	0.030 (3%)	D	Uniform	-
LL Defl inch	0.012 (L/12101)	5'10 7/8"	0.388 (L/360)	0.030 (3%)	L	L	-
TL Defl inch	0.022 (L/6292)	5'10 7/8"	0.581 (L/240)	0.040 (4%)	D+L	L	
							Ì

TI WISE 100083566 NCE OF ON September 13, 2018

Design Notes

1 Girders are designed to be supported on the bottom edge only.

2 Top braced at bearings.

3 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-1-12	(Span)0-7-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-4-6 to 11-7-15		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				5 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Notes

Calculated Shuchired Designs is responsible only of the structural adequizey of this component based on the design criteria and leadings 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. Lumber

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
requirements, multi-ply
fastening details, beam strength values, and code

fastening ceraiss, incomparison 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 rotation

For flat roofs provide proper drainage to prevent ponding

This design is

Manufacturer Info

Forex APA: PR-L318

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IN THE DESIGN OF THIS COMPONENT.

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400



Version 18.40.162 Powered by iStruct™



GREENPARK

Client: Project: Address: Date: 9/7/2018

Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

1 - SPF 1.875"

2-SPF 6.875"

8%

3%

67 / 101

82 / 142

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

Level: Ground Floor 2

2 SPF

168 L

224 L

Wind

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

12'2 3/4' 12'2 3/4'

Member Infor	mation			Unfactor	red React	tions UNPATTERN	ED lb (Uplift)
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow
Plies:	1	Design Method:	LSD	1	67	53	0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	95	66	0
Deflection LL:	360	Load Sharing:	No	1 -			
Deflection TL:	240	Deck:	Not Checked				
Importance:	Normal	Vibration:	Not Checked				
General Load							
Floor Live:	40 PSF			Bearings	and Fac	tored Reactions	
Dead:	15 PSF			Bearing	Length	Cap. React D/L lb	Total Ld. Case

Analysis Results

1 SPF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	480 ft-lb	5'10 7/8"	17130 ft-lb	0.028 (3%)	1.25D+1.5L	L
Unbraced	480 ft-lb	5'10 7/8"	3868 ft-lb	0.124 (12%)	1.25D+1.5L	L
Shear	137 lb	1'1"	5798 lb	0.024 (2%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/16496)	5'10 7/8"	0.388 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.011 (L/13065)	5'10 7/8"	0.388 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.019 (L/7290)	5'10 7/8"	0.581 (L/240)	0.030 (3%)	D+L	L

TI WISE IN 100083566 VCE OF ONT September 13, 2018

Design Notes 1 Girders are designed to be supported on the bottom edge only.

2 Top braced at bearings.

3 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-2-12	(Span)0-6-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	11-9-6 to 12-2-12	(Span)2-6-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

5 PLF Self Weight

> Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

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 inlended application, and to verify the dimensions and loads. Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corr

chemicals

Handling & Installation

LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code

fastening actions, varieties, proprieties approvals
Demaged Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex

APA: PR-L318

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This design is



Project:

Address:

GREENPARK

Date: RO Designer:

9/7/2018

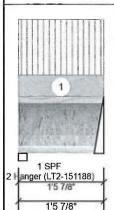
Page 1 of 1

Job Name: Project #:

NJ 11.875" 2-Ply - PASSED

Level: Ground Floor

MILLWOOD 2-ELEV 1



11 7/8"

Member	Information			Unfacto	red Reaction	s UNPATTERI	NED lb (Uplift)
Times	Cirdos	Auutinations	Class (Desidential)	In	I form	D1	C	_

Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	48	18	0	0	
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	49	18	0	0	
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF			Bearing	s and Factore	d Reactions			

Analysis Results

Ld. Comb. Bearing Length Cap. React D/L lb Total Ld Case 1 - SPF 1.875" 4% 23/72 95 L 1.25D+1.5L 4% 23/73 96 L 1.25D+1.5L 2.000" Hanger

Analysis Actual Location Allowed Capacity Comb. Case Moment 27 ft-lb 8 7/8" 9020 ft-lb 0.003 (0%) 1.25D+1.5L L Unbraced 27 ft-lb 8 7/8" 8539 ft-lb 0.003 (0%) 1.25D+1.5L L Shear 83 lb 1 1/8" 3400 lb 0.024 (2%) 1.25D+1.5L L 0 999.000 (L/0) 0.000 (0%) Perm Defl in. 0.000 (L/999) LL Defl inch 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) 0 999.000 (L/O) 0.000 (0%) TL Defl inch 0.000 (L/999)

PROFESSIONAL CAGALINA 100083566 WCE OF ON

September 13, 2018

Design Notes

Dead:

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.

15 PSF

- 5 Top flange braced at bearings.
- 6 Bottom flange braced at bearings

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

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
 Uoist not to be treated with fire retardant or corr

Handling & Installation

andling & Installation.

Noist langes must not be cut or drilled.
Refer to latest copy of the IJoist product information details for framing details, stiffener tables, web hole-chart, bridging details, multi-piy fastening details and handling/erection details.

Damaged IJoist must not be used.
Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
- lateral displacement and rotation

 6. Web stiffeners for point load as shown Minimum

This design is

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Manufacturer Info

Nascor by Kott

Kott Lumber Company 14 Anderson Blvd, Ontario 905-642-4400





Client: **GREENPARK**

Project: Address: Date:

9/7/2018

Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #

11.875" NJ

Level: Ground Floor 2-Ply - PASSED



11 7/8"

Page 1 of 1

-7	anger (LT2-151188)
- 1	15770
1	1'5 7/8"
,	13770

Member Infor	mation		17.6%	Unfactor	ed React	ions U	NPATTERNI	ED lb (Up	lift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	2	Design Method:	LSD	1	65		24	0		0
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	66		25	0		0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings	and Fact	ored I	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total Ld	. Case	Ld. Comb.
				1 - SPF	1.875"	5%	31/98	128 L		1.25D+1.5L
nalysis Resul	ts			2 - Hanger	2.000"	5%	31 / 99	130 L		1.25D+1.5L
Analysis A	ctual Loca	ation Allowed Capac	ity Comb Case							

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
	Moment	36 ft-lb	8 7/8"	9020 ft-lb	0.004 (0%)	1.25D+1.5L	L	
	Unbraced	36 ft-lb	8 7/8"	8539 ft-lb	0.004 (0%)	1.25D+1.5L	L	
	Shear	112 lb	1 1/8"	3400 lb	0.033 (3%)	1.25D+1.5L	L	
	Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
	LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
	TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
_								

PROFESSIONAL CHOMES 100083566 NCE OF ON

September 13, 2018

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top flange braced at bearings.
- 6 Bottom flange braced at bearings

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-14	(Span)1-1-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-5-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. If 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.

Lumber

Dry service conditions, unless noted otherwise
 Uoist not to be treated with fire retardant or corrosive

Handling & Installation

articuling & installation

Libelt flanges must not be cut or drifted

Refer to latest copy of the Joist product information
details for framing details, stiffners tables, web hote
chart, bridging details, multi-ply fastening details and
handling/erection details

Damaged Joists must not be used
Details and beautiful to the product of the production of

This design is

 Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing in prints 3.5 Inches
 For flat roofs pro Nascor by Kott

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



Client:

GREENPARK

Project: Address:

Date: 9/10/2018

Designer: RO

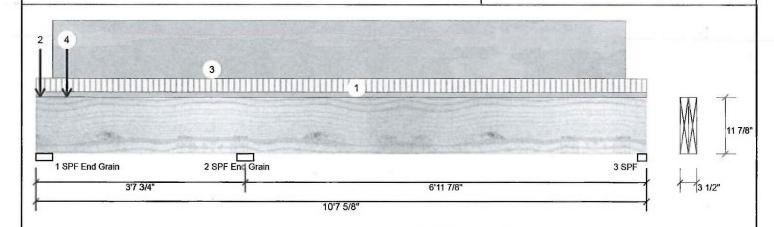
Job Name: MILLWOOD 2-ELEV 1

Project #:

Forex 2.0E-3000Fb LVL F15-A

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor



Member Infor	mation			Unfacto	red Reac	tions U	NPATTERN	ED lb (U	plif
Type:	Girder	Application:	Floor (Residential)	Brg	Live	_	Dead	Snow	
Plies:	2	Design Method:	LSD	1	986		484	0	
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	176		679	0	
Deflection LL:	360	Load Sharing:	No	3	52		259	0	
Deflection TL:	240	Deck:	Not Checked	"			200		
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF			Bearing	s and Fac	tored l	Reactions		
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total L	d. C
				1 - SPF End	3.500"	24%	578 / 1504	2082 L	-

Ana	lysis	Resu	ts
-----	-------	------	----

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Neg Moment	-617 ft-lb	3'7 3/4"	22269 ft-lb	0.028 (3%)	1.4D	Uniform
ı	Unbraced	-617 ft-lb	3'7 3/4"	22269 ft-lb	0.028 (3%)	1.4D	Uniform
	Pos Moment	521 ft-lb	7'9"	22269 ft-lb	0.023 (2%)	1.4D	Uniform
	Unbraced	521 ft-lb	7'9"	21873 ft-lb	0.024 (2%)	1.4D	Uniform
	Shear	421 lb	4'7 5/8"	7537 lb	0.056 (6%)	1.4D	Uniform
	Perm Defl in.	0.005 (L/17692)	7'3 7/16"	0.230 (L/360)	0.020 (2%)	D	Uniform
	LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
	TL Defl inch	0.006 (L/14724)	7'3 3/8"	0.345 (L/240)	0.020 (2%)	D+L	_L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on full section width.

ift)

Brg	Live	Dead	Snow	Wind
1	986	484	0	0
2	176	679	0	0
3	52	259	0	0

Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	24%	578 / 1504	2082	<u>L_</u>	1.25D+1.5L
2 - SPF End Grain	3.500"	17%	995 / 0	995	Uniform	1.4D
3-SPF	1.875"	13%	348/0	348	Uniform	1.4D



September 13, 2018

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and leadings 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 leads. Lumber

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

Handling & Installation

Idinaling & Installation

LVL beams must not be cut or drilled

Refer to manufacturer's product information
regarding installation requirements, multi-ply
fastening details, beam strength values, and code
approvals

Damaged Brams must not be used

Design assumes top edge is laterally restrained

Provide lateral support at bearing points to avoid
lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

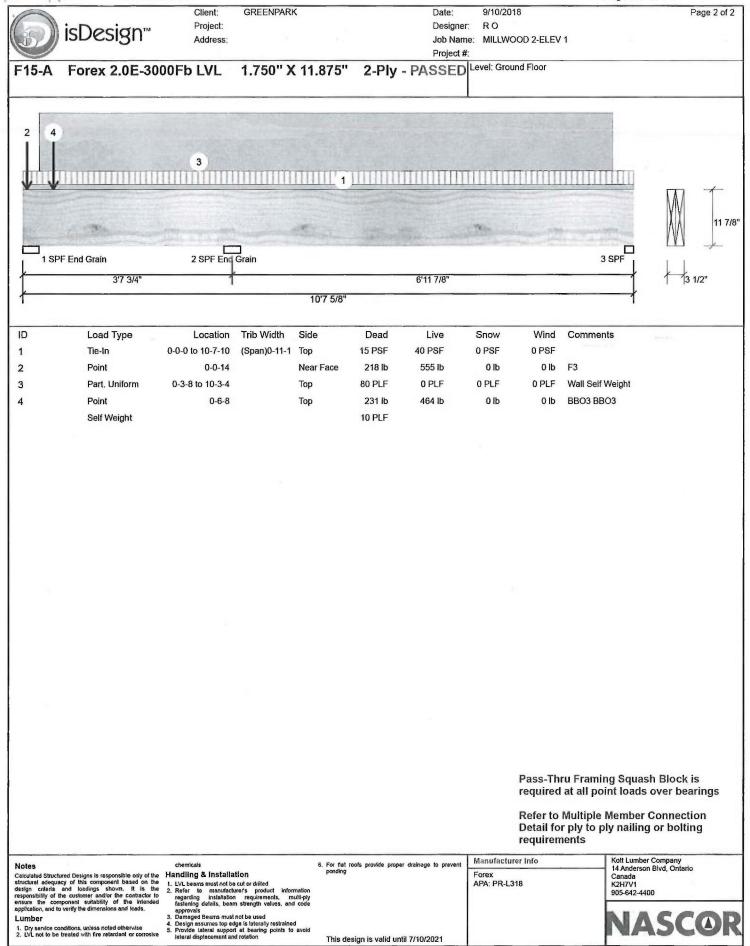
Manufacturer Info

Forex APA: PR-L318

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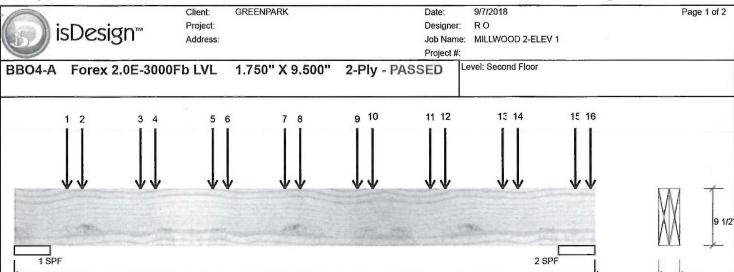
Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400

This design is



This design is valid until 7/10/2021

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



Member Inform	nation			Unfactored	Reactio	ns UNPATTERNI	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	2221	861	0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	2284	885	0	0
Deflection LL:	360	Load Sharing:	No	_				
Deflection TL:	240	Deck:	Not Checked	1				
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings ar	nd Facto	red Reactions		
Dead:	15 PSF	56		Bearing Lei	ngth	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
		1		1-SPF 6.0	00"	34% 1076 / 3332	4409 L	1.25D+1.5L
				2-SPE 60	00"	35% 1106 / 3425	4531 I	1 25D+1 5l

Analysis Results

ĺ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	7713 ft-lb	3'11 1/4"	22724 ft-lb	0.339 (34%)	1.25D+1.5L	L
	Unbraced	7713 ft-lb	3'11 1/4"	21721 ft-lb	0.355 (36%)	1.25D+1.5L	L
	Shear	3886 lb	6'9 1/4"	9277 lb	0.419 (42%)	1.25D+1.5L	L
	Perm Defl in.	0.033 (L/2630)	3'11 3/8"	0.238 (L/360)	0.140 (14%)	D	Uniform
	LL Defl inch	0.084 (L/1016)	3'11 3/8"	0.238 (L/360)	0.350 (35%)	L	L
L	TL Defl inch	0.117 (L/733)	3'11 3/8"	0.356 (L/240)	0.330 (33%)	D+L	L
г							

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on full section width.



September 13, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-8-12		Тор	111 lb	297 lb	0 lb	0 lb	J7
2	Point	0-11-4		Тор	116 lb	310 lb	0 lb	0 lb	J7
3	Point	1-8-12		Тор	111 lb	297 lb	0 lb	0 lb	J7
4	Point	1-11-4		Тор	116 lb	310 lb	0 lb	0 lb	J7
5	Point	2-8-12		Тор	111 lb	297 lb	0 lb	0 lb	J7

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.

Lumber

Dry service conditions, unless noted otherwise
 LVI. not to be treated with fire retardant or corrosive.

Handling & Installation

- Handling & Installation

 1. LVL beams must not be cut or 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 rotation

Manufacturer Info Forex APA: PR-L318

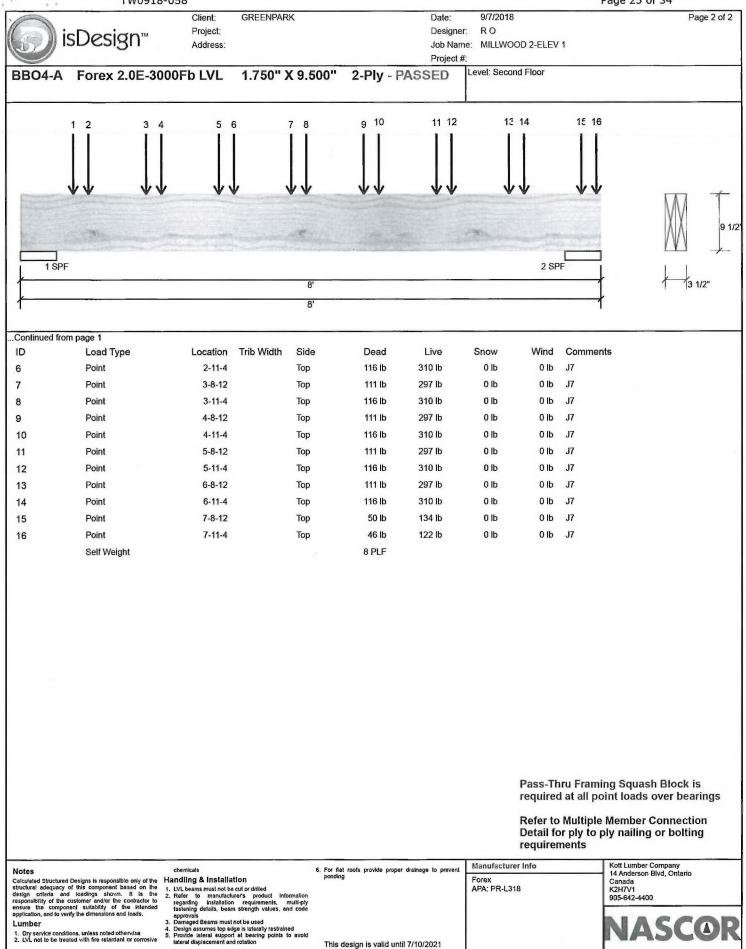
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Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400



This design is





This design is valid until 7/10/2021



GREENPARK

Project: Address: Date: Designer:

9/7/2018

RO

MILLWOOD 2-ELEV 1

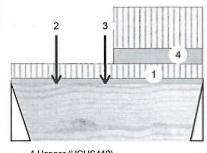
Job Name: Project #:

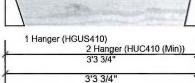
Forex 2.0E-3000Fb LVL

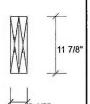
1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor







Page 1 of 1

Unfactored Reactions UNPATTERNED Ib (Uplift) Member Information Brg Wind Girder Application: Floor (Residential) Live Dead Snow Type: Plies: Design Method: 150 83 0 0 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 88 0 0 2 169 Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Not Checked Importance: Normal Vibration: General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead:

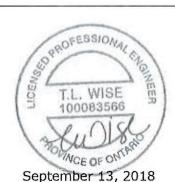
Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	246 ft-lb	1'7 1/2"	34261 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	246 ft-lb	1'7 1/2"	34261 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	246 lb	1'3 1/8"	11596 lb	0.021 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.001 (L/46486)	1'7 3/4"	0.145 (L/240)	0.010 (1%)	D+L	L

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	3%	104 / 225	329	L	1.25D+1.5L
2 - Hanger	2.500"	6%	110 / 253	363	L	1.25D+1.5L



- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on full section width.



/ Lateral	siendemess rado based	on full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-3-12	(Span)1-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-9-7		Near Face	26 lb	70 lb	0 lb	0 lb	J2
3	Point	1-7-8		Near Face	33 lb	35 lb	0 lb	PassaTh	nru-Framing Squash Block is d at all point loads over bearings
4	Tie-In	1-9-4 to 3-3-12	(Span)	Тор	15 PSF	40 PSF	0 PSF	0 PSF	a at an point loads over bearings
	Self Weight		3-11-13		10 PLF				Multiple Member Connection or ply to ply nailing or bolting ments

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-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 rotation

Manufacturer Info Forex APA: PR-L318

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This design is IN THE DESIGN OF THIS COMPONENT.





Project:

GREENPARK

Address:

9/7/2018 Date:

RO Designer:

Job Name: MILLWOOD 2-ELEV 1

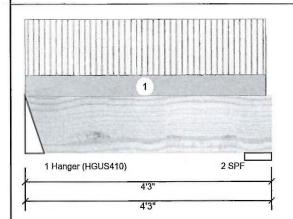
Project #:

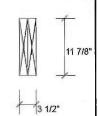
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Page 1 of 1

												ALC: No. of Street	
Member Inf	ormation		-10				Unfacto	red Reac	tions U	NPATT	ERNED Ib	(Uplift)	
Type:	Girder		Applica	tion:	loor (Residen	tial)	Brg	Live		Dead	Sn	wo	Wind
Plies:	2		Design	Method: I	LSD		1	35	i	33		0	0
Moisture Cond	lition: Dry		Building	Code:	NBCC 2010 / C	DBC 2012	2	35		34		0	0
Deflection LL:	360		Load S		Vo								
Deflection TL:	240		Deck:		Not Checked								
Importance:	Normal		Vibratio	n: I	Not Checked								
General Load								1.5			Local Control		
Floor Live:	40 PSF							s and Fac					
Dead:	15 PSF						Bearing	Length	•	React D		al Ld. Case	
							1 - Hanger	4.000"	1%	41	/ 52 9	3 L	1.25D+1.5L
Analysis Re	sults						2-SPF	5.500"	1%	43	/53 9	5 L	1.25D+1.5L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case						_	-
Moment	72 ft-lb	2' 3/4"	34261 ft-lb	0.002 (0%) 1.25D+1.5L	. L					/	OFESSI	DNA.
Unbraced	72 ft-lb	2' 3/4"	34261 ft-lb	0.002 (0%) 1.25D+1.5L	. L					1/5	Pic	12
Shear	36 lb	1'3 1/8"	11596 lb	0.003 (0%) 1.25D+1.5L	L					100		SE 566
Perm Defl in.	0.000 (L/999)	0	999.000 (L/	0.000 (0%)						1 3 4	- 1 1021	m ac
LL Defl inch	0.000 (L/999)	0	999.000 (L/	0.000 (0%)						9	T.L. WI	SE T
TL Defl inch	0.000 (L/999)	0	999.000 (L/	0) 0.000 (0%)						1 -	100083	500
Design Not											1	V.,	1861
	er nailing holes.						1				13	50u	TO ST
	designed to be so										/	"NCE OF	ON
	es must be fasten			cturer's details	S.						Sept	ember 1	3, 2018
	nust be supported	equally by al	l plies.								Cope		,
5 Top braced	at bearings. ced at bearings.												
	iderness ratio bas	ed on full sec	tion width.										
ID	Load Type		Location	Trib Width	Side	Dead	Liv	e Sr	now	Wind	Comment	s	
1	Tie-In	0-0-0	0 to 4-1-14	(Span)0-10-1	Тор	15 PSF	40 PS	F 0 F	PSF	0 PSF			
	Self Weight					10 PLF							

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this compowent 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. Lumber

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

Handling & Installation

LIVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals.

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 rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

requirements

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.

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400

Pass-Thru Framing Squash Block is required at all point loads over bearings Refer to Multiple Member Connection Detail for ply to ply nailing or bolting

Version 18.40.162 Powered by iStruct™



Address:

Project:

GREENPARK

Date: Designer:

9/7/2018 RO

Job Name: MILLWOOD 2-ELEV 1

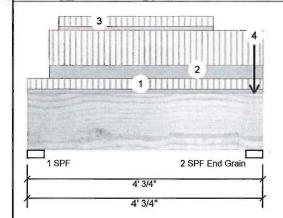
Project #

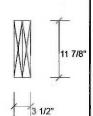
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Page 1 of 1

Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

	Unfacto	red Reaction	S UNPATTER	NED lb (Uplif	t)
	Brg	Live	Dead	Snow	Wind
	1	643	260	0	0
012	2	885	375	0	0

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 1215 ft-lb 2' 5/16" 34261 ft-lb 0.035 (4%) 1.25D+1.5L L Moment Unbraced 1215 ft-lb 2' 5/16" 34261 ft-lb 0.035 (4%) 1.25D+1.5L L Shear 711 lb 2'10 1/8" 11596 lb 0.061 (6%) 1.25D+1.5L L Perm Defl in. 0.001 2' 5/16" 0.120 (L/360) 0.010 (1%) D Uniform (L/34561)2' 5/16" 0.120 (L/360) 0.030 (3%) L 0.003 LL Defl inch (L/13799)

2' 5/16" 0.180 (L/240) 0.020 (2%) D+L

Bearings and Factored Reactions

-							
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - SPF	3.500"	17%	325 / 965	1289	L	1.25D+1.5L	
2 - SPF End Grain	3.500"	20%	469 / 1328	1797	L	1.25D+1.5L	



- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.

TL Defl inch 0.004 (L/9862)

6 Lateral slenderness ratio based on full section width



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-0-12	(Span)3-7-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part, Uniform	0-4-8 to 4-0-12		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-6-8 to 3-2-8		Near Face	25 PLF	68 PLF	0 PLF	Pagg_Fh	ru Framing Squash Block is
4	Point	3-11-0		Near Face	88 lb	169 lb	0 lb	required	at all point loads over bearings
	Self Weight				10 PLF			Refer to	Multiple Member Connection

This design is

Notes

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Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or con

Handling & Installation

Articuling & Installation

LVL beams must not be cut or 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 rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

requirements

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Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1

Version 18.40.162 Powered by iStruct™



Detail for ply to ply nailing or bolting

Project: Address: **GREENPARK**

Date: Designer: 9/7/2018

Job Name: MILLWOOD 2-ELEV 1

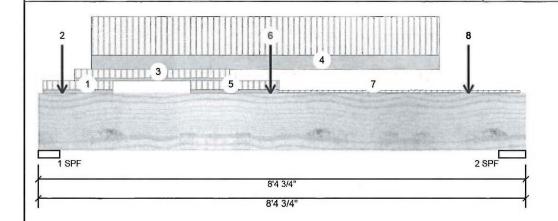
Project #:

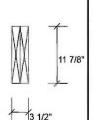
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Wind

0

0

Page 1 of 2

Member Inform	ation
Туре:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Floor Live:	40 PSF
Dead:	15 PSF

Application: Floor (Residential) Design Method: LSD NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No

Not Checked

Not Checked

Brg Live Dead 1594 649 2 1377 568

Bearings and Factored Reactions

Bearing Length 1-SPF 4.500"

2 - SPF 5.500"

Unfactored Reactions UNPATTERNED lb (Uplift)

red l	red Reactions									
Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.						
33%	811 / 2391	3202	L	1.25D+1.5L						
23%	710 / 2066	2776	L	1.25D+1.5L						

Snow

0

0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5966 ft-lb	4'	34261 ft-lb	0.174 (17%)	1.25D+1.5L	L
Unbraced	5966 ft-lb	4'	31511 ft-lb	0.189 (19%)	1.25D+1.5L	L
Shear	3035 lb	7' 1/8"	11596 lb	0.262 (26%)	1.25D+1.5L	L
Perm Defl in.	0.016 (L/5638)	4' 3/4"	0.256 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.040 (L/2325)	4' 13/16"	0.256 (L/360)	0.150 (15%)	L	L
TL Defl inch	0.056 (L/1646)	4' 13/16"	0.384 (L/240)	0.150 (15%)	D+L	L

Deck:

Vibration:

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
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- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on full section width.

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September 13, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-1-0 to 1-3-8	(Span)3-7-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-5-0		Near Face	77 lb	205 lb	0 lb	0 lb	J7
3	Part. Uniform	0-7-8 to 3-3-8		Far Face	25 PLF	68 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-11-0 to 6-11-0		Near Face	115 PLF	308 PLF	0 PLF	0 PLF	
5	Tie-In	2-7-8 to 4-1-12	(Span)3-7-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Point	4-0-0		Far Face	83 lb	150 lb	0 lb	0 lb	F6

Continued on page 2...

Notes

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Handling & Installation

LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code

approvals
Demaged Bearns must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is

Manufacturer Info

APA: PR-L318

READ ALL NOTES ON THIS PAGE AND ON THE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IN THE DESIGN OF THIS COMPONENT.





Project: Address: **GREENPARK**

Date: 9/7/2018

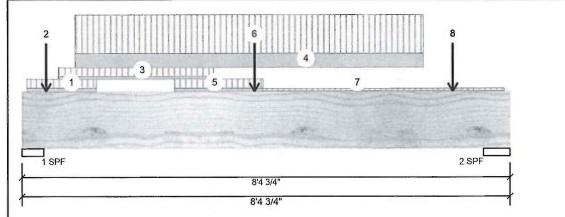
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" 2-Ply - PASSED Level: Second Floor



11 7/8"

Page 2 of 2

Continued	from	page	1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Tie-In	4-1-12 to 8-3-10	(Span)0-11-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
8	Point	7-5-0		Near Face	117 lb	313 lb	0 lb	0 lb	J7
	Self Weight				10 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

Celculated 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 inlended application, and to verify the dimensions and loads.

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

chemicals

Handling & Installation

landling & Installation

LVL beam must not be cut or drilled

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Damaged Beams must not be used

Design assumes top edge is laterally restrained

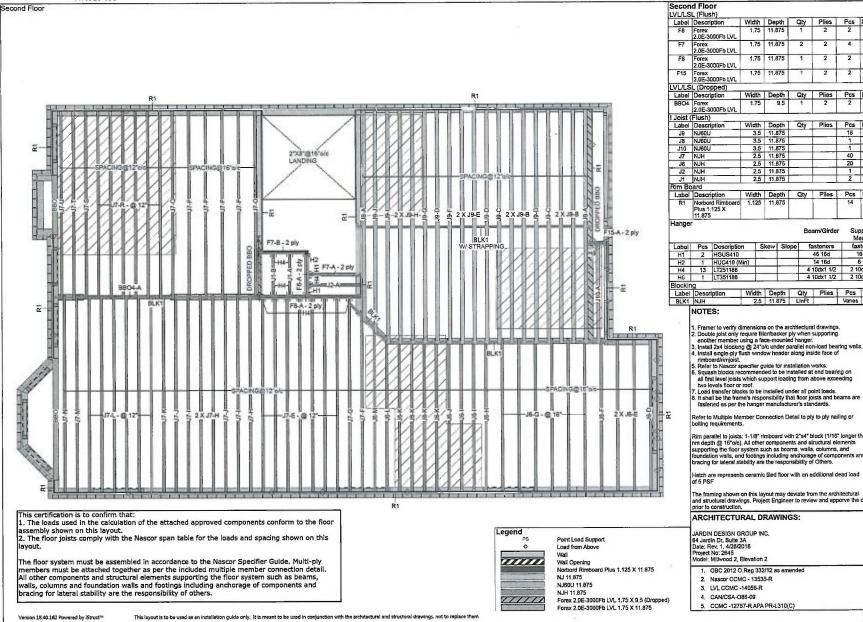
Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400

This design is valid until 7/10/2021



Width Depth Qty Piles Pcs Length Layout Name MILLWOOD 2-ELEV 2 4-0-0 Design Method LSD Description Created Qty Plies Pcs Length June 25, 2018 8-0-0 Builder GREENPARK Sales Rep Pcs Length 18 20-0-0 Width Depth Qty Plies RM 1 18-0-0 Designer 1 8-0-0 RO 40 16-0-0 Shipping 20 14-0-0 1 6-0-0 Project 2 4-0-0 Builder's Project Kott Lumber Company Width Depth Qty Plies Pcs Length 14 Anderson Blyd Stouffville, Ontario Canada K2H7V1 Beam/Girder 905-642-4400 Supported Member Job Path S;\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS \MILLWOOD 2\FLOORS\ELEV 2 fasteners fasteners 46 16d 16 16d 14 16d 6 10d WILLWOOD 2-ELEV 2.isl 4 10dx1 1/2 2 10dx1 1/2 4 10dx1 1/2 2 10dx1 1/2 Second Floor Design Method Floor

1. Framer to verify dimensions on the architectural drawings

6. Squash blocks recommended to be installed at end bearing on

I and transfer blocks to be installed under all point loads

Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than nm depth @ 15"o(c). All other components and structural elements supporting the floor system such as boams, walls, columns, and foundation walls, and footings including encharge of components and bracing for lateral stability are the responsibility of Others

Hatch are represents ceramic filed floor with an additional dead load

The framing shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and apporve the deviation prior to construction.



Loads

Live

Doad

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener Vibration

Ceiling:

Dock

Deflection Girder LL Span L/

LSD

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

Gypsum 1/2"

September 13, 2018

Address:

Project:

GREENPARK

Date: 9/7/2018

Designer: RO

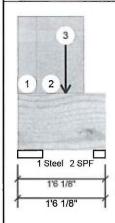
Job Name: MILLWOOD 2-ELEV 2

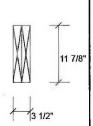
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

Member Inform	nation			Unfactored Reactions UNPATTERNED lb (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Sno	W	Wind	
Plies:	2	Design Method:	LSD	1	72	103		0	0	
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	61	53		0	0	
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load				-	START - S					
Floor Live:	40 PSF			Bearings a	nd Facto	ored Reactions				
Dead:	15 PSF			Bearing Le	ength	Cap. React D/L	b Total	Ld. Case	Ld. Comb.	
				1 - Steel 5.2	250"	2% 129 / 10	8 237	L	1.25D+1.5L	
				2-SPF 2.3	375"	3% 66/9	2 158	L	1.25D+1.5L	

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
	Moment	78 ft-lb	10"	33233 ft-lb	0.002 (0%)	1.25D+1.5L	L	
	Unbraced	78 ft-lb	10"	33233 ft-lb	0.002 (0%)	1.25D+1.5L	L	
	Shear	107 lb	1'4 3/8"	11248 lb	0.009 (1%)	0.9D+1.5L	L	
	Perm Defl in.	0.000 (L/999)	0	999,000 (L/0)	0.000 (0%)			
	LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
	TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
-								

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- sed on full section width

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September 13, 2018

o Latera	ai siendemess ratio baseu c	of full section with.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 0-4-0		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-4-0 to 1-1-12		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Point	0-10-0		Near Face	50 lb	133 lb	0 lb	0 lb	J10
	Self Weight				10 PLF				nru Framing Squash Block is d at all point loads over bearings

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

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 applications and baseful suitability of the intended applications and baseful suitability of the intended

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

chemicals

Handling & Installation

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 Refer to manufacturer's product information
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 fastening details, beam strength values, and code
- rastering details, ocean 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 rotation

For flat roofs provide proper drainage to prevent ponding

This design

Manufacturer info Forex APA: PR-L318

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GREENPARK

Project: Address:

Date: 9/7/2018

Designer: RO

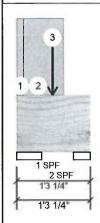
Job Name: MILLWOOD 2-ELEV 3

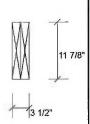
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

Member Inform		Unfactored Reactions UNPATTERNED Ib (Uplift)								
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	2	Design Method:	LSD	1	108		101	0	i	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	65		41	0		0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored l	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	5.250"	3%	126 / 162	288	L	1.25D+1.5L
				2-SPF	3.500"	2%	52/98	149	L	1.25D+1.5L

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
	Moment	58 ft-lb	7 1/2"	34261 ft-lb	0.002 (0%)	1.25D+1.5L	L	
	Unbraced	58 ft-lb	7 1/2"	34261 ft-lb	0.002 (0%)	1.25D+1.5L	L	
	Shear	190 lb	1'4 3/8"	11596 lb	0.016 (2%)	1.25D+1.5L	L	
	Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
	LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
	TL Defl inch	0.000 (L/999)	0	999,000 (L/0)	0.000 (0%)			
-								_

Design Notes

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- 6 Lateral slenderness ratio based on full section width.

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September 13, 2018

o Laterai Si	enderness ratio based t	III juli section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 0-1-8		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-1-8 to 0-9-12		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Point	0-7-8		Far Face	65 lb	173 lb	0 lb	0 lb	J9
	Self Weight				10 PLF				nru Framing Squash Block is d at all point loads over bearings
	ID 1 2	ID Load Type 1 Part. Uniform 2 Part. Uniform 3 Point	1 Part. Uniform 0-0-0 to 0-1-8 2 Part. Uniform 0-1-8 to 0-9-12 3 Point 0-7-8	ID Load Type Location Trib Width 1 Part. Uniform 0-0-0 to 0-1-8 0-0-0 to 0-1-8 2 Part. Uniform 0-1-8 to 0-9-12 0-7-8 3 Point 0-7-8	ID Load Type Location Trib Width Side 1 Part. Uniform 0-0-0 to 0-1-8 Top 2 Part. Uniform 0-1-8 to 0-9-12 Top 3 Point 0-7-8 Far Face	ID Load Type Location Trib Width Side Dead 1 Part. Uniform 0-0-0 to 0-1-8 Top 80 PLF 2 Part. Uniform 0-1-8 to 0-9-12 Top 80 PLF 3 Point 0-7-8 Far Face 65 lb	ID Load Type Location Trib Width Side Dead Live 1 Part. Uniform 0-0-0 to 0-1-8 Top 80 PLF 0 PLF 2 Part. Uniform 0-1-8 to 0-9-12 Top 80 PLF 0 PLF 3 Point 0-7-8 Far Face 65 lb 173 lb	ID Load Type Location Trib Width Side Dead Live Snow 1 Part. Uniform 0-0-0 to 0-1-8 Top 80 PLF 0 PLF 0 PLF 2 Part. Uniform 0-1-8 to 0-9-12 Top 80 PLF 0 PLF 0 PLF 3 Point 0-7-8 Far Face 65 lb 173 lb 0 lb	ID Load Type Location Trib Width Side Dead Live Snow Wind 1 Part. Uniform 0-0-0 to 0-1-8 Top 80 PLF 0 PLF 0 PLF 0 PLF 0 PLF 2 Part. Uniform 0-1-8 to 0-9-12 Top 80 PLF 0 PLF 0 PLF 0 PLF 0 PLF 3 Point 0-7-8 Far Face 65 lb 173 lb 0 lb 0 lb Self Weight 10 PLF Pass-Th

Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

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Manufacturer Info Forex APA: PR-L318

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This design IN THE DESIGN OF THIS COMPONENT.

