

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.



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

2. Nascor CCMC - 13535-R

3. LVL CCMC -14056-R

4. CAN/CSA-086-09

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

0

Label Description

Forex

Forex

Joist (Flush)

F12 NJ

F11 NJ

F10 NJ

F9 NJ

J7 NJH

J6 NJH

J5 NJH

J4 NJH

J3 NJH

J2 NJH

Н3

H4

H7

F15

F3

2.0E-3000Fb LVL

2.0E-3000Fb LVL

2.0E-3000Fb LVL

Forex 2.0E-3000Fb LVL

Norbord Rimboa

Pcs Description

6 LT2-151188

HUCQ1.81/9-

11 LT251188

rimboard/rimjoist.

bolting requirements

prior to construction.

Date: Rev. 1, 4/26/2018

Project No: 2645

Legend

two levels floor or roof.

NOTES:

Plus 1.125 X

11.875

Width Depth

1.75 11.875

1.75 11.875

1.75 11.875

1.5 11.875

1.5 11.875

1.5 11.875

1.5 11.875

2.5 11.875

2.5 11.875

2.5 | 11.875

2.5 11.875

2.5 11.875

2.5 11.875

1.125 11.875

Skew Slope

2.5 11.875 LinFt

3. Install 2x4 blocking @ 24"o/c under parallel non-load bearing walls.

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

all first level joists which support loading from above exceeding

3. It shall be the frame's responsibility that floor joists and beams are

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

rim depth @ 16"o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and

Hatch are represents ceramic tiled floor with an additional dead load

The framing shown on this layout may deviate from the architectural

. Framer to verify dimensions on the architectural drawings. 2. Double joist only require filler/backer ply when supporting

I. Install single-ply flush window header along inside face of

Load transfer blocks to be installed under all point loads.

fastened as per the hanger manufacturer's standards.

bracing for lateral stability are the responsibility of Others.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A

Model: Millwood 2, Elevation 2

. Refer to Nascor specifier guide for installation works.

another member using a face-mounted hanger.

1.75

Qty

Width Depth Qty Plies

3

2

2

Plies

2

2

Beam/Girder

fasteners

4 10dx1 1/2

4 10dx1 1/2

Pcs Length

2

4

4

2

Point Load Support Load from Above

Wall Opening Norbord Rimboard Plus 1.125 X 11.875

NJH 11 875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

Layout Name 12-0-0 MILLWOOD 2-ELEV 2 6-0-0 Design Method LSD 4-0-0 Description Created Pcs Length June 25, 2018 16-0-0 Builder 14-0-0 **GREENPARK** 4-0-0 2-0-0 Sales Rep 35 16-0-0 RM 14-0-0 Designer 12-0-0 RO 1 10-0-0 Shipping 8-0-0 Project 3 6-0-0 Builder's Project Width Depth Qty Plies Pcs Length Kott Lumber Company 14 Anderson Blvd Stouffville, Ontario Canada K2H7V1 Supported Member 905-642-4400 fasteners Job Path 2 10dx1 1/2 S:\CUSTOMERS\GREENPARK 2 10dx1 1/2 MINNISALE HOMES/MODELS MILLWOOD 2\FLOORS\ELEV 2 \MILLWOOD 2-ELEV 2.isi **Ground Floor** Width Depth Qty Plies Pcs Length Design Method LSD Varies 29-0-0 Building Code NBCC 2010 / OBC 2012 Floor Loads Live 40 Dead 15 Deflection Joist 480 LL Span L/ 360 TL Span L/ LL Cant 2L/ 480 TL Cant 2L/ 360 Deflection Girder LL Span L/ 360 TL Span L/ 240 LL Cant 2L/ 480 TL Cant 2L/ 240 Decking Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than Deck SPF Plywood Thickness 3/4" foundation walls, and footings including anchorage of components and Nailed & Glued Fastener Vibration and structural drawings. Project Engineer to review and apporve the deviation

NJ 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

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

Vibration

Ceiling:

Deck

Deflection Girder

Floor

Loads

Live

Dead

Building Code NBCC 2010 / OBC

R1 2"X8"@16"o/c LANDING -6-2X J9-H-6 2 X J9-E 6 த் 2 X J9-B 2 X J9-B F15-A - 2 ply BLK1 F7-B - 2 ply W/STRAPPING 王 F7-A,- 2 ply Blocking BBQ4-A F8-A - 2 ply 로 2 X J7-H 근 2 X J6-E -J6-G - @ 16" -J7-I - @ 12" J7-E - @ 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 lavout.

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

2.0E-3000Fb LVL Layout Name F7 1.75 6-0-0 Forex MILLWOOD 2-ELEV 2 2.0E-3000Fb LVL F6 Forex 1.75 11.875 4-0-0 Design Method 2.0E-3000Fb LVL LSD F15 1.75 11.875 2-0-0 Forex Description 2.0E-3000Fb LVL LVL/LSL (Dropped) Created Label Description Width Depth Qty Plies Pcs | Length June 25, 2018 BBO4 Forex 1.75 2 9.5 8-0-0 Builder 2.0E-3000Fb LVL GREENPARK Joist (Flush) Label Description Width Depth Qty Plies Pcs | Length Sales Rep RM J9 NJ60U 3.5 11.875 18 20-0-0 J8 NJ60U 3.5 11.875 18-0-0 Designer J10 N.I60U 3.5 11.875 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 Project J2 NJH 2.5 11.875 6-0-0 J1 NJH 2.5 11.875 2 4-0-0 Builder's Project Rim Board **Kott Lumber Company** Pcs Length Label Description Width Depth Qty Plies 14 Anderson Blvd Norbord Rimboard 1.125 11.875 14 Stouffville, Ontario Plus 1.125 X 11.875 Canada K2H7V1 Hanger 905-642-4400 Beam/Girder Supported Member Job Path Label Pcs Description Skew Slope fasteners fasteners S:\CUSTOMERS\GREENPARK H1 2 HGUS410 46 16d 16 16d **IMINNISALE HOMESIMODELS** H2 HUC410 (Min) 14 16d 6 10d \MILLWOOD 2\FLOORS\ELEV 2 1 \MILLWOOD 2-ELEV 2.isl H4 13 LT251188 4 10dx1 1/2 2 10dx1 1/2 H6 1 LT351188 4 10dx1 1/2 2 10dx1 1/2 Second Floor

Width Depth

11.875

1.75

Qty Plies

Pcs Length

2

10-0-0

NOTES:

Label Description

BLK1 NJH

Second Floor LVL/LSL (Flush) Label Description

Forex

F8

- 1. 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. Install 2x4 blocking @ 24"o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of rimboard/rimioist

2.5 11,875 LinFt

Width Depth Qty Plies Pcs Length

Varies | 40-0-0

- 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.
- 7. Load transfer blocks to be installed under all point loads. B. 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)

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LSD

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

Gypsum 1/2"

September 13, 2018

MULTIPLE MEMBER CONNECTIONS

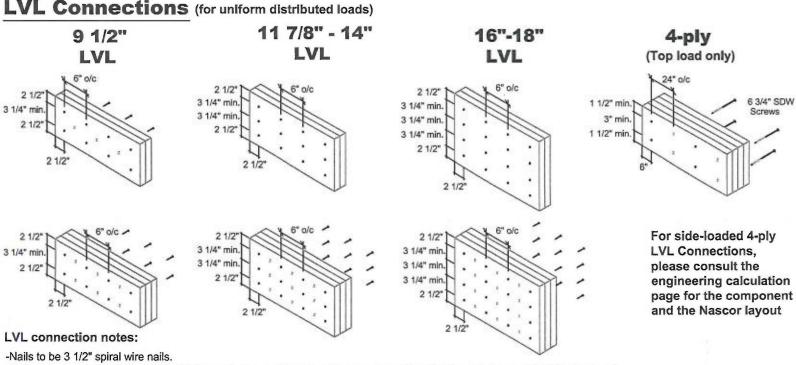
Conventional Connections (for uniform distributed loads)

2x10 2x12 2x6 2x8 2-ply 3-ply

Conventional connection notes:

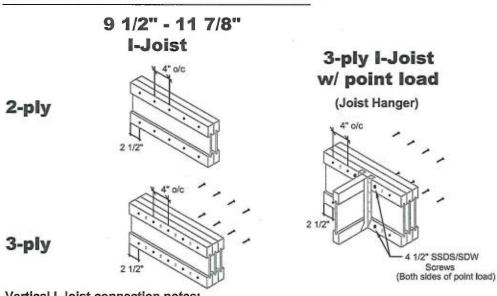
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

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

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

Fx: 613-838-4751

TW0918-058

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.

<u>CODE</u>

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

COMPONENT

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

2x12 2x8 2x10 2x6 2-ply

Conventional connection notes:

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)

11 7/8" - 14" 16"-18" 9 1/2" 4-ply LVL LVL LVL (Top load only) For side-loaded 4-ply LVL Connections, 3 194" mi 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.

- -Nalls to be Graze 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.
- -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.
- -Nalis 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.

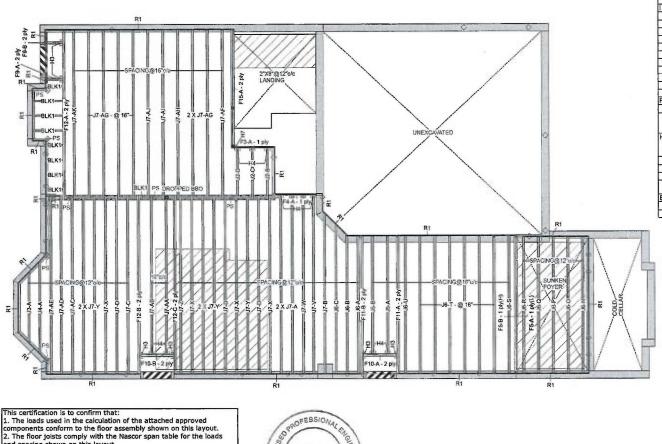
KOTT 3228 Moodle Drive Ottawa, ON K2H 7V1 Ph: 613-838-2775 613-838-4751

MULTI -PLY CONNECTION

Ground Floor

MILLWOOD 2-ELEV 2

LSD



LVL/LSL (Flush) Width Depth Qty Pcs Longth F5 1.75 11.675 2 14-0-0 2.0E-3000Fb LVL Layout Name 11.875 12-0-0 2.0E-3000Fb LVL F4 1.75 11.875 6-0-0 Design Method 2.0E-3000Fb LVL Forex 2.0E-3000Fb LVL 1.75 11.875 Description Joist (Flush) Created Width Depth Qty Plies Pcs Length Label Description June 25, 2018 F12 NJ 1.5 11.875 6 16-0-0 Builder 4 14-0-0 F11 NJ 1.5 11.875 GREENPARK 1.5 11.875 4 4-0-0 F10 NJ F9 NJ 1.5 11.875 4 2-0-0 Sales Rep J7 NJH 2.5 11.875 35 16-0-0 16 14-0-0 RM J6 NJH J5 NJH 2.5 11.875 2.5 11.875 2 12-0-0 1 10-0-0 2.5 11.875 2.5 11.875 J4 NJH 1 8-0-0 J3 NJH J2 NJH 25 11 875 3 8-0-0 Rim Board Label Description Width Depth Qty Plies Pcs Langth R1 Norbord Rimboa Plus 1.125 X 1.125 11.875 12 11.875 Hanger Supported Member Label Pcs Description | Skew Slope fasteners H3 6 LT2-151188 H4 11 LT251188 H7 1 HUCQ1.81/9 4 10dxt 1/2 2 10dxt 1/2 4 10dx1 1/2 2 10dx1 1/2 SDS Blocking Label Description BLK1 NJH Varies 29-0-0

Ground Floor

- Framer to verify dimensions on the architectural drawings. Couble joist only require filter/backer ply when supporting another member using a face-mounted hanger.
 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.
- 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
- 7. Load transfer blocks to be installed under all point loads.
 8. 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 nm 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 oracing for lateral stability are the responsibility of Others

Hatch are represents ceramic tiled floor with an additional dead load of 5 PSF

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: Rov. 1, 4/26/2018 Project No: 2645 Model: Millwood 2, Elevation 2

Legend

- 1. OBC 2012 O.Reg 332/12 as amenda
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4 CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

111111

Point Load Support Load from Above

Watt 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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and spacing shown on this layout.

the included multiple member connection detail.

stability are the responsibility of others.

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

The floor system must be assembled in accordance to the Nascor

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

Specifier Guide. Multi-ply members must be attached together as per

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

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September 13, 2018

Designer RO Shipping Project Builder's Project Kott Lumber Company 14 Anderson Blvd Stouffville, Ontario Canada K2H7V1 905-642-4400 ioh Path S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS \MILLWOOD 2\FLOORS\ELEV 2 WILLWOOD 2-ELEV 2.isl Ground Floor Design Method LSD Building Code NBCC 2010 / OBC 2012 Floor

Loads

40 Live 15 Dead Deflection Joist 480 LL Span L/ 360 TL Span U 480 LL Cant 2L/ TL Cant 2L/ 360 Deflection Girder LL Span L/ 360 TL Span L/ 240 LL Cant 2L/ 480 TL Cant 2L/ 240 Decking SPF Plywood 3/4 Thickness Nailed & Glued Fastener Vibration

isDesign™

GREENPARK Client

Project:

Address:

9/7/2018 Date: Designer:

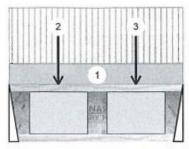
RO

Job Name: MILLWOOD 2-ELEV 1

Project #

2-Ply - PASSED NJ 11.875"

Level: Ground Floor

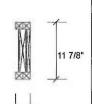


1 Hanger (LT2-151188) 2 Hanger (LT2-151188) 3

Girder

Member Information

Type:



Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

	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
П	Importance:	Normal	Vibration:	Not Checked
1	General Load			
L	Floor Live:	40 PSF		
1	Dead:	15 PSF		

Location Allowed

1'4 1/2" 9020 ft-lb

1'4 1/2" 5749 ft-lb

1'5 9/16" 0.093 (L/360) 0.010 (1%) D

1'5 1/2" 0.093 (L/360) 0.030 (3%) L

1'5 9/16" 0.140 (L/240) 0.020 (2%) D+L

2'10 3/4" 3400 lb

Application:

Floor (Residential)

Comb.

0.044 (4%) 1.25D+1.5L L

0.070 (7%) 1.25D+1.5L L

0.164 (16%) 1.25D+1.5L L

Case

Brg	Live	Dead	Snow	Wind
1	282	106	0	0
2	287	108	0	0

Cap. React D/L lb Total Ld. Case Bearing Length 2.000 20% 132 / 423 555 L Hanger 2.000" 21% 135 / 431 566 L Hanger Uniform

Wind

Bearings and Factored Reactions

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September 13, 2018

Design Notes

LL Defl inch

Analysis Results

Perm Defl in. 0.001

TL Defl inch 0.003

Actual

401 ft-lb

401 ft-lb

(L/38142)

(L/14284)

(L/10392)

558 lb

0.002

Analysis

Moment

Shear

Unbraced

- 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
1	Tie-In	0-0-0 to 3-0-0	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF
2	Point	0-10-4		Far Face	87 lb	233 lb	0 lb
3	Point	2-2-4		Far Face	86 lb	229 lb	0 lb

Capacity

0 PSF Pass-Thru Framing Squash Block is required a fall point loads over bearings

Comments

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

cactoriate abutine to be signs in responsibility of the customer and or the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor of the component suitability of the intended

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

chemicals

Handling & Installation

Joist flanges must not be cut or drilled Refer to latest copy of the Lloist product information details for framing details, stiffner fables, web hote chart, bridging details, musti-ply fastening details and handlingferection details Damaged Lloists 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 robation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs proponding
 READ ALL NOTES ON T

This design i

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





Project: Address: Date: 9/7/2018

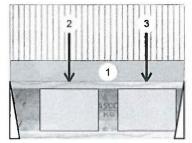
Designer: RO

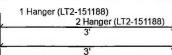
MILLWOOD 2-ELEV 1 Job Name:

Project #:

11.875" 2-Ply - PASSED F10-B NJ

Level: Ground Floor







Wind

0

0

Page 1 of 1

Member Inform	nation		
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		

Bearings and Factored Reactions

Live

343

404

Brg

1

2

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

129

152

Snow

0

0

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 2.000" 25% 161 / 514 675 L 1.25D+1.5L Hanger 2.000" 29% 189 / 606 795 L 1.25D+1.5L Hanger

Analysis Results

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

O DOMONI	narige braces at bearings	•						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	
1	Tie-In	0-0-0 to 3-0-0	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF	
2	Point	1-0-4		Far Face	130 lb	346 lb	0 lb	
3	Point	2-4-4		Far Face	110 lb	293 lb	0 lb	



September 13, 2018

IC Wind Comments 0 PSF 2 0 lb Pass Thru Framing Squash Block is 3 required at all point loads over bearings

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

Notes

Lumber

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

Handling & Installation

- Handling & Installation

 1. Joist finages must not be cut or drilled

 2. Refer to latest copy of the IJoist product information
 details for training details, stifferer tables, web hole
 chart, bridging details, multi-ply festering details and
 handling/erection details

 3. Damaged Joists must not be used

 4. Design assumes top flange to be laterally restrained
 by stlached 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
 For flat roofs pr

This design i

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: 9/7/2018

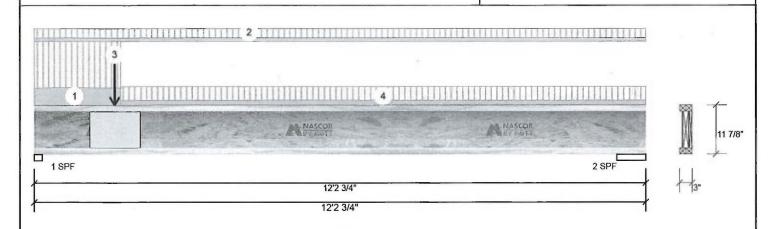
RO Designer:

Job Name: MILLWOOD 2-ELEV 1

Project #:

2-Ply - PASSED NJ 11.875"

Level: Ground Floor



Member Inf	mber Information						Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder		Application	n: Fl	oor (Residenti	ial)	Brg	Live		Dead	Sno	w	Wind
Plies:	2		Design M	ethod: LS	3D		1	512		192		0	0
Moisture Condi	ition: Dry		Building (Code: NI	BCC 2010 / O	BC 2012	2	243		91		0	0
Deflection LL:	360		Load Sha	ring: No	0								
Deflection TL:	240		Deck:	No	ot Checked								
Importance:	Normal		Vibration:	N	ot Checked								
General Load								1000					
Floor Live:	40 PSF						Bearing:	s and Fact	ored	Reactions			
Dead:	15 PSF						Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
			ı				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 Res	ults												
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case					/	SESSIO	No.
Moment	1602 ft-lb	4'6 5/8"	9020 ft-lb	0.178 (18%)	1.25D+1.5L	L					108	Or	MALE
Unbraced	1602 ft-lb	4'6 5/8"	1617 ft-lb	0.991 (99%)	1.25D+1.5L	L				-/	38		181
Shear	993 lb	1 1/8"	3400 lb	0.292 (29%)	1.25D+1.5L	L				- 1	36	-	Mal Choline
Perm Defl in.	0.018 (L/7877)	5'6 5/16"	0.388 (L/360)	0.050 (5%)	D	Uniform					G .	T.L. WIS	SE m
LL Defl inch	0.047 (L/2957)	5'6 5/16"	0.388 (L/360)	0.120 (12%)	L	L				1.0	J .	1000835	66

	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 Defl 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.

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		ru Framing Squash Block is

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

Notes

Colculated 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 International Colculations and to verify the dimensions and loads.

Lumber

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

Handling & Installation

- Handling & Installation

 1. Idials flagses must not be cut or drilled

 2. Refer to latest copy of the IJoist product information
 details for framing details, sifferer tables, web hole
 chart, bridging details, multi-ply fastening details end
 handling/erceton details

 3. Damaged IJoists 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 length>= 3.6 inches
 For flat roofs pro

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.

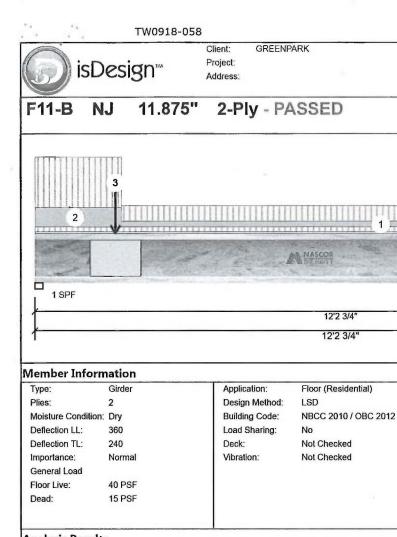
Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1

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September 13, 2018







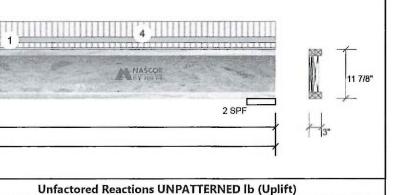
Date: 9/7/2018

Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

Level: Ground Floor



Brg	Live	Dead	Snow	Wind	
1	471	177	0	0	
2	206	77	0	0	

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 1.875" 35% 221 / 707 928 L 1.25D+1.5L 2 - SPF 6.875" 12% 96 / 308 405 L 1.25D+1.5L

Analysis Results

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 3 Top loa 4 Top fla	e plies must be fastened ads must be supported eq nge must be laterally brad n flange braced at bearing	together as per manufa Jually by all plies. ced at a maximum of 5						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind
1	Tie-In	0-0-0 to 12-2-12	(Span)0-3-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF
_	Tio In	0.00 to 1.0 11	(Cnan)2 2 0	Top	15 DOE	AN DOE	U DOE	O DOE



September 13, 2018

O DOMOIN	nango biacoa at boaini	90.							
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 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. Noist flarges must not be cut or drilled

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

3. Damaged lobists 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 length>= 3.5 inches
 For fait roofs pro

Manufacturer Info

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



This design is





Client: **GREENPARK**

Project: Address: Date: 9/7/2018

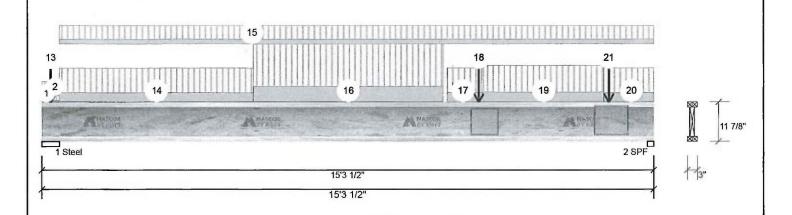
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

2-Ply - PASSED NJ 11.875"

Level: Ground Floor



Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind	
Plies:	2	Design Method:	LSD	1	641		269		0	0	
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	539		202		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	and Fact	ored R	eactions				
Dead:	15 PSF			Bearing L	ength.	Cap.	React 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 DOLLOIN	nungo bracca at bearinge	4.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 0-5-4	(Span)0-3-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-0-0 to 0-5-4	(Span)0-8-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
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	
5	Point	0-2-10		Тор	1 lb	3 lb	0 lb	0 lb	J7	
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 inlended application, and to verify the dimensions and loads. Lumber

Handling & Installation

Handling & Installation

1. IJoist flanges must not be cut or drilled

2. Refer to latest copy of the IJoist product information
details for training details, stitler, tables, web hole
chart, bridging details, multiply fastening details and
handling/erection details

3. Damaged floatist must not be used

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

This design is v

 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
 For flat roots provid Nascor by Kott

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

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

Manufacturer Info

T.L. WISE 100083566 100083566 WCE OF ONTARI September 13, 2018

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1



Version 18.40.162 Powered by iStruct™



Page 2 of 2



Client: **GREENPARK** Project:

Address:

Date:

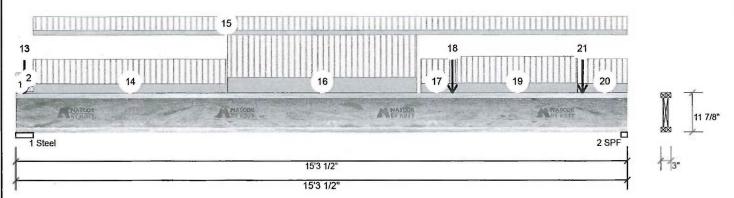
9/7/2018 RO

Designer: Job Name: MILLWOOD 2-ELEV 1

Project #:

2-Ply - PASSED

Level: Ground Floor



Continued fr	om 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 lb	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

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design critieria 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
 Usist not to be treated with fire retardant or contains.

chemicals

Handling & Installation

Handling & Installation

1. Joist flanges must not be cut or drilled

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

3. Damaged Joists 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 lengther 3.5 inches
 For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Manufacturer Info

Nascor by Kott



isDesign™

Client:

Project:

Address:

GREENPARK

Date: Designer: 9/7/2018

RO

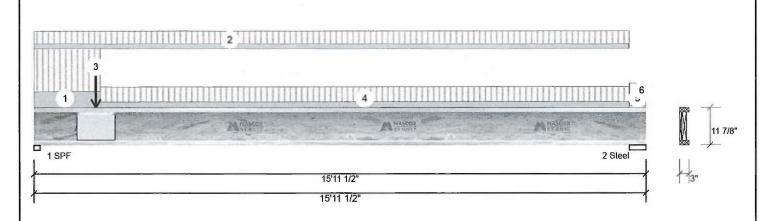
Job Name: MILLWOOD 2-ELEV 1

Project #:

11.875" 2-Ply - PASSED F12-B NJ

TW0918-058

Level: Ground Floor



Member Info	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind	
Plies:	2	Design Method:	LSD	1	712		267		0	0	
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	376		141	1	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	and Fact	ored l	Reactions				
Dead:	15 PSF			Bearing L	ength.	Сар.	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	
A I I - D	IA.										

Analysis Results

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

Location

1-7-6

0-0-0 to 1-8-14

0-0-0 to 15-6-4

1-8-14 to 15-6-4

15-6-4 to 15-11-8

15-6-4 to 15-11-8

Trib Width

(Span)3-3-0

(Span)

0-11-12 to 0-11-12

to 1-1-12

(Span)

0-10-12

(Span)0-5-4

(Span)1-1-12 Top

Side

Top

Top

Top

Top

Near Face

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.

Load Type

Tie-In

Tie-In

Point

Tie-In

Tie-In

Tie-In

4 Top flange must be laterally braced at a maximum of 4'2" o.c.

5 Bottom flange braced at bearings.



Page 12 of 34

Page 1 of 1

0 lb F10 s-Thru Framing Squash Block is Pass-Thru Framing Squasii Siccilings required at all point loads over bearings

Refersto Multiple Member Connection Details for ply to ply nailing or bolting requirements

Notes

ID

2

3

5

6

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

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

chemicals

Handling & Installation

- andling & Installation.

 Notifianges must not be cut or drilled.
 Refer to latest copy of the I Joist product Information details for framing details, stiffener tables, web hote chart, bridging details, multi-ply fastening details and handling/erection details.

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

Dead

15 PSF

15 PSF

129 lb

15 PSF

15 PSF

15 PSF

This design is

Live

40 PSF

40 PSF

343 lb

40 PSF

40 PSF

40 PSF

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
 For first points.

Manufacturer Info Nascor by Kott

Snow

0 PSF

0 PSF

0 lb

0 PSF

0 PSF

0 PSF

Wind

0 PSF

0 PSF

Comments

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

Version 18.40.162 Powered by iStruct™





Client: **GREENPARK**

Project: Address: Date: 9/7/2018

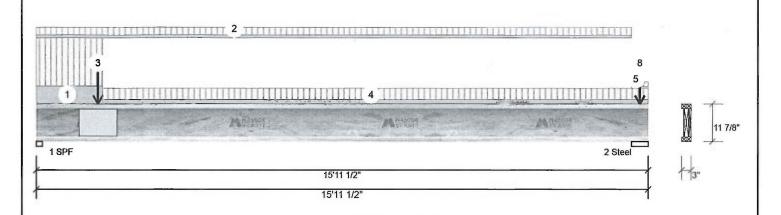
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

11.875" 2-Ply - PASSED F12-C NJ

Level: Ground Floor



Member Infor	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	w	Wind	
Plies:	2	Design Method:	LSD	1	649		244		0	0	
Moisture Condition	i: Dry	Building Code:	NBCC 2010 / OBC 2012	2	417		179		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	Reactions				
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
				1 - SPF	1.875"	48%	305 / 973	1278	L	1.25D+1.5L	
				2 - Steel	5.250"	25%	223 / 625	849	L	1.25D+1.5L	

Analysis Results

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 (L/240)	0.200 (20%)	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 4'10" o.c.

5 Bottom flange braced at bearings

O Dottoin	nango bracoa at boarni	90.							
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 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...

Notes

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 load.

Lumber

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

Handling & Installation

- Harduting & Installation
 Hold inges must not be cut or drilled
 Refer to latest copy of the Lioist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
 Damaged bloists must not be used
 Design assumes top flange to be talerally 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>= 3.5 inches 7. For flat roofs p

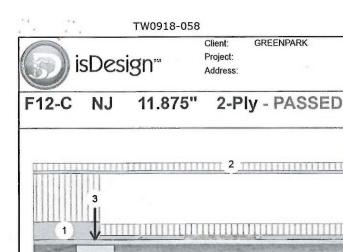
Manufacturer Info Nascor by Kott

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Page 2 of 2

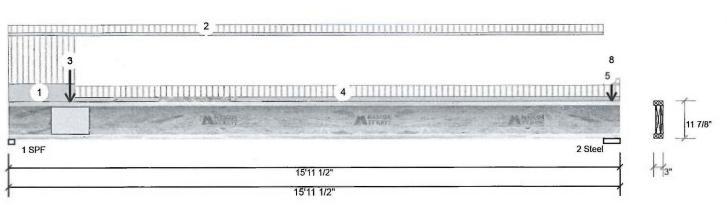


9/7/2018 Date: RO Designer:

Job Name: MILLWOOD 2-ELEV 1

Project #:

Level: Ground Floor



.Continued from page 1 Wind Comments ID Load Type Location Trib Width Side Dead Live Snow 80 lb 0 lb 0 lb 7 Point 15-8-14 Top 30 lb 8 Point 15-8-14 Top 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 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

Francining a Installation

1. Joist flanges must not be cut or drilled

2. Refer to latest copy of the Joist product information
details for framing details, stiffener tables, web hole
chart, bridging details, multi-py fastening details and
handling/eraction details

3. Damaged Joists 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 faches
 For flat roofs provide proper drainage to prevent

This design is valid until 7/10/2021

Manufacturer Info

Nascor by Kott



Project:

Address:

Date: 9/10/2018

Designer: RO

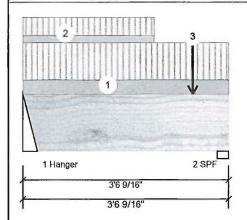
Job Name: MILLWOOD 2-ELEV 1

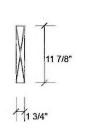
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 1

Member Infor	mation						Unfacto	red React	ions U	NPATTERN	ED lb ((Uplift)		
Туре:	Girder		Application	on: F	loor (Resident	ial)	Brg	Live		Dead	Sno	w	Wind	_
Plies:	1		Design N	/lethod: L	SD		1	555		218		0	0	
Moisture Condition	n: Dry		Building	Code: N	BCC 2010 / O	BC 2012	2	510		201		0	0	
Deflection LL:	360		Load Sha	aring: N	О		3							
Deflection TL:	240		Deck:	N	ot Checked									
Importance:	Normal		Vibration	: N	ot Checked									
General Load														_
Floor Live:	40 PSF						Bearing	s and Fac	ored l	Reactions				
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Com	b.
							1 - Hanger	3.000"	28%	272 / 833	1106	L	1.25D+1.	5L
Analysis Resul	ts						2 - SPF	2.375"	40%	251 / 765	1016	L	1.25D+1.	5L
Analysis Ad	tual	Location	Allowed	Capacity	Comb.	Case								
Moment 78	5 ft-lb	1'9 5/16"	17130 ft-lb	0.046 (5%)	1.25D+1.5L	L						FESSIO/		
Unbraced 78	5 ft-lb	1'9 5/16"	13259 ft-lb	0.059 (6%)	1.25D+1.5L	L					108),	12	

Uniform

Perm Defl in. 0.001 1'9 7/16" 0.108 (L/360) 0.010 (1%) D (L/26669) 0.004 1'9 3/8" 0.108 (L/360) 0.030 (3%) L LL Defl inch (L/10472) TL Defl inch 0.005 (L/7520) 1'9 3/8" 0.161 (L/240) 0.030 (3%) D+L

2'5 1/16" 5798 lb



September 13, 2018

Design Notes

Shear

1 Fill all hanger nailing holes.

745 lb

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

ID	Load Type	Location	Trib 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

0.129 (13%) 1.25D+1.5L L

Squash Block is ed 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

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

portrains supprovals
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 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. This design is v





GREENPARK Client:

Project: Address:

Date: Designer:

9/7/2018 RO

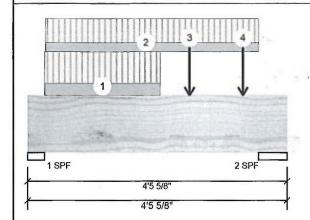
Job Name: MILLWOOD 2-ELEV 1

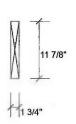
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 1

Member Inform	nation		- NA	Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Sno	w	Wind	
Plies:	1	Design Method:	LSD	1	1024	395		0	0	
Moisture Condition:	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							
General Load		100000000000000000000000000000000000000								
Floor Live:	40 PSF			Bearings a	and Fact	ored Reaction	ıs			
Dead:	15 PSF			Bearing L	ength	Cap. React D/	L lb Total	Ld. Case	Ld. Comb.	
				1-SPF 3	3.500"	54% 493 / 1	536 2029	L	1.25D+1.5L	
				2-SPF 5	5.875"	34% 529 / 1	649 2178	L	1.25D+1.5L	

Ana	lvsis	Resu	lts

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 (L/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			Dana Th	ru Eromina (

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

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

chemicals

- Handling & Installation

 1. UVL beams must not be cut or drilled

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

 3. Demaged Beams must not be used

 4. Deston assumes to adven is laterath vestrained.

For flat roofs provide proper drainage to prevent ponding

This design is

Manufacturer Info

Forex APA: PR-L318

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Client:

Project: Address: GREENPARK

Date: Designer: RO

9/7/2018

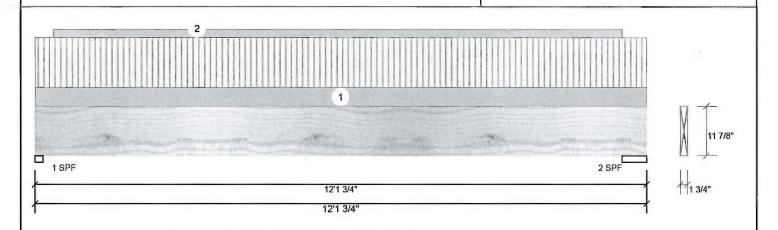
Job Name: MILLWOOD 2-ELEV 1

Project #:

F5-A Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor



nation			Unfactor	ed Reac	tions U	NPATTERN	ED lb (Uplift)	
Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
1	Design Method:	LSD	1	73		67		0	0
Dry	Building Code:	NBCC 2010 / OBC 2012	2	77		70		0	0
360	Load Sharing:	No							
240	Deck:	Not Checked							
Normal	Vibration:	Not Checked	1						
40 PSF			Bearings	and Fac	tored l	Reactions			
15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
	77		1 - SPF	1.875"	10%	83 / 109	192	L	1.25D+1.5L
			2-SPF	5.875"	3%	88 / 115	203	L	1.25D+1.5L
	Girder 1 Dry 360 240 Normal	Girder Application: Design Method: Dry Building Code: 360 Load Sharing: 240 Deck: Normal Vibration:	Girder Application: Floor (Residential) 1 Design Method: LSD Dry Building Code: NBCC 2010 / OBC 2012 360 Load Sharing: No 240 Deck: Not Checked Normal Vibration: Not Checked	Application: Floor (Residential) Brg	Girder Application: Floor (Residential) Design Method: LSD Dry Building Code: NBCC 2010 / OBC 2012 360 Load Sharing: No Deck: Not Checked Vibration: Not Checked Bearings and Fact Bearing Live 1 73 2 77 Bright Code 1 73 2 77 Bearings and Fact Bearing Length	Application: Floor (Residential) Brg Live	Application: Floor (Residential) Brg Live Dead	Application: Floor (Residential) Brg Live Dead Snow	Application: Floor (Residential) Brg Live Dead Snow

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

T.L. WISE 100083566 WCE OF ONTAR September 13, 2018

UNIDATTEDNIED II. (II. I'C.)

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 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 corrosive.

Handling & Installation

Handling & Installation

1. LVL beam 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

This design is

Manufacturer Info

Forex APA: PR-L318

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11 7/8"

Wind

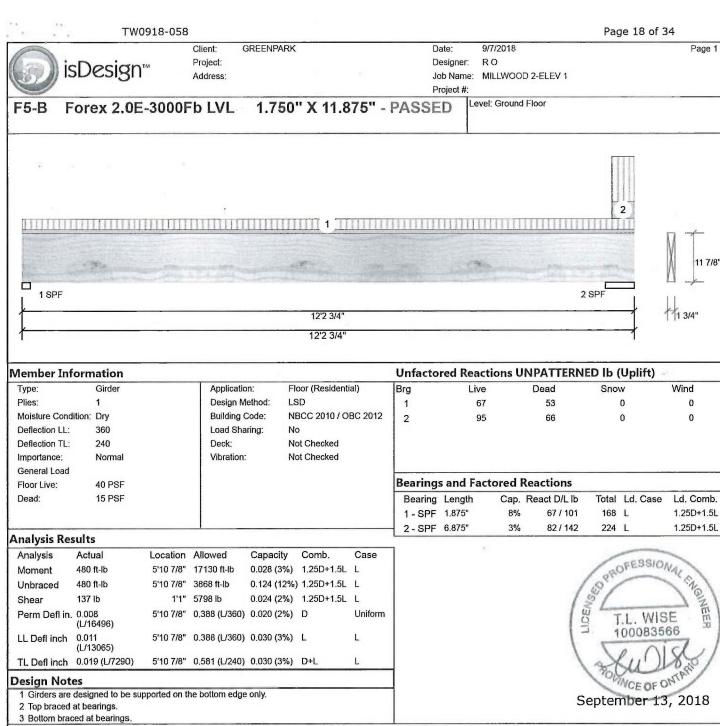
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0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L



3 Bottom b	praced 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	
	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 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
 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-phy
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

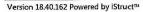
This design is

Manufacturer Info Forex

APA: PR-L318

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Project: Address: Date: 9/7/2018

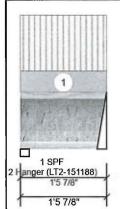
Designer: RO

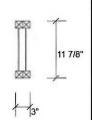
Job Name: MILLWOOD 2-ELEV 1

Project #:

11.875" 2-Ply - PASSED NJ

Level: Ground Floor





Page 1 of 1

Member Inf	ormation						Unfacto	red React	ions U	NPATTERN	ED lb ((Uplift)	
Туре:	Girder		Application	on: F	loor (Resident	ial)	Brg	Live		Dead	Sno	w	Wind
Plies:	2		Design M	ethod: L	SD		1	48		18		0	0
Moisture Cond	ition: Dry		Building (Code: N	IBCC 2010 / O	BC 2012	2	49		18		0	0
Deflection LL:	360		Load Sha	ring: N	lo								
Deflection TL:	240		Deck:	N	lot Checked		1						
Importance:	Normal		Vibration:		lot Checked								
General Load													_
Floor Live:	40 PSF						Bearing:	s and Fact	ored	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
			1				1 - SPF	1.875"	4%	23 / 72	95	L	1.25D+1.5L
Analysis Res	sults						2 - Hanger	2.000"	4%	23/73	96	L	1.25D+1.5L
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					/	FESSIO/	V
Unbraced	27 ft-lb	8 7/8"	8539 ft-lb	0.003 (0%)	1.25D+1.5L	L					PR		NAT CHOWNEED
Shear	83 lb	1 1/8"	3400 lb	0.024 (2%)	1.25D+1.5L	L				-/	9/		151
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1:	3		_ Z
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1 3	2 7	.L. WIS	E m

Design Notes

1 Fill all hanger nailing holes.

TL Defl inch 0.000 (L/999)

- 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

September 13, 2018

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. Lumber

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

chemicals

Handling & Installation

I. Joist langes must not be cut or drilled
 Refer to latest copy of the IJoist product information details for framing details, sifferer tebles, web hole chart, bridging details, multi-ply fastening details and handling/erection details
 Demaged IJoists must not be used
 Design assumes top fange to be laterally restrained by attached sheathing or as specified in engineering notes.

0 999.000 (L/O) 0.000 (0%)

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 lengths—3.5 Inches.
 For flat roofs provider
 READ ALL NOTES OF

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





GREENPARK Client:

Project:

Address:

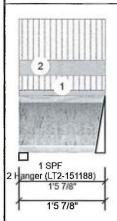
9/7/2018 Date:

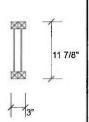
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

NJ 11.875" 2-Ply - PASSED Level: Ground Floor





Page 1 of 1

Member Info	rmation						Unfacto	red React	ions U	NPATTERN	ED lb ((Uplift)	
Туре:	Girder		Applicatio	n: Fl	oor (Resident	ial)	Brg	Live		Dead	Sno	w	Wind
Plies:	2		Design M	ethod: L	SD		1	65		24		0	0
Moisture Conditi	on: Dry		Building C	Code: N	BCC 2010 / O	BC 2012	2	66		25		0	0
Deflection LL:	360		Load Sha	ring: N	o		1.55						
Deflection TL:	240		Deck:	N	ot Checked								
Importance:	Normal		Vibration:	N	ot Checked								
General Load													
Floor Live:	40 PSF		1				Bearing	s and Fact	ored	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF	1.875"	5%	31 / 98	128	L	1.25D+1.5L
Analysis Resu	ılts						2 - Hanger	2.000"	5%	31 / 99	130	L	1.25D+1.5L
Analysis /	Actual	Location	Allowed	Capacity	Comb.	Case					-		
Moment 3	66 ft-lb	8 7/8"	9020 ft-lb	0.004 (0%)	1.25D+1.5L	L					/	FESSIO,	V
Unbraced 3	66 ft-lb	8 7/8"	8539 ft-lb	0.004 (0%)	1.25D+1.5L	L					681	_	J. C.
Shear	12 lb	1 1/8"	3400 lb	0.033 (3%)	1.25D+1.5L	L				1	91		101
Perm Defl in. (0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1.	3 _		- Z
LL Defl inch).000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1 3	T Seller	L. WIS	E 66
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1 -	1	000835	66 "

- 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

September 13, 2018

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
 Lioist not to be treated with fire retardant or con-

Handling & Installation

Handling & Installation

1. Joist flanges must not be cut or drilled

2. Refer to latest copy of the Judist product information details for framing details, eitherner tables, web hole chart, bridging details, multi-byl restrening details and handling/erection details

3. Demaged Judists 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 stiffeness for point load as shown Minimum point load bearing le place 3.5 inches.
 For flat roofs proving the pointing state of the pointin

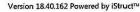
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

This design is v

Manufacturer Info

Nascor by Kott







Client: **GREENPARK**

Project:

Address:

Designer:

RO

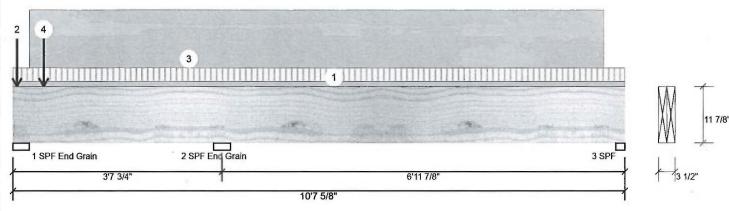
Job Name: MILLWOOD 2-ELEV 1

9/10/2018

Project #

Date:

Level: Ground Floor Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED



Member Intor	mation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Conditio	n: 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		

Analysis	Results
----------	---------

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-617 ft-lb	3'7 3/4"	22269 ft-lb	0.028 (3%)	1.4D	Uniform
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 (∐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
- 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.

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

ľ	Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
	1 - SPF End Grain	3.500"	24%	578 / 1504	2082	L_	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

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
 LVL not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

Alforming of installation of dilled

Refer to manufacturer's product information regarding installation requirements, multi-ply (astening 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

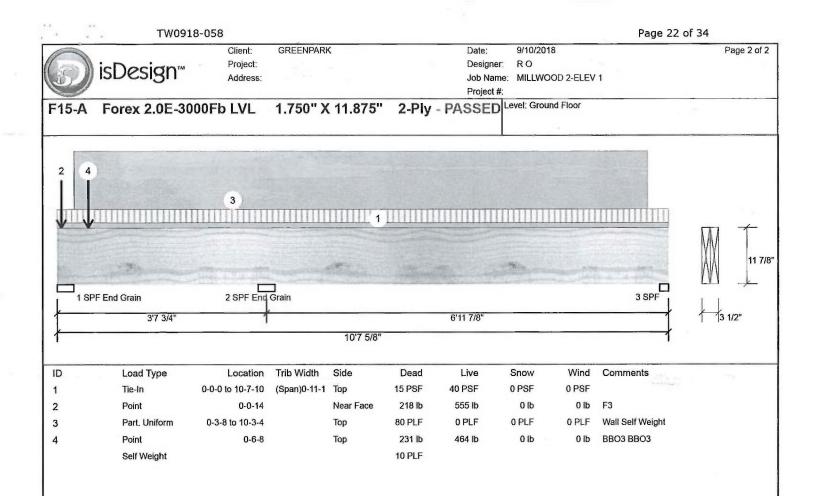
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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





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

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

chemicals

Handling & Installation

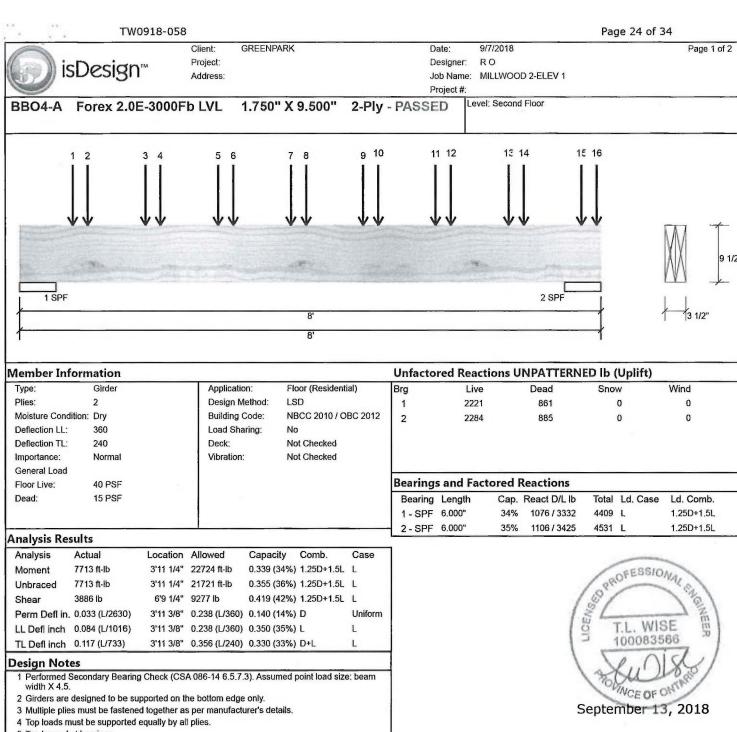
approvals
Damaged Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Manufacturer Info

APA: PR-L318



- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on full section width

Latera	Sichachicas fallo basca off	run sconori mani.								
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 inlended application, and to verify the dimensions and loads.

Lumber

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

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 taterally restrained

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

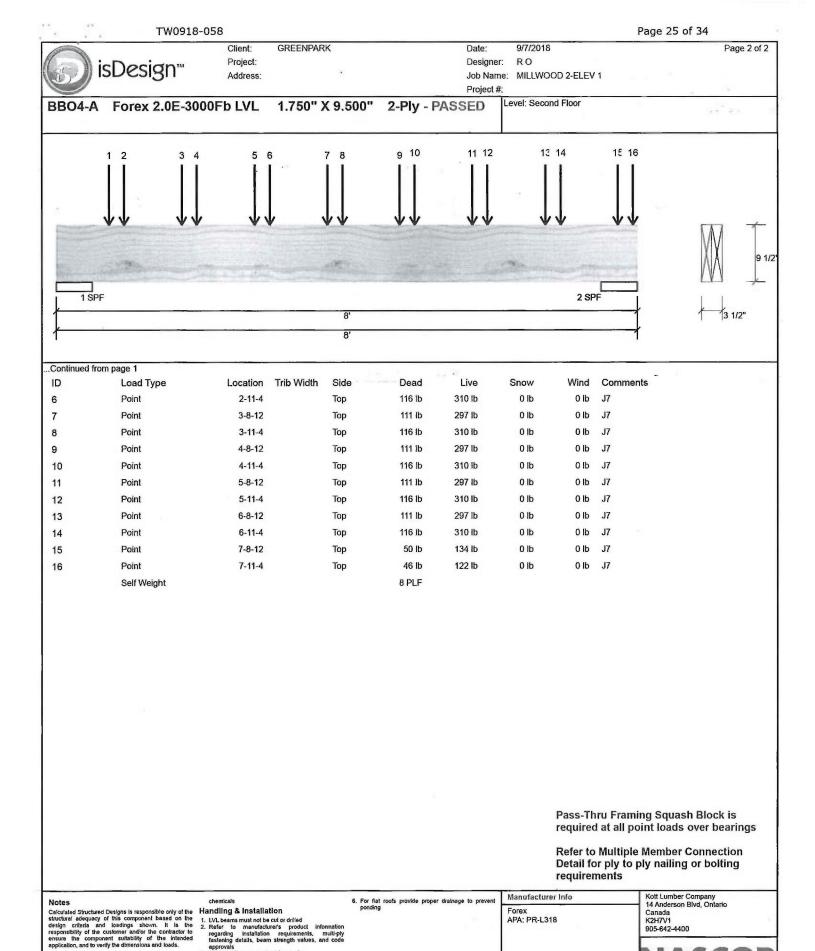
This design is v

Manufacturer Info Forex APA: PR-L318

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This design is valid until 7/10/2021

Lumber

papprovals

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

Project: Address: Date:

9/7/2018 RO

Designer: Job Name: MILLWOOD 2-ELEV 1

Project #:

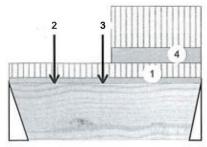
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Brg

1 2 Level: Second Floor



1 Hanger (HGUS410) 2 Hanger (HUC410 (Min)) 3'3 3/4"



Wind

0

0

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

Page 1 of 1

Member Info	rmation			
Туре:	Girder	Application:	Floor (Residential)	T
Plies:	2	Design Method:	LSD	ı
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	1
General Load				ŀ
Floor Live:	40 PSF			Į
Dead:	15 PSF	1		ſ

	Bearings and Factored Reactions												
	Bearing	Length	Cap.	React D/L lb	Total	Ld. Ca							
	1 - Hanger	4.000"	3%	104 / 225	329	L							
_	2 - Hanger	2.500"	6%	110 / 253	363	L							

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

83

88

Snow

0

0

Live

150

169

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

Design Notes

- 1 Fill all hanger nailing holes.
- 2 G
- 3 M
- 4 To
- 5 To
- 6 B

Load Type	Location	Trih Width	Side	Dead	Live	Snow
Lateral slenderness ratio based on	full section width.					
Bottom braced at bearings.				1		
Top braced at bearings.				1		
Top loads must be supported equa	lly by all plies.					
Multiple plies must be fastened tog		acturer's detail:	S.			
Girders are designed to be support						
Civilara ara designad to be support	ad an the hattem a	dae only		1		



September 13, 2018

7 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 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	PassiTi	Pass Thru-Framing Squash Block is required 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	d at all point loads over bearings		
	Self Weight		3-11-13		10 PLF				o Multiple Member Connection or ply to ply nailing or bolting ments		

cardiate staticates besigns responsible why in 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 sectionals and buseful the dimensible and leaf to

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

chemicals

Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-pty fastening details, beam strength values, and code
- approva's Damaged Beams must not be used
- Design assumes top edge is laterally restrained Provide lateral support at bearing points to lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex 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 IN THE DESIGN OF THIS COMPONENT. This design is

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

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





Client:

Project: Address: **GREENPARK**

Date: 9/7/2018

Designer: RO

Job Name: MILLWOOD 2-ELEV 1

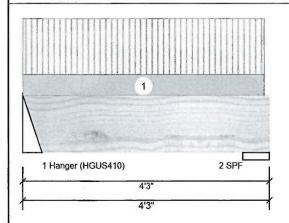
Project #:

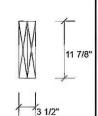
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Page 1 of 1

Member Inf	ormation				,		Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder		Applicati	on: Fi	loor (Resident	ial)	Brg	Live		Dead	Sno	w	Wind
Plies:	2		Design N	fethod: L	SD		1	35		33		0	0
Moisture Cond	ition: Dry		Building	Code: N	BCC 2010 / O	BC 2012	2	35		34		0	0
Deflection LL:	360		Load Sha	aring: N	o								
Deflection TL:	240		Deck:	N	ot Checked								
Importance:	Normal		Vibration	: N	ot Checked								
General Load													
Floor Live:	40 PSF								tored	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb		Ld. Case	Ld. Comb.
							1 - Hanger	4.000"	1%	41 / 52	93	L	1.25D+1.5L
Analysis Res	ults						2 - SPF	5.500"	1%	43 / 53	95	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					/	OFESSIO	No.
Unbraced	72 ft-lb	2' 3/4"	34261 ft-lb	0.002 (0%)	1.25D+1.5L	L					108×	-	SE 566
Shear	36 lb	1'3 1/8"	11596 lb	0.003 (0%)	1.25D+1.5L	L				/	3/		101
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1	W L	- 1 1111	T M
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1	0	T.L. WI	DE M
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			1			1	400.00	1000835	000
Design Note	es						1			/	1	1,0	1861
1 Fill all hange	1 Fill all hanger nailing holes.									32	18	de	Charles .
	designed to be su	• •									1	WCEOF	Old

- 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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-1-14	(Span)0-10-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	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

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
 LVL not to be treated with fire retardant or cor

Handling & Installation

Handling & Installation

1. IV.1 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

For flat roofs provide proper drainage to prevent ponding

This design is

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.

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1

September 13, 2018





Project: Address: Date:

9/7/2018 RO Designer:

Job Name: MILLWOOD 2-ELEV 1

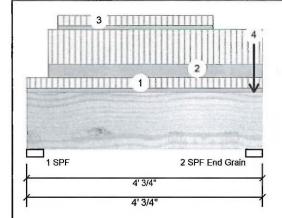
Project #:

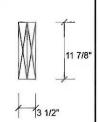
Forex 2.0E-3000Fb LVL F7-B

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Wind 0 0

Ld. Comb.

1.25D+1.5L

Page 1 of 1

Member Info	rmation			Unfacto	red Reac	tions U	NPATTERNI	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	-
Plies:	2	Design Method:	LSD	1	643		260		0	
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	885		375		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 Fac	tored I	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	
				1 - SPF	3.500"	17%	325 / 965	1289	L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1215 ft-lb	2' 5/16"	34261 ft-lb	0.035 (4%)	1.25D+1.5L	L
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 (L/34561)	2' 5/16"	0.120 (L/360)	0.010 (1%)	D	Uniform
LL Defl inc	h 0.003 (L/13799)	2' 5/16"	0.120 (L/360)	0.030 (3%)	L	L
TL Defl inc	h 0.004 (L/9862)	2' 5/16"	0.180 (L/240)	0.020 (2%)	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 braced at bearings.
- 5 Bottom braced at bearings.

2 - SPF End Grain	3.500"	20%	469 / 1328	1797 L	1.25D+1.5L
				PROFES	SIONAL
			(T.L.\	SIONAL FINAL SIONA

September 13, 2018

6 Lateral	sienderness ratio dased o	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	d at all point loads over bearings
	Self Weight				10 PLF				Multiple Member Connection or ply to ply nailing or bolting ments

Notes

Lumber

Handling & Installation

LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-pty 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

This design is

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.



Project:

Address:

Date: 9/7/2018 Designer:

RO

Job Name: MILLWOOD 2-ELEV 1

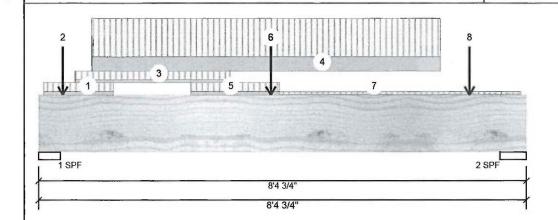
Project #:

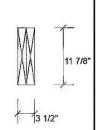
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Page 1 of 2

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

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

Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Dead Snow Wind Brg Live 1594 649 0 0 2 1377 568 0 0

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

Total Ld. Case Ld. Comb. 1 - SPF 4.500" 33% 811 / 2391 3202 L 1.25D+1.5L 2 - SPF 5.500" 23% 710 / 2066 2776 L 1.25D+1.5L

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

Vibration:

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.
- ratio based on full section width

	6 Lateral sienderness ratio base		Juli section width.	101.						
Г	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

Calculated Structured Designs is responsible only of structural adequacy of this component based on design criteria and loadings shown. It is responsibility of the customer and/or the contraction ensure the component suitability of the Inter 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

paprovals
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 in

Manufacturer Info

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.

Kott Lumber Company 14 Anderson Blvd, Ontario

T.L. WISE 100083566

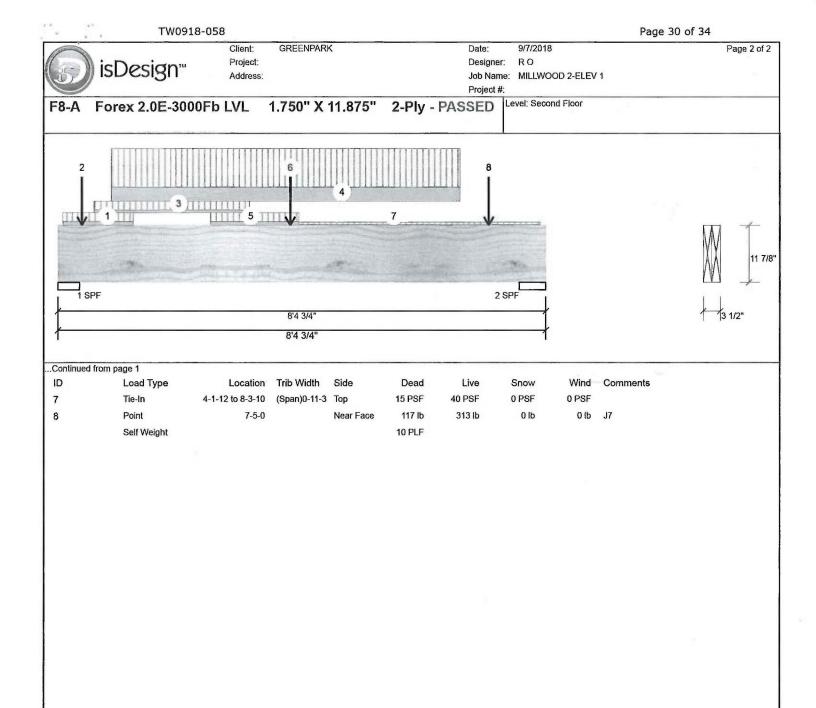
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September 13, 2018



Canada

K2H7V1



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

Handling & Installation

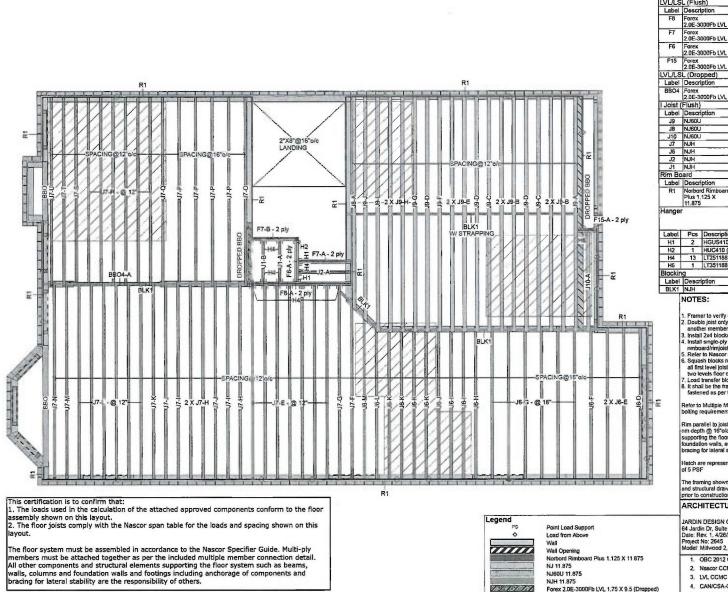
LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code reser to manuacuturers produce information regarding installation requirements, multi-ply fastening details, beam strength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

This design is valid until 7/10/2021

Manufacturer Info Forex APA: PR-L318

Second Floor



Second Floor LVL/LSL (Flush) Plies Pcs Length Width Depth Qty Label Description 1.75 11.875 Forex 2.0E-3000F5 LVL Layout Name 6-0-0 MILLWOOD 2-ELEV 2 2.0E-3000Fb LVL 2 4-0-0 Design Method Forex 2.0E-3000Fb LVL 11 875 2 LSD 11.875 2-0-0 2.0E-3000Fb LVL Description LVL/LSL (Dropped) Created Width Depth | Qty | Plies | Pcs | Length Label Description June 25, 2018 BBO4 Forex 2.0E-3000Fb LVL Builder GREENPARK I Joist (Flush) Label Description
 Width
 Depth
 Qty
 Plies
 Pcs
 Length

 3.5
 11.875
 18
 20-0-0
 Sales Rep 19 NJ60U RM 1 18-0-0 Designer J8 NJ60U 3.5 11.875 J10 NJ60U J7 NJH 3.5 11.875 2.5 11.875 1 8-0-0 40 16-0-0 RO Shipping J6 NJH 2.5 11.875 2.5 11.875 20 14-0-0 Snipping 1 6-0-0 Project J2 NJH J1 NJH 2.5 11.875 2 4-0-0 Builder's Project Rim Board Kott Lumber Company Label Description Width Depth Qty Plies Pcs Length 14 Anderson Blvd Norbord Rimboard 1.125 11.875 Plus 1.125 X 11.875 Stouffville, Ontario Canada K2H7V1 905-642-4400 Beam/Girder Member Job Path Label Pcs Description fasteners S:\CUSTOMERS\GREENPARK H1 2 HGUS410 46 16d 16 16d MINNISALE HOMES/MODELS MILLWOOD 2/FLOORS/ELEV 2 H2 1 HUC410 (Min) 14 16d 6 10d H4 13 LT251188 WILLWOOD 2-ELEV 2.isl 4 10dx1 1/2 2 10dx1 1/2

 Width
 Depth
 Qty
 Plies
 Pcs
 Length

 2.5
 11.875
 LinFt
 Varies
 40-0-0

NOTES:

- Framer to verify dimensions on the architectural drawings.
 Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
 Install 2x4 blocking @ 24*0c under parallel non-load bearing walls.
 Install 3x4 blocking @ 24*0c under parallel non-load bearing walls.
 Install single-cyl flusth window header along inside face of
- nmboard/rimjoist.
 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.
- 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 nm 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 of 5 PSF

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 Nescor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-088-09

Forex 2.0E-3000Fb LVL 1.75 X 11.875

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



September 13, 2018

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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

KIKOT

4 10dx1 1/2 2 10dx1 1/2 Second Floor

Design Method

Floor

Loads

Live

Doad Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/ TI Cant 21/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration Ceiling:

Dock

Deflection Girder LL Span L/

Building Code NBCC 2010 / OBC 2012

LSD

40

15

480

360

480

360

360

240

480

240

5/8"

SPF Plywood

Nailed & Glued

Gypsum 1/2"



GREENPARK Client:

Project: Address:

Date: Designer:

9/7/2018 RO

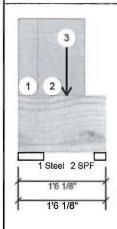
Job Name: MILLWOOD 2-ELEV 2

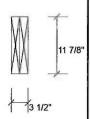
Project #

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

Member Info	mation			Unfactored	Reactions	UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	72	103	0	0
Moisture Condition	n: 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		111.						
Floor Live:	40 PSF			Bearings ar	nd Factored	Reactions		
Dead:	15 PSF			Bearing Le	ngth Ca _l	o. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - Steel 5.2	50" 2"	% 129 / 108	237 L	1.25D+1.5L
				2 - SPF 2.3	75" 3	66 / 92	158 L	1.25D+1.5L

Analysis Results

Amaluaia	Antural	1	Allesseed	Canadia	Cauch	C	
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 bra	aced at bearings.								Septemb
5 Bottom	braced at bearings.								
6 Lateral	slenderness ratio based of	n full section width.							
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

Point 0-10-0 Near Face 50 lb 133 lb 0 lb Self Weight 10 PLF

This design

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

3

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 loade.

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

chemicals

Handling & Installation

anding & installation
LVL beam 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 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

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 K2H7V1 905-642-4400

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September 13, 2018



Project: Address:

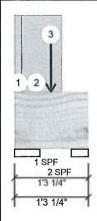
Date: 9/7/2018

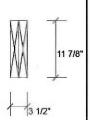
Designer: RO Job Name: MILLWOOD 2-ELEV 3

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

Member Inforn	nation			Unfactor	red Reac	tions U	NPATTERN	ED lb (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	W	Wind
Plies:	2	Design Method:	LSD	1	108		101		0	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	Cap.	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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- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on full section width.

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LICENS	T.L. WISE 100083566	NEER
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September 13, 2018

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					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

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Dry service conditions, unless noted otherwise
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chemicals

Handling & Installation

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 Damaged Beams must not be used

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Manufacturer Info

Forex APA: PR-L318

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