Ground Floor

40

15

480

360

480

360

360

240

480

240

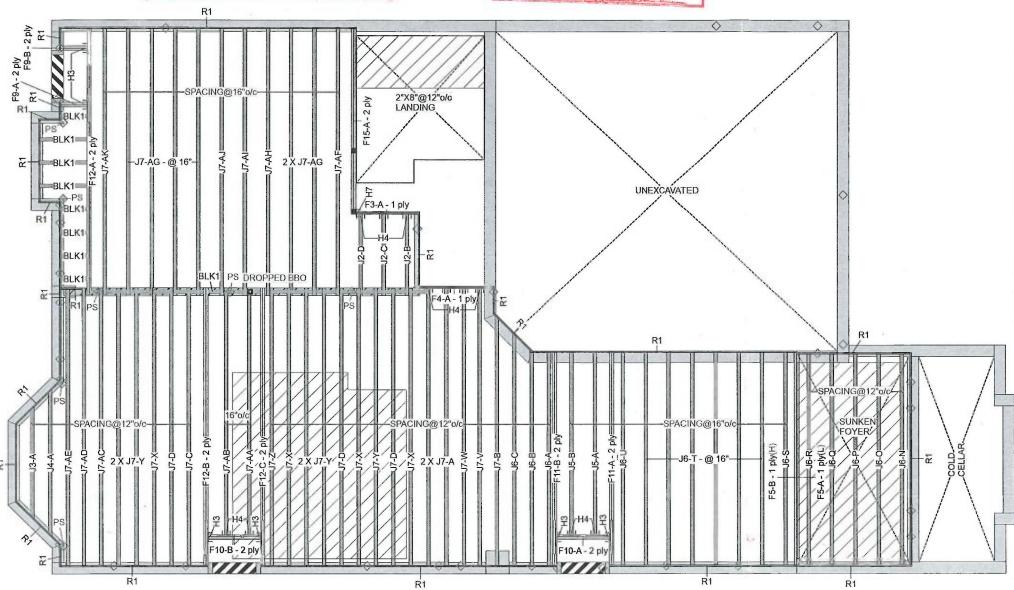
SPF Plywood

Nailed & Glued

All work shall conform to the Ontario Building Code O. Reg. 332/12 as amended

Engineered floor joists shall be installed In accordance with the supplier's layout and specifications forming part of the permit drawings





This certification is to confirm that:

Version 18.40.162 Powered by iStruct™

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)

| BLK1 | NJH | | 2.5 | 11. | B75 1 | .inFt | | Varies | 29-0-0 | Building Code NBCC 2010 / OBC | |
|----------|-----------------------------|-------------|------------|------|---------|-------|-----------|--------|-----------------|---|--|
| | Descr | iption | Width | | | Qty | Plies | Pcs | Length | Design Method LSD | |
| Blockin | | | | | | | | | | Ground Floor | |
| H7 | 1 | HUCQ1.81 | /9- | | | | | | | \MILLWOOD 2\FLOORS\ELEV 2 \MILLWOOD 2-ELEV 2.isl | |
| H4 | 11 | LT251188 | | | | 4 | 10dx1 1/2 | 2 10 | dx1 1/2 | S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS | |
| H3_ | 6 | LT2-151188 | 3 | | | | 10dx1 1/2 | | dx1 1/2 | | |
| Label | Pcs | Description | | Skew | Slope | | asteners | | teners | Job Path | |
| Hanger | | | | 1272 | | | am/Girder | Me | ported ember | Canada K2H7V1 905-642-4400 | |
| R1 | Norbor Plus 1. 11.875 | | 1.125 | 11.8 | 375 | | | 12 | 12 | 14 Anderson Blvd Stouffville, Ontario | |
| | Descr | • | Width | | | Qty | Plies | Pcs | Length | Kott Lumber Company | |
| Rim Bo | ard | | | | | | | | | Builder's Project | |
| J2 | NJH | | 2.5 | 11.8 | 375 | | | 3 | 6-0-0 | Project | |
| J3 | NJH | | 2.5 | 11.8 | | | | 1 | 8-0-0 | Shipping | |
| J4 | NJH | | 2.5 | 11.8 | | | | 1 | 10-0-0 | | |
| J5 | NJH | | 2.5 | 11.8 | | | | 2 | 12-0-0 | Designer RO | |
| J6 | NJH | | 2.5 | 11.6 | | | | 16 | 14-0-0 | | |
| F9 J7 | NJ | | 1.5 2.5 | 11.8 | | 2 | | 35 | 16-0-0 | RM | |
| F10 | NJ | | 1.5 | 11.8 | | 2 | 2 2 | 4 | 4-0-0 2-0-0 | Sales Rep | |
| F11 | NJ | | 1.5 | 11.8 | | 2 | 2 | 4 | 14-0-0 | GREENPARK | |
| F12 | NJ | | 1.5 | 11.8 | | 3 | 2 | 6 | 16-0-0 | Builder | |
| | Descr | iption | Width | De | | Qty | Plies | Pcs | Length | June 25, 2018 | |
| Joist (| Flush) | | | | | | | | | Created | |
| F3 | Forex 2.0E-3 | 000Fb LVL | 1.75 | 11.8 | 375 | | | 1 | 4-0-0 | Description | |
| F4 | Forex 2.0E-3 | 000Fb LVL | 1.75 | 11.8 | | | | 1 | 6-0-0 | Design Method LSD | |
| F15 | Forex 2.0E-3 | 000Fb LVL | 1.75 | 11.8 | 375 | 1 | 2 | 2 | 12-0-0 | Layout Name MILLWOOD 2-ELEV 2 | |
| F5 | Forex 2.0E-3 | 000Fb LVL | 1.75 | 11.8 | 375 | | | 2 | 14-0-0 | | |

Width Depth Qty Plies Pcs Length

NOTES:

Ground Floor

LVL/LSL (Flush)

Label Description

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/rimjoist 5. Refer to Nascor specifier guide for installation works.

6. Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.

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

ARCHITECTURAL DRAWINGS:

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

Legend

Point Load Support Load from Above

Wall Opening Norbord Rimboard Plus 1.125 X 11.875

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

Floor Loads

Live

Dead

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

TL Span L/ LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

Deflection Girder LL Span L/

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

18-331276-000-00RR_FLOOR

Second Floor

Layout Name

Design Method

Description

June 25, 2018

GREENPARK

Sales Rep

Created

Builder

RM

RO

Shipping

Canada

K2H7V1

Job Path

905-642-4400

Design Method

Deflection Joist

Deflection Girder

LL Span L/

TL Span L/

LL Cant 2L/ TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

Floor

Loads

Live

Dead

14 Anderson Blvd

Stouffville, Ontario

Kott Lumber Company

S:\CUSTOMERS\GREENPARK

\MINNISALE HOMES\MODELS MILLWOOD 2\FLOORS\ELEV 2

LSD

2012

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

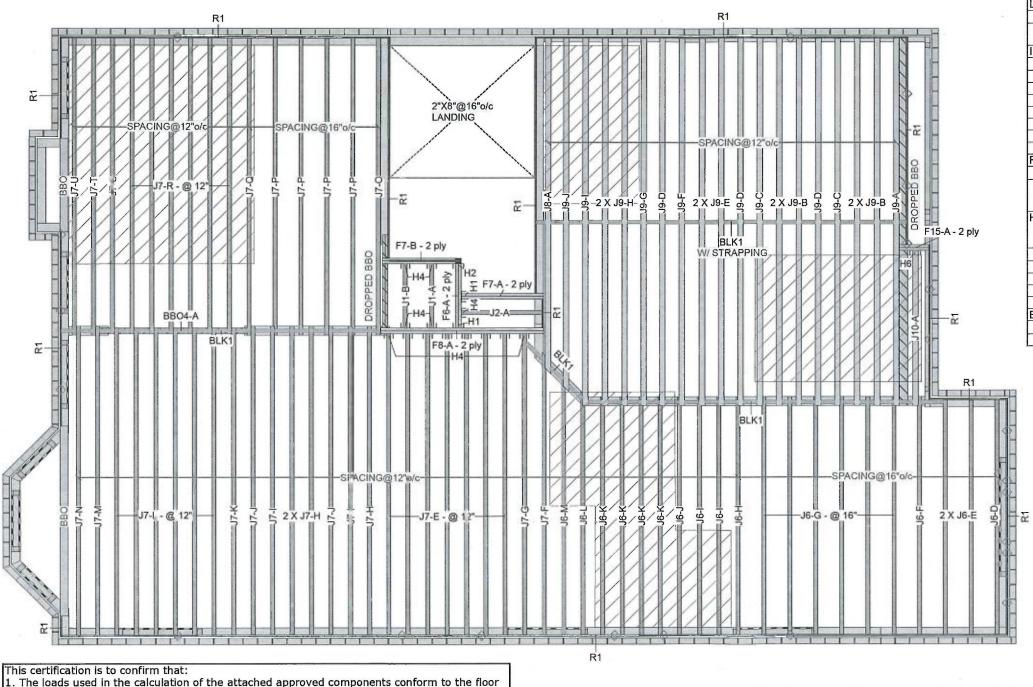
Gypsum 1/2"

\MILLWOOD 2-ELEV 2.isl

Project

LSD

MILLWOOD 2-ELEV 2



ARCHITECTURAL DRAWINGS: Point Load Support 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Load from Above Project No: 2645 Wall Opening Norbord Rimboard Plus 1.125 X 11.875

Legend

0

NJ 11.875

NJ60U 11.875

Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped)

Forex 2.0F-3000Fb LVL 1.75 X 11.875

NJH 11.875

11111

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

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

3. LVL CCMC -14056-R

4. CAN/CSA-O86-09

LVL/LSL (Flush) Pcs Length Width Depth Qty Plies Label Description 2 10-0-0 F8 Forex 2.0E-3000Fb LVL 11.875 F7 6-0-0 1.75 11.875 2.0E-3000Fb LVL F6 Forex 1.75 4-0-0 2.0E-3000Fb LVL F15 Forex 1.75 11.875 2-0-0 2.0E-3000Fb LVL LVL/LSL (Dropped) Label Description Width Depth Qty Plies Pcs Length BBO4 Forex 1.75 9.5 8-0-0 2.0E-3000Fb LVL Joist (Flush) Label Description Pcs Length Width Depth Qty Plies J9 NJ60U 3.5 11.875 18 20-0-0 JIS NJEOU 3.5 11.875 18-0-0 Designer J10 NJ60U 3.5 11.875 8-0-0 J7 NJH 2.5 11.875 40 16-0-0 J6 NJH 2 5 11 875 20 | 14-0-0 J2 NJH 2.5 11.875 6-0-0 J1 NJH 2.5 11.875 2 4-0-0 Builder's Project Rim Board Label Description Pcs Length Width Depth Qty Plies Norbord Rimboard 1.125 11.875 Plus 1.125 X 11.875 Hanger Beam/Girder Supported Member Skew Slope Label Pcs Description fasteners fasteners 2 HGUS410 H1 46 16d 16 16d H2 1 HUC410 (Min) 6 10d 14 16d 4 10dx1 1/2 H4 13 LT251188 2 10dx1 1/2 Second Floor H6 1 LT351188 4 10dx1 1/2 2 10dx1 1/2 Blocking Building Code NBCC 2010 / OBC Label Description Width Depth Qty Plies Pcs Length

NOTES:

BLK1 NJH

Second Floor

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

2.5 11.875 LinFt

- 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.
- Load transfer blocks to be installed under all point loads.
- It shall be the frame's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

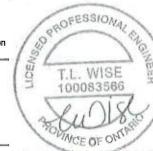
Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than rim depth @ 16"o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and foundation walls, and footings including anchorage of components and bracing for lateral stability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

Hatch are represents ceramic tiled floor with an additional dead load

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

JARDIN DESIGN GROUP INC. Model: Millwood 2, Elevation 2

2. Nascor CCMC - 13535-R



September 13, 2018

assembly shown on this layout.

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

The floor system must be assembled in accordance to the Nascor Specifier Guide. Multi-ply

All other components and structural elements supporting the floor system such as beams,

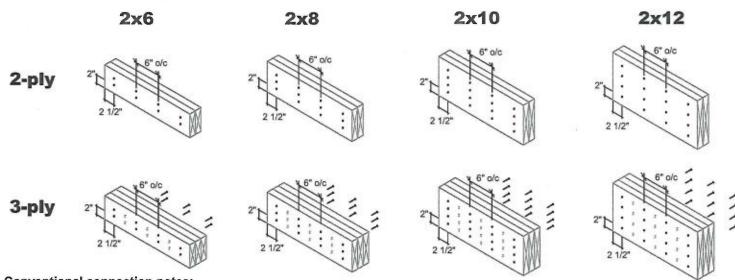
walls, columns and foundation walls and footings including anchorage of components and

bracing for lateral stability are the responsibility of others.

members must be attached together as per the included multiple member connection detail.

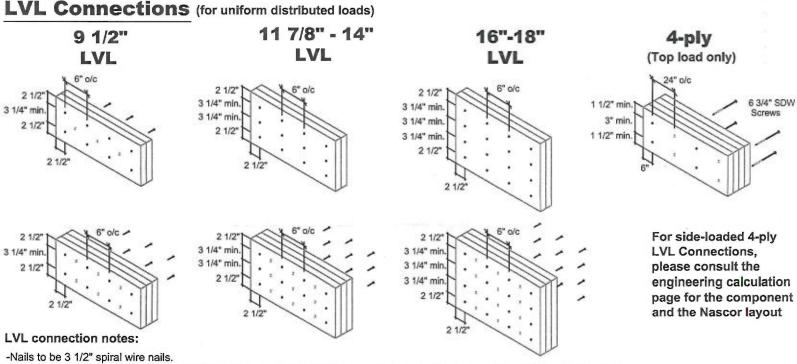
MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)



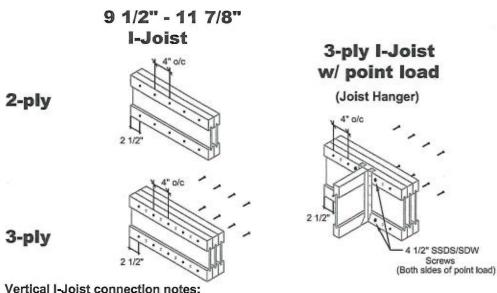
Conventional connection notes:

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



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

Vertical I-Joist Connections (for uniform distributed loads)



Vertical I-Joist connection notes:

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



MULTI-PLY CONNECTION DETAILS

> Date: November 30, 2016 Scale: NTS

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

Ex: 613-838-4751

Engineering Note Page (ENP-2)

REVISION 2009-10-09

Please read all notes prior to installation of the component

DESIGN INFORMATION

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

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

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

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

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

Installation of NASCOR joists is to be carried out in accordance with the current edition of the manufacturer's approved literature available at http://www.nascor.ca.

CODE

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

COMPONENT

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

HANDLING AND INSTALLATION

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



MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)

2-ply

2x6





2x8





3-ply









Conventional connection notes:

-Nails to be 3" 10d spiral wire nails.

-Nalis to be 3 four spiral wife rials.

-Nalis to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.

-Number of rows and spacing as per details shown, unless noted otherwise,

-"X" represents nall driven from the opposite side.

11 7/8" - 14"

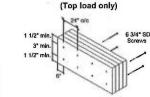
LVL

LVL Connections (for uniform distributed loads)

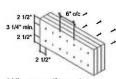
LVL

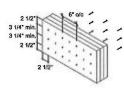


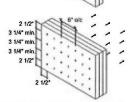
16"-18" LVL



4-ply







For side-loaded 4-ply LVL Connections, please consult the engineering calculation page for the component and the Nascor layout

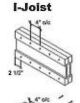
LVL connection notes:

- -Nails to be 3 1/2" spiral wire nails.
- -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.
- -Minimum 3 114" 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)

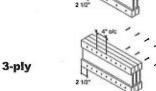
9 1/2" - 11 7/8" **I-Joist**

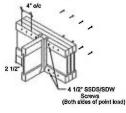
2-ply



3-ply I-Joist w/ point load

(Joist Hanger)





Vertical I-Joist connection notes

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

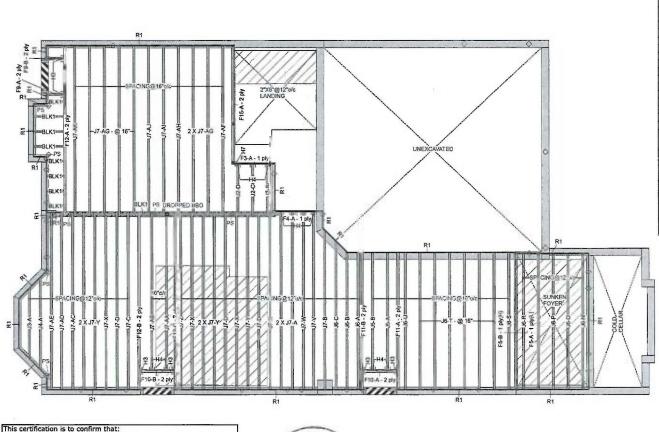
котт 3228 Moodle Drive Ottawa, ON K2H 7V1 Ph: 613-838-2775

MULTI-PLY CONNECTION

Ground Floor

MILLWOOD 2-ELEV 2

Pcs Longth 2 14-0-0



Version 18.40.162 Powered by iStruct^{ru}

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

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

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

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



September 13, 2018

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

2.0E-3000Fb LVL Layout Name 11.875 12-0-0 Forex 2.0E-3000Fb LVL F4 6-0-0 1.75 Forex Design Method 2.0E-3000Fb LVL LSD F3 1.75 Forex Description 2.0E-3000Fb LVL Joist (Flush) Created
 Width
 Depth
 Qty
 Plies
 Pcs
 Length

 1.5
 11.875
 3
 2
 6
 16-0-0

 1.5
 11.875
 2
 2
 4
 14-0-0
 Label Description June 25, 2018 F12 NJ Builder F11 NJ GREENPARK F10 NJ 1.5 11.875 4 2-0-0 Sales Rep F9 NJ 1.5 11.875 2 J7 NJH 2.5 11.875 2.5 11.875 35 18-0-0 R M 16 14-0-0 Designer J6 NJH J5 NJH 2.5 11.875 2 12-0-0 1 10-0-0 RO 2.5 11.875 1 8-0-0 Shipping 2.5 11.875 3 8-0-0 Project J2 NJH 25 11.875 Rim Board Width Depth Qty Plies Pcs Length Label Description 1 125 11.875 Norbord Rimboard Plus 1.125 X 11.875 Hanger Member

Width Dopth Qty

1.75 11.875

| H7 | 1 | HUCQ1. | 81/9- | | | | | |
|---------|------|---------|-------|--------|-------|-------|--------|--------|
| Blockin | g | | | | | | | |
| Label | Desc | ription | Width | Depth | Qty | Piles | Pcs | Length |
| BLK1 | NJH | | 25 | 11.875 | LinFt | | Varies | 29-0-0 |

fasteners

NOTES:

H3 6 LT2-151188

H4 11 LT251188

Ground Floor

F5

LVL/LSL (Flush)
Label Description

Forex

Framer to verify dimensions on the architectural drawings.

Label Pcs Description Skew Slope

- 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.
- 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. two levels floor or fool.

 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 regulrements.

R/m parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than ntm depth @ 16°o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and (oundation 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

Legend

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

2. Nascor CCMC - 13535-R

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

3. LVL CCMC -14056-R

4. CAN/CSA-O86-09

Point Load Support Load from Above Norbord Rimboard Plus 1.125 X 11.875 N.I 11 875 NJH 11.875

Forex 2.0E-3000Fb LVL 1.75 X 11.875

111111

Bullder's Project Kott Lumber Company 14 Anderson Blvd Stouffville, Ontario Canada K2H7V1 905-642-4400 fasteners Job Path 4 10dx1 1/2 2 10dx1 1/2 S:\CUSTOMERS\GREENPARK 4 10dx1 1/2 2 10dx1 1/2 MINNISALE HOMES/MODELS
MILLWOOD 2/FLOORS/ELEV 2 MILLWOOD 2-ELEV 2.isl **Ground Floor** Design Method Varies 29-0-0 Building Code NBCC 2010 / OBC 2012 Floor Loads 40 1 iva 15 Dead Deflection Joist LL Span L/ 480 360

> 480 360

> 360

240

480

240

3/4"

SPF Plywood

Natled & Glued

TL Span 1/

LI Cant 2L/

TI Capt 21/

LL Span L/

TI Span I/

LL Cant 2L/

TL Cant 2L

Decking

Thickness

Fastener

Vibration

Dock

Deflection Girder

PS



GREENPARK Project:

Address:

Date:

9/7/2018

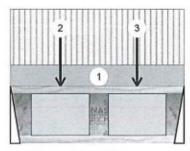
Designer: RO

MILLWOOD 2-ELEV 1 Job Name:

Project #:

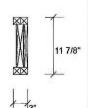
11.875" 2-Ply - PASSED NJ

Level: Ground Floor



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

3'



Wind

Page 1 of 1

| Туре: | 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 | | - 34.700 | |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |
| | | | |

Unfactored Reactions UNPATTERNED Ib (Uplift) Bra Live Dead

| 1 | 282 | 106 | 0 | 0 |
|----|-----|-----|---|---|
| 2 | 287 | 108 | 0 | 0 |
| () | | | | |

Analysis Results

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

Bearings and Factored Reactions

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------------|--------|------|--------------|-------|----------|------------|
| 1 - Hanger | 2.000" | 20% | 132 / 423 | 555 | L | 1.25D+1.5L |
| 2 - Hanger | 2.000" | 21% | 135 / 431 | 566 | L | 1.25D+1.5L |



1 Fill all hanger nailing holes.

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

3 Multiple plies must be fastened together as per manufacturer's details.

4 Top loads must be supported equally by all plies.

Load Type

Tie-In

Point

Point

5 Top flange braced at bearings.

6 Bottom flange braced at bearings.



Wind Comments 0 PSF

Pass-Thru Framing Squash Block is requ₩ed aball point loads over bearings

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

Notes

ID

2

3

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 corre

Handling & Installation

Location

0-10-4

2-2-4

0-0-0 to 3-0-0

Trib Width

(Span)1-9-8

Side

Top

Far Face

Far Face

IAMOLING & INSTALLATION

I Jubist flanges must not be cut or drilled

Refer to latest copy of the IJoist product information
detals for framing detals, eliffener tables, web hole
chart, bridging detals, multi-by frastening detals and
handling/erection detals

Demaged IJoist must not be used

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

Provide lateral support at bearing points to evoid 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

Dead

87 lb

86 lb

15 PSF

Live

40 PSF

233 lb

229 lb

Manufacturer Info Nascor by Kott

Snow

0 PSF

0 lb

0 lb

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



Version 18.40.162 Powered by iStruct™





GREENPARK

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

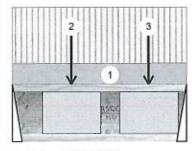
RO

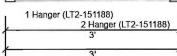
MILLWOOD 2-ELEV 1

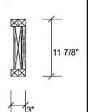
Job Name: Project #:

2-Ply - PASSED NJ 11.875"

Level: Ground Floor







Wind

0

0

Page 1 of 1

| Mem | ber | Info | rma | tior |
|-----|-----|------|-----|------|
| | | | | |

| Г | Type: | Girder |
|---|---------------------|--------|
| | Plies: | 2 |
| | Moisture Condition: | Dry |
| | Deflection LL: | 360 |
| | Deflection TL: | 240 |
| | Importance: | Normal |
| | General Load | |
| | Floor Live: | 40 PSF |
| | | |

15 PSF

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

2 404

Brg

| Pennings and Eastered Peastions | |
|---------------------------------|------|
| | |
| | |
| | |
| | |
| | |
| | |

Dead

129

152

Snow

0

0

Unfactored Reactions UNPATTERNED Ib (Uplift)

Analysis Results

Dead:

| 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 |
| TI Deflinch | 0.004 (1.77538) | 1'1 5/16" | 0.140 (1/240) | 0.030 (3%) | D+L | L |

Bearings and Factored Reactions

Live

343

| 9 | | | | | | |
|---------------|--------|------|--------------|-------|----------|------------|
| Bearing | Length | Сар. | React D/L lb | Total | Ld. Case | Ld. Comb. |
| 1 - Hanger | 2.000" | 25% | 161 / 514 | 675 | L | 1.25D+1.5L |
| 2 - Hanger | 2.000" | 29% | 189 / 606 | 795 | L | 1.25D+1.5L |

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



| Snow |
|-------|
| |
| 0 PSF |
| 0 lb |
| 0 lb |
| |

Wind Comments 0 PSF 0 lb Pass ThruFraming Squash Block is required at all point loads over bearings

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

Notes

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

chemicals

Handling & Installation

- andling & installation
 Lolist flanges must not be cut or drilled
 Refer to latest copy of the Lloist product information
 details for framing details, sittlener tables, web hote
 chart, bridging details, multi-ply fastering details and
 handling/erection 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 rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roots

This design

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, Onlario Canada K2H7V1



Client:

GREENPARK

Address:

Project:

Date:

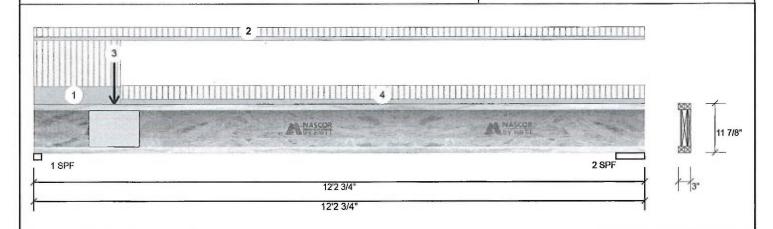
9/7/2018

RO Designer: MILLWOOD 2-ELEV 1 Job Name:

Project #:

2-Ply - PASSED NJ 11.875"

Level: Ground Floor



| Vlember Info | rmation | | | Unfactor | red Reac | tions U | NPATTERN | ED IP (| Uplift) | |
|--------------------|---------|----------------|----------------------|----------|----------|---------|--------------|---------|----------|------------|
| Type: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Snow | / | Wind |
| Plies: | 2 | Design Method: | LSD | 1 | 512 | | 192 | C |) | 0 |
| Moisture Condition | on: Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 243 | 61 | 91 | C | | 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 F | Reactions | | | |
| Dead: | 15 PSF | | | Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
| | | | | 1-SPF | 1.875" | 38% | 240 / 767 | 1008 | L | 1.25D+1.5L |
| | | | | 2-SPF | 6.875" | 14% | 114 / 365 | 479 | L | 1.25D+1.5L |

Analysis Results

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



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

5 Bottom flange braced at bearings.



TI WISE THE

100083566

HALDA TERRITOR II (II 1954)

| 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 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
 iJoist not to be treated with fire retardant or continuous.

Handling & Installation

Andling & Installation

Loist flanges must not be cut or drilled

Refer to latest copy of the Lloist product information
details for framing details, suffland rables, web hole
chart, bridging details, multi-ply fastening details and
handling/erection details

Damaged Lloist must not be used

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

This design is

5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
7. For that roofs pro

READ ALL NOTES ON THIS PAGE AND ON THE CONTAINS SPECIFICATIONS AND CRITERIA USED

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT IN THE DESIGN OF THIS COMPONENT.

Manufacturer Info

Nascor by Kott

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





Client: **GREENPARK**

Project: Address:

Date:

9/7/2018

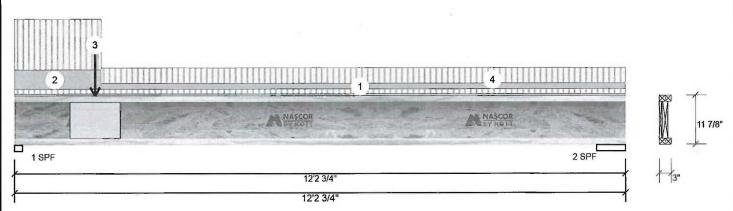
RO

Designer: Job Name: MILLWOOD 2-ELEV 1

Project #:

2-Ply - PASSED 11.875"

Level: Ground Floor



| Member Inform | nation | | | Unfacto | red Reac | tions U | NPATTERNI | ED lb (| Uplift) | | |
|--------------------|--------|----------------|----------------------|---------|-----------|---------|--------------|---------|----------|------------|---|
| Type: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Snov | N | Wind | |
| Plies: | 2 | Design Method: | LSD | 1 | 471 | | 177 | | 0 | 0 | |
| Moisture Condition | : Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 206 | | 77 | | 0 | 0 | |
| Deflection LL: | 360 | Load Sharing: | No | 1 - | | | | | | | |
| Deflection TL: | 240 | Deck: | Not Checked | | | | | | | | |
| Importance: | Normal | Vibration: | Not Checked | | | | | | | | |
| General Load | | | | | | | | | | | _ |
| Floor Live: | 40 PSF | | | Bearing | s and Fac | tored l | Reactions | | | | |
| Dead: | 15 PSF | | | Bearing | Length | Сар. | 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

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



Design Notes

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

| Ì | ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|---|----|-----------|-------------------|-------------------|-----------|--------|--------|-------|-------|----------------------------|
| ı | 1 | Tie-In | 0-0-0 to 12-2-12 | (Span)0-3-12 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| I | 2 | Tie-In | 0-0-0 to 1-8-14 | (Span)3-3-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| I | 3 | Point | 1-7-6 | | Near Face | 106 lb | 282 lb | 0 lb | 0 lb | F10 |
| I | 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 |

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 latended application, and to verify the dimensions and loads.

Lumber

Handling & Installation

Andling & Installation

Lolst flanges must not be cut or drilled
Refer to latest copy of the Lolst product information
detals for framing detals, stiflener tables, veb hole
chart, bridging details, multi-ply fastering details and
handling/erection details
Damaged Lolsts must not be used
Design assumes top flange to be laterally restrained
by ettached 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 Bat roofs pro

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

Client: **GREENPARK**

Project:

Address:

Date: 9/7/2018

Designer:

Job Name: MILLWOOD 2-ELEV 1

Project #:

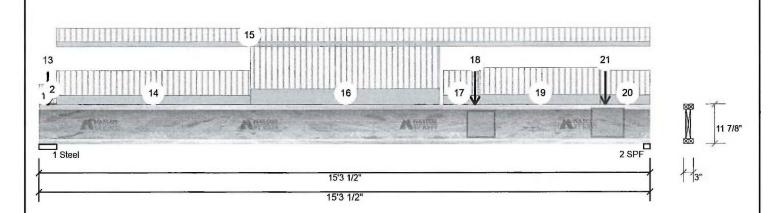
2 - SPF 1.875"

40%

253 / 809

11.875" 2-Ply - PASSED NJ

Level: Ground Floor



| Member Inforn | nation | | | Unfacto | red Reac | tions U | INPATTERN | ED lb (| (Uplift) |
|---------------------|--------|----------------|----------------------|-----------|----------|---------|--------------|---------|----------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Sno | w |
| Plies: | 2 | Design Method: | LSD | 1 | 641 | | 269 | | 0 |
| Moisture Condition: | Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 539 | 100 | 202 | | 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 | 11 | | Bearing | Length | Сар. | React D/L lb | Total | Ld. Case |
| | | 1 | | 1 - Steel | 5 250" | 38% | 337 / 961 | 1298 | L |

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%) | Ĺ | L |
| TL Defl inch | 0.226 (L/788) | 7'10 3/8" | 0.741 (L/240) | 0.300 (30%) | D+L | L |
| | | | | | | |

Design Notes

T.L. WISE 100083566 100083566 WCE OF OH

1061 L

Wind 0 0

Ld. Comb. 1.25D+1.5L

1.25D+1.5L

September 13, 2018

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.

| 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 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

chemicals

Handling & Installation

andling & Installation.

Note flanges 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-byp fastening details and handlingferection details.

Design objects must not be used.

Design assumes top flange to be laterally restrained by attached shealthing 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 as sib-z 3.5 inches
 For flat roofs provide 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

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

Page 2 of 2



GREENPARK Client:

Project: Address: Date:

9/7/2018

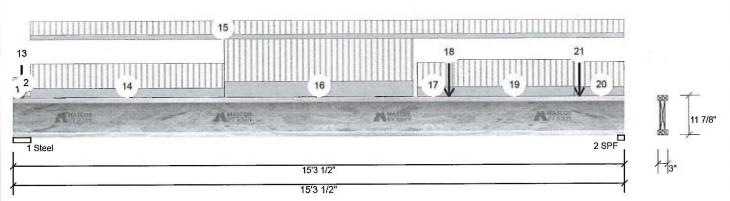
Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

2-Ply - PASSED 11.875"

Level: Ground Floor



| Continued | from page 1 | | | | | | | | |
|-----------|-------------|--------------------|-------------------|----------|--------|--------|-------|-------|------------------|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 8 | Point | 0-2-10 | | Тор | 22 lb | 59 lb | 0 lb | 0 lb | J7 |
| 9 | Point | 0-2-10 | | Тор | 2 lb | 5 lb | 0 lb | 0 lb | J7 |
| 10 | Point | 0-2-10 | | Тор | 20 lb | 0 lb | 0 lb | 0 lb | Wall Self Weight |
| 11 | Point | 0-2-10 | | Тор | 9 lb | 25 lb | 0 lb | 0 lb | J7 |
| 12 | Point | 0-2-10 | | Тор | 10 lb | 26 lb | 0 lb | 0 lb | J7 |
| 13 | Point | 0-2-10 | | Тор | 9 lb | 0 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 criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the hiended application, and to verify the dimensions and loads.

Lumber

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

chemicals

Handling & Installation

and ling & Installation.

Joist flanges must not be out or drifted.
Refer to latest copy of the Libist product information details for framing details, stiffener tables, web hole chart. bridging details, multi-ply fastering details and handling/erection details.

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

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

This design is valid until 7/10/2021

Manufacturer Info Nascor by Kott

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



Client:

Project:

Address:

GREENPARK

Date:

2 - Steel 5.250"

22%

176 / 563

9/7/2018

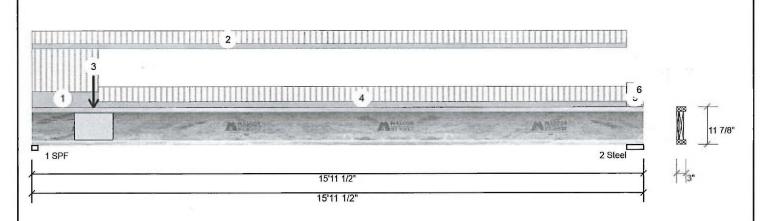
Job Name: MILLWOOD 2-ELEV 1

Designer: RO

Project #:

11.875" 2-Ply - PASSED F12-B NJ

Level: Ground Floor



| Member Info | rmation | | | Unfactore | ed Reacti | ions U | NPATTERN | ED lb (| Uplift) |
|--------------------|---------|----------------|----------------------|-----------|-----------|--------|--------------|---------|----------|
| Type: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Snov | N |
| Plies: | 2 | Design Method: | LSD | 1 | 712 | | 267 | | 0 |
| Moisture Condition | on: Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 376 | | 141 | | 0 |
| Deflection LL: | 360 | Load Sharing: | No | | | | | | |
| Deflection TL: | 240 | Deck: | Not Checked | | | | | | |
| Importance: | Normal | Vibration: | Not Checked | | | | | | |
| General Load | | | | 4 | | | | | |
| Floor Live: | 40 PSF | | | Bearings | and Fact | ored I | Reactions | | |
| Dead: | 15 PSF | la l | | Bearing I | .ength | Cap. | React D/L lb | Total | Ld. Case |
| | | | | 1 - SPE 1 | 875" | 53% | 334 / 1068 | 1402 | L |

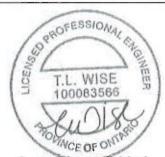
Analysis Results

| 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 |



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

5 Bottom flange braced at bearings.



739 L

Wind

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

September 13, 2018

| 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) 0-11-12 to 0-11-12 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF |
| 3 | Point | 1-7-6 | | Near Face | 129 lb | 343 lb | 0 lb | 0 lb F10 Pass-Thru Framing Squash Block is |
| 4 | Tie-In | 1-8-14 to 15-6-4 | (Span)1-1-12 to 1-1-12 | Тор | 15 PSF | 40 PSF | 0 PSF | required at all point loads over bearings |
| 5 | Tie-In | 15-6-4 to 15-11-8 | (Span)0-5-4 | Тор | 15 PSF | 40 PSF | 0 PSF | Refer to Multiple Member Connection |
| 6 | Tie-In | 15-6-4 to 15-11-8 | (Span) 0-10-12 | Тор | 15 PSF | 40 PSF | 0 PSF | Degaisfor 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 Holst not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

andling & Installation

Lioist lianges must not be cut or drilled

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

Damaged Lioists must not be used

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

This design is

Provide lateral support at bearing points to avoid lateral displacement and rotation
 (Neb stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 7. For flat roofs proporting
 READ ALL NOTES ON

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

Manufacturer Info

Nascor by Kott

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





Client: **GREENPARK**

Project: Address: Date: 9/7/2018

Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

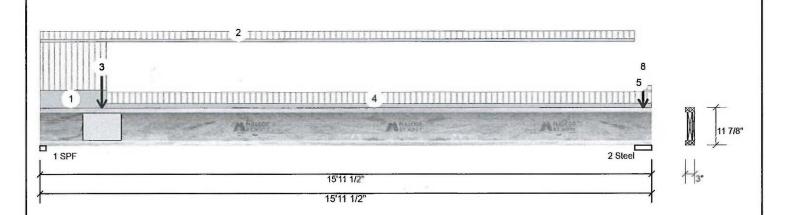
2 - Steel 5.250"

25%

223 / 625

11.875" 2-Ply - PASSED NJ

Level: Ground Floor



| Member Info | rmation | Unfacto | red Reac | tions L | INPATTERN | ED lb (| (Uplift) | | |
|------------------|---------|----------------|----------------------|---------|------------------|---------|--------------|-------|----------|
| Type: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Sno | w |
| Plies: | 2 | Design Method: | LSD | 1 | 649 | | 244 | | 0 |
| Moisture Conditi | on: Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 417 | | 179 | | 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 | Reactions | | |
| Dead: | 15 PSF | | | Bearing | Length | Cap. | React D/L lb | Total | Ld. Case |
| | | | | 1-SPF | 1.875" | 48% | 305 / 973 | 1278 | L |

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 (1/1664) | 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 |
| | | | | | | |

OPROFESSIONAL THOMES LICEA 100083566 WCE OF ONTER

849 L

Wind 0 0

Ld. Comb. 1.25D+1.5L

1.25D+1.5L

September 13, 2018

Design Notes

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

| o bollom | nange braced at bearing | ys. | | | | | | | | |
|----------|-------------------------|-------------------|-------------------------|----------|--------|--------|-------|-------|----------|--|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments | |
| 1 | Tie-In | 0-0-0 to 1-8-14 | (Span)3-3-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | | |
| 2 | Tie-In | 0-0-0 to 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

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
 Uplist not to be treated with fire retardant or corrosive

Handling & Installation

Handling & Installation

1. Julist flagges must not be cut or drilled

2. Refer to latest copy of the Librat product Information details for framing details, stifferen tables, veb hotic chart. bridging details, multi-ply fastening details and handling ferection details

3. Demaged Librats 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 stiffeness for point load as shown Minimum point load bearing length>= 3.5 inches
 Port flat roofs propording
 READ ALL NOTES ON

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 K2H7V1 905-642-4400



isDesign™

Client: **GREENPARK**

Project: Address: Date:

9/7/2018

Job Name: MILLWOOD 2-ELEV 1

Designer: RO

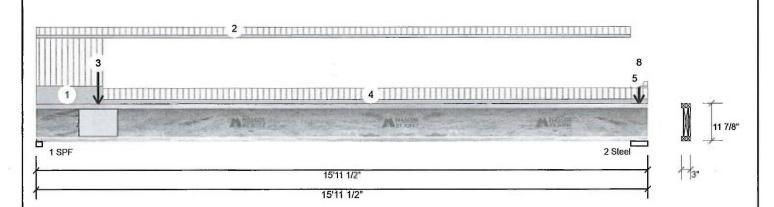
Page 14 of 34

Page 2 of 2

Project #:

11.875" 2-Ply - PASSED NJ

Level: Ground Floor



..Continued from page 1

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

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

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

Notes

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

Lumber

Handling & Installation

Handling & Installation

1. Jubist flarges must not be cut or drilled

2. Refer to latest copy of the IJoist product information details for framing details, sufferer tables, web hole chart. bridging details, multi-ply tastening details and handling ferection 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 lengthr=3.5 inches
 To fine flat provide proper dishnage to prevent ponding

This design is valid until 7/10/2021

Manufacturer info

Nascor by Kott

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



Address:

GREENPARK

Project:

Date:

9/10/2018

RO

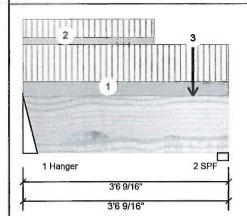
Designer: MILLWOOD 2-ELEV 1 Job Name:

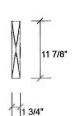
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 1

| ormation | | | | | | Unfacto | red Reacti | ons Ul | VPATTERNE | ED lb (| Uplift) | |
|--------------------|---|---|--|--|---|---|--|--|---|--|--|--|
| Girder | | Applicatio | n: Fl | oor (Residenti | ial) | Brg | Live | | Dead | Sno | N | Wind |
| 1 | | Design M | ethod: LS | SD C | | 1 | 555 | | 218 | | 0 | 0 |
| tion: Dry | | Building C | Code: Ni | BCC 2010 / O | BC 2012 | 2 | 510 | | 201 | | 0 | 0 |
| 360 | | Load Sha | ring: No | 0 | | | | | | | | |
| 240 | | Deck: | No | ot Checked | | | | | | | | |
| Normal | | Vibration: | No | ot Checked | | | | | | | | |
| | | | | | | | | | | | | |
| 40 PSF | | | | | | Bearing | s and Fact | ored R | eactions | | | |
| 15 PSF | | | | | | Bearing | Length | Cap. I | React D/L lb | Total | Ld. Case | Ld. Comb. |
| | | | | | | 1 - Hanger | 3.000" | 28% | 272 / 833 | 1106 | L | 1.25D+1.5L |
| ults | | | | | | 2-SPF | 2.375" | 40% | 251 / 765 | 1016 | L | 1.25D+1.5L |
| Actual | Location | Allowed | Capacity | Comb. | Case | | | | | | | |
| 785 ft-lb | 1'9 5/16" | 17130 ft-lb | 0.046 (5%) | 1.25D+1.5L | L | | | | | | =FSSIO | |
| 785 ft-lb | 1'9 5/16" | 13259 ft-lb | 0.059 (6%) | 1.25D+1.5L | L | 1 | | | | OPIC |) Francisco | W. |
| 745 lb | 2'5 1/16" | 5798 lb | 0.129 (13%) | 1.25D+1.5L | L | | | | / | 91 | | 181 |
| 0.001 (L/26669) | 1'9 7/16" | 0.108 (L/360) | 0.010 (1%) | D | Uniform | | | | 1 | 1 | 1 WIS | E E |
| 0.004 (L/10472) | 1'9 3/8" | 0.108 (L/360) | 0.030 (3%) | L | L | | | | 13 | 1 | 000835 | 36 |
| 0.005 (L/7520) | 1'9 3/8" | 0.161 (L/240) | 0.030 (3%) | D+L | L | | | | 1 | 1 | 0 01 | 01 |
| es | | | | | | 1 | | | / | 350 | XU! | 1000 |
| er nailing holes. | | | | | | 1 | | | | 100 | NCE OF O | HIL |
| designed to be su | pported on th | ne bottom edge | only. | | | | | | S | | | |
| at bearings. | | | | | | | | | 50 | Specifi | 1001 13 | , 2010 |
| | Girder 1 1 tion: Dry 360 240 Normal 40 PSF 15 PSF | Girder 1 tion: Dry 360 240 Normal 40 PSF 15 PSF Location 785 ft-lb 1'9 5/16" 745 lb 2'5 1/16" 0.001 1'9 7/16" (L/26669) 0.004 1'9 3/8" (L/10472) 0.005 (L/7520) 1'9 3/8" Es r nailing holes. designed to be supported on the | Girder 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Girder 1 Application: FI Design Method: LS Building Code: NI Load Sharing: Ni Deck: Ni Vibration: Ni 40 PSF 15 PSF Actual Location Allowed Capacity 785 ft-lb 1'9 5/16" 17130 ft-lb 0.046 (5%) 785 ft-lb 1'9 5/16" 13259 ft-lb 0.059 (6%) 745 lb 2'5 1/16" 5798 lb 0.129 (13%) 0.001 1'9 7/16" 0.108 (L/360) 0.010 (1%) (L/26669) 0.004 1'9 3/8" 0.108 (L/360) 0.030 (3%) (L/10472) 0.005 (L/7520) 1'9 3/8" 0.161 (L/240) 0.030 (3%) 25 Trailling holes. designed to be supported on the bottom edge only. | Application: Floor (Resident Design Method: LSD Building Code: NBCC 2010 / O Load Sharing: No Deck: Not Checked Vibration: Not Checked | Application: Floor (Residential) Design Method: LSD Building Code: NBCC 2010 / OBC 2012 Load Sharing: No Deck: Not Checked Vibration: | Application: Floor (Residential) Design Method: LSD 1 1 1 2 2 2 2 360 240 Normal Vibration: Not Checked Vibration: Not | Application: Floor (Residential) 1 555 555 2 510 | Application: Floor (Residential) Brg Live | Application: Floor (Residential) Design Method: LSD Design Method: | Application: Floor (Residential) Design Method: LSD Building Code: NBCC 2010 / OBC 2012 2 510 201 20 | Application: Floor (Residential) Design Method: LSD Design Method: LSD Building Code: NBCC 2010 / OBC 2012 Load Sharing: No Deck: Not Checked Vibration: Not Checked Vibration: Not Checked Vibration: Not Checked Normal Nor |

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 Squash |

sh Block is required at all point loads over bearings

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

Notes

Colcutated 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 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 con-

Handling & Installation

- Handling & Installation

 1. LVL beams must not be cut or drilled

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

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



Address:

GREENPARK

Project:

Date:

9/7/2018

Designer: RO

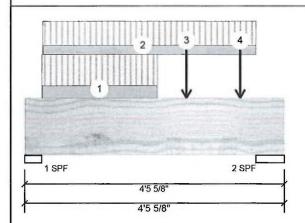
MILLWOOD 2-ELEV 1 Job Name:

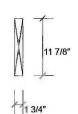
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 1

| Member | Information |
|--------|-------------|
| Tyne: | Girder |

| Туре: | Girder |
|---------------------|--------|
| Plies: | 1 |
| 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

Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|----------|------|------|------|------|
| Brg 1 | 1024 | 395 | 0 | 0 |
| 2 | 1099 | 424 | 0 | 0 |

Bearings and Factored Reactions

| 1 | Bearing | Length | Cap. I | React D/L lb | Total | Ld. Case | Ld. Comb. | |
|---|---------|--------|--------|--------------|-------|----------|------------|--|
| | 1 - SPF | 3.500" | 54% | 493 / 1536 | 2029 | L | 1.25D+1.5L | |
| - | 2 - SPF | 5.875" | 34% | 529 / 1649 | 2178 | L | 1.25D+1.5L | |

Analysis Results

| 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 |



September 13, 2018

Design Notes

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

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

Squash Block is required at all point loads over bearings

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

Notes

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, mutti-ply fastening details, beam strength values, and code
- approvals
 Damaged Beams must not be used
 Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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





Client:

Project:

Address:

GREENPARK

Date:

9/7/2018

Designer: RO

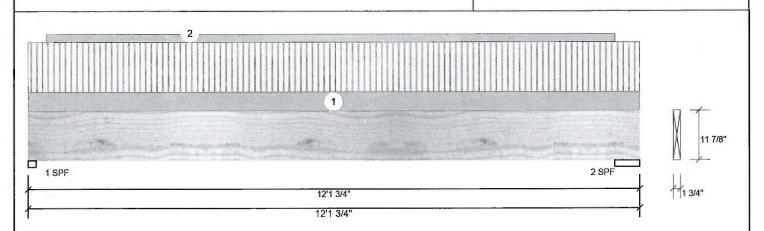
Job Name: MILLWOOD 2-ELEV 1

Project #:

Forex 2.0E-3000Fb LVL

1,750" X 11.875" - PASSED

Level: Ground Floor



| Member Infor | mation | | | Unfactor | ed React | ions UNPATTERN | IED lb (Uplift) | |
|--------------------|--------|--|----------------------|----------|----------|-------------------|-----------------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Live | Dead | Snow | Wind |
| Plies: | 1 | Design Method: | LSD | 1 | 73 | 67 | 0 | 0 |
| Moisture Condition | n: Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 77 | 70 | 0 | 0 |
| Deflection LL: | 360 | Load Sharing: | No | | | | | |
| Deflection TL: | 240 | Deck: | Not Checked | | | | | |
| Importance: | Normal | Vibration: | Not Checked | | | | | |
| General Load | | The state of the s | | | | | | |
| Floor Live: | 40 PSF | | | Bearings | and Fact | ored Reactions | | |
| Dead: | 15 PSF | | | Bearing | Length | Cap. React D/L lb | Total Ld. Case | Ld. Comb. |
| | | | | 1 - SPF | 1.875" | 10% 83 / 109 | 192 L | 1.25D+1.5L |

2 - SPF 5.875"

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 100083566 WCE OF ONT

203 L

1.25D+1.5L

88 / 115

3%

September 13, 2018

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

- 2 Top braced at bearings.
- 3 Bottom braced at bearings.

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

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

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

Notes

Lumber

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.

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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, Onlario Canada K2H7V1



GREENPARK

Client:

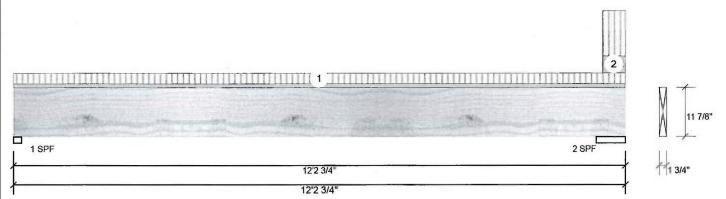
Project: Address:

Date: 9/7/2018 Designer: RO

Job Name: MILLWOOD 2-ELEV 1

Project #:

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



| Member Infor | mation | 100 | 4 | Unfactor | red Reac | tions U | NPATTERN | ED lb (| (Uplift) | |
|--------------------|--------|----------------|----------------------|----------|----------|---------|--------------|---------|----------|------------|
| Type: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Snov | w | Wind |
| Plies: | 1 | Design Method: | LSD | 1 | 67 | | 53 | | 0 | 0 |
| Moisture Condition | n: Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 95 | | 66 | | 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 | il i | | Bearings | and Fac | tored | Reactions | | | |
| Dead: | 15 PSF | | | Bearing | Length | Сар. | React D/L lb | Total | Ld. Case | Ld. Comb. |
| | | | | 1-SPF | 1.875" | 8% | 67 / 101 | 168 | L | 1.25D+1.5L |
| | | | | 2-SPF | 6.875" | 3% | 82 / 142 | 224 | L | 1.25D+1.5L |

Analysis Results

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

T.L. WISE IN 100083566 100083566 WCE OF ON

September 13, 2018

| Design Notes | |
|-----------------------------|--------------------------------------|
| 1 Girders are designed to b | e supported on the bottom edge only. |

- 2 Top braced at bearings.
- 3 Bottom braced at bearings.

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

Lumber

Handling & Installation

- Handling & Installation

 1. LVL beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is lateraty restrained

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

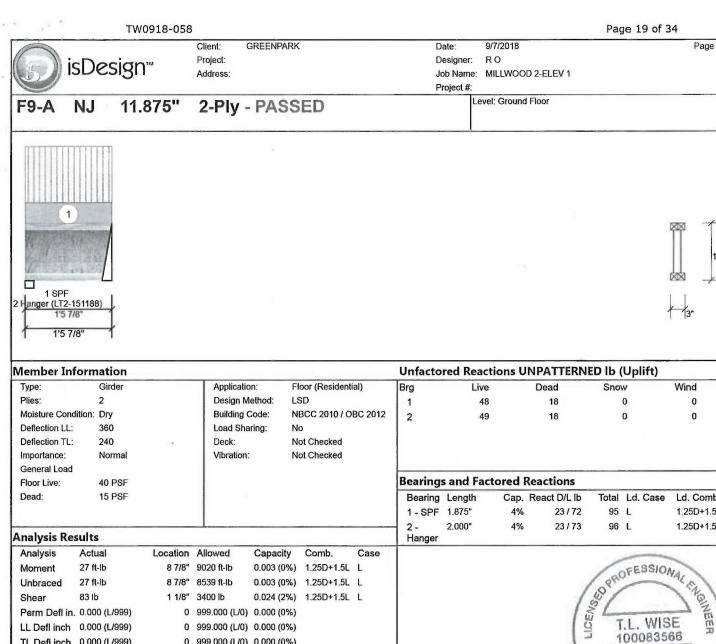
For flat roofs provide proper drainage to prevent ponding

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 Canada K2H7V1 905-642-4400



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

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

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

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

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design 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
 Upoist not to be treated with fire retardant or corrosive

chemicais

Handling & Installation

Libist flanges must not be cut or drilled Refer to latest copy of the Jibist product information details for framing details, stiffener tables, web hote chart, bridging details, smulti-ply fastening details and handlingferection details Damaged Jibist must not be used Design assumes top fange to be laterally restrained by attached shealthing or as specified in engineering profes.

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

Provide fateral support at bearing points to avoid lateral displacement and rotation.
 Web stiffeners for point load as shown Minimum point load bearing le indthe 3.5 inches.
 For fat roots providing the pointing ponding.
 PREMINER PURPLING NOTE

BIGINETERING NOTE

TOTAL

STATEMENT OF THE PROVIDED TO TH

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

Manufacturer Info

Nascor by Kott

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

100083566

September 13, 2018



11 7/8"

Page 1 of 1

Wind

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L



Project:

GREENPARK

Address:

9/7/2018 Date:

RO Designer:

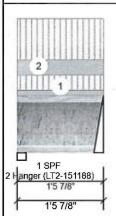
MILLWOOD 2-ELEV 1 Job Name:

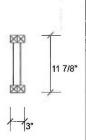
Project #:

NJ 11.875"

2-Ply - PASSED

Level: Ground Floor





Page 1 of 1

| Member In | ormation | | | | | | Unfacto | red React | ions U | INPATTERN | 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 | 65 | | 24 | | 0 | 0 |
| Moisture Cond | lition: Dry | | Building (| Code: | NBCC 2010 / O | BC 2012 | 2 | 66 | | 25 | | 0 | 0 |
| Deflection LL: | 360 | | Load Sha | ring: t | No | | - | | | | | | |
| Deflection TL: | 240 | | Deck: | 1 | Not Checked | | | | | | | | |
| Importance: | Normal | | Vibration: | 1 | Not Checked | | | | | | | | |
| General Load | | | | | | | | | | | | | |
| Floor Live: | 40 PSF | | | | | | Bearing | s and Fac | 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 Re | sults | | | | | | 2 - Hanger | 2.000" | 5% | 31 / 99 | 130 | L | 1.25D+1.5L |
| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case | | | - 111 | 200 | | | |
| Moment | 36 ft-lb | 8 7/8" | 9020 ft-lb | 0.004 (0% | 1.25D+1.5L | L | | | | | / | FESSIO | V |
| Unbraced | 36 ft-lb | 8 7/8" | 8539 ft-lb | 0.004 (0% | 1.25D+1.5L | L | | | | | 1 68 | - | 135 |
| Shear | 112 lb | 1 1/8" | 3400 lb | 0.033 (3%) | 1.25D+1.5L | L | | | | / | 9/ | | E 66 |
| Perm Defl in | 0.000 (L/999) | 0 | 999.000 (L/0) | 0.000 (0%) | | | | | | f: | 3 | 77.77 | - Z |
| LL Defl inch | 0.000 (L/999) | 0 | 999.000 (L/0) | 0.000 (0%) | | | | | | 1 6 | 3 7 | L. WIS | E m |
| TL Defl inch | 0.000 (L/999) | 0 | 999.000 (L/0) | 0.000 (0% | | | | | | 1- | 1 1 | 000835 | 66 |
| Design Not | es | | | | | | | | | 1 | .\ | 0,0 | 841 |
| | er nailing holes. | | | | | | | | | , | 350 | X | TARI |
| | designed to be su | | _ | - | | | | | | | 100 | WCE OF C | MI |
| | s must be fastene | - | • | urer's details | i. | | | | | S | enter | nber 13 | . 2018 |
| 4 Top loads I | nust be supported | equally by al | plies. | | | | | | | _ | | | , |

- 4 Top loads must be supported equally by all plies.
- 5 Top flange braced at bearings.
- 6 Bottom flange braced at bearings

| O DOMONII | larige braced at bearing | ٥. | | | | | | | |
|-----------|--------------------------|-----------------|--------------|------|--------|--------|-------|-------|----------|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Tie-In | 0-0-0 to 1-5-14 | (Span)1-1-15 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 1-5-14 | (Span)3-3-0 | Тор | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |

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

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

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. 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
 Uplist not to be treated with fire retardant or corrosive

chemicals
Handling & Installation

1. Distrianges must not be cut or diffied

2. Refer to letest copy of the Lists product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and ...

3. Daminged Lists 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 le jubb=3.5 inches
 For flat roofs provided to the provided lateral displacement and rotation.

| Provided lateral displacement and rotation lateral displacement and rotation lateral displacement and rotation. |

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

This design is

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





Project:

Address:

GREENPARK

Date:

9/10/2018

Page 1 of 2

RO Designer:

Job Name: MILLWOOD 2-ELEV 1

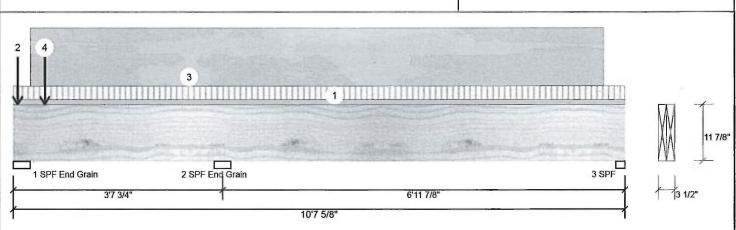
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Ground Floor



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

| Analysis Res | ults | | | | | |
|---------------|--------------------|-----------|---------------|------------|-------|---------|
| 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 (L/240) | 0.020 (2%) | D+L | _L |

Design Notes

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

Unfactored Reactions UNPATTERNED Ib (Uplift)

| 91114000 | | | /ab | ~/ |
|----------|------|------|------|------|
| Brg | Live | Dead | Snow | Wind |
| 1 | 986 | 484 | 0 | 0 |
| 2 | 176 | 679 | 0 | 0 |
| 3 | 52 | 259 | 0 | 0 |
| | | | | |

Bearings and Factored Reactions

| 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

Notes

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

Lumber

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

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 approval.

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

6. For flat roofs provide proper drainage to prevent

This design is

Manufacturer Info

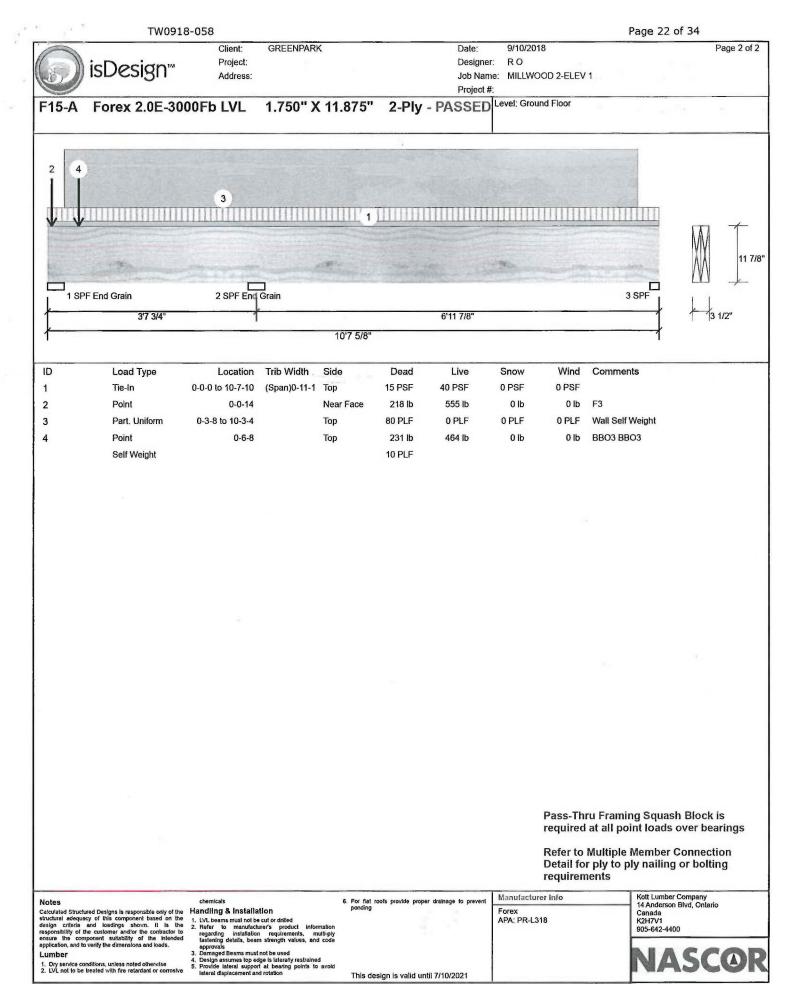
Forex APA: PR-L318

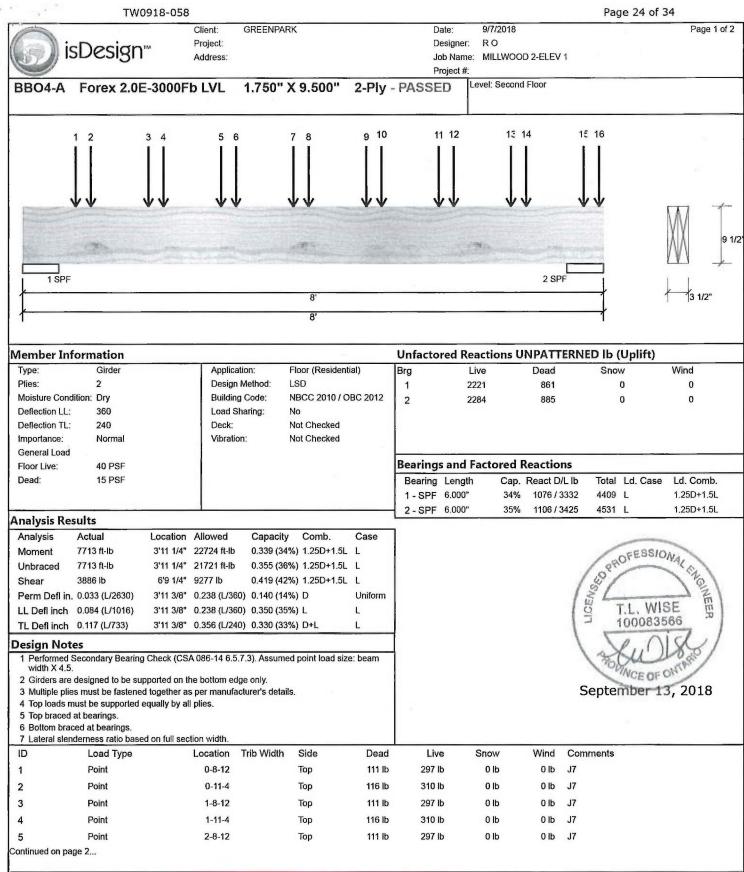
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

Version 18.40.162 Powered by iStructTM







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

chemicals

Handling & Installation

LVL beams must not be cut or drilled

Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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 v

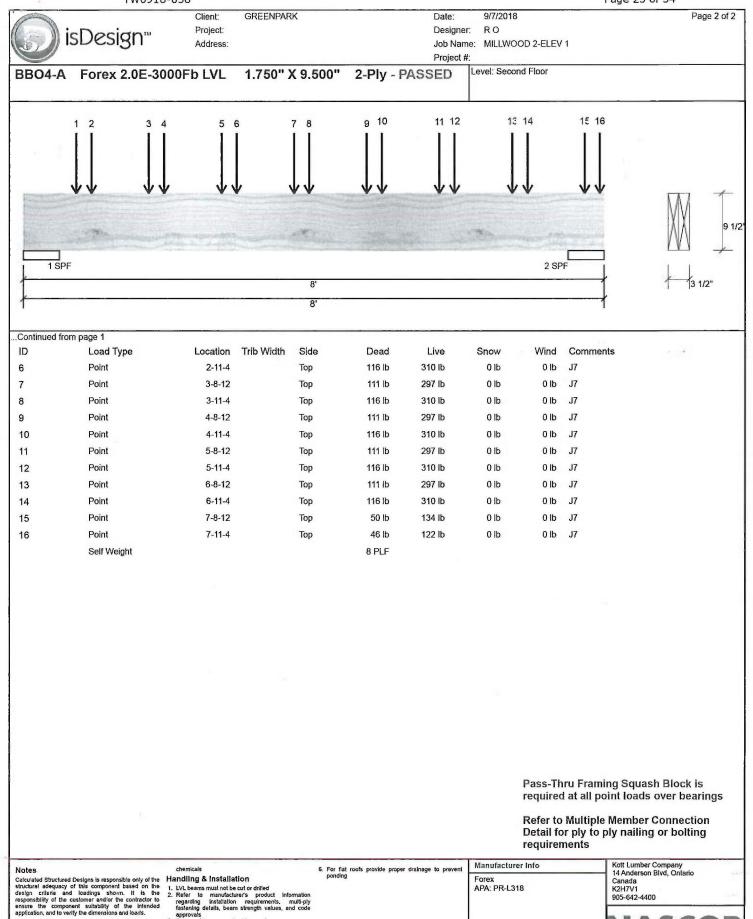
Manufacturer Info Forex APA: PR-L318

READ ALL NOTES ON THIS PAGE AND ON THE **CONTAINS SPECIFICATIONS AND CRITERIA USED** IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT

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





This design is valid until 7/10/2021

Lumber



Project: Address: GREENPARK

Date: Designer:

9/7/2018

Job Name: MILLWOOD 2-ELEV 1

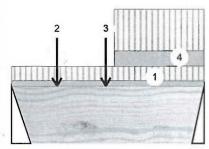
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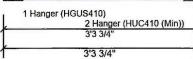
Project #:

F6-A Forex 2.0E-3000Fb LVL

1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





15 PSF

11 7/8"

Page 1 of 1

| Member Info | mation | | |
|-------------------|--------|----------------|----------------------|
| Type: | 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 | 4.0 | |

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 150 | 83 | 0 | 0 |
| 2 | 169 | 88 | 0 | 0 |
| | | | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

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



Dead:

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



September 13, 2018

| / Lateral | SICHGCITICSS TATIO DESCE | off full acction 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 | | J2 |
| 3 | Point | 1-7-8 | | Near Face | 33 lb | 35 lb | 0 lb | PassiTh | nry-Framing Squash Block is I 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 | at an point loads over bearings |
| | Self Weight | | 3-11-13 | | 10 PLF | | | | Multiple Member Connection or ply to ply nailing or bolting nents |

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 nitended application, and to verify the dimensions and loads.

Lumber 1. Dry service co

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

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
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoil 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 Canada K2H7V1 905-642-4400



Client: Project: Address:

GREENPARK

Date:

9/7/2018

RO

Designer: Job Name: MILLWOOD 2-ELEV 1

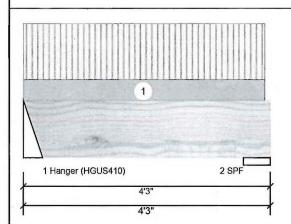
Project #

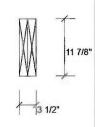
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Page 1 of 1

| Type: | Girder | |
|-------------------|--------|------|
| Plies: | 2 | |
| Moisture Conditio | n: Dry | |
| Deflection LL: | 360 | |
| Deflection TL: | 240 | |
| Importance: | Normal | |
| General Load | | |
| Floor Live: | 40 PSF | |
| Dead: | 15 PSF | |
| Analysis Resul | ts | |
| Analysis A | ctual | Loca |

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

| Unfactored Reactions UNPATTERNED Ib (Uplift) | | | | | | | | |
|--|------|------|------|------|--|--|--|--|
| Brg | Live | Dead | Snow | Wind | | | | |
| 1 | 35 | 33 | 0 | 0 | | | | |
| 2 | 35 | 34 | 0 | 0 | | | | |
| | | | | | | | | |
| _ | | | | | | | | |

| Bearings and Factored Reactions | | | | | | | |
|---------------------------------|--------|------|--------------|-------|----------|------------|--|
| Bearing | Length | Сар. | React D/L lb | Total | Ld. Case | Ld. Comb. | |
| 1 - Hanger | 4.000" | 1% | 41 / 52 | 93 | L | 1.25D+1.5L | |
| 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 |
| Unbraced | 72 ft-lb | 2' 3/4" | 34261 ft-lb | 0.002 (0%) | 1.25D+1.5L | L |
| Shear | 36 lb | 1'3 1/8" | 11596 lb | 0.003 (0%) | 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%) | | |



Comments

NCE OF ON September 13, 2018

Design Notes

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

| ID | Load Type | Location | Trib Width |
|----|-----------|----------|------------|

0-0-0 to 4-1-14 (Span)0-10-1 Top Tie-In Self Weight

Dead Live Snow Wind 15 PSF 40 PSF 0 PSF 0 PSF

10 PLF

Side

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

chemicals

Handling & Installation

- and ling & Installation

 LV-beams must not be cut or drilled

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

 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 i

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, Onlario Canada K2H7V1 905-642-4400



Project: Address: GREENPARK

Date: Designer: 9/7/2018

Job Name: MILLWOOD 2-ELEV 1

Project #

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

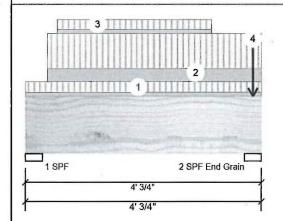
2-Ply - PASSED

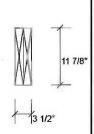
Brg

1

2

Level: Second Floor





Wind

0

Page 1 of 1

| Member Info | rmation | | |
|--------------------|---------|----------------|----------------------|
| Type: | Girder | Application: | Floor (Residential) |
| Plies: | 2 | Design Method: | LSD |
| Moisture Condition | on: Dry | Building Code: | NBCC 2010 / OBC 2012 |
| Deflection LL: | 360 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal | Vibration: | Not Checked |
| General Load | | 3.2 - 2.2 11 | |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | 7 | |

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

260

375

Snow

0

0

Analysis Results Analysis Actual Location Allowed Capacity Comb. 1215 ft-lb 0.035 (4%) 1.25D+1.5L L 2' 5/16" 34261 ft-lb Moment 1215 ft-lb 2' 5/16" 34261 ft-lb 0.035 (4%) 1.25D+1.5L L Unbraced 0.061 (6%) 1.25D+1.5L L Shear 711 lb 2'10 1/8" 11596 lb Perm Defl in. 0.001 2' 5/16" 0.120 (L/360) 0.010 (1%) D (L/34561) 0.003 LL Defl inch 2' 5/16" 0.120 (L/360) 0.030 (3%) L (L/13799) TL Defl inch 0.004 (L/9862) 2' 5/16" 0.180 (L/240) 0.020 (2%) D+L

Bearings and Factored Reactions

Live 643

885

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



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



September 13, 2018

| 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 | Passt∓hru Framing Squash Block is |
| 4 | Point | 3-11-0 | | Near Face | 88 lb | 169 lb | 0 lb | required at all point loads over bearings |
| | Self Weight | | | | 10 PLF | | | Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements |

Concusted 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

chemicals

Handling & Installation

- Indining of instantance in 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
- naged 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 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 905-642-4400

Project:

Address:

Date: 9/7/2018

Designer:

Job Name: MILLWOOD 2-ELEV 1

Project #:

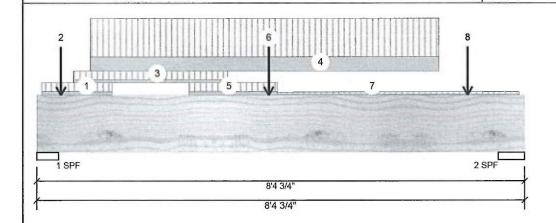
Forex 2.0E-3000Fb LVL

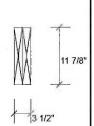
1.750" X 11.875"

GREENPARK

2-Ply - PASSED

Level: Second Floor





Page 1 of 2

| Member Inform | nation | | |
|---------------------|--------|----------------|----------------------|
| Туре: | 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 | | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 1594 | 649 | 0 | 0 |
| 2 | 1377 | 568 | 0 | 0 |

Bearings and Factored Reactions

| I | Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---------|--------|------|--------------|-------|----------|------------|
| I | 1 - SPF | 4.500" | 33% | 811 / 2391 | 3202 | L | 1.25D+1.5L |
| ł | 2-SPF | 5.500" | 23% | 710 / 2066 | 2776 | L | 1.25D+1.5L |

Analysis Results

Floor Live:

Dead:

| 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 |
| | | | | | | |



September 13, 2018

Design Notes

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

40 PSF

15 PSF

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

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|---------------|------------------|-------------|-----------|---------|---------|-------|-------|----------|
| 1 | Tie-In | 0-1-0 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...

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 con

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

approvats
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

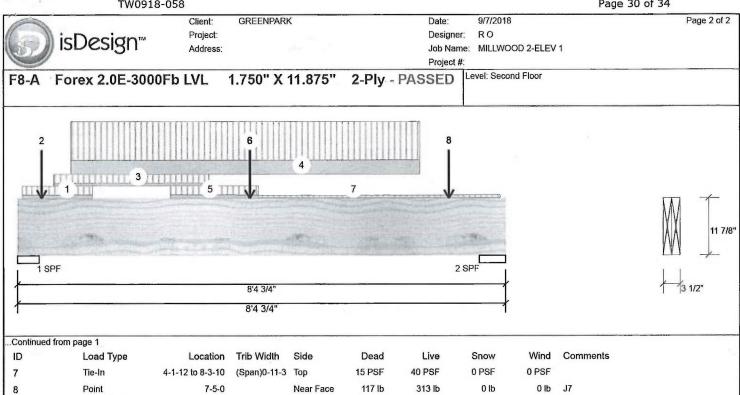
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

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





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

Calcutated 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.

Self Weight

Lumber

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. Damsged Beams must not be used

 4. Design assumes top edge is lateraty restrained

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

For flat roofs provide proper drainage to prevent ponding

Forex

APA: PR-L318

Manufacturer Info

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

This design is valid until 7/10/2021

walls, columns and foundation walls and footings including anchorage of components and

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 then

bracing for lateral stability are the responsibility of others.

Version 18.40.162 Powered by iStruct's

LSD

40

15

480

360

480 360

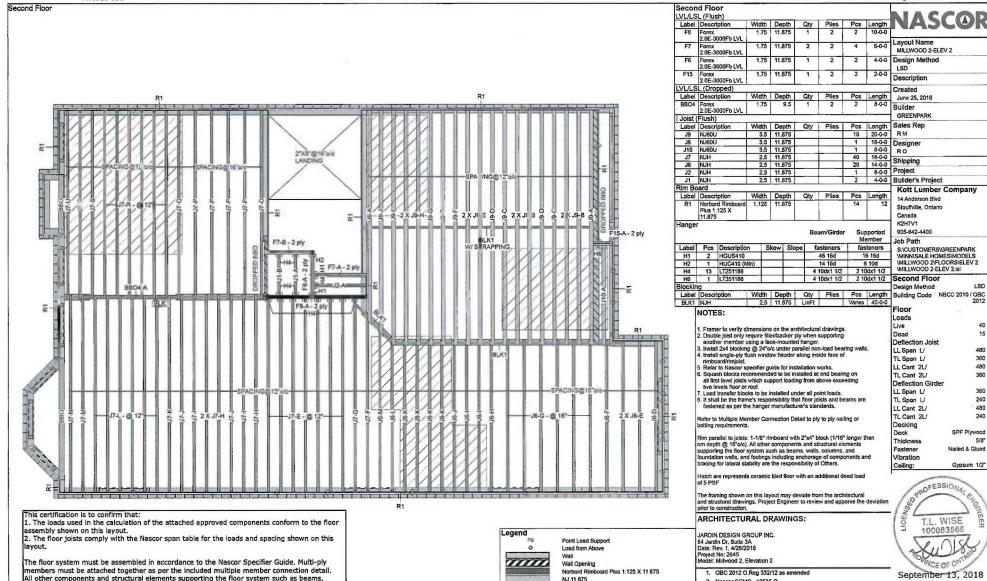
360

240

480

240

5/8*



Norbord Rimboard Plus 1.125 X 11 875

Forex 2.0E-3000Fb LVL 1.75 X 11.875

Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped)

NJ 11.875

N.I60U 11 875

NJH 11,875

111111

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

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

2 Nascor CCMC - 13535-R

3. LVL CCMC -14056-R

4. CAN/CSA-086-09

September 13, 2018



GREENPARK Client:

Project: Address:

Date: Designer:

9/7/2018 RO

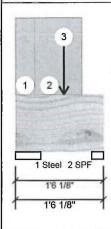
Job Name: MILLWOOD 2-ELEV 2

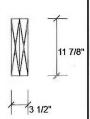
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

| Member Inform | ber Information | | | Unfactor | red Reac | d Reactions UNPATTERNED lb (Uplift) | | | | |
|---------------------|-----------------|----------------|----------------------|-----------|----------|-------------------------------------|--------------|-------|----------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Snov | V | Wind |
| Plies: | 2 | Design Method: | LSD | 1 | 72 | | 103 | | 0 | 0 |
| Moisture Condition: | Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 61 | | 53 | | 0 | 0 |
| Deflection LL: | 360 | Load Sharing: | No | 1000 | | | | | | |
| Deflection TL: | 240 | Deck: | Not Checked | | | | | | | |
| Importance: | Normal | Vibration: | Not Checked | | | | | | | |
| General Load | | | | | | | | | | |
| Floor Live: | 40 PSF | | | Bearings | and Fac | tored | Reactions | | | |
| Dead: | 15 PSF | | | Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
| | | | | 1 - Steel | 5.250" | 2% | 129 / 108 | 237 | L | 1.25D+1.5L |
| 1 ' n I | | | | 2-SPF | 2.375" | 3% | 66 / 92 | 158 | L | 1.25D+1.5L |

Analysis Results

| Е | | | | | | | | |
|---|---------------|---------------|----------|---------------|------------|------------|------|---|
| | 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%) | | | |
| | | | | _ | | | | ۰ |

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.
- 6. Lateral slenderness ratio based on full section width

| PROFESSIONAL |
|---------------|
| T.L. WISE |
| 100083566 |
| NOE OF ON PER |

September 13, 2018

| U Lateral | sicilidelliess tallo pased c | III IUII SCUIDII WIUUI. | | | | | | | |
|-------------|------------------------------|-------------------------|------------|-----------|--------|--------|-------|-------|---|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Part, Uniform | 0-0-0 to 0-4-0 | | Тор | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-4-0 to 1-1-12 | | Тор | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 3 | Point | 0-10-0 | | Near Face | 50 lb | 133 lb | 0 lb | 0 lb | J10 |
| Self Weight | | | | | 10 PLF | | | | nru Framing Squash Block is d at all point loads over bearings |

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

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

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

Handling & Installation

- and ling & Installation

 LVL beams must not be cut or drilled

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

 Damaged Beams must not be used

 Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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 Lurnber Company 14 Anderson Blvd, Ontatio Canada K2H7V1 905-642-4400



Version 18.40.162 Powered by iStruct™





Address:

GREENPARK Project:

Date: Designer: 9/7/2018

RO

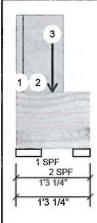
MILLWOOD 2-ELEV 3 Job Name:

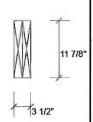
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

| Member Info | rmation | | | Unfactor | ed React | tions U | NPATTERN | ED lb (| (Uplift) | |
|------------------|---------|----------------|----------------------|----------|----------|---------|--------------|---------|----------|------------|
| Туре: | Girder | Application: | Floor (Residential) | Brg | Live | | Dead | Sno | W | Wind |
| Plies: | 2 | Design Method: | LSD | 1 | 108 | | 101 | | 0 | 0 |
| Moisture Conditi | on: Dry | Building Code: | NBCC 2010 / OBC 2012 | 2 | 65 | | 41 | | 0 | 0 |
| Deflection LL: | 360 | Load Sharing: | No | 1550 | | | | | | |
| Deflection TL: | 240 | Deck: | Not Checked | | | | | | | |
| Importance: | Normal | Vibration: | Not Checked | 1 | | | | | | |
| 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 | ī |
|---|---------------|---------------|----------|---------------|------------|------------|------|---|
| | 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%) | | | |
| г | | | | | | | | |

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

| TL Defl inch | 0.000 (L/999) | 0 99 | 9.000 (L/0) | 0.000 (0%) | |
|-----------------|-----------------------|------------------|--------------|-----------------|--|
| esign Note | es | | | | |
| 1 Girders are | designed to be suppo | orted on the b | ottom edge | only. | |
| 2 Multiple plie | s must be fastened to | ogether as pe | er manufacti | irer's details. | |
| 3 Top loads m | ust be supported equ | ually by all pli | es. | | |
| 4 Top braced | at bearings. | | | | |



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| O Laterar | siendenness rand based c | of full section with. | | | | | | | |
|-----------|--------------------------|-----------------------|------------|----------|--------|--------|-------|-------|---|
| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
| 1 | Part. Uniform | 0-0-0 to 0-1-8 | | Тор | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-1-8 to 0-9-12 | | Тор | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 3 | Point | 0-7-8 | | Far Face | 65 lb | 173 lb | 0 lb | 0 lb | J9 |
| | Self Weight | | | | 10 PLF | | | | nru Framing Squash Block is d at all point loads over bearings |

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 landed 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 beams must not be cut or drilled

 2. Refer to manufacturers 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

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 This design IN THE DESIGN OF THIS COMPONENT.

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