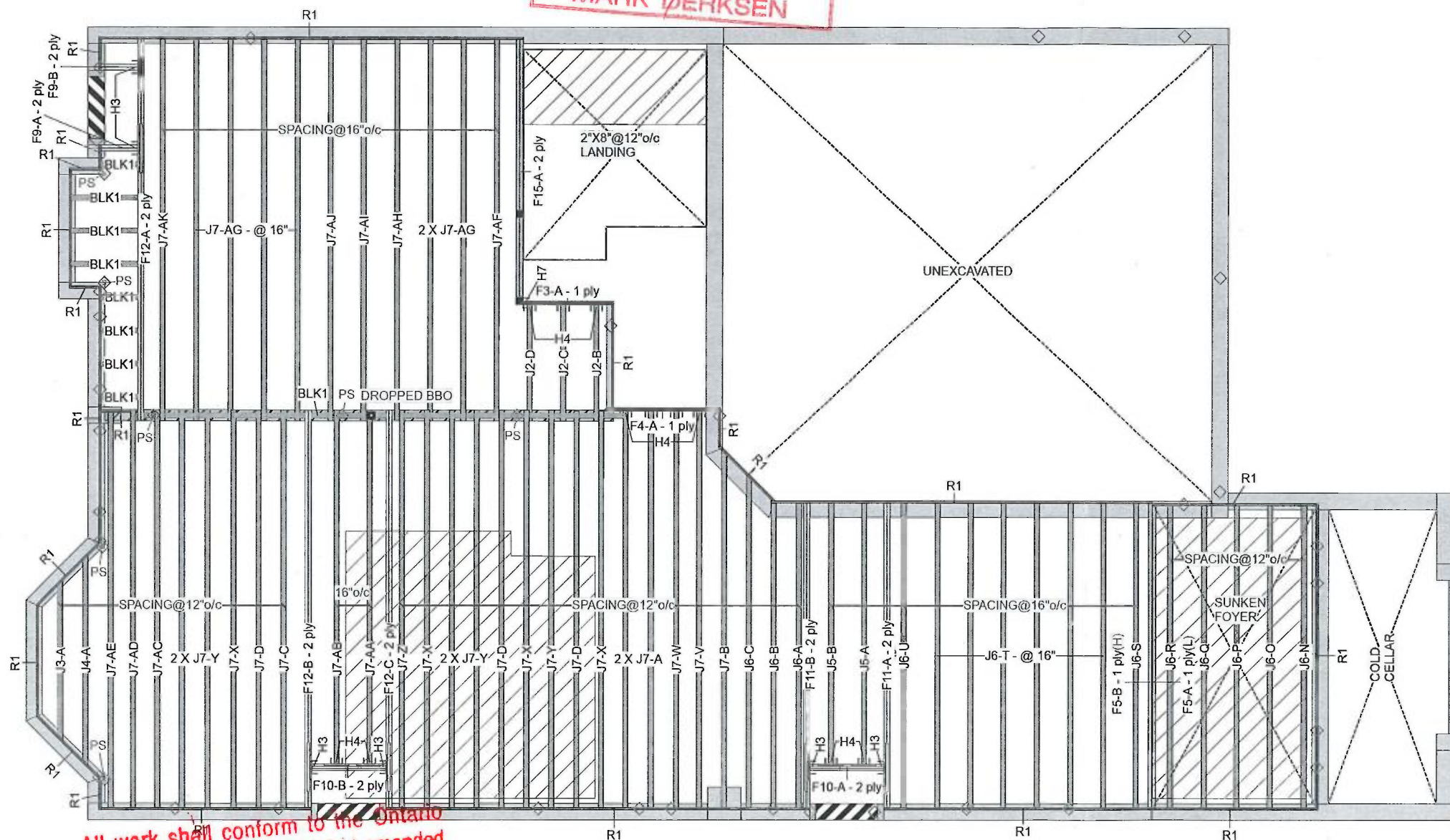


Ground Floor

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



| Ground Floor LVL/LSL (Flush) | | | | | | | |
|---------------------------------|--|--------------------|--------|-------|-------------|---------------------|--------|
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| F5 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | | | 2 | 14-0-0 |
| F15 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 12-0-0 |
| F4 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | | | 1 | 6-0-0 |
| F3 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | | | 1 | 4-0-0 |
| I Joist (Flush) | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| F12 | NJ | 1.5 | 11.875 | 3 | 2 | 6 | 16-0-0 |
| F11 | NJ | 1.5 | 11.875 | 2 | 2 | 4 | 14-0-0 |
| F10 | NJ | 1.5 | 11.875 | 2 | 2 | 4 | 4-0-0 |
| F9 | NJ | 1.5 | 11.875 | 2 | 2 | 4 | 2-0-0 |
| J7 | NJH | 2.5 | 11.875 | | | 35 | 16-0-0 |
| J6 | NJH | 2.5 | 11.875 | | | 16 | 14-0-0 |
| J5 | NJH | 2.5 | 11.875 | | | 2 | 12-0-0 |
| J4 | NJH | 2.5 | 11.875 | | | 1 | 10-0-0 |
| J3 | NJH | 2.5 | 11.875 | | | 1 | 8-0-0 |
| J2 | NJH | 2.5 | 11.875 | | | 3 | 6-0-0 |
| Rim Board | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| R1 | Norbord Rimboard Plus 1.125 X 11.875 | 1.125 | 11.875 | | | 12 | 12 |
| Hanger | | | | | | | |
| Label | Pcs | Description | Skew | Slope | fasteners | Supported Member | |
| H3 | 6 | LT2-151188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 | |
| H4 | 11 | LT251188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 | |
| H7 | 1 | HUCQ1.81/9- SDS | | | | | |
| Blocking | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| BLK1 | NJH | 2.5 | 11.875 | LinFt | | Varies | 29-0-0 |

NOTES:

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

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

| | |
|----|--------------------------------------|
| PS | Point Load Support |
| ◇ | Load from Above |
| ▨ | Wall |
| ▩ | 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 |

NASCOR

Layout Name
MILLWOOD 2-ELEV 2Design Method
LSD

Description

Created
June 25, 2018Builder
GREENPARKSales Rep
R MDesigner
R O

Shipping

Project

Builder's Project

Kott Lumber Company

14 Anderson Blvd
Stouffville, Ontario

Canada

K2H7V1

905-642-4400

Job Path

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

Ground Floor

Design Method LSD

Building Code NBCC 2010 / OBC
2012

Floor

Loads

Live 40

Dead

15

Deflection Joist

LL Span 1/ 480

TL Span 1/ 360

LL Cant 2L/ 480

TL Cant 2L/ 360

Deflection Girder

LL Span 1/ 360

TL Span 1/ 240

LL Cant 2L/ 480

TL Cant 2L/ 240

Decking

Deck SPF Plywood

Thickness 3/4"

Fastener Nailed & Glued

Vibration

LOT 16

This certification is to confirm that:

1. The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.
2. The floor joists comply with the Nascor span table for the loads and spacing shown on this layout.

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

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

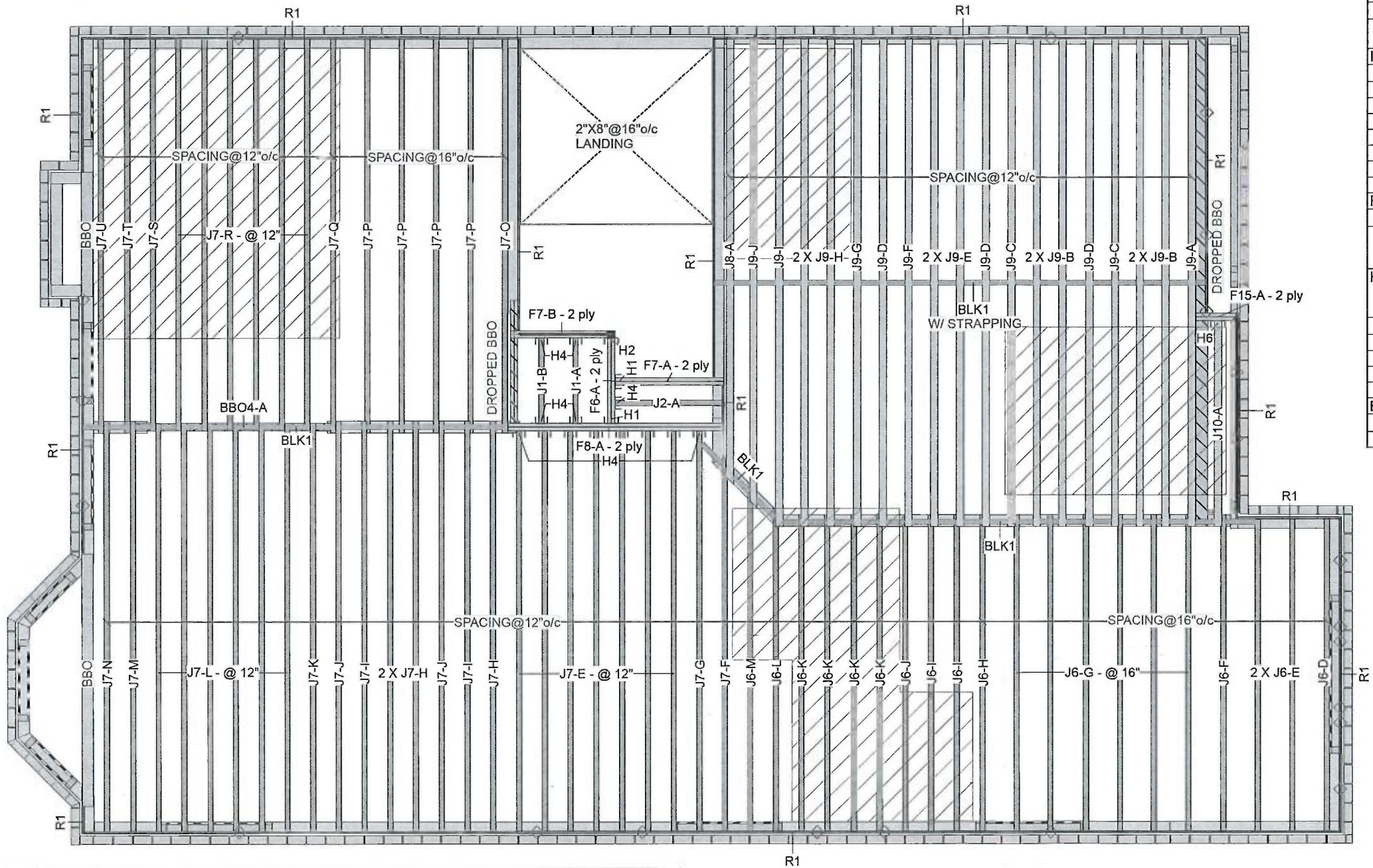


September 13, 2018

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

KOTT

Second Floor



This certification is to confirm that:

1. The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.
2. The floor joists comply with the Nascor span table for the loads and spacing shown on this layout.

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

| Legend | |
|--------|--|
| PS | Point Load Support |
| ◊ | Load from Above |
| ▨ | Wall |
| ▧ | Wall Opening |
| ▩ | Norbord Rimboard Plus 1.125 X 11.875 |
| ▪ | NJ 11.875 |
| ▫ | NJ60U 11.875 |
| ▬ | NJH 11.875 |
| ▭ | Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped) |
| ▮ | Forex 2.0E-3000Fb LVL 1.75 X 11.875 |

| Second Floor | | | | | | | |
|-------------------|--|--------------|--------|-------------|-------------|---------------------|--------|
| LVL/LSL (Flush) | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| F8 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 10-0-0 |
| F7 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 2 | 2 | 4 | 6-0-0 |
| F6 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 4-0-0 |
| F15 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 2-0-0 |
| LVL/LSL (Dropped) | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| BBO4 | Forex 2.0E-3000Fb LVL | 1.75 | 9.5 | 1 | 2 | 2 | 8-0-0 |
| I Joist (Flush) | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| J9 | NJ60U | 3.5 | 11.875 | | | 18 | 20-0-0 |
| J8 | NJ60U | 3.5 | 11.875 | | | 1 | 18-0-0 |
| J10 | NJ60U | 3.5 | 11.875 | | | 1 | 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 | | | 1 | 6-0-0 |
| J1 | NJH | 2.5 | 11.875 | | | 2 | 4-0-0 |
| Rim Board | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| R1 | Norbord Rimboard Plus 1.125 X 11.875 | 1.125 | 11.875 | | | 14 | 12 |
| Hanger | | | | | | | |
| | | | | Beam/Girder | | Supported Member | |
| Label | Pcs | Description | Skew | Slope | fasteners | fasteners | |
| H1 | 2 | HGUS410 | | | 46 16d | 16 16d | |
| H2 | 1 | HUC410 (Min) | | | 14 16d | 6 10d | |
| H4 | 13 | LT251188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 | |
| H6 | 1 | LT351188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 | |
| Blocking | | | | | | | |
| Label | Description | Width | Depth | Qty | Plies | Pcs | Length |
| BLK1 | NJH | 2.5 | 11.875 | LinFt | | Varies | 40-0-0 |

NOTES:

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

Refer to Multiple Member Connection Detail to ply to ply nailing or 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 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 approve the deviation prior to construction.

| ARCHITECTURAL DRAWINGS: | |
|---|--|
| JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Millwood 2, Elevation 2 | |
| 1. OBC 2012 O.Reg 332/12 as amended | |
| 2. Nascor CCMC - 13535-R | |
| 3. LVL CCMC - 14056-R | |
| 4. CAN/CSA-O86-09 | |
| 5. CCMC -12787-R APA PR-L310(C) | |

Layout Name
MILLWOOD 2-ELEV 2

Design Method
LSD

Description

Created
June 25, 2018

Builder
GREENPARK

Sales Rep
R M

Designer
R O

Shipping

Project

Builder's Project
Kott Lumber Company
14 Anderson Blvd
Stouffville, Ontario
Canada
K2H7V1
905-642-4400

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

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

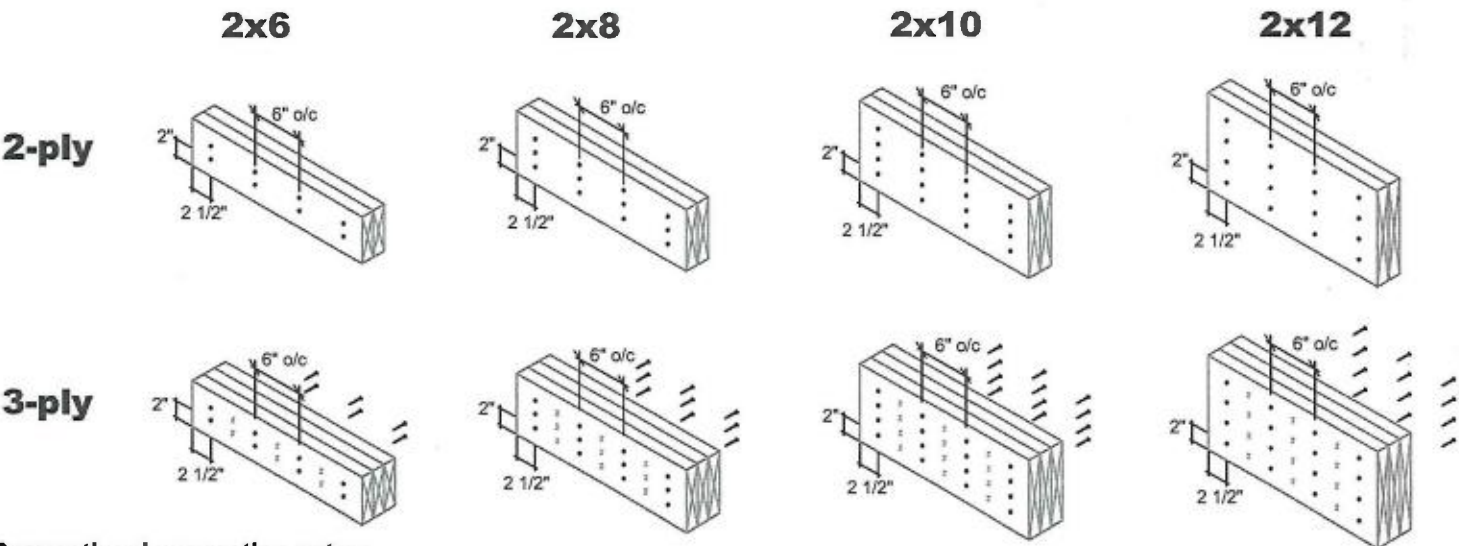
Floor
Loads
Live 40
Dead 15
Deflection Joist
LL Span L/ 480
TL Span L/ 360
LL Cant 2L/ 480
TL Cant 2L/ 360
Deflection Girder
LL Span L/ 360
TL Span L/ 240
LL Cant 2L/ 480
TL Cant 2L/ 240
Decking
Deck SPF Plywood
Thickness 5/8"
Fastener Nailed & Glued
Vibration
Ceiling: Gypsum 1/2"

September 13, 2018

LOT 16

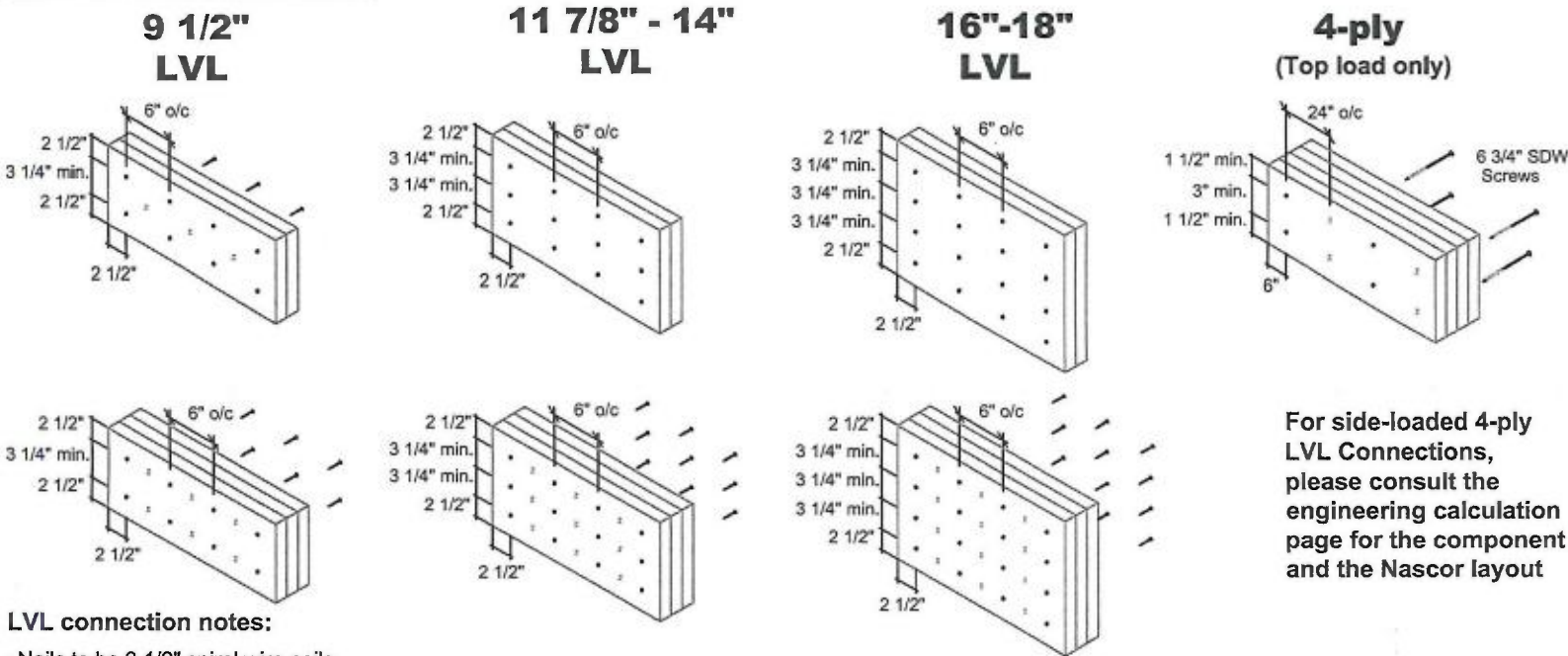
MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)



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

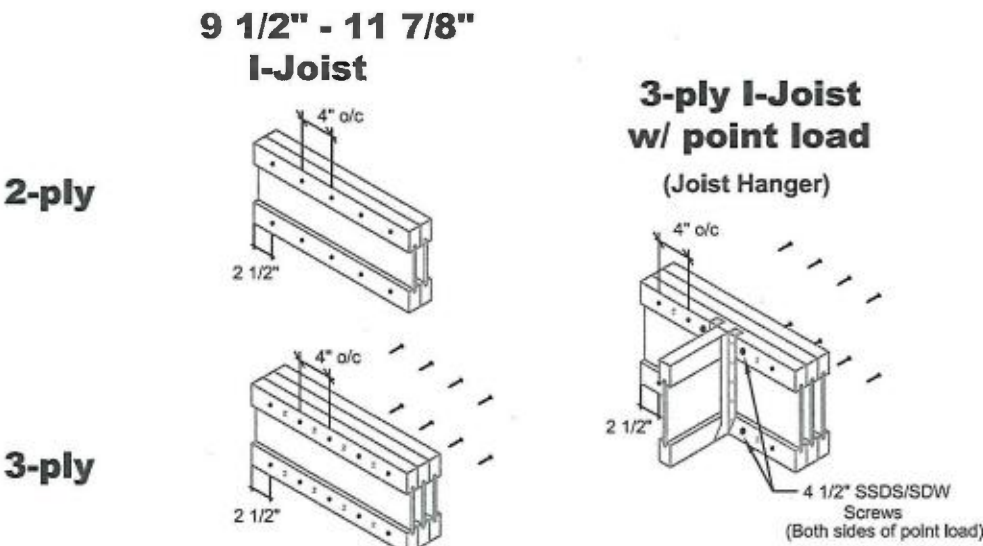
LVL Connections (for uniform distributed loads)



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.
-Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail or screw driven from the opposite side.

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

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.

MILLWOOD 2-0/6 → RL.2

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 only 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

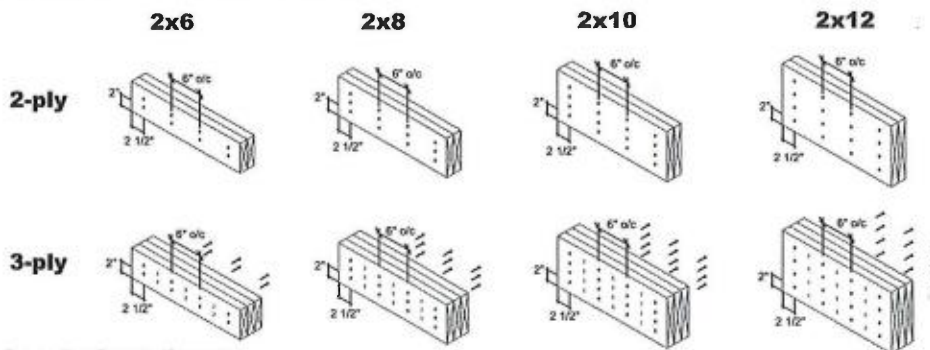
1. The building component used in construction must be the same as indicated on the drawings.
2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
3. Members consisting of multiple plies 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 pre-authorization.

MULTIPLE MEMBER CONNECTIONS

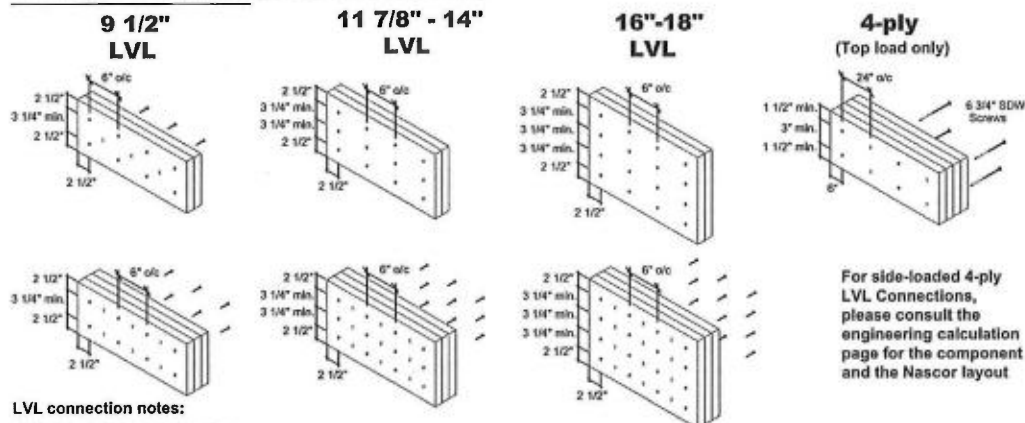
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

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

LVL Connections (for uniform distributed loads)

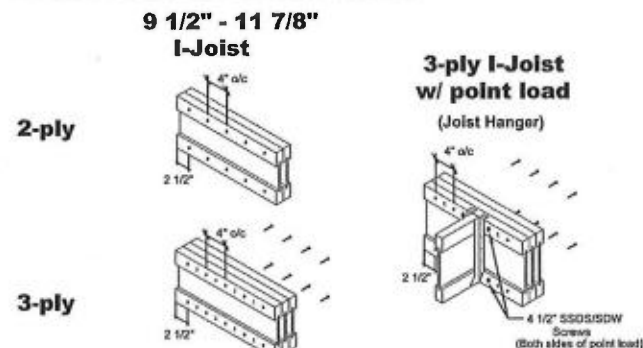


LVL connection notes:

- 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.
- Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail or screw driven from the opposite side.

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

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

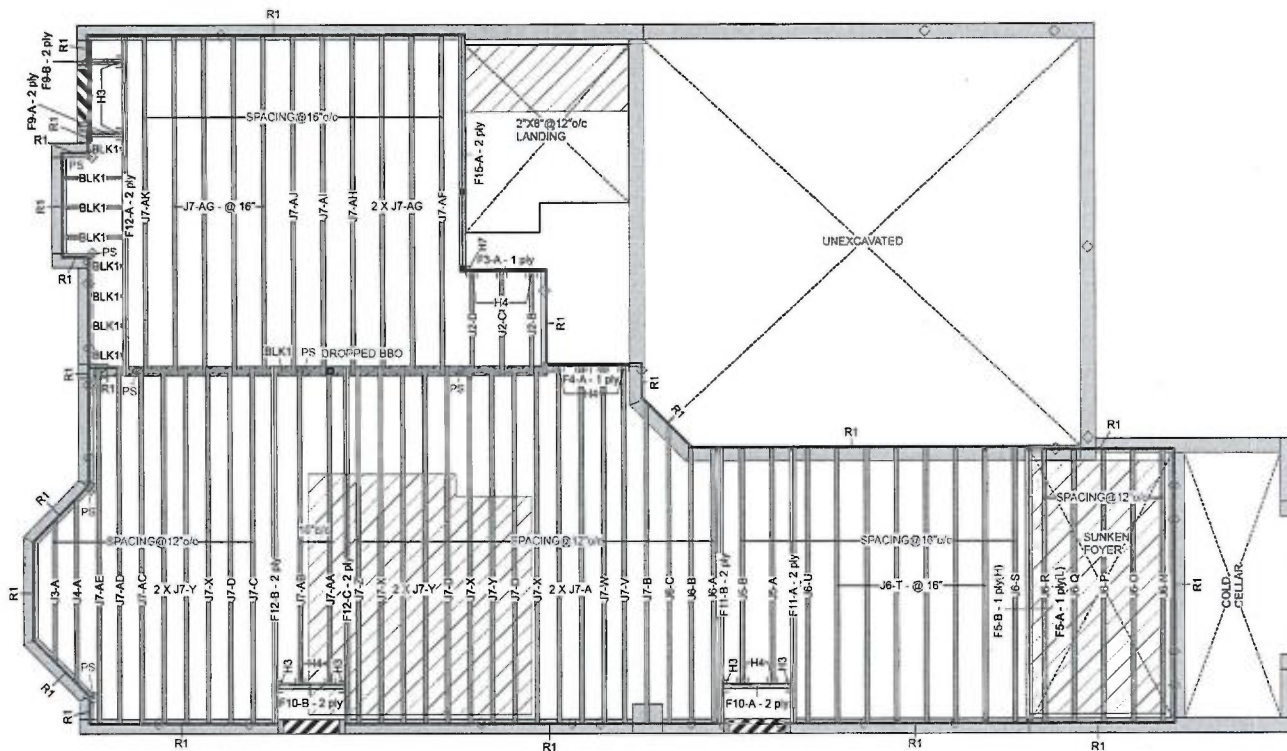
Date: November 30, 2018
Scale: NTS

KOTT

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

KOTT

Ground Floor



This certification is to confirm that:

1. The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.
2. The floor joists comply with the Nascor span table for the loads and spacing shown on this layout.

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

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



September 13, 2018

Ground Floor

LVL/LSL (Flush)

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-----------------------|-------|--------|-----|-------|-----|--------|
| F5 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | | | 2 | 14-0-0 |
| F15 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 12-0-0 |
| F4 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | | | 1 | 6-0-0 |
| F3 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | | | 1 | 4-0-0 |

Joist (Flush)

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-------------|-------|--------|-----|-------|-----|--------|
| F12 | NJ | 1.5 | 11.875 | 3 | 2 | 6 | 16-0-0 |
| F11 | NJ | 1.5 | 11.875 | 2 | 2 | 4 | 14-0-0 |
| F10 | NJ | 1.5 | 11.875 | 2 | 2 | 4 | 4-0-0 |
| F9 | NJ | 1.5 | 11.875 | 2 | 2 | 4 | 2-0-0 |
| J7 | NJH | 2.5 | 11.875 | | | 35 | 16-0-0 |
| J6 | NJH | 2.5 | 11.875 | | | 16 | 14-0-0 |
| J5 | NJH | 2.5 | 11.875 | | | 2 | 12-0-0 |
| J4 | NJH | 2.5 | 11.875 | | | 1 | 10-0-0 |
| J3 | NJH | 2.5 | 11.875 | | | 1 | 8-0-0 |
| J2 | NJH | 2.5 | 11.875 | | | 3 | 6-0-0 |

Rim Board

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|--------------------------------------|-------|--------|-----|-------|-----|--------|
| R1 | Norbord Rimboard Plus 1.125 X 11.875 | 1.125 | 11.875 | | | 12 | 12 |

Hanger

| Label | Pcs | Description | Skew | Slope | fasteners | Supported Member |
|-------|-----|----------------|------|-------|-------------|------------------|
| H3 | 6 | LT2-151188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 |
| H4 | 11 | LT251188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 |
| H7 | 1 | HUCQ1.81/9-SDS | | | | |

Blocking

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-------------|-------|--------|-------|-------|-------|--------|
| BLK1 | NJH | 2.5 | 11.875 | 1inF1 | | Vanes | 29-0-0 |

NOTES:

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

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

Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than rim depth @ 16"oc). 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 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 approve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.
64 Jardin Dr, Suite 3A
Date: Rev 1, 4/26/2018
Project No: 2045
Model: Millwood 2, Elevation 2

Legend

| | |
|----|--------------------------------------|
| PS | Point Load Support |
| ○ | Load from Above |
| ▨ | Wall |
| ▩ | 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 |

NASCOR

Layout Name
MILLWOOD 2-ELEV 2Design Method
LSD

Description

Created
June 25, 2018Builder
GREENPARKSales Rep
R.M.Designer
R.O.

Shipping

Project

Builder's Project

Kott Lumber Company
14 Anderson Blvd
Stouffville, Ontario

Canada

K2H7V1

905-642-4400

Job Path

S:\CUSTOMERS\GREENPARK
WINNISALE HOMES\MODELS

MILLWOOD 2\FLOORS\ELEV 2

MILLWOOD 2-ELEV 2.dwg

Ground Floor

Design Method

Building Code

NBCC 2010 / OBC

2012

Floor

Loads

Live

Dead

Deflection Joist

LL Span /

TL Span /

LL Cant 2L/

TL Cant 2L/

Deflection Girder

LL Span /

TL Span /

LL Cant 2L/

TL Cant 2L/

Decking

Deck

Thickness

Fastener

Vibration

SPF Plywood

3/4"

Nailed & Glued

Vibration

KOTT



isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

Designer: R O

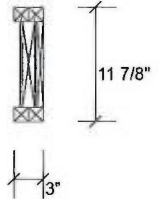
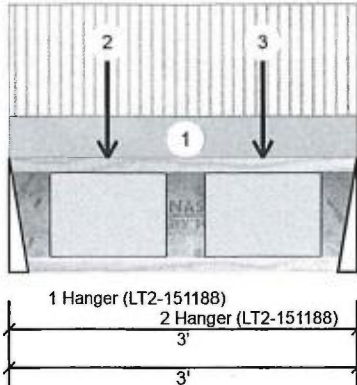
Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 1 of 1

F10-A NJ 11.875" 2-Ply - PASSED

Level: Ground Floor

**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

| Bearing | Length | Cap. React D/L lb | Total Ld. Case | Ld. Comb. |
|------------|--------|-------------------|----------------|------------|
| 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 |

Analysis Results

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

Design Notes

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



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|----------------|-------------|----------|--------|--------|-------|-------|---|
| 1 | Tie-In | 0-0-0 to 3-0-0 | (Span)1-9-8 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 0-10-4 | | Far Face | 87 lb | 233 lb | 0 lb | 0 lb | Pass-Thru Framing Squash Block is required at all point loads over bearings |
| 3 | Point | 2-2-4 | | Far Face | 86 lb | 229 lb | 0 lb | 0 lb | |

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

1. Dry service conditions, unless noted otherwise
2. Joist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. Joist flanges must not be cut or drilled
2. Refer to latest copy of the Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Joists must not be used
4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

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 ponding

Manufacturer Info

Nascor by Kott

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

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

NASCOR





isDesign™

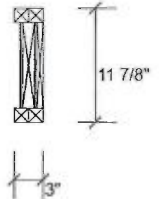
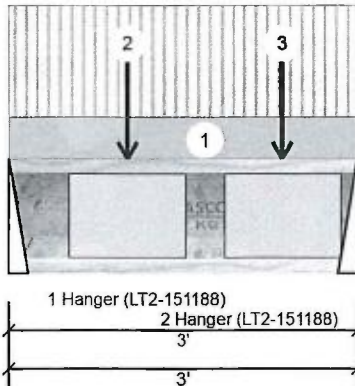
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F10-B NJ 11.875" 2-Ply - PASSED

Level: Ground Floor


Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 343 | 129 | 0 | 0 |
| 2 | 404 | 152 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. 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 |

Analysis Results

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

Design Notes

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



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|----------------|-------------|----------|--------|--------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 3-0-0 | (Span)1-9-8 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 1-0-4 | | Far Face | 130 lb | 346 lb | 0 lb | 0 lb | J7 |
| 3 | Point | 2-4-4 | | Far Face | 110 lb | 293 lb | 0 lb | 0 lb | |

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 Structural 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

1. Dry service conditions, unless noted otherwise
2. Joist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. Joist flanges must not be cut or drilled
2. Refer to latest copy of the Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Joists must not be used
4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

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 ponding

Manufacturer Info

Nascor by Kott

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

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

NASCOR




isDesign™

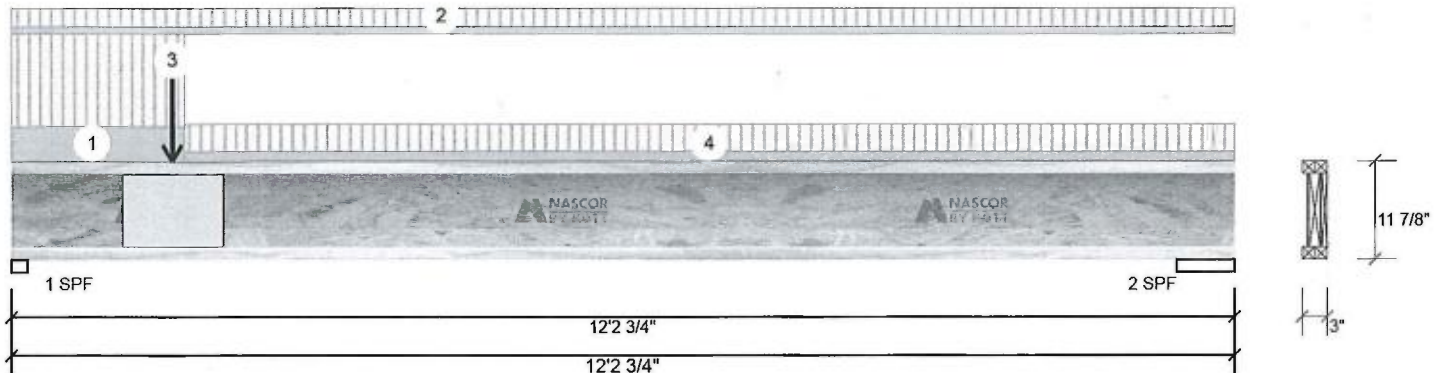
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F11-A NJ 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 512 | 192 | 0 | 0 |
| 2 | 243 | 91 | 0 | 0 |

Bearings and Factored Reactions

| 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 |

Design Notes

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



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|-------------------|--------------|----------|--------|--------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 1-8-14 | (Span)3-3-0 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 12-2-12 | (Span)0-7-12 | Top | 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 | Top | 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 Structural 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
- Ljoist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

- Ljoist flanges must not be cut or drilled
- Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
- Damaged Ljoists 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 roofs provide ponding

Manufacturer Info

Nascor by Kott

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

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





isDesign™

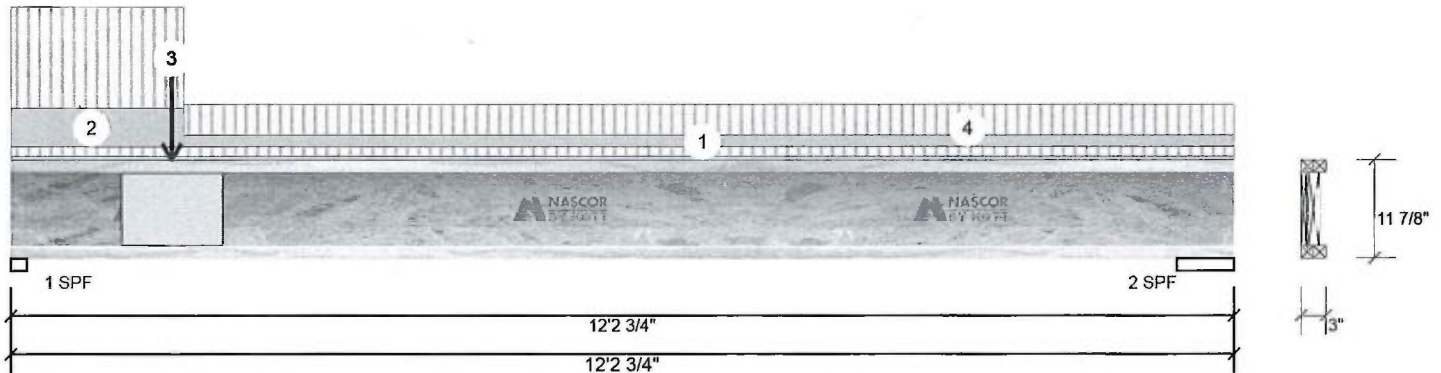
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F11-B NJ 11.875" 2-Ply - PASSED

Level: Ground Floor

**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

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

Analysis Results

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



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|-------------------|---------------|-----------|--------|--------|-------|-------|---|
| 1 | Tie-In | 0-0-0 to 12-2-12 | (Span)0-3-12 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 1-8-14 | (Span)3-3-0 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Point | 1-7-6 | | Near Face | 106 lb | 282 lb | 0 lb | 0 lb | F10 |
| 4 | Tie-In | 1-8-14 to 12-2-12 | (Span)0-11-12 | Top | 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 Structural 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

1. Dry service conditions, unless noted otherwise
2. Joist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. Joist flanges must not be cut or drilled
2. Refer to latest copy of the Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Joists must not be used
4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

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 ponding

Manufacturer Info

Nascor by Kott

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

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

NASCOR





isDesign™

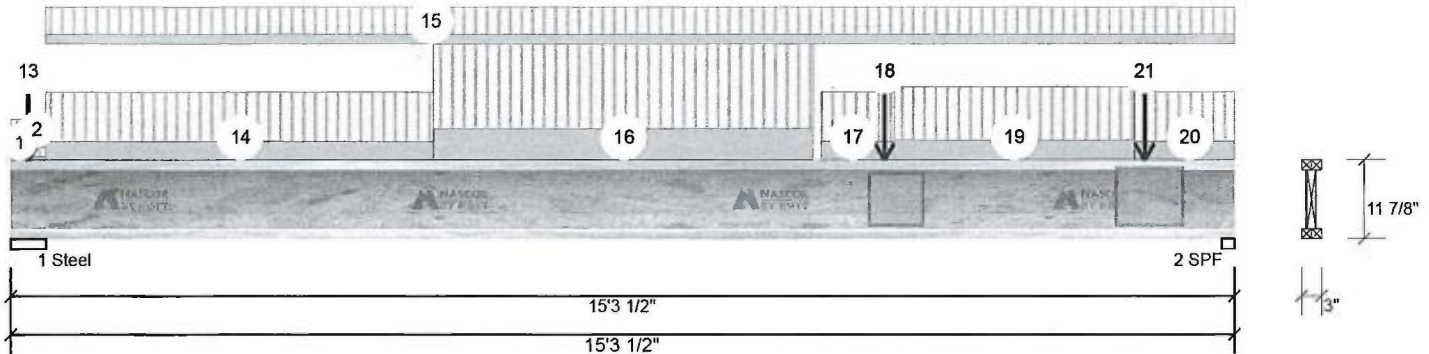
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 2

F12-A NJ 11.875" 2-Ply - PASSED

Level: Ground Floor


Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 641 | 269 | 0 | 0 |
| 2 | 539 | 202 | 0 | 0 |

Bearings and Factored Reactions

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

Analysis Results

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

Design Notes

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



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|----------------|--------------|------|--------|--------|-------|-------|------------------|
| 1 | Tie-In | 0-0-0 to 0-5-4 | (Span)0-3-12 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 0-0-0 to 0-5-4 | (Span)0-8-4 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Point | 0-2-10 | | Top | 1 lb | 3 lb | 0 lb | 0 lb | J7 |
| 4 | Point | 0-2-10 | | Top | 1 lb | 4 lb | 0 lb | 0 lb | J7 |
| 5 | Point | 0-2-10 | | Top | 1 lb | 3 lb | 0 lb | 0 lb | J7 |
| 6 | Point | 0-2-10 | | Top | 1 lb | 0 lb | 0 lb | 0 lb | Wall Self Weight |
| 7 | Point | 0-2-10 | | Top | 21 lb | 56 lb | 0 lb | 0 lb | J7 |

Continued on page 2...

| | | | | |
|--|---|---|---|--|
| Notes Calculated Structural 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 1. Dry service conditions, unless noted otherwise 2. Joist not to be treated with fire retardant or corrosive chemicals | Handling & Installation 1. Joist flanges must not be cut or drilled 2. Refer to latest copy of the Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details 3. Damaged Joists must not be used 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes. | 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 ponding | Manufacturer Info Nascor by Kott | Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400 |
| | | | READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. | |

This design is v





isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

Designer: R O

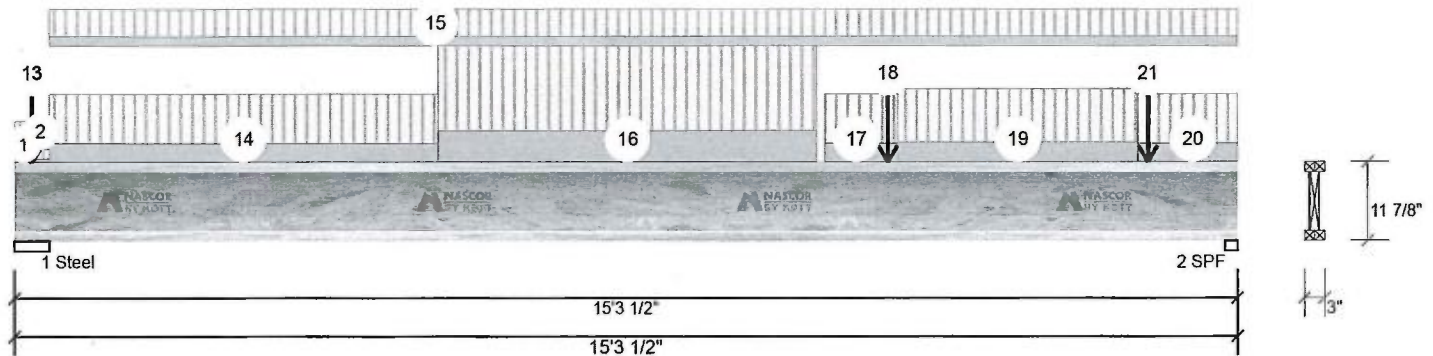
Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 2 of 2

F12-A NJ 11.875" 2-Ply - PASSED

Level: Ground Floor



Continued from page 1

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|--------------------|---------------|----------|--------|--------|-------|-------|------------------|
| 8 | Point | 0-2-10 | | Top | 22 lb | 59 lb | 0 lb | 0 lb | J7 |
| 9 | Point | 0-2-10 | | Top | 2 lb | 5 lb | 0 lb | 0 lb | J7 |
| 10 | Point | 0-2-10 | | Top | 20 lb | 0 lb | 0 lb | 0 lb | Wall Self Weight |
| 11 | Point | 0-2-10 | | Top | 9 lb | 25 lb | 0 lb | 0 lb | J7 |
| 12 | Point | 0-2-10 | | Top | 10 lb | 26 lb | 0 lb | 0 lb | J7 |
| 13 | Point | 0-2-10 | | Top | 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 15 | Tie-In | 0-5-4 to 15-3-8 | (Span)0-10-12 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 16 | Tie-In | 5-3-10 to 10-0-8 | (Span)2-9-15 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 17 | Tie-In | 10-1-10 to 11-0-10 | (Span)1-7-15 | Top | 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 20 | Tie-In | 14-0-10 to 15-3-8 | (Span)1-7-15 | Top | 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 Structural 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

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

chemicals**Handling & Installation**

1. Joist flanges must not be cut or drilled
2. Refer to latest copy of the Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Joists must not be used
4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

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

NASCOR





isDesign™

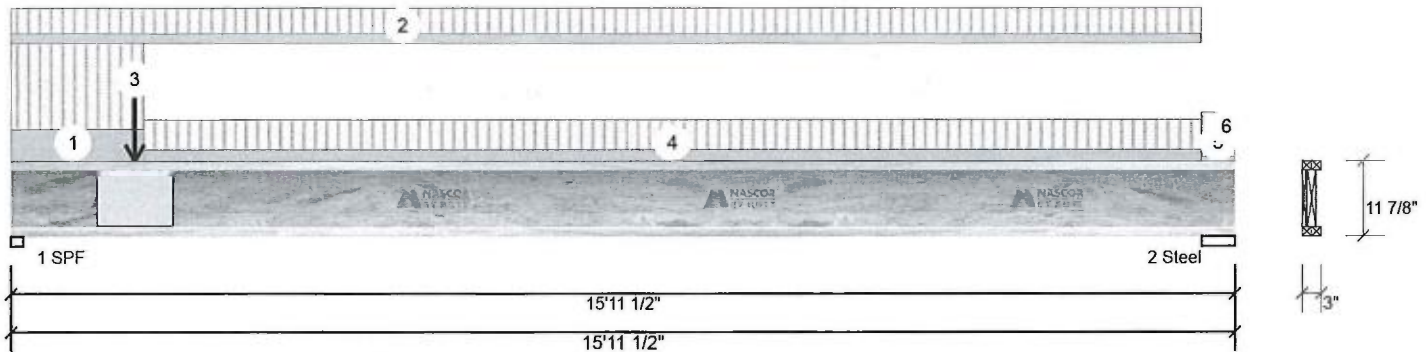
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F12-B NJ 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 712 | 267 | 0 | 0 |
| 2 | 376 | 141 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. React D/L lb | Total Ld. Case | Ld. Comb. |
|-----------|--------|-------------------|----------------|-------------------|
| 1 - SPF | 1.875" | 53% | 334 / 1068 | 1402 L 1.25D+1.5L |
| 2 - Steel | 5.250" | 22% | 176 / 563 | 739 L 1.25D+1.5L |

Analysis Results

| 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 |

Design Notes

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



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-----------|-------------------|--------------------------|-----------|--------|--------|-------|-------|---|
| 1 | Tie-In | 0-0-0 to 1-8-14 | (Span)3-3-0 | Top | 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 3 | Point | 1-7-6 | | Near Face | 129 lb | 343 lb | 0 lb | 0 lb | F10 |
| 4 | Tie-In | 1-8-14 to 15-6-4 | (Span)1-1-12 to 1-1-12 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | Pass-Thru Framing Squash Block is required at all point loads over bearings |
| 5 | Tie-In | 15-6-4 to 15-11-8 | (Span)0-5-4 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | Refer to Multiple Member Connection |
| 6 | Tie-In | 15-6-4 to 15-11-8 | (Span)0-10-12 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | Details for ply to ply nailing or bolting requirements |

Notes

Calculated Structural 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
- Ljoist not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

- Ljoist flanges must not be cut or drilled
- Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web note chart, bridging details, multi-ply fastening details and handling/erection details
- Damaged Ljoists 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 roofs provide ponding

Manufacturer Info

Nascor by Kott

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

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

NASCOR





isDesign™

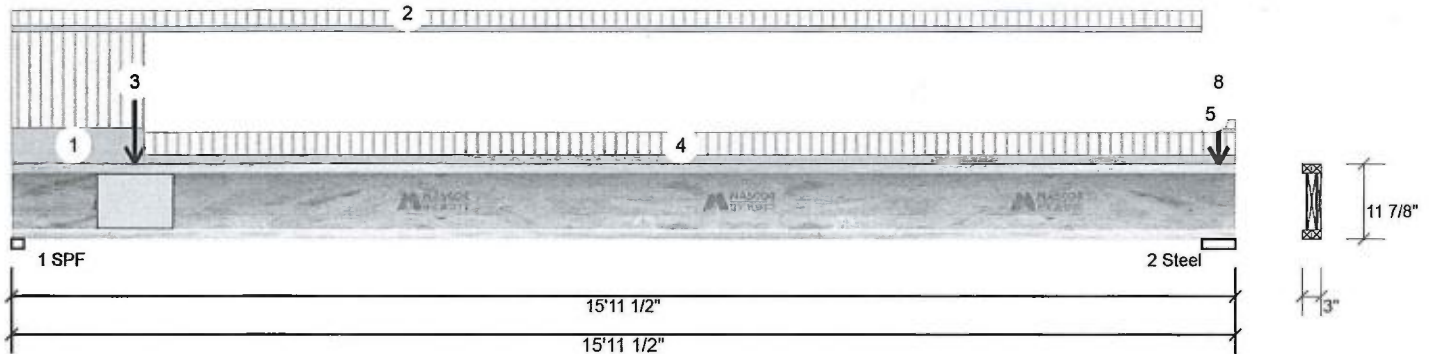
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 2

F12-C NJ 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 649 | 244 | 0 | 0 |
| 2 | 417 | 179 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. React D/L lb | Total Ld. Case | Ld. Comb. |
|-----------|--------|-------------------|----------------|------------|
| 1 - SPF | 1.875" | 48% 305 / 973 | 1278 L | 1.25D+1.5L |
| 2 - Steel | 5.250" | 25% 223 / 625 | 849 L | 1.25D+1.5L |

Analysis Results

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

Design Notes

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



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 | Top | 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 | Top | 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 5 | Tie-In | 15-6-4 to 15-11-8 | (Span)0-3-12 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 6 | Point | 15-8-14 | | Top | 32 lb | 85 lb | 0 lb | 0 lb | J7 |

Continued on page 2...

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

1. Ljoist flanges must not be cut or drilled
2. Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Ljoists must not be used
4. Design assumes top 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 ponding

Manufacturer Info

Nascor by Kott

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

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

NASCOR





isDesign™

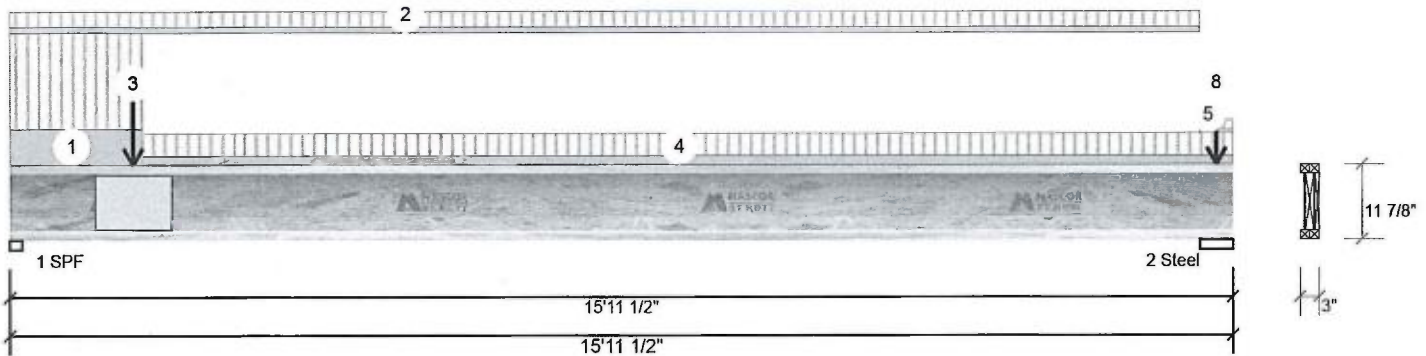
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 2 of 2

F12-C NJ 11.875" 2-Ply - PASSED

Level: Ground Floor



...Continued from page 1

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

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

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

Notes

Calculated Structural 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

1. Dry service conditions, unless noted otherwise
2. Ljoist not to be treated with fire retardant or corrosive chemicals

chemicals**Handling & Installation**

1. Ljoist flanges must not be cut or drilled
2. Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Ljoists must not be used
4. Design assumes top 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

NASCOR





isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/10/2018

Designer: R O

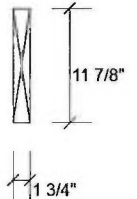
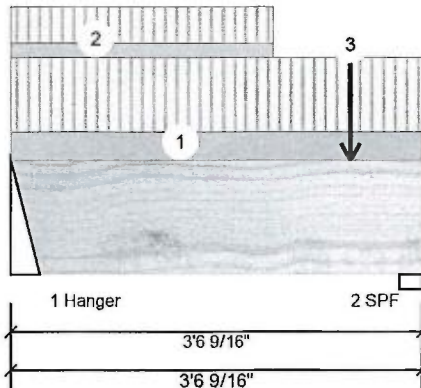
Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 1 of 1

F3-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor

**Member Information**

| | | | |
|---------------------|--------|----------------|----------------------|
| Type: | Girder | Application: | Floor (Residential) |
| Plies: | 1 | Design Method: | LSD |
| Moisture Condition: | Dry | Building Code: | NBCC 2010 / OBC 2012 |
| Deflection LL: | 360 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal | Vibration: | Not Checked |
| General Load | | | |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 555 | 218 | 0 | 0 |
| 2 | 510 | 201 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. React D/L lb | Total Ld. Case | Ld. Comb. |
|------------|--------|-------------------|----------------|------------|
| 1 - Hanger | 3.000" | 28% 272 / 833 | 1106 L | 1.25D+1.5L |
| 2 - SPF | 2.375" | 40% 251 / 765 | 1016 L | 1.25D+1.5L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---------------|-----------------|-----------|---------------|-------------|------------|---------|
| Moment | 785 ft-lb | 1'9 5/16" | 17130 ft-lb | 0.046 (5%) | 1.25D+1.5L | L |
| Unbraced | 785 ft-lb | 1'9 5/16" | 13259 ft-lb | 0.059 (6%) | 1.25D+1.5L | L |
| Shear | 745 lb | 2'5 1/16" | 5798 lb | 0.129 (13%) | 1.25D+1.5L | L |
| Perm Defl in. | 0.001 (L/26669) | 1'9 7/16" | 0.108 (L/360) | 0.010 (1%) | D | Uniform |
| LL Defl inch | 0.004 (L/10472) | 1'9 3/8" | 0.108 (L/360) | 0.030 (3%) | L | L |
| TL Defl inch | 0.005 (L/7520) | 1'9 3/8" | 0.161 (L/240) | 0.030 (3%) | D+L | L |

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings.



September 13, 2018

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|---------------|----------------|------------|-----------|--------|---------|-------|-------|----------|
| 1 | Part. Uniform | 0-0-0 to 3-6-9 | | Top | 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 | | | | |

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 Structural 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

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

chemicals**Handling & Installation**

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

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

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

This design is v

NASCOR





isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

Designer: R O

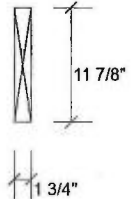
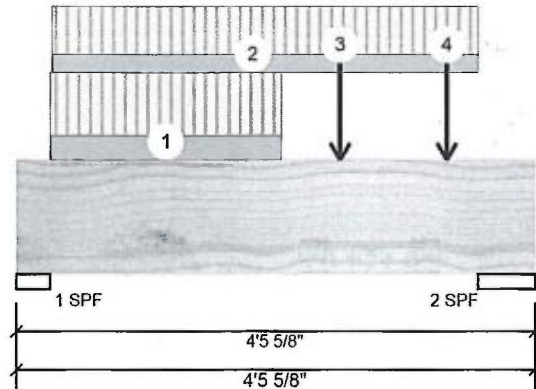
Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 1 of 1

F4-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor

**Member Information**

| | | | |
|---------------------|--------|----------------|----------------------|
| Type: | Girder | Application: | Floor (Residential) |
| Plies: | 1 | Design Method: | LSD |
| Moisture Condition: | Dry | Building Code: | NBCC 2010 / OBC 2012 |
| Deflection LL: | 360 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal | Vibration: | Not Checked |
| General Load | | | |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

| Bearing | Length | Cap. | 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 |

Design Notes

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



September 13, 2018

Notes

Calculated Structural 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, multiply 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

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

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





isDesign™

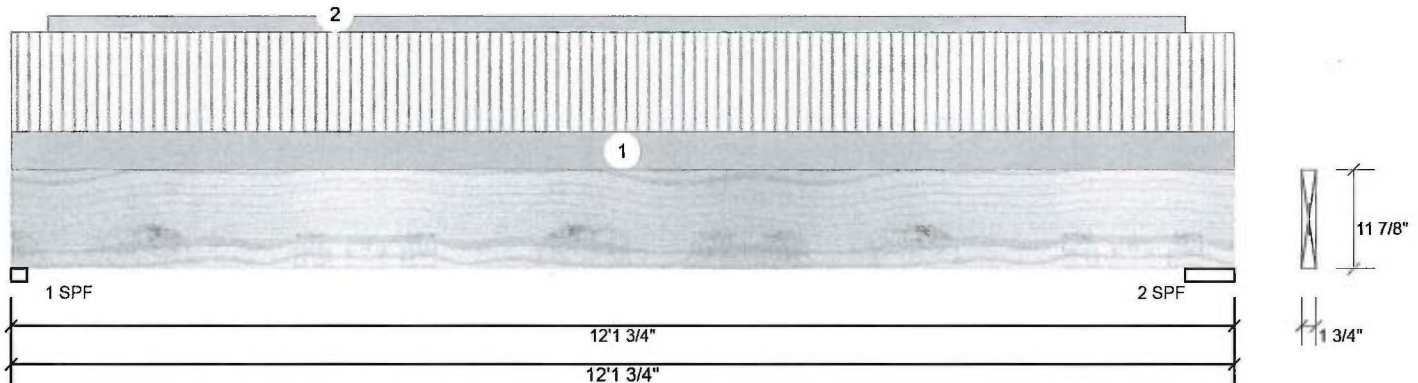
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F5-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor



Member Information

| | | | |
|---------------------|--------|----------------|----------------------|
| Type: | Girder | Application: | Floor (Residential) |
| Plies: | 1 | Design Method: | LSD |
| Moisture Condition: | Dry | Building Code: | NBCC 2010 / OBC 2012 |
| Deflection LL: | 360 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal | Vibration: | Not Checked |
| General Load | | | |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 73 | 67 | 0 | 0 |
| 2 | 77 | 70 | 0 | 0 |

Bearings and Factored Reactions

| 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" | 3% | 88 / 115 | 203 L | 1.25D+1.5L |

Analysis Results

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

Design Notes

- Girders are designed to be supported on the bottom edge only.
- Top braced at bearings.
- 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Part. Uniform Self Weight | 0-4-6 to 11-7-15 | | Top | 2 PLF 5 PLF | 0 PLF | 0 PLF | 0 PLF | |



September 13, 2018

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 Structural 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 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

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

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



isDesign™

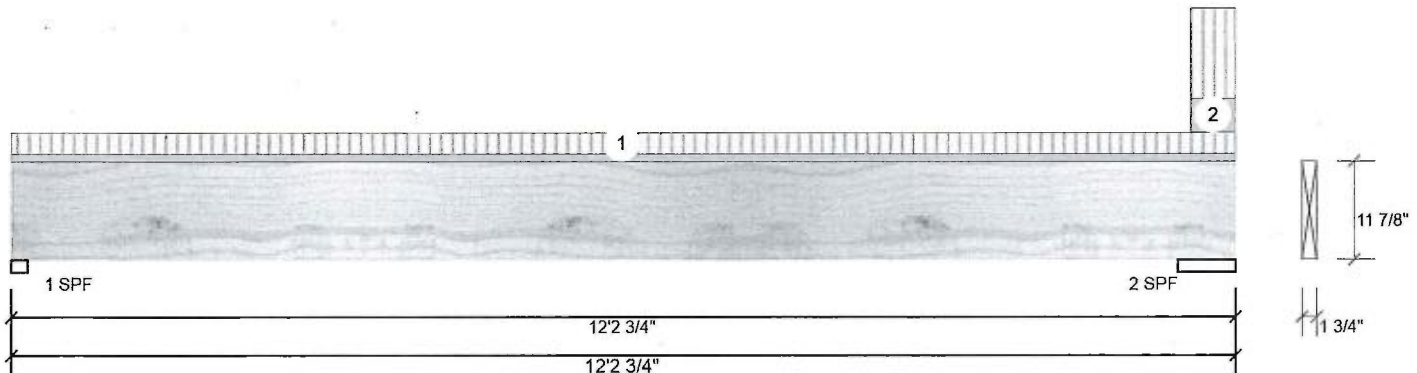
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F5-B Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor



Member Information

Unfactored Reactions UNPATTERNED lb (Uplift)

| | | | |
|---------------------|--------|----------------|----------------------|
| Type: | Girder | Application: | Floor (Residential) |
| Plies: | 1 | Design Method: | LSD |
| Moisture Condition: | Dry | Building Code: | NBCC 2010 / OBC 2012 |
| Deflection LL: | 360 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal | Vibration: | Not Checked |
| General Load | | | |
| Floor Live: | 40 PSF | | |
| Dead: | 15 PSF | | |

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 67 | 53 | 0 | 0 |
| 2 | 95 | 66 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. 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 |



September 13, 2018

Design Notes

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

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-------------|-------------------|--------------|------|--------|--------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 12-2-12 | (Span)0-6-14 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Tie-In | 11-9-6 to 12-2-12 | (Span)2-6-2 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| | Self Weight | | | | 5 PLF | | | | |

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

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

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer info

Forex
 APA: PR-L318

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

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:

NASCOR





isDesign™

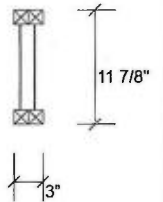
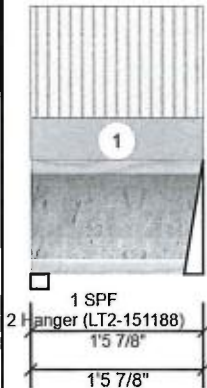
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F9-A NJ 11.875" 2-Ply - PASSED

Level: Ground Floor


Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 48 | 18 | 0 | 0 |
| 2 | 49 | 18 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. React | D/L lb | Total Ld. Case | Ld. Comb. |
|------------|--------|------------|---------|----------------|------------|
| 1 - SPF | 1.875" | 4% | 23 / 72 | 95 L | 1.25D+1.5L |
| 2 - Hanger | 2.000" | 4% | 23 / 73 | 96 L | 1.25D+1.5L |

Analysis Results

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

Design Notes

- 1 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.



September 13, 2018

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

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

chemicals
Handling & Installation

1. Ljoist flanges must not be cut or drilled
2. Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Ljoists must not be used
4. Design assumes top 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 ponding

Manufacturer Info

Nascor by Kott

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

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 valid





isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

Designer: R O

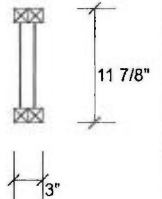
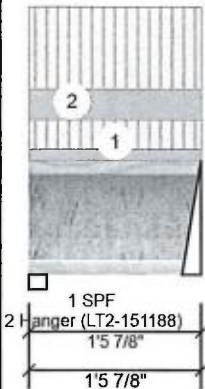
Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 1 of 1

F9-B NJ 11.875" 2-Ply - PASSED

Level: Ground Floor

**Member Information****Unfactored Reactions UNPATTERNED lb (Uplift)**

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

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 65 | 24 | 0 | 0 |
| 2 | 66 | 25 | 0 | 0 |

Bearings and Factored Reactions

| 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 |
| 2 - Hanger | 2.000" | 5% | 31 / 99 | 130 L 1.25D+1.5L |

Analysis Results

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

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.



September 13, 2018

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

1. Dry service conditions, unless noted otherwise
2. Ljoist not to be treated with fire retardant or corrosive chemicals

chemicals**Handling & Installation**

1. Ljoist flanges must not be cut or drilled
2. Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged Ljoists must not be used
4. Design assumes top 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 ponding

Manufacturer Info

Nascor by Kott

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

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

This design is v

NASCOR





isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/10/2018

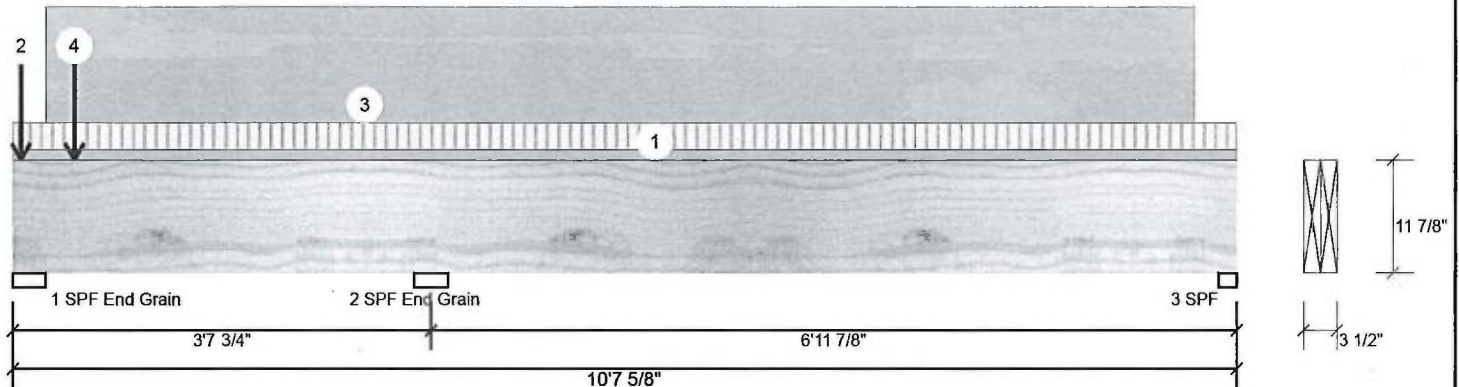
Designer: R O

Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 1 of 2

F15-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

| 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 |

Analysis Results

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



September 13, 2018

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multiply 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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

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

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

This design is v



isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/10/2018

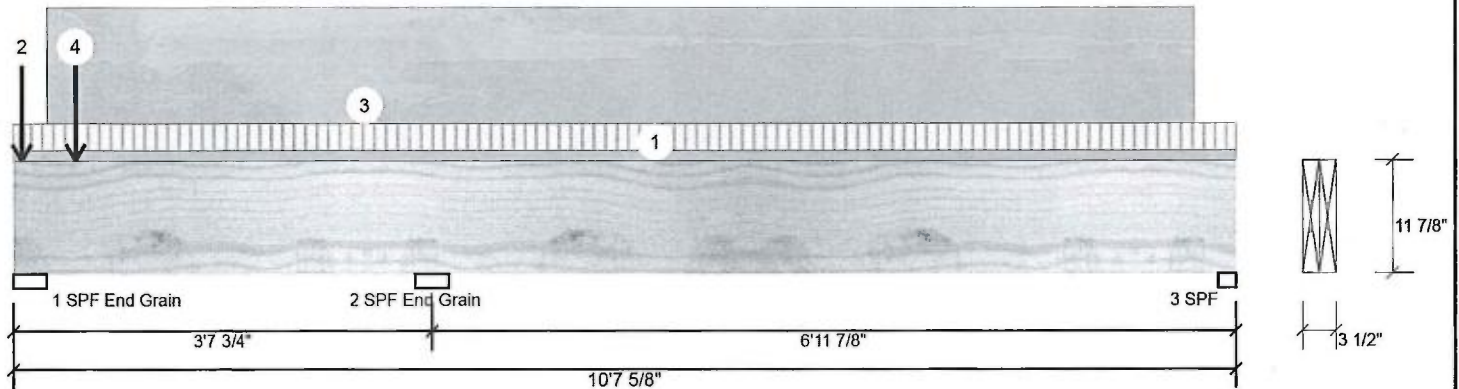
Designer: R O

Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 2 of 2

F15-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED Level: Ground Floor



| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|---------------|------------------|--------------|-----------|--------|--------|-------|-------|------------------|
| 1 | Tie-In | 0-0-0 to 10-7-10 | (Span)0-11-1 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 0-0-14 | | Near Face | 218 lb | 555 lb | 0 lb | 0 lb | F3 |
| 3 | Part. Uniform | 0-3-8 to 10-3-4 | | Top | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 4 | Point | 0-6-8 | | Top | 231 lb | 464 lb | 0 lb | 0 lb | BBO3 BBO3 |
| | Self Weight | | | | 10 PLF | | | | |

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

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

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

This design is valid until 7/10/2021



isDesign™

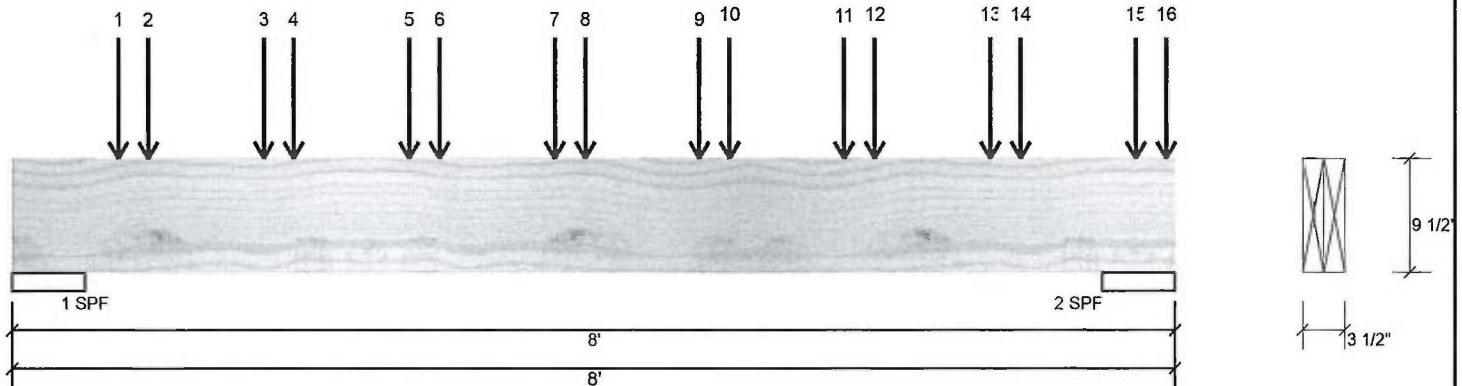
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 2

BBO4-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 2221 | 861 | 0 | 0 |
| 2 | 2284 | 885 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|--------------|-------|----------|------------|
| 1 - SPF | 6.000" | 34% | 1076 / 3332 | 4409 | L | 1.25D+1.5L |
| 2 - SPF | 6.000" | 35% | 1106 / 3425 | 4531 | L | 1.25D+1.5L |

Analysis Results

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



September 13, 2018

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

Continued on page 2...

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
 APA: PR-L318

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

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

This design is v

NASCOR





isDesign™

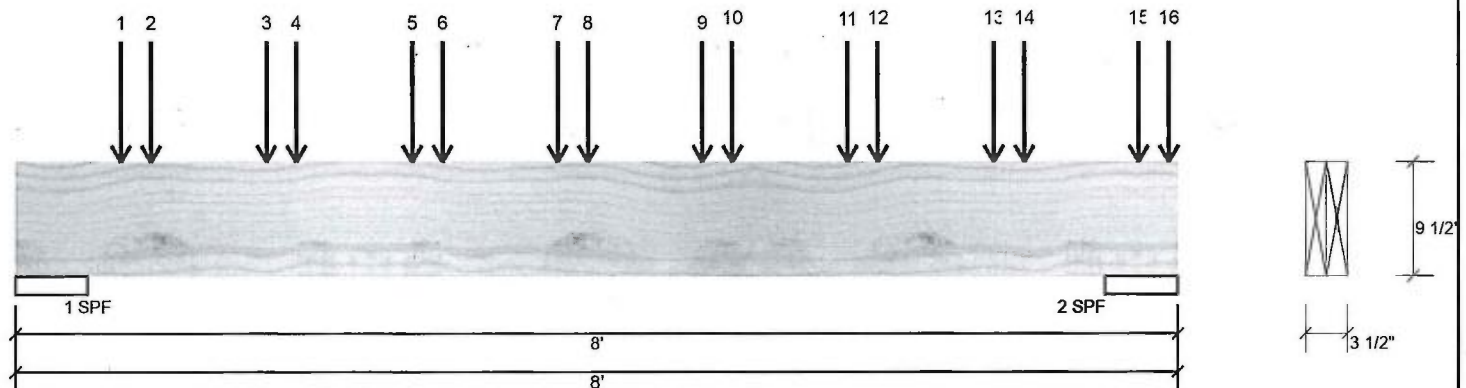
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 2 of 2

BBO4-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED

Level: Second Floor



Continued from page 1

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Comments |
|----|-------------|----------|------------|------|--------|--------|------|------|----------|
| 6 | Point | 2-11-4 | | Top | 116 lb | 310 lb | 0 lb | 0 lb | J7 |
| 7 | Point | 3-8-12 | | Top | 111 lb | 297 lb | 0 lb | 0 lb | J7 |
| 8 | Point | 3-11-4 | | Top | 116 lb | 310 lb | 0 lb | 0 lb | J7 |
| 9 | Point | 4-8-12 | | Top | 111 lb | 297 lb | 0 lb | 0 lb | J7 |
| 10 | Point | 4-11-4 | | Top | 116 lb | 310 lb | 0 lb | 0 lb | J7 |
| 11 | Point | 5-8-12 | | Top | 111 lb | 297 lb | 0 lb | 0 lb | J7 |
| 12 | Point | 5-11-4 | | Top | 116 lb | 310 lb | 0 lb | 0 lb | J7 |
| 13 | Point | 6-8-12 | | Top | 111 lb | 297 lb | 0 lb | 0 lb | J7 |
| 14 | Point | 6-11-4 | | Top | 116 lb | 310 lb | 0 lb | 0 lb | J7 |
| 15 | Point | 7-8-12 | | Top | 50 lb | 134 lb | 0 lb | 0 lb | J7 |
| 16 | Point | 7-11-4 | | Top | 46 lb | 122 lb | 0 lb | 0 lb | J7 |
| | Self Weight | | | | 8 PLF | | | | |

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

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

Notes

Calculated Structural 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

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

chemicals**Handling & Installation**

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
 APA: PR-L318

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

NASCOR

This design is valid until 7/10/2021



isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

Designer: R O

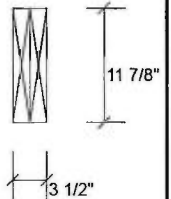
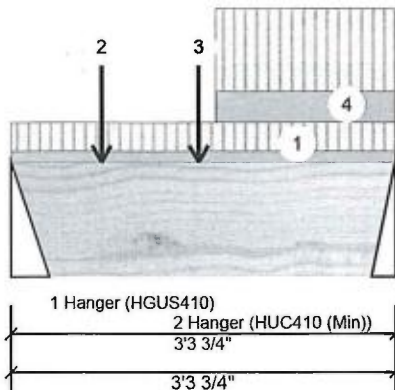
Job Name: MILLWOOD 2-ELEV 1

Project #:

Page 1 of 1

F6-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor

**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

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

Analysis Results

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

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 | Side | Dead | Live | Snow | Wind | Comments |
|----|-------------|-----------------|---------------|-----------|--------|--------|-------|-------|----------|
| 1 | Tie-In | 0-0-0 to 3-3-12 | (Span)1-4-8 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Point | 0-9-7 | | Near Face | 26 lb | 70 lb | 0 lb | 0 lb | J2 |
| 3 | Point | 1-7-8 | | Near Face | 33 lb | 35 lb | 0 lb | 0 lb | |
| 4 | Tie-In | 1-9-4 to 3-3-12 | (Span)3-11-13 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| | Self Weight | | | | 10 PLF | | | | |

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

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



September 13, 2018

Notes

Calculated Structural 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

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

chemicals**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multiply 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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

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

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

NASCOR





isDesign™

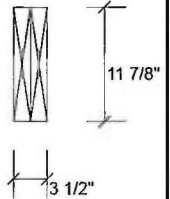
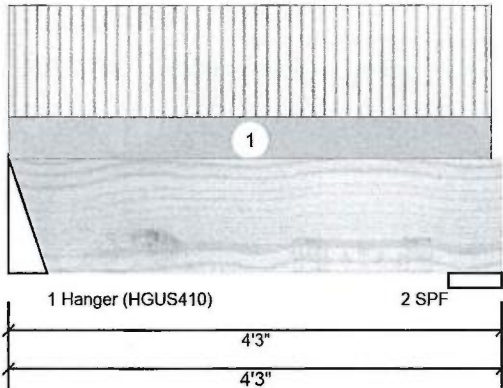
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F7-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 35 | 33 | 0 | 0 |
| 2 | 35 | 34 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. 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 Results

| 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%) | | |

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.



September 13, 2018

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

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

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

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
 APA: PR-L318

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

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



isDesign™

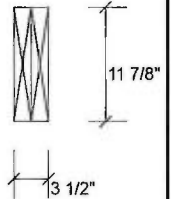
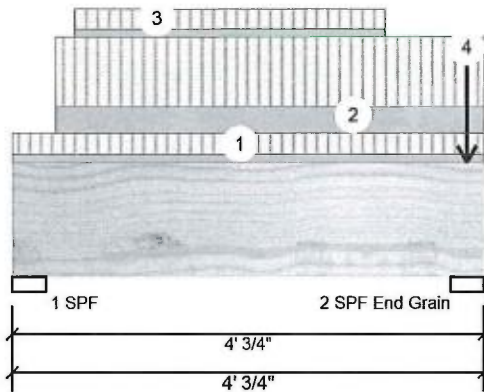
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 1

F7-B Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 643 | 260 | 0 | 0 |
| 2 | 885 | 375 | 0 | 0 |

Bearings and Factored Reactions

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

Analysis Results

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

Design Notes

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top braced at bearings.
- Bottom braced at bearings.
- 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 2 | Part. Uniform | 0-4-8 to 4-0-12 | | Top | 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 | 0 PLF | Pass Thru Framing Squash Block is required at all point loads over bearings |
| 4 | Point | 3-11-0 | | Near Face | 88 lb | 169 lb | 0 lb | 0 lb | |
| | Self Weight | | | | 10 PLF | | | | Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements |

Notes

Calculated Structural 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 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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
 APA: PR-L318

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

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

NASCOR





isDesign™

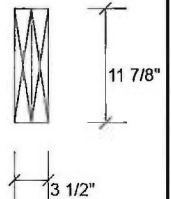
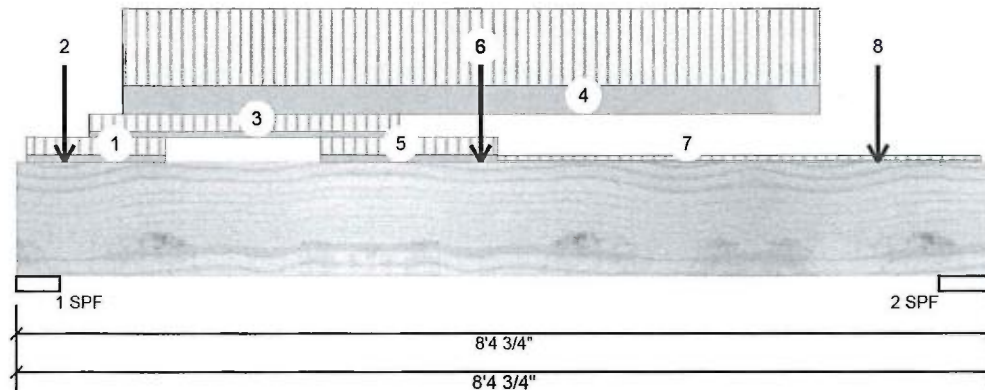
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 1 of 2

F8-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor

**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

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

Analysis Results

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

Design Notes

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top braced at bearings.
- Bottom braced at bearings.
- 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 | 0-1-0 to 1-3-8 | (Span)3-7-4 | Top | 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 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | |
| 6 | Point | 4-0-0 | | Far Face | 83 lb | 150 lb | 0 lb | 0 lb | F6 |

Continued on page 2...

Notes

Calculated Structural 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 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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
 APA: PR-L318

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

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





isDesign™

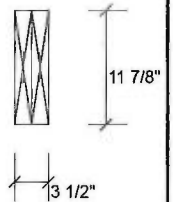
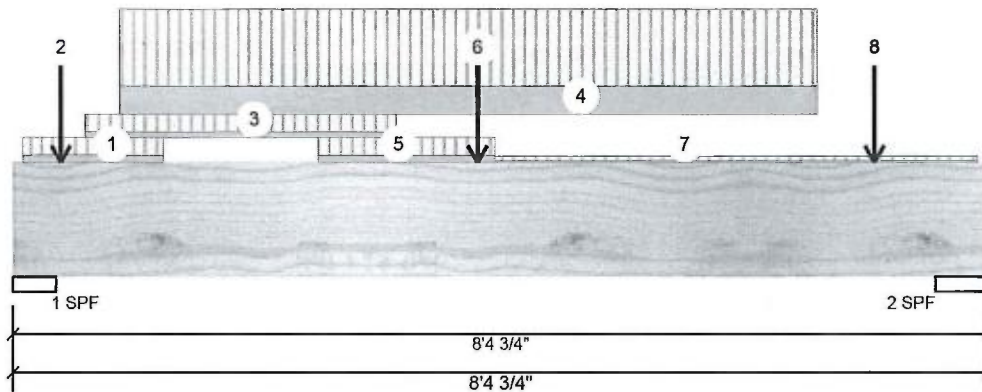
Client: GREENPARK
 Project:
 Address:

Date: 9/7/2018
 Designer: R O
 Job Name: MILLWOOD 2-ELEV 1
 Project #:

Page 2 of 2

F8-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



...Continued from page 1

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

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

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

Notes

Calculated Structural 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

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

chemicals**Handling & Installation**

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

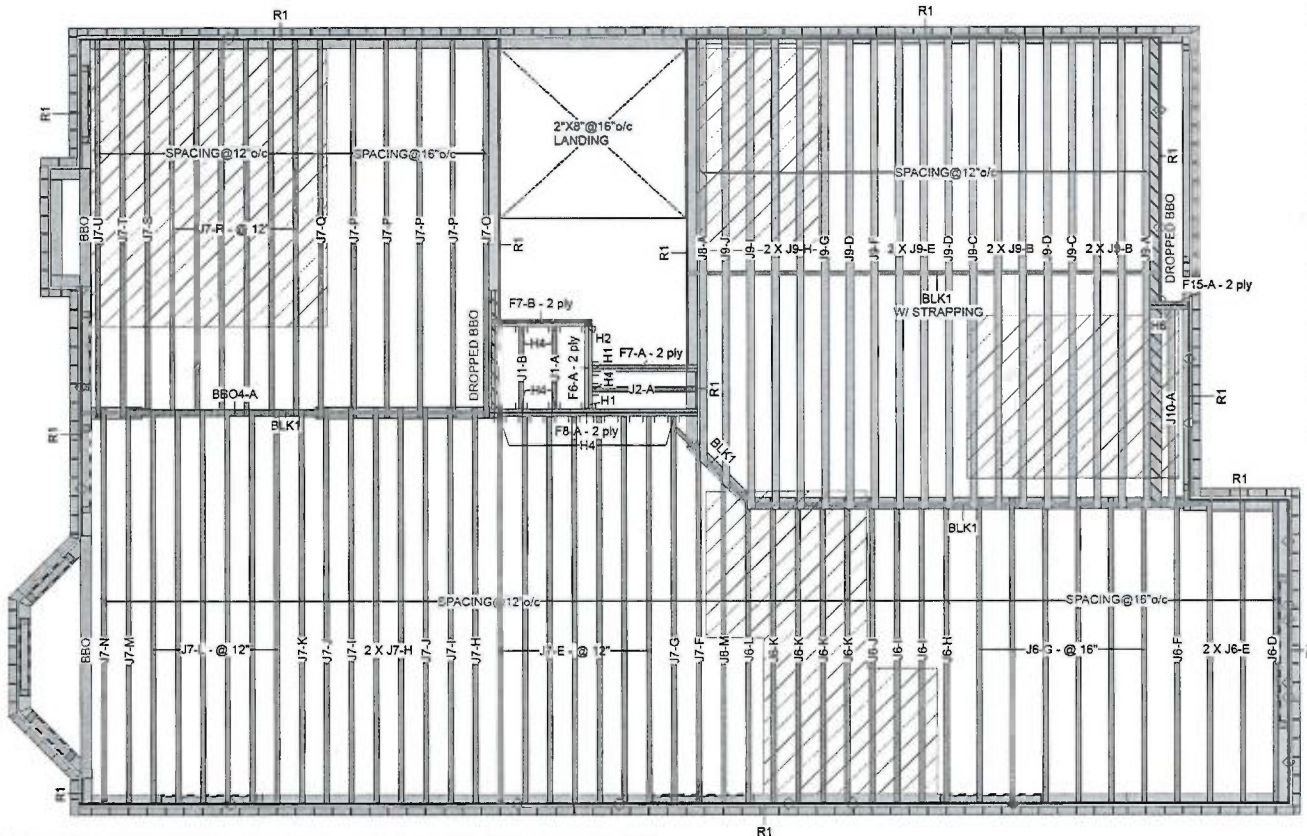
Forex
 APA: PR-L318

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

NASCOR

This design is valid until 7/10/2021

Second Floor



This certification is to confirm that:

1. The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.
2. The floor joists comply with the Nascor span table for the loads and spacing shown on this layout.

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

Legend

| | |
|----|--|
| PS | Point Load Support |
| ◊ | Load from Above |
| ▨ | Wall |
| ▧ | Wall Opening |
| ▩ | Norbord Rimboard Plus 1.125 X 11.875 |
| ▪ | NJ 11.875 |
| ▫ | NJ60U 11.875 |
| ▬ | NJH 11.875 |
| ▭ | Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped) |
| ▮ | Forex 2.0E-3000Fb LVL 1.75 X 11.875 |

Second Floor

LVL/SL (Flush)

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-----------------------|-------|--------|-----|-------|-----|--------|
| F8 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 10-0-0 |
| F7 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 2 | 2 | 4 | 6-0-0 |
| F6 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 4-0-0 |
| F15 | Forex 2.0E-3000Fb LVL | 1.75 | 11.875 | 1 | 2 | 2 | 2-0-0 |

LVL/SL (Dropped)

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-----------------------|-------|-------|-----|-------|-----|--------|
| B804 | Forex 2.0E-3000Fb LVL | 1.75 | 9.5 | 1 | 2 | 2 | 8-0-0 |

Joist (Flush)

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-------------|-------|--------|-----|-------|-----|--------|
| J9 | NJ60U | 3.5 | 11.875 | | | 18 | 20-0-0 |
| J8 | NJ60U | 3.5 | 11.875 | | | 1 | 18-0-0 |
| J10 | NJ60U | 3.5 | 11.875 | | | 1 | 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 | | | 1 | 6-0-0 |
| J1 | NJH | 2.5 | 11.875 | | | 2 | 4-0-0 |

Rim Board

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|--------------------------------------|-------|--------|-----|-------|-----|--------|
| R1 | Norbord Rimboard Plus 1.125 X 11.875 | 1.125 | 11.875 | | | 14 | 12 |

Hanger

| Label | Pcs | Description | Skew | Slope | fasteners | fasteners |
|-------|-----|--------------|------|-------|-------------|-------------|
| H1 | 2 | HGUS410 | | | 46 16d | 16 16d |
| H2 | 1 | HUC410 (Min) | | | 14 16d | 6 16d |
| H4 | 13 | LT251188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 |
| H6 | 1 | LT351188 | | | 4 10dx1 1/2 | 2 10dx1 1/2 |

Blocking

| Label | Description | Width | Depth | Qty | Piles | Pcs | Length |
|-------|-------------|-------|--------|-----|-------|--------|--------|
| BLK1 | NJH | 2.5 | 11.875 | | | Varies | 40-0-0 |

NOTES:

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

Refer to Multiple Member Connection Detail to ply to ply nailing or 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 area 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 approve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.
64 Jardin Dr, Suite 3A
Date: Rev. 1, 4/26/2018
Project No: 2945
Model: Millwood 2, Elevation 2

1. OBC 2012 O.Reg 332/12 as amended
2. Nascor CCMC - 13535-R
3. LVL CCMC -14056-R
4. CAN/CSA-O88-09
5. CCMC -12787-RAPA-PR-1310(C)

NASCOR

Layout Name
MILLWOOD 2-ELEV 2

Design Method
LSD

Description

Created
June 25, 2018

Builder
GREENPARK

Sales Rep
R M

Designer
R O

Shipping

Project

Builder's Project

Kott Lumber Company

14 Anderson Blvd

Stouffville, Ontario

Canada

KZH7V1

905-642-4400

Job Path

S:\CUSTOMERS\GREENPARK

WINNISALE HOMES\MODELS

WILLWOOD 2\FLOORS\ELEV 2

WILLWOOD 2-ELEV 2.isl

Second Floor

Design Method LSD

Building Code NBCC 2010 / OBC

2012

Floor

Loads

Live 40

Dead 15

Deflection Joist

LL Span 1/ 480

TL Span 1/ 360

LL Span 2/ 480

TL Span 2/ 360

Deflection Girder

LL Span 1/ 360

TL Span 1/ 240

LL Span 2/ 480

TL Span 2/ 240

Decking

Dock

SPF Plywood

Thickness 5/8"

Fastener Nailed & Glued

Vibration

Ceiling Gypsum 1/2"



September 13, 2018

KOTT



isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

Designer: R O

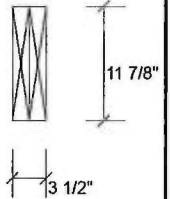
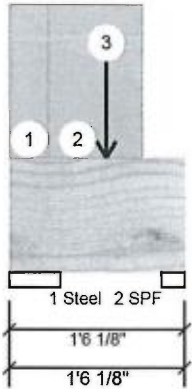
Job Name: MILLWOOD 2-ELEV 2

Project #:

Page 1 of 1

F15-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 72 | 103 | 0 | 0 |
| 2 | 61 | 53 | 0 | 0 |

Bearings and Factored Reactions

| 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 |
| 2 - SPF | 2.375" | 3% | 66 / 92 | 158 | L | 1.25D+1.5L |

Analysis Results

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

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 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 | Part. Uniform | 0-0-0 to 0-4-0 | | Top | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-4-0 to 1-1-12 | | Top | 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 | | | | |

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 Structural 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

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

chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multiply 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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

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

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

NASCOR





isDesign™

Client: GREENPARK

Project:

Address:

Date: 9/7/2018

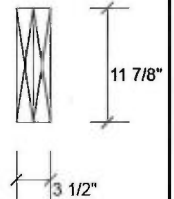
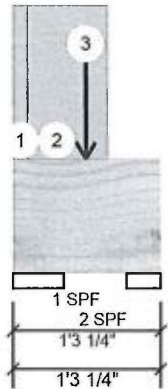
Designer: R O

Job Name: MILLWOOD 2-ELEV 3

Project #:

Page 1 of 1

F15-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1 | 108 | 101 | 0 | 0 |
| 2 | 65 | 41 | 0 | 0 |

Bearings and Factored Reactions

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|--------------|-------|----------|------------|
| 1 - SPF | 5.250" | 3% | 126 / 162 | 288 | L | 1.25D+1.5L |
| 2 - SPF | 3.500" | 2% | 52 / 98 | 149 | L | 1.25D+1.5L |

Analysis Results

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

Design Notes

- 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 | Part. Uniform | 0-0-0 to 0-1-8 | | Top | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 2 | Part. Uniform | 0-1-8 to 0-9-12 | | Top | 80 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Self Weight |
| 3 | Point | 0-7-8 | | Far Face | 65 lb | 173 lb | 0 lb | 0 lb | J9 |
| | Self Weight | | | | 10 PLF | | | | |

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

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

Notes

Calculated Structural 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

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

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

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

NASCOR

