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.



ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Oct 2018 Project No: Model: Millwood 5-015

Legend



Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 LPI 20Plus 11.875 NJ40U 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-086-09

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

NOTES:

- . Frame
- 2. Double anothe 3. Install
- 4. Install rimboa
- Refer to Nascor specifier guide for installation works. . Squash blocks recommended to be installed at end bearing on
- all first level joists which support loading from above exceeding two levels floor or roof. . Load transfer blocks to be installed under all point loads.
- 8. It shall be the framer'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"x 4" 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 addtional dead load

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.

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

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

	T
th	NASCOR
1-0	Layout Name

	d Floor									
	SL (Flus	-					1 90		I	NASCOR
	Descr	iption	Widt		pth	Qty	Plies	Pcs	Length	MASCON
F4	Forex 2.0E-3	000Fb LVL	1.7		875			2	16-0-0	Layayi Nama
F3	Forex 2.0E-3	000Fb LVL	1.7	5 11.	875			1	14-0-0	Layout Name LOT 15 (MILLWOOD 5)
F5	Forex 2.0E-3	000Fb LVL	1.7	5 11.	875	1	2	2	10-0-0	Design Method
F2	Forex	000Fb LVL	1.7	5 11.	875			1	6-0-0	LSD Description
FH2	Forex	000Fb LVL	1.7	5 11.	875	2	2	4	4-0-0	MINNISALE HOMES BRAMPTON, ONT.
F20	Forex	000Fb LVL	1.7	5 11.	875	1	2	2	4-0-0	Revised
F1	Forex	000Fb LVL	1.7	5 11.	875			1	4-0-0	January 09, 2019 Builder
l Joist	(Flush)									GREENPARK
Label	Descr	iption	Widt	h De	pth	Qty	Plies	Pcs	Length	Sales Rep
F10	LPI 20	Plus	2.	5 11.	875			2	16-0-0	RM
F9	LPI 20	Plus	2.	5 11.	875			2	14-0-0	Designer
F8	LPI 20	Plus	2.	5 11.	875			2	4-0-0	
J12	LPI 20	Plus	2.	5 11.	875			14	16-0-0	RCO
J10	LPI 20	Plus	2.	5 11.	875			27	14-0-0	Shipping
J3	LPI 20	Plus	2.	5 11.	875			1	10-0-0	Project
J4	LPI 20	Plus	2.	5 11.	875			3	8-0-0	Builder's Project
J2	LPI 20		2.		875			4	6-0-0	Kott Lumber Company
J1	LPI 20		2.	5 11.	875			3	4-0-0	
J7	NJ40U		3.	5 11.	875			20	18-0-0	14 Anderson Blvd
Rim Bo	pard									Stouffville, Ontario
Label	Descr	iption	Widt	h De	pth	Qty	Plies	Pcs	Length	Canada
R1		d Rimboard	1.12	5 11.	875			14	12	L4A 7X4
	Plus 1.									905-642-4400
Blockir	na									Job Path
	Descr	iption	Widt	h De	pth	Qty	Plies	Pcs	Length	D:\Users\rochavillo\WORK FROM
BLK1	LPI 20		2.		875	LinFt		Varies	28-0-0	HOME\GREENPARK\MINNISALE HOMES\LOT 15 (MILLWOOD 5)
Hange	r									\FLOOR\F-LOT 15 (MILLWOOD 5)
						В	eam/Girde		ported	Ground Floor
Label	Pcs	Descriptio	n T	Skew	Slop	e	fasteners		ember	Design Method LSD
H1	1	LS90		O.C.	Giop		idotorioro	144	TO TO TO	Building Code NBCC 2010 / OBC 2012
H2 H4	26 1	LT251188 LT251188	-			4	10dx1 1/2	2 10	dx1 1/2	Floor
		1231100								Loads
NOTES:										Live 40
1 Fram	er to ve	rify dimensio	ns on t	he arch	itectura	al draw	inne			Dead 15
		nly require fi								Deflection Joist
anoth	er meml	per using a fa	ace-mo	unted h	anger.	•				LL Span L/ 480
		cking @ 24"						lls.		TL Span L/ 360
		oly flush wind	low he	ader ald	ng ins	de fac	e of			LL Cant 2L/ 480
	ard/rimid	or specifier (uide fo	r install	ation v	orks				TL Cant 2L/ 360
o. Itelel	14430	or obsenie! f	Juint It	. matan	COOII V	JING.			1	

RECEIVED

Deflection Girder

360

240

480

360

SPF Plywood

Nailed & Glued

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

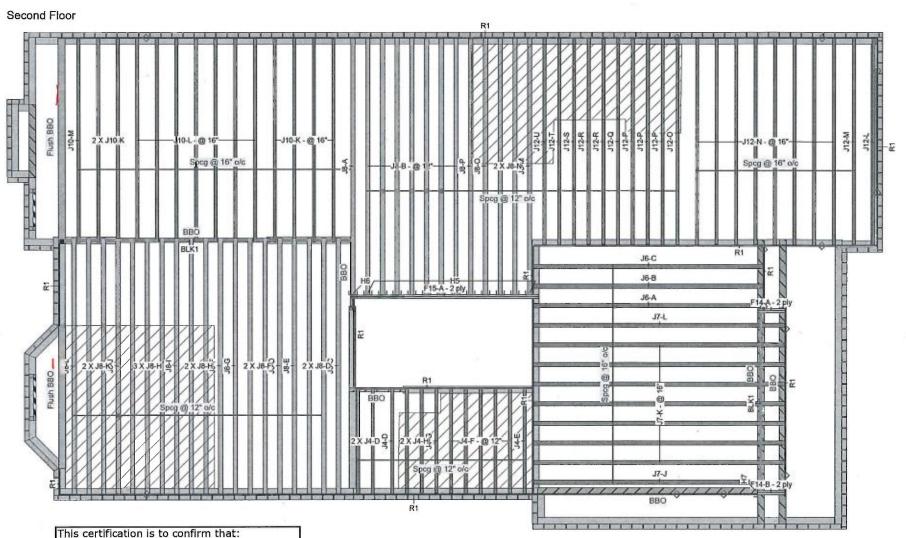
Deck

JAN 16 2019

Building Division

Version 18.40.162 Powered by iStruct™

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



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.





Load from Above Wall Wall Opening Norbord Rimboard Plus 1.125 X 11.875 LPI 20Plus 11.875 NJ40U 11.875 NJ60U 11.875

- 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)

J10	2.5	5 11.8	875				14	14-0-0		
J4	LPI 20	Plus	2.5	5 11.6	875				12	8-0-0
J7	NJ40U		3.5	5 11.8	875				9	18-0-0
J6	NJ40L		3.5	5 11.8	375				3	16-0-0
J8	NJ60L	1	3.5	5 11.6	375				32	18-0-0
Rim Bo	ard	- 0								
Label	Descr	iption	Width	n De	pth	(Qty	Plies	Pcs	Length
R1 Norbord Rimboard Plus 1.125 X 11.875		1.125	5 11.6	375				17	12	
Blockin	g									
Label	Descr	iption	Width	n De	Depth		Qty	Plies	Pcs	Length
BLK1	LPI 20	Plus	2.5	5 11.8	375	L	inFt		Varies	21-0-0
Hanger							Bea	ım/Girde		ported ember
Label	Pcs	Description	1	Skew	Slo	ре	fa	steners	fas	teners
H5	12	LT351188					4 1	0dx1 1/2	2 10	dx1 1/2
H6	1	LT351188								
H7	1	Unknown Hanger								
NOTES:										

Qty

Width Depth

2.5 11.875

11.875

11 875

Width Depth Qty Plies

1.75

1.75

Second Floor

F15 Forex

I Joist (Flush)

LVL/LSL (Flush)

Label Description

Forex

Label Description J12 LPI 20Plus

2.0E-3000Fb LVL

2.0E-3000Fb LVL

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

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

Rim parallel to joists: 1-1/8" rimboard with 2"x 4" 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

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Oct. 2018 Model: Millwood 5-015

Plies Pcs Length 2 2 14-0-0 MILLWOOD 5)

	17-0-0	
	2-0-0	Layout Name LOT 15 (MILLWOOD !
		Design Method
s	Length	LSD
)	16-0-0	Revised
ļ	14-0-0	January 09, 2019
?	8-0-0	
	18-0-0	Description
	16-0-0	MINNISALE HOMES
	18-0-0	BRAMPTON, ONT.
		Builder
s	Length	GREENPARK

PARK 2 Sales Rep RM

Designer RCO Shipping

Project Builder's Project

Kott Lumber Company 14 Anderson Blvd

Stouffville, Ontario Canada L4A 7X4

905-642-4400 Job Path

D:\Users\rochavillo\WORK FROM HOME\GREENPARK\MINNISALE HOMES\LOT 15 (MILLWOOD 5) \FLOOR\LOT 15.isl

Second Floor

LSD Design Method Building Code NBCC 2010 / OBC

Floor Loads Live Dead Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/ TL Cant 2L/ Deflection Girder LL Span L/

40

15

480

360

480

360

360

240

Gypsum 1/2"

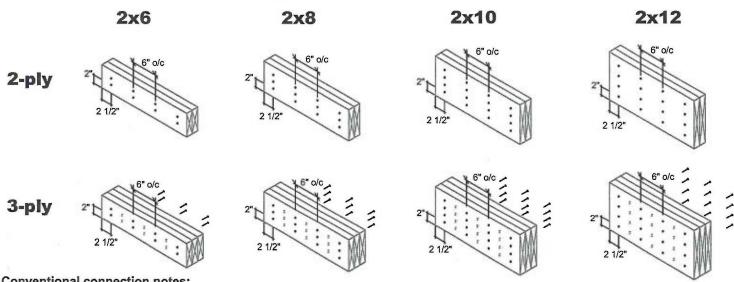
TL Span L/ 480 LL Cant 2L/ 360 TL Cant 2L/ Decking SPF Plywood Deck Thickness Fastener Nailed & Glued

Vibration

LE MEMBER CONNECTIONS

GREENPARK-MINNISALE HOMES MODEL MILLWOOD 5-1 & 5-2-

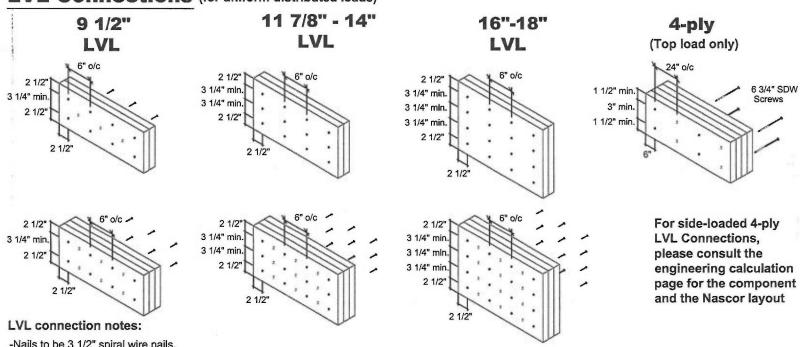
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

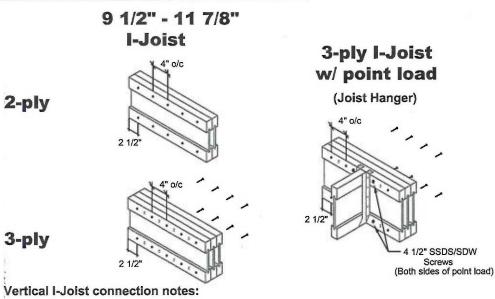
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



- -Nails to be 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.

Vertical I-Joist Connections (for uniform distributed loads)



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



MULTI-PLY CONNECTION **DETAILS**

> Date: November 30, 2016 Scale: NTS

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

Fx: 613-838-4751

Engineering Note Page (ENP-2)

REVISION 2018-10-17



Please read all notes prior to installation of the component

DESIGN INFORMATION

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

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

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

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

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

Installation of floor joists is to be carried out in accordance with the current edition of the manufacturer's literature available at http://www.kottgroup.com.

CODE

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

COMPONENT

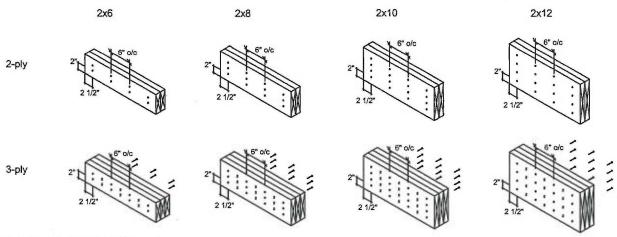
- 1. The building component used in construction must be the same as indicated on the drawings.
- 2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
- 3. Members consisting of multiple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

HANDLING AND INSTALLATION

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



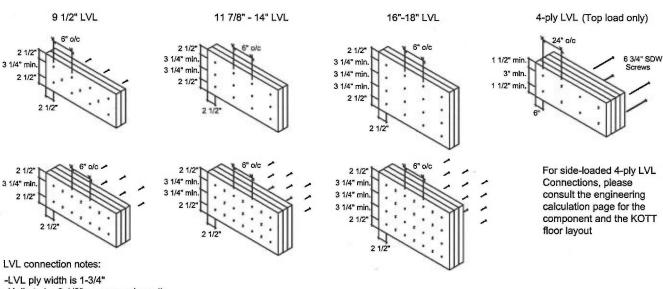
Conventional Connections



Conventional connection notes:

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

LVL Connections



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

Multiple Member Connections

All connections are for uniformly distributed loads.

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



KOTT Inc. 3228 Moodie Drive Ottawa, ON K2H 7V1 613-838-2775





Client: GREENPARK

Project: Address:

1/9/2019 Date:

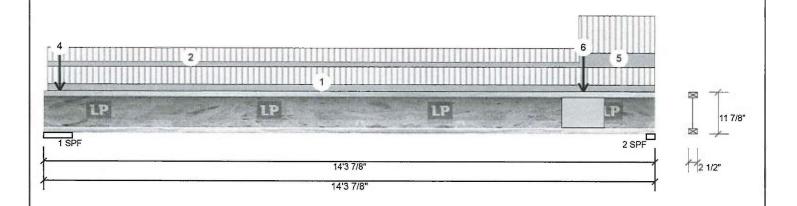
Designer: **RCO**

Job Name: LOT 15 (MILLWOOD 5)

Project #:

11.875" - PASSED LPI 20Plus

Level: Ground Floor



Member Inform	nation			Unfactored Reactions UNPATTERNED lb (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	1	Design Method:	LSD	1	803	415	0	0			
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	701	263	0	0			
Deflection LL:	360	Load Sharing:	No	-			-	1.511			
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bearings a	nd Facto	red Reactions					
Dead:	15 PSF			Bearing Le	ngth	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1-SPF 8.0	000"	94% 519 / 1205	1724 L	1.25D+1.5L			
				2-SPF 23	375"	84% 329 / 1052	1380 L	1.25D+1.5I			

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2952 ft-lb	8'1 1/4"	6250 ft-lb	0.472 (47%)	1.25D+1.5L	L
Shear	1355 lb	14'2 1/4"	2345 lb	0.578 (58%)	1.25D+1.5L	L
Perm Defl in.	0.070 (L/2319)	7'7 5/8"	0.453 (L/360)	0.160 (16%)	D	Uniform
LL Defl inch	0.187 (L/870)	7'7 5/8"	0.453 (L/360)	0.410 (41%)	L	L
TL Defl inch	0.258 (L/632)	7'7 5/8"	0.679 (L/240)	0.380 (38%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Applied loads over end bearings and loads exceeding 250 lbs over intermediate bearings must be transferred directly to the support by rim board, blocking, squash blocks, or other
- 3 Dead Load Deflection: Instant = 0.070", Long Term = 0.105"
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange must be laterally braced at a maximum of 6'1" o.c.

	je praced at bearings								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-1-2 to 14-3-14	(Span)1-6-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 12-6-8	(Span)1-1-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-4-8		Тор	148 lb	376 lb	0 lb	0 lb	J12
	Bearing Length	0-1-8							
4	Point	0-4-8		Тор	107 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-1-8							
ontinued on pag	je 2								

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

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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 until 10/31/2020

Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325

www.lpcorp.com CCMC: 12412-R APA: PR-L238C

Kott Lumber Company 14 Anderson Blvd, Ontario **L4A 7X4** 905-642-4400

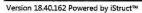
T.L. WISE TOURSE

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January 14, 2019







TW0119-062 Page 5 of 29

isDesign™

GREENPARK Client:

Project:

Address:

1/9/2019 Date:

Designer: RCO

Job Name: LOT 15 (MILLWOOD 5)

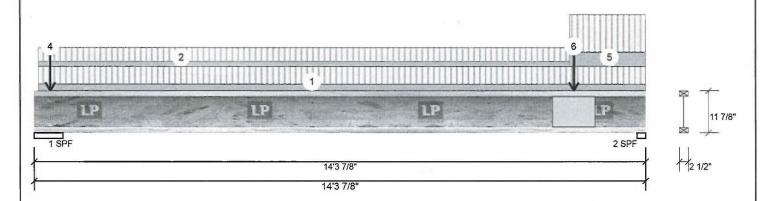
Project #:

LPI 20Plus

11.875" - PASSED

Level: Ground Floor

Page 2 of 2



.Continued from	page 1
-----------------	--------

l	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	5	Tie-In	12-6-8 to 14-3-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
١	6	Point	12-7-12		Near Face	111 lb	296 lb	0 lb	016	F8

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

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ressure the accuracy of the injurit and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

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Manufacturer Info

Louisiana-Pacific Corp Louisiana-Paolic Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400

This design is valid until 10/31/2020



GREENPARK Client:

Project: Address:

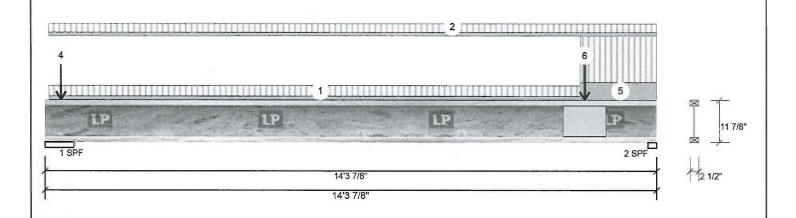
Date: Designer:

1/9/2019 RCO

Job Name: LOT 15 (MILLWOOD 5)

Project #:

LPI 20Plus 11.875" - PASSED Level: Ground Floor



Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind	
Plies:	1	Design Method:	LSD	1	428		213		0	0	
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	583		219		0	0	
Deflection LL:	360	Load Sharing:	No	-							
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bearings	and Fac	tored l	Reactions				
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
				1 - SPF	8.000"	50%	266 / 642	908	L	1.25D+1.5L	
				2-SPF	2.375"	70%	273 / 874	1148	L	1.25D+1.5L	

Analysis Results

Ī	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	1891 ft-lb	9'1 1/8"	6250 ft-lb	0.303 (30%)	1.25D+1.5L	L
	Shear	1127 lb	14'2 1/4"	2345 lb	0.481 (48%)	1.25D+1.5L	L
	Perm Defl in.	0.045 (L/3636)	7'10 7/16"	0.453 (L/360)	0.100 (10%)	D	Uniform
	LL Defl inch	0.120 (L/1363)	7'10 7/16"	0.453 (L/360)	0.260 (26%)	L	L
	TL Defl inch	0.164 (L/991)	7'10 7/16"	0.679 (L/240)	0.240 (24%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Applied loads over end bearings and loads exceeding 250 lbs over intermediate bearings must be transferred directly to the support by rim board, blocking, squash blocks, or other device.
- 3 Dead Load Deflection: Instant = 0.045", Long Term = 0.067"
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange must be laterally braced at a maximum of 7'6" o.c.
- 7 Rottom flange braced at he

7 BOLLOITI	nange braceu at bearings									
ID.	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-1-2 to 12-6-8	(Span)0-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-1-2 to 14-3-14	(Span)0-7-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Point	0-4-8		Тор	70 lb	188 lb	0 lb	0 lb	J12	
	Bearing Length	0-1-8								
4	Point	0-4-8		Тор	53 lb	0 lb	0 lb	0 lb	Wall Self Weight	
	Bearing Length	0-1-8								

Continued on page 2...

Notes

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

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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 until 10/31/2020

Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C

L4A 7X4 905-642-4400

Canada



Kott Lumber Company 14 Anderson Blvd, Ontario

T.L. WISE 100083566

100083566

January 14, 2019



Page 2 of 2



GREENPARK Client:

Project: Address:

Date:

RCO

Designer:

Job Name: LOT 15 (MILLWOOD 5)

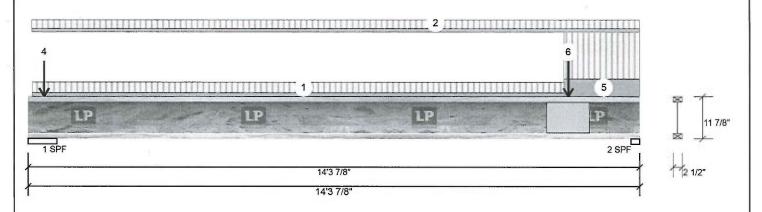
1/9/2019

Project #:

LPI 20Plus

11.875" - PASSED

Level: Ground Floor



...Continued from page 1

ı	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
ı	5	Tie-In	12-6-8 to 14-3-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	6	Point	12-7-12		Far Face	133 lb	355 lb	0 lb	0 lb	F8

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

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the injust and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

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Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400

This design is valid until 10/31/2020



Client: Project Address: GREENPARK

1/9/2019 Date: RCO Designer:

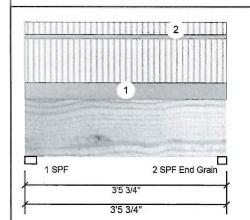
Job Name: LOT 15 (MILLWOOD 5)

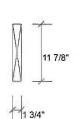
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Wind

Page 1 of 1

Member Information							
Type:	Girder	Application:	Floor (Residential)				
Plies:	1	Design Method:	LSD				
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2				
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						

	1	173	73	0	0
2012	2	169	71	0	0

Dead

Snow

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 263 ft-lb 1'9 1/8" 17130 ft-lb 0.015 (2%) 1.25D+1.5L L Moment 0.020 (2%) 1.25D+1.5L L 263 ft-lb Unbraced 1'9 1/8" 13199 ft-lb Shear 127 lb 1'1 1/2" 5798 lb 0.022 (2%) 1.25D+1.5L L Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) LL Defl inch 0.001 1'9 1/8" 0.108 (L/360) 0.010 (1%) L L (L/31868)

1'9 1/8" 0.162 (L/240) 0.010 (1%) D+L

Bearings and Factored Reactions Cap. React D/L lb Bearing Length Total Ld. Case Ld. Comb. 1 - SPF 2.375" 14% 92 / 259 351 L 1.25D+1.5L 2 - SPF 1.875" 14% 89 / 253 343 L 1.25D+1.5L End

Grain

Brg



January 14, 2019

Design Notes

TL Defl inch

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

0.002

(L/22387)

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-5-12	(Span)3-10-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 3-5-12	(Span)1-0-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

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

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

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

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

chemicals

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex

APA: PR-L318

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

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4







Client: GREENPARK

Project: Address

Date: 1/9/2019

Designer: RCO

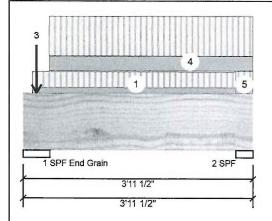
Job Name: LOT 15 (MILLWOOD 5)

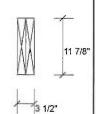
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





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Page 1 of 2

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	1				

Brg	Live	Dead	Snow	Wind
1	2635	1104	0	0
1 2	270	110	0	•

Unfactored Reactions UNPATTERNED lb (Uplift)

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 5.500" 56% 1380 / 3952 5332 L 1.25D+1.5L End Grain 2-SPF 3.500" 7% 148 / 405 553 L 1.25D+1.5L

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case Moment 404 ft-lb 2' 3/4" 34261 ft-lb 0.012 (1%) 1.25D+1.5L L Unbraced 404 ft-lb 2' 3/4" 34261 ft-lb 0.012 (1%) 1.25D+1.5L L 1'4 5/8" 11596 lb Shear 396 lb 0.034 (3%) 1.25D+1.5L L Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) LL Defl inch 0.001 2' 13/16" 0.111 (L/360) 0.010 (1%) L L (L/42098) TL Defl inch 0.001 2' 13/16" 0.167 (L/240) 0.010 (1%) D+L L



- 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.

(L/29228)

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

T.L. WISE
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Sul 80
January 14, 2019

/ Lateral s	sienderness ratio based o	on full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part, Uniform	0-1-14 to 3-8-0		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
2	Point	0-2-12		Тор	1 lb	0 lb	0 lb	0 lb	Wall Self Weight
3	Point	0-2-12		Тор	993 lb	2393 lb	0 lb	0 lb	BBO5 BBO5
4	Part. Uniform	0-5-5 to 3-11-8		Far Face	38 PLF	102 PLF	0 PLF	0 PLF	
continued on	page 2								

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, it is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended

Lumber

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

chemicals

Handling & Installation

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

tastening 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

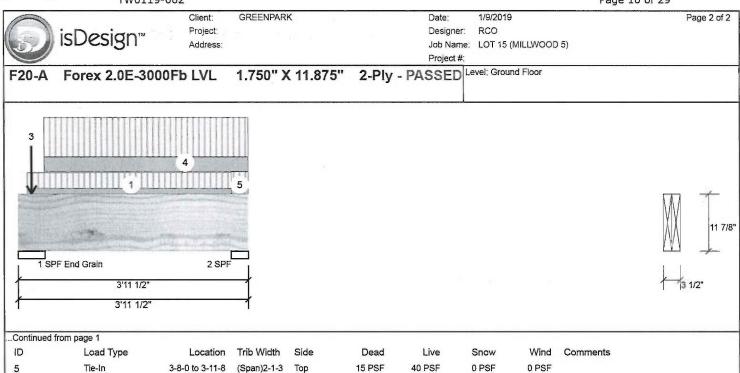
Forex APA: PR-L318

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Kott Lumber Company 14 Anderson Blvd, Ontario L4A 7X4 905-642-4400



Self Weight



10 PLF

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

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

Notes

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

Lumber

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

Handling & Installation

Handling & Installation

1. LVL beams must not be out or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

This design is valid until 7/10/2021

Manufacturer Info

Forex APA: PR-L318

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4



Client: GREENPARK

Project: Address:

1/9/2019 Designer:

RCO

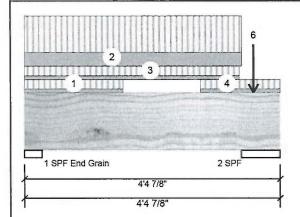
Job Name: LOT 15 (MILLWOOD 5)

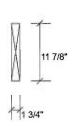
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Wind

0

0

Page 1 of 1

Member Information							
Туре:	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						

Bearings and Factored Reactions

28%

Live

708

1119

Brg

2

2-SPF 8.000"

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

275

558

Searings and Factored Reactions								
Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.		
1 - SPF End Grain	3.625"	30%	344 / 1062	1406	L	1.25D+1.5L		

Analysis Results

15 PSF

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1044 ft-lb	1'11 11/16"	17130 ft-lb	0.061 (6%)	1.25D+1.5L	L
Unbraced	1044 ft-lb	1'11 11/16"	12407 ft-lb	0.084 (8%)	1.25D+1.5L	L
Shear	631 lb	2'9 3/4"	5798 lb	0.109 (11%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/20391)	1'11 15/16"	0.119 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.005 (L/7939)	1'11 15/16"	0.119 (L/360)	0.050 (5%)	L	L
TL Defl inch	0.007 (L/5714)	1'11 15/16"	0.178 (L/240)	0.040 (4%)	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 Top braced at bearings.
- 4 Bottom braced at bearings

698 / 1678	2376 L	1.25D+1.5L
/	OPROFESS	SIONAL EN
(199	T.L. W	VISE EN 3566

Snow

0

0

January 14, 2019

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1 Dottoiti	Didoca at Dearingo.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind Comments
1	Tie-In	0-0-0 to 1-8-7	(Span)3-2-0 to 3-2-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Part. Uniform	0-0-0 to 3-8-14		Тор	90 PLF	240 PLF	0 PLF	0 PLF
3	Part, Uniform	0-0-0 to 3-8-7		Far Face	24 PLF	64 PLF	0 PLF	0 PLF
4	Tie-In	3-0-7 to 4-4-14	(Span)3-2-0 to 3-2-0	Тор	15 PSF	40 PSF	0 PSF	PaspsThru Framing Squash Block is required at all point loads over bearings
5	Point	3-11-6		Тор	187 lb	498 lb	0 lb	Olb J6
6	Point	3-11-6		Тор	127 lb	0 lb	0 lb	Refer to Multiple Member Connection Detail for Will to by Hatiling or bolting
	Self Weight				5 PLF			requirements

Notes

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

Lumber

Handling & Installation

- LVI. 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

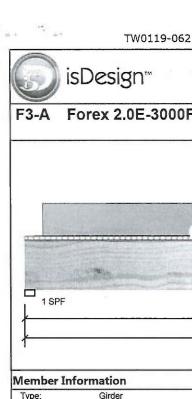
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex

APA: PR-L318

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Client: Project: Address: GREENPARK

Date: 1/9/2019

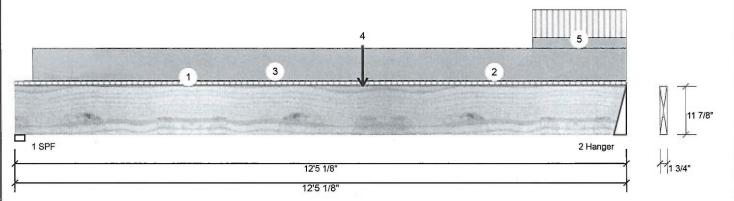
Designer: RCO

Job Name: LOT 15 (MILLWOOD 5)

Project #:

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

Level: Ground Floor



Member Infor	mation			Unfactore	d React	ions U	NPATTERN	ED ID (Uplift)
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow
Plies:	1	Design Method:	LSD	1	182		583	0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	338		680	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked	1				
General Load								
Floor Live:	40 PSF			Bearings a	and Fact	tored	Reactions	
Dead:	15 PSF			Bearing L	ength.	Cap.	React D/L lb	Total Ld. Cas

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4073 ft-lb	7' 7/8"	13876 ft-lb	0.294 (29%)	1.25D+1.5L	L
Unbraced	4073 ft-lb	7' 7/8"	4076 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	1048 lb	11'3"	4696 lb	0.223 (22%)	1.25D+1.5L	L
Perm Defl in.	0.118 (L/1236)	6'3 7/16"	0.403 (1/360)	0.290 (29%)	D	Uniform
LL Defl inch	0.052 (L/2769)	6'7 3/4"	0.403 (1/360)	0.130 (13%)	L	L
TL Defl inch	0.170 (L/855)	6'4 3/4"	0.605 (L/240)	0.280 (28%)	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 must be laterally braced at a maximum of 11' 3/8" o.c.

4 Bottom braced at bearings.

Unfactored Reactions UNPATTERNED II	o (Uplift)
-------------------------------------	------------

Brg	Live	Dead	Snow	Wind
1	182	583	0	0
2	338	680	0	0

Bearing	s and rac	torea i	Reactions			
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	49%	817 / 0	817	Uniform	1.4D
2-	3.000"	43%	850 / 507	1357	1	1.25D+1.5I

Hanger

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January 14, 2019

	ID	Load Type	Location	Trib Width	Side	14	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 12-5-2	(Span)0-5-7	Тор		15 PSF	40 PSF	0 PSF	0 PSF	
	2	Part. Uniform	0-2-4 to 12-5-2		Тор		1 PLF	0 PLF	0 PLF	0 PLF	
	3	Part. Uniform	0-4-6 to 12-5-2		Тор		80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	4	Point	7-0-14		Тор		135 lb	274 lb	0 lb	0 lb	BBO4 BBO4
	5	Tie-In	10-6-4 to 12-5-2	(Span)3-5-13	Тор		15 PSF	40 PSF	0 PSF		u Framing Squash Block is
		Self Weight					5 PLF			required	at all point loads over bearings
- 1											

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

Notes

Lumber

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

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

For flat roofs provide proper drainage to prevent ponding

This design is

Forex

APA: PR-L318

Manufacturer Info

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

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400





GREENPARK Client:

Project: Address:

1/9/2019 Date:

RCO Designer:

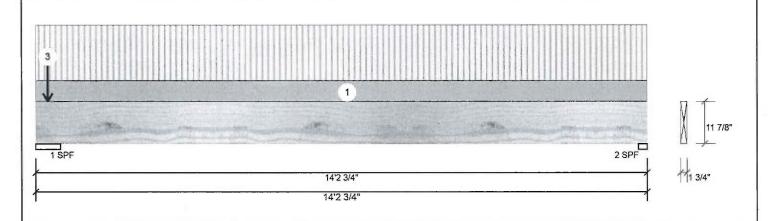
Job Name: LOT 15 (MILLWOOD 5)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor



Member Inforr	nation			Unfactor	ed React	ions Ul	NPATTERNI	ED lb (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
Plies:	1	Design Method:	LSD	1	108		94		0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	41		48		0	0
Deflection LL:	360	Load Sharing:	No	-						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored R	eactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	6.875"	4%	118 / 163	280	L	1.25D+1.5L
				2-SPF	2.375"	5%	61 / 62	122	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	407 ft-lb	7'3 5/8"	17130 ft-lb	0.024 (2%)	1.25D+1.5L	L
Unbraced	407 ft-lb	7'3 5/8"	3310 ft-lb	0.123 (12%)	1.25D+1.5L	L
Shear	102 lb	13'1 1/4"	5798 lb	0.018 (2%)	1.25D+1.5L	L
Perm Defl in.	0.012 (L/13751)	7'3 11/16"	0.453 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.010 (L/16186)	7'3 11/16"	0.453 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.022 (L/7435)	7'3 11/16"	0.679 (L/240)	0.030 (3%)	D+L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam
- 2 Girders are designed to be supported on the bottom edge only.
- 3. Top braced at bearings

	braced at bearings.			41					
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 14-2-12	(Span)0-3-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-3-6		Тор	24 lb	65 lb	0 lb	0 lb	J12
3	Point	0-3-6		Тор	19 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				5 PLF				ru Framing Squash Block is at all point loads over bearings

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

Canada

L4A 7X4

requirements

Notes

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

Lumber

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

Handling & Installation

- LVI. 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

This design is valid u

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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

905-642-4400



Kott Lumber Company 14 Anderson Blvd, Ontario

T.L. WISE 100083566

100083566

January 14, 2019

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Client: **GREENPARK**

Project: Address: Date:

1/9/2019

Designer: RCO

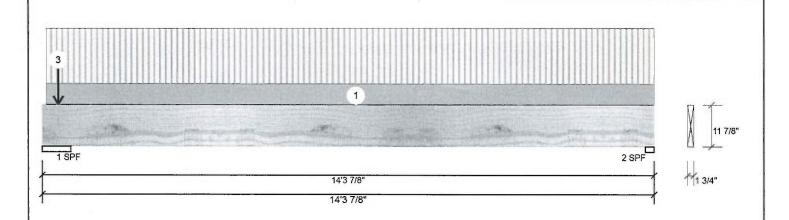
Job Name: LOT 15 (MILLWOOD 5)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor



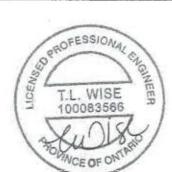
Member Infor	mation			Unfacto	red Reac	tions U	NPATTERN	ED lb ((Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	w	Wind
Plies:	1	Design Method:	LSD	1	260		171		0	0
Moisture Conditio	n; Dry	Building Code:	NBCC 2010 / OBC 2012	2	121		78		0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearing:	s and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	8.000"	7%	214 / 390	604	L	1.25D+1.5L
Amalusia Bass				2-SPF	2.375"	11%	98 / 181	278	L	1.25D+1.5L

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	927 ft-lb	7'4 3/4"	17130 ft-lb	0.054 (5%)	1.25D+1.5L	L
	Unbraced	927 ft-lb	7'4 3/4"	3310 ft-lb	0.280 (28%)	1.25D+1.5L	L
	Shear	233 lb	13'2 3/8"	5798 lb	0.040 (4%)	1.25D+1.5L	L
	Perm Defl in.	0.019 (L/8515)	7'4 13/16"	0.453 (L/360)	0.040 (4%)	D	Uniform
	LL Defl inch	0.030 (L/5524)	7'4 13/16"	0.453 (L/360)	0.070 (7%)	L	L
	TL Defl inch	0.049 (L/3351)	7'4 13/16"	0.679 (L/240)	0.070 (7%)	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 Top braced at bearings.
- 4 Bottom braced at bearings.



January 14, 2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-1-2 to 14-3-14	(Span)0-10-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-4-8		Тор	50 lb	133 lb	0 lb	0 lb	J12
3	Point	0-4-8		Тор	38 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				5 PLF				

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

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

Notes

Lumber

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
- payrovals

 Damaged Beams must not be used

 Design assumes top adge is laterally restrained

 Provide lateral support at bearing points to avoid

 lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid

Manufacturer Info

Forex

APA: PR-L318

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

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400



Version 18.40.162 Powered by iStruct™



Client: **GREENPARK**

Project: Address: Date:

1/9/2019

Designer: **RCO**

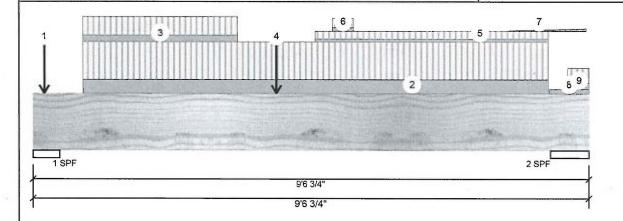
Job Name: LOT 15 (MILLWOOD 5) Project #:

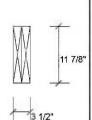
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Ground Floor





Page 1 of 2

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

15 PSF

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	1586	642	0	0
2	1516	640	0	0

Floor (Residential)

Not Checked Not Checked

NBCC 2010 / OBC 2012

LSD

No

Bearings	and	Factored	Reactions
Rearing	Longt	h Con	Poort D/I I

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1-SPF	5.500"	27%	802 / 2378	3181	L	1.25D+1.5L
2-SPF	8.000"	18%	800 / 2274	3074	L	1.25D+1.5L

Analysis Results

Dead:

Capacity	Comb.	Case
0.198 (20%)	1.25D+1.5L	L
0.220 (22%)	1.25D+1.5L	L
0.267 (27%)	1.25D+1.5L	L
0.080 (8%)	D	Uniform
0.190 (19%)	L	L
0.180 (18%)	D+L	L
	0.198 (20%) 0.220 (22%) 0.267 (27%) 0.080 (8%) 0.190 (19%)	Capacity Comb. 0.198 (20%) 1.25D+1.5L 0.220 (22%) 1.25D+1.5L 0.267 (27%) 1.25D+1.5L 0.080 (8%) D 0.190 (19%) L 0.180 (18%) D+L

Application:

Deck:

Vibration:

Design Method:

Building Code: Load Sharing:

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.

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January 14, 2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-2-5		Near Face	43 lb	114 lb	0 lb	0 lb	J2
2	Part. Uniform	0-10-5 to 8-10-5		Far Face	102 PLF	271 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-10-5 to 3-6-5		Near Face	49 PLF	130 PLF	0 PLF	0 PLF	
4	Point	4-2-5		Near Face	63 lb	167 lb	0 lb	0 lb	J4
5	Part. Uniform	4-10-5 to 8-10-5		Near Face	22 PLF	58 PLF	0 PLF	0 PLF	

Continued on page 2...

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

Lumber

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

chemicals

Handling & Installation

- Handling & Installation

 1. LVL beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

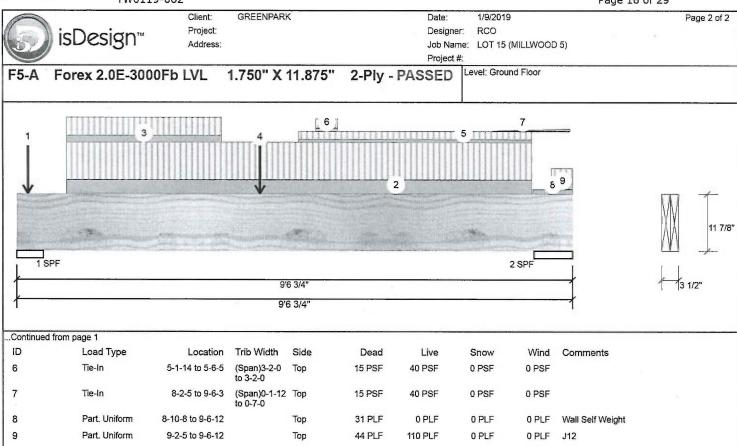
Manufacturer Info

Forex APA: PR-L318

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

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400





10 PLF

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

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

Notes

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

Self Weight

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

Handling & Installation

LVL beams must not be cut or drilled
 Refer to manufacturer's product inforregarding installation requirements, materials details, beam strength values, and approvale.

approvals

Damaged Beams must not be used

Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

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

This design is valid until 7/10/2021



GREENPARK Client:

Project: Address:

1/9/2019 Date:

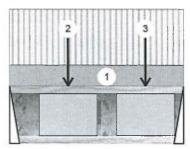
Designer: RCO

Job Name: LOT 15 (MILLWOOD 5)

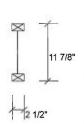
Project #:

11.875" - PASSED LPI 20Plus

Level: Ground Floor



1 Hanger (LT251188) 2 Hanger (LT251188) 3' 3'



Page 1 of 1

Member Information				
Type:	Girder			
Plies:	1			
Moisture Condition:	Dry			
Deflection 11:	360			

Deflection TL: 240 Importance: Normal General Load

40 PSF Floor Live: Dead: 15 PSF Application: Floor (Residential) Design Method: LSD

Building Code: NBCC 2010 / OBC 2012 Load Sharing:

Deck: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	299	112	0	0
2	346	130	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	37%	140 / 448	588	L	1.25D+1.5L
2 - Hanger	2.000"	43%	162 / 519	681	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	496 ft-lb	1' 1/16"	6250 ft-lb	0.079 (8%)	1.25D+1.5L	L
Shear	674 lb	2'10 3/4"	2345 lb	0.287 (29%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/16094)	1' 15/16"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.006 (L/6034)	1' 7/8"	0.093 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.008 (L/4389)	1' 15/16"	0.140 (L/240)	0.050 (5%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.002", Long Term = 0.003"
- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange braced at bearings.
- 7 Bottom flange braced at bearings.

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January 14, 2019	

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-0-1		Near Face	109 lb	291 lb	0 lb	0 lb	J10
3	Point	2-4-1		Near Face	94 lb	250 lb	0 lb	0 lb	J10

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

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the acute conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

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This design is valid until 10/31/2020

Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C Kott Lumber Company 14 Anderson Blvd, Ontario L4A 7X4 905-642-4400





Client: GREENPARK

Project: Address: Date:

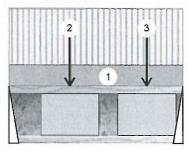
1/9/2019 RCO Designer:

Job Name: LOT 15 (MILLWOOD 5)

Project #:

11.875" - PASSED LPI 20Plus

Level: Ground Floor



1 Hanger (LT251188) 2 Hanger (LT251188) 3

网	1
	11 7/8"
\triangle	-/
21	/2"

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

Member Inform	ation
Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal

40 PSF

15 PSF

* *

Deck: Vibration:

Application: Floor (Residential) Design Method: LSD **Building Code:** NBCC 2010 / OBC 2012

Not Checked

Load Sharing: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Dead Snow Brg Live Wind 296 111 0 1 0 355 133 0 0 2

Bearings and Factored Reactions Bearing Length 2.000" Hanger 2.000" 2 -

Hanger

Cap. React D/L lb Total Ld. Case 37% 138 / 443 582 L 166 / 532 699 L

> T.L. WISE 100083566 100083566 NCE OF ONT

January 14, 2019

Analysis Results

General Load

Floor Live: Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	512 ft-lb	1' 9/16"	6250 ft-lb	0.082 (8%)	1.25D+1.5L	L
Shear	692 lb	2'10 3/4"	2345 lb	0.295 (29%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/15614)	1' 9/16"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.006 (L/5851)	1' 9/16"	0.093 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.008 (L/4256)	1' 9/16"	0.140 (L/240)	0.060 (6%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.002", Long Term = 0.003"
- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange braced at bearings.
- 7 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-0-9		Near Face	112 lb	299 lb	0 lb	0 lb	J10
3	Point	2-4-9		Near Face	93 lb	248 lb	0 lb	0 lb	J10
								Pass-Thr	u Framing So

Squash Block is required at all point loads over bearings

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

Canada

Notes

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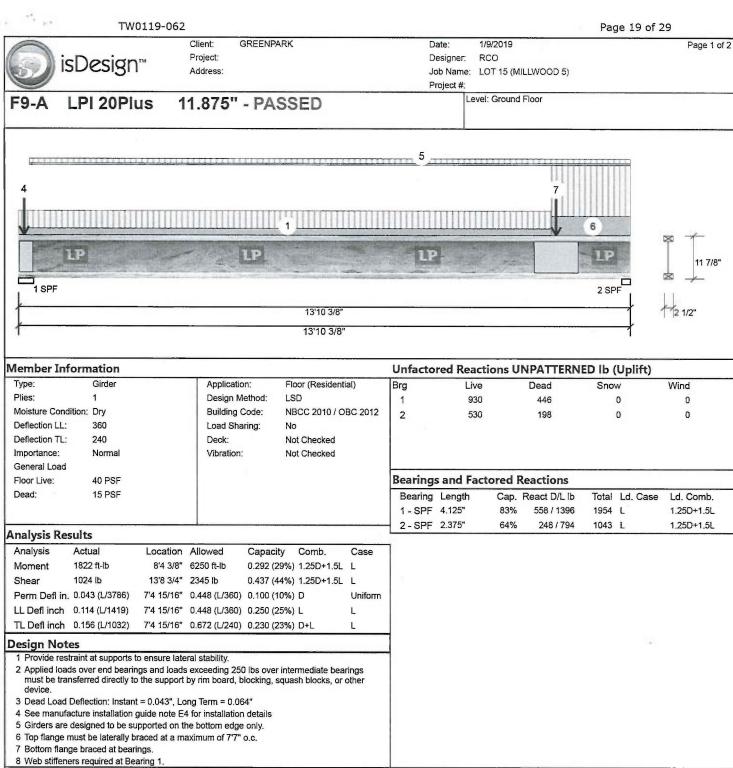
Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325

905-642-4400 www.lpcorp.com CCMC: 12412-R APA: PR-L238C



Kott Lumber Company 14 Anderson Blvd, Ontario



	, , , , , ,								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-1-0	(Span)1-1-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-1-8		Тор	300 lb	661 lb	0 lb	0 lb	BBO5 BBO5
	Bearing Length	0-1-8							
3	Point	0-1-8		Тор	13 lb	34 lb	0 lb	0 lb	18
	Bearing Length	0-1-8							
Same Process of the con-									

Continued on page 2...

Notes

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Kott Lumber Company

NASCOR



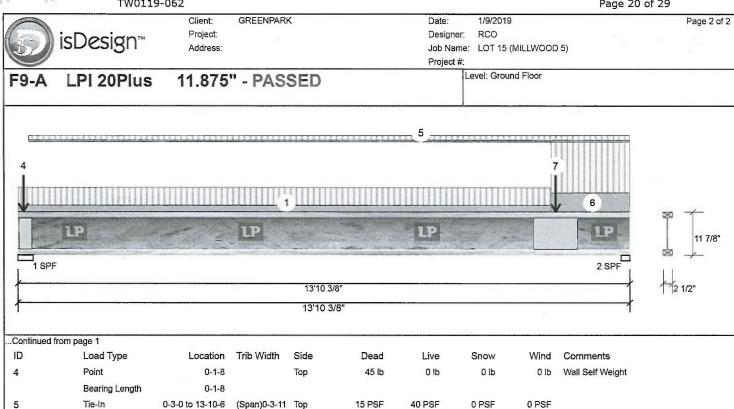
12-1-0 to 13-10-6

12-2-4

(Span)3-2-8

Top

Near Face



15 PSF

112 lb

40 PSF

299 lb

0 PSF

0 lb

0 PSF

0 lb F8

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

6

7

Tie-In

Point

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This design is valid until 10/31/2020



GREENPARK

Client: Project: Address: Date: 1/9/2019

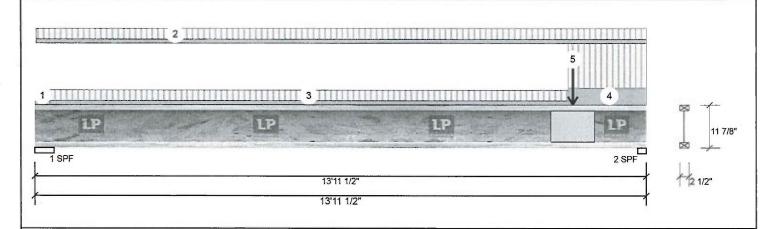
Designer: RCO

Job Name: LOT 15 (MILLWOOD 5)

Project #:

F9-B LPI 20Plus 11.875" - PASSED

Level: Ground Floor



Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	1	Design Method:	LSD	1	262	98	0	0		
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	600	225	0	0		
Deflection LL:	360	Load Sharing:	No	_						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings a	and Fact	ored Reactions				
Dead:	15 PSF			Bearing L	ength.	Cap. React D/L lb	Total Ld. Case	Ld. Comb.		
				1-SPF 5	.250"	28% 123 / 392	515 L	1.25D+1.5L		
				2-SPF 2	.375"	72% 281 / 900	1181 L	1.25D+1.5L		

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2026 ft-lb	8'6 9/16"	6250 ft-lb	0.324 (32%)	1.25D+1.5L	L
Shear	1160 lb	13'9 7/8"	2345 lb	0.495 (49%)	1.25D+1.5L	L
Perm Defl in.	0.047 (L/3405)	7'6 1/4"	0.448 (L/360)	0.110 (11%)	D	Uniform
LL Defl inch	0.126 (L/1278)	7'6 1/4"	0.448 (L/360)	0.280 (28%)	L	L
TL Defl inch	0.174 (L/929)	7'6 1/4"	0.672 (L/240)	0.260 (26%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.047", Long Term = 0.071"
- 3 See manufacture installation guide note E4 for installation details
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange must be laterally braced at a maximum of 7'3" o.c.

6 Bottom flange braced at bearings.



January 14, 2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Commens
1	Tie-In	0-0-0 to 0-4-2	(Span)0-6-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-6 to 13-11-8	(Span)0-9-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-4-2 to 12-2-2	(Span)0-9-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	12-2-2 to 13-11-8	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	12-3-6		Far Face	130 lb	346 lb	0 lb		ruffiraming Squash Block is at all point loads over bearings

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

Notes

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

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This design is valid until 10/31/2020

Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400







Client: GREENPARK

Project: Address:

1/9/2019 Date:

RCO Designer:

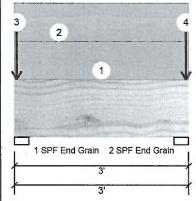
Job Name: LOT 15 (MILLWOOD 5)

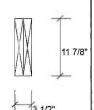
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





Page 1 of 1

Member In	formation						Unfacto	red React	ions U	INPATTERN	ED lb	(Uplift)	
Туре:	Girder		Applicati	ion: F	loor (Reside	ential)	Brg	Live		Dead	Sno	w	Wind
Plies:	2		Design N	Method: L	SD		1	0		159		0	0
Moisture Cond	lition: Dry		Building	Code: N	NBCC 2010 /	OBC 2012	2	0		159		0	0
Deflection LL:	360		Load Sh	aring:	No.								
Deflection TL:	240		Deck:	1	lot Checked								
Importance:	Normal		Vibration	n: N	lot Checked								
General Load													
Floor Live:	40 PSF						Bearing:	s and Fac	tored	Reactions			
Dead:	15 PSF						Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1-SPF	3.000"	4%	223/0	223	Uniform	1.4D
							End						
Analysis Re	sults						Grain						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	2-SPF	3.000"	4%	223 / 0	223	Uniform	1.4D
Moment	108 ft-lb	1'6"	22269 ft-lb	0.005 (0%)	1.4D	Uniform	End Grain					-	in the same of the
Unbraced	108 ft-lb	1'6"	22269 ft-lb	0.005 (0%)	1.4D	Uniform	- Ordini			-	/	OFESSI	ONA
Shear	96 lb	1'9 7/8"	7537 lb	0.013 (1%)	1.4D	Uniform					10	RU	OMAL CAGINEER SE 586
Perm Defl in	0.000 (L/999)	0	999.000 (L/0) 0.000 (0%)							I SE		101
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)	i					1	2 L	-	- Z
TI Deflinch	0.000 (L/999)	0	999.000 (L/0							- 1	S	T.L. W	SE m

Design Notes

1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size; beam

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

7 Lateral slenderness ratio based on full section width.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF
3	Point	0-0-8		Тор	25 lb	0 lb	0 lb
4	Point	2-11-8		Тор	25 lb	0 lb	0 lb
	Self Weight				10 PLF		

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		Transportation that are							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Point	0-0-8		Тор	25 lb	0 lb	0 lb	Pass ₀ Thr required	u Feagring இழுத்தி Block is atali நoint loads over bearings
4	Point	2-11-8		Тор	25 lb	0 lb	0 lb	0 lb Refer to	Header Column Header Motting Member Connection
	Self Weight				10 PLF			Detail for requirem	ply to ply nailing or bolting ents

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

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

Handling & Installation

- LVL beams must not be cut or drilled
 Refer to menufacturer'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 restreined
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex

APA: PR-L318

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

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4







Client:

Project: Address: GREENPARK

1/9/2019 Date:

RCO Designer:

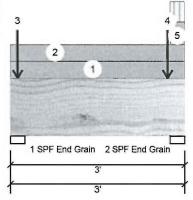
Job Name: LOT 15 (MILLWOOD 5)

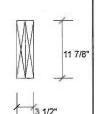
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





Page 1 of 2

Member Inf	ormation						Unfacto	red React	ions U	INPATTERN	ED lb ((Uplift)	
Type:	Girder		Application	on: F	loor (Reside	ntial)	Brg	Live		Dead	Sno	W	Wind
Plies:	2		Design IV	lethod: L	.SD		1	0		158		0	0
Moisture Cond	ition: Dry		Building (Code: N	IBCC 2010 /	OBC 2012	2	12		170		0	0
Deflection LL:	360		Load Sha	aring: N	10								
Deflection TL:	240		Deck:	1	lot Checked								
Importance:	Normal		Vibration:	: 1	lot Checked								
General Load													
Floor Live:	40 PSF						Bearing	s and Fact	ored	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF End	3.000"	4%	222 / 0	222	Uniform	1.4D
Analysis Res	ults					,	Grain						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	2-SPF	3.000"	5%	238 / 0	238	Uniform	1.4D
Moment	110 ft-lb	1'6 1/8"	22269 ft-lb	0.005 (0%)	1.4D	Uniform	End Grain						
Unbraced	110 ft-lb	1'6 1/8"	22269 ft-lb	0.005 (0%)	1.4D	Uniform	-				/	OFESSI	DNA
Shear	102 lb	1'2 1/8"	7537 lb	0.014 (1%)	1.4D	Uniform					108	1	12
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)							1 50		SE SE
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						1	T K		OF M
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)						- 1	0	T.L. W	SE m

Design Notes

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

7 Lateral	slenderness ratio based or	n full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

ght 3 Point 0-1-8 Top 23 lb 0 lb 0 lb Header Column Header Column Point 2-8-8 Top 23 lb 0 lb 0 lb Header Column Header Column

Continued on page 2...

Notes

Lumber

Handling & Installation

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

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L4A 7X4 905-642-4400

Kott Lumber Company 14 Anderson Blvd, Ontario

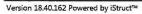
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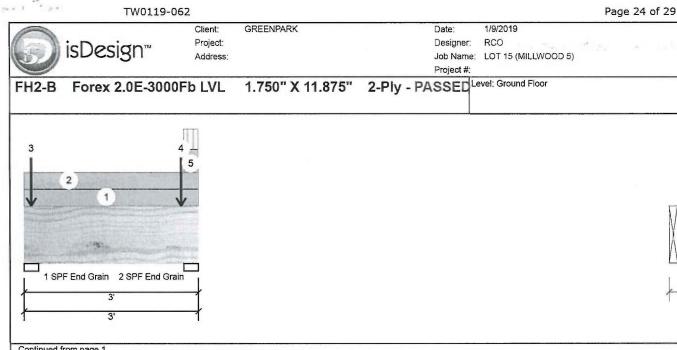
January 14, 2019



This design is







..Continued from page 1 Wind Comments ID Load Type Location Trib Width Side Dead Live Snow 55 PLF 48 PLF 0 PLF 0 PLF 5 Part. Uniform 2-9-0 to 3-0-0 Near Face J2 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

Lumber

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

Handling & Installation

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

approvals
Damaged Beams must not be used
Design assumes top edge is interally
Provide lateral support at bearing
lateral displacement and rotation

APA: PR-L318

Manufacturer Info

Kott Lumber Company 14 Anderson Blvd, Ontario L4A 7X4 905-642-4400

Page 2 of 2

11 7/8"

This design is valid until 7/10/2021



GREENPARK Client:

Project: Address:

1/9/2019 Date:

RCO Designer:

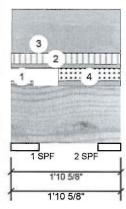
Job Name: LOT 15 (MILLWOOD 5)

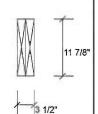
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

Member Inf	ormation						Unfacto	red React	ions (INPATTE	RNED lb (Uplift)	
Type:	Girder		Applicati		loor (Residenti	al)	Brg	Live		Dead	Snow	Wind
Plies:	2		Design I		SD		1	22		98	6	0
Moisture Cond			Building		IBCC 2010 / O	BC 2012	2	18		95	19	0
Deflection LL: Deflection TL:	360 240		Load Sh Deck:		lo lot Checked							
Importance:	Normal		Vibration		lot Checked							
General Load	Nomial		VIDIGIIOI		ot Oneoxed							
Floor Live:	40 PSF						Bearing	s and Fact	ored	Reaction	s	
Dead:	15 PSF						Bearing			React D/L		Ld. Comb.
		10					1-SPF	_	2%			1.25D+1.5L
							2-SPF		2%			1.25D+1.5S
Analysis Re	sults						2 0					+0.5L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	1					
Moment	27 ft-lb	1' 1/16"	23297 ft-lb	0.001 (0%)	1.25D+1.5S	L						
Habanand	27 ft-lb	41 4 (4 C)	22207 # 15	0.004 (00()	+0.5L						OFESSI	ONA
Unbraced	27 11-10	1 1/16	23297 ft-lb	0.001 (0%)	1.25D+1.5S +0.5L	L					100	10
Shear	71 lb	1'4 7/8"	7885 lb	0.009 (1%)	1.25D+1.5S +0.5L	L					T.L. W	700
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0	0.000 (0%)							0 T.L. W	ISE m
LL Defl inch	0.000 (L/999)	0	999.000 (L/0) 0.000 (0%)							100083	566
TL Defl inch	0.000 (L/999)	0	999.000 (L/0	0.000 (0%)							100	vid ,
Design Not	es						1				1 35 KL	100/
2 Multiple plie3 Top loads n4 Top braced5 Bottom brace	designed to be su as must be fastened nust be supported at bearings. and at bearings. derness ratio bas	ed together as equally by all	per manufac plies.								January 14,	The second secon
ID	Load Type			Trib Width	Side	Dead	Liv	e Sno	ow .	Wind	Comments	
1	Tie-In	0-0-	-0 to 0-4-8 ((Span)0-4-1	Тор	15 PSF	40 PS	F OP	SF	0 PSF		
2	Tie-In	0-0-0		(Span) 0-11-15	Тор	15 PSF	40 PS	F 0 P			ı Framing Squash E at all point loads ov	
3	Part. Uniform	0-0-4	to 1-10-10		Тор	80 PLF	0 PL	F 0P			Wall Self Weight	e. wearings
4	Part. Uniform	0-9-12	to 1-10-10		Тор	10 PLF	0 PL	F 23 P			Multiple Member Co	
	Self Weight					10 PLF				Detail for requireme	ply to ply nailing or	bolting

Notes

Notices

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 andior the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

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

Handling & Installation

Handling & Installation

1. LVL beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumas top adge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is

Forex APA: PR-L318

Manufacturer Info

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Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4





Client:

Project: Address: GREENPARK

1/9/2019 Date:

RCO Designer:

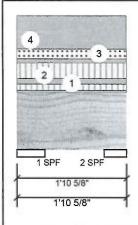
Job Name: LOT 15 (MILLWOOD 5)

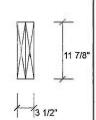
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Page 1 of 1

nation			Unfactore	ed React	ions U	NPATTERNI	ED lb (l	Jplift)	
Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	,	Wind
2	Design Method:	LSD	1	52		118	23	3	0
Dry	Building Code:	NBCC 2010 / OBC 2012	2	47		107	21		0
360	Load Sharing:	No							
240	Deck:	Not Checked							
Normal	Vibration:	Not Checked							
40 PSF			Bearings a	and Fact	tored I	Reactions			
15 PSF			Bearing L	ength.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
			1 - SPF 5	5.750"	2%	148 / 34	182	L	1.25D+1.5S
			2-SPF 4	.625"	3%	134 / 31	164	L	1.25D+1.5S
	2 Dry 360 240 Normal	Girder Application: Design Method: Dry Building Code: Load Sharing: Deck: Normal Vibration: 40 PSF 15 PSF	Girder Application: Floor (Residential) Design Method: LSD Building Code: NBCC 2010 / OBC 2012 Load Sharing: No Deck: Not Checked Vibration: Not Checked	Application: Floor (Residential) Brg 1	Application: Floor (Residential) Brg Live	Application: Floor (Residential) Brg Live	Application: Floor (Residential) Brg Live Dead	Application: Floor (Residential) Brg Live Dead Snow	Application: Floor (Residential) Brg Live Dead Snow

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	30 ft-lb	11 7/8"	22269 ft-lb	0.001 (0%)	1.25D+1.5S	L
Unbraced	30 ft-lb	11 7/8"	22269 ft-lb	0.001 (0%)	1.25D+1.5S	L
Shear	76 lb	6 7/8"	7537 lb	0.010 (1%)	1.25D+1.5S	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.

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SKU SK	5/
January 14, 2019	

January	14,	2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-10-10	(Span)0-8-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-10-10	(Span)1-11-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part, Uniform	0-0-0 to 1-10-10		Тор	10 PLF	0 PLF	23 PLF	0 PLF	
4	Part. Uniform	0-0-0 to 1-10-10		Тор	80 PLF	0 PLF	0 PLF	Pass	ru Framing Squash Block is at all point loads over bearings
	Self Weight				10 PLF			required	at all point loads over bearings

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

Notes

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

Lumber

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

Handling & Installation

- LVL beams must not be cut or drilled
 Refer to manufacturer's product informatic regarding installation requirements, multi-pfastening details, beam strength values, and code.
- approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is v

Manufacturer Info

APA: PR-L318

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Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400





Client: GREENPARK

Project: Address:

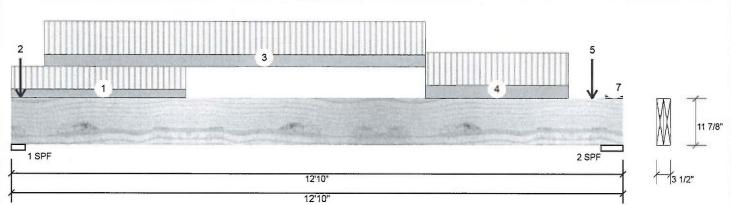
1/9/2019 Date:

RCO Designer:

Job Name: LOT 15 (MILLWOOD 5)

Project #:

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



Member Infor	mation			Unfactored	Reaction	S UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	2725	1090	0	0
Moisture Conditio	n; Dry	Building Code:	NBCC 2010 / OBC 2012	2	2272	945	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load		102						
Floor Live:	40 PSF			Bearings an	d Factor	ed Reactions		
Dead:	15 PSF			Bearing Ler	ngth C	ap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 3.50	00"	72% 1363 / 4088	5450 L	1.25D+1.5L
				2-SPF 5.50	00"	39% 1181 / 3408	4589 L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14298 ft-lb	6' 3/16"	34261 ft-lb	0.417 (42%)	1.25D+1.5L	L
Unbraced	14298 ft-lb	6' 3/16"	27327 ft-lb	0.523 (52%)	1.25D+1.5L	L
Shear	4742 lb	11'5 3/8"	11596 lb	0.409 (41%)	1.25D+1.5L	L
Perm Defl in.	0.088 (L/1661)	6'3"	0.407 (L/360)	0.220 (22%)	D	Uniform
LL Defl inch	0.217 (L/674)	6'2 3/4"	0.407 (L/360)	0.530 (53%)	L	L
TL Defl inch	0.306 (L/479)	6'2 13/16"	0.610 (L/240)	0.500 (50%)	D+L	L

Design Notes

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

6 Lateral slenderness ratio based on full section width.									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-8-0		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
2	Point	0-2-5		Far Face	5 lb	14 lb	0 lb	0 lb	J8
3	Part. Uniform	0-8-5 to 8-8-5		Far Face	130 PLF	345 PLF	0 PLF	0 PLF	
4	Part. Uniform	8-8-5 to 11-8-5		Far Face	138 PLF	345 PLF	0 PLF	0 PLF	
5	Point	12-2-5		Far Face	120 lb	298 lb	0 lb	0 lb	J8

Continued on page 2...

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

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

Handling & Installation

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 lateralty restrained

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

12-5-10 to 12-10-0 (Span)0-8-9 Top

40 PSF

15 PSF

Manufacturer Info

0 PSF

Forex APA: PR-L318

0 PSF

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Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4

T.L. WISE 100083566

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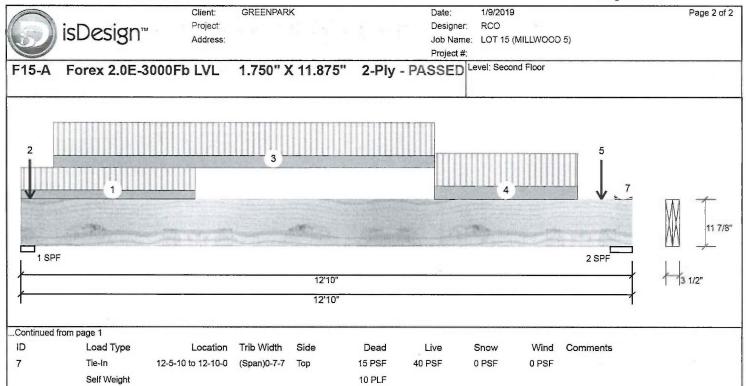
January 14, 2019



This design



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

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

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Lumber

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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

This design is valid until 7/10/2021

Manufacturer Info Forex APA: PR-L318

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4