Design Method

Deflection Joist

Deflection Girder

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Strapping

Deck

Floor

Loads

Live Dead

Building Code NBCC 2010 / OBC

2012

15

480

360

480

360

360

240

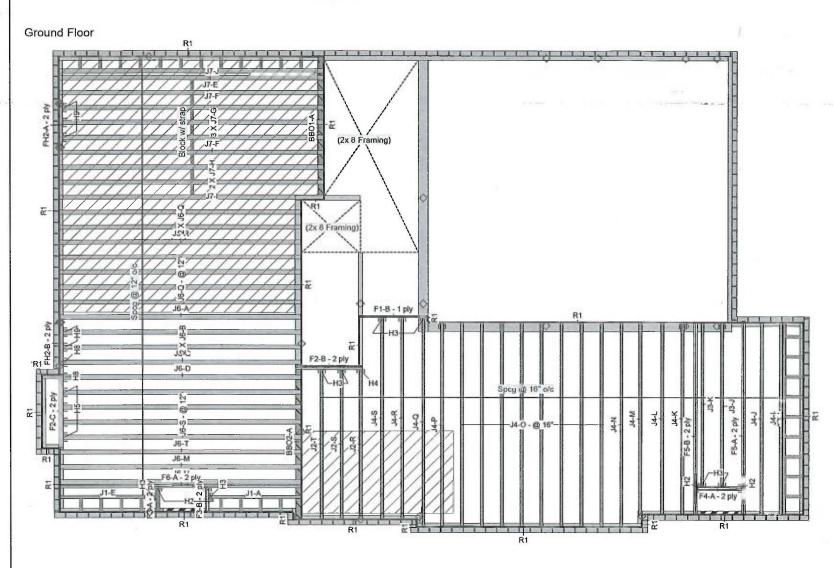
480

360

SPF Plywood

Nailed & Glued

1"X4", 1 Row at



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.





All work shall conform to the Ontario Building Gode 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.

Legend



1.125 X 9.5 1.75 X 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 4. CAN/CSA-O86-09

♦	Load from Above
The Division of	Wall
	Wall Opening
	Norbord Rimboard Plus
	NJ 9.5
	NJ60U 9.5
	NJH 9.5
	Forex 2.0E-3000Fb LVL

2. Nascor CCMC - 13535-R

3. LVL CCMC -14056-R

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

	L (Flush) Description	Width	Depth	Qty	Plies	Pcs	Length	NASCO
F2	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	6-0-0	
F1	Forex 2.0E-3000Fb LVL	1.75	9.5			1	6-0-0	Layout Name MILLWOOD 12-2 (WOD)
FH2	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	4-0-0	Design Method
l Joist (Flush)	- 3						
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Description
F6	NJ	1.5	9.5	1	2	2	16-0-0	MINNISALE HOMES BRAMPTON, ONT.
F5	NJ	1.5	9.5	2	2	4	14-0-0	
F4	NJ	1.5	9.5	1	2	2	4-0-0	Created
F3	NJ	1.5	9.5	2	2	4	2-0-0	June 28, 2018 Builder GREENPARK
J7	NJ60U	3.5	9.5			10	18-0-0	
J6	NJ60U	3.5	9.5			19	16-0-0	
J4	NJH	2.5	9.5			19	14-0-0	Sales Rep
J3	NJH	2.5	9.5			2	12-0-0	RM
J2	NJH	2.5	9.5			3	10-0-0	
J1	NJH	2.5	9.5			2	8-0-0	Designer
Rim Bo	ard		- 70			gran alle		RCO
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Shipping
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			15	12	Project
Blockin	q						·	Builder's Project
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Kott Lumber Company
BLK1	NJH	2.5	9.5	LinFt		Varies	33-0-0	14 Anderson Blvd
Hanger					ım/Girde	r Su	oported ember	Stouffville, Ontario Canada

I L4A (A4							
905-642-4400	fasteners	Slope fasteners		Skew	Description	Pcs	Label
Job Path	2 10dx1 1/2	4 10dx1 1/2			LT2-159	4	H2
//	2 10dx1 1/2	4 10dx1 1/2			LT259	9	НЗ
S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS					LT259	1	H4
MILLWOOD 12\MILLWOOD12-2	2 10dx1 1/2	4 10d			LT359	4	H5
\FLOOR\REV\WOD\MILLWOOD					LT359	2	Н8
Ground Floor	4 10dx1 1/2	4 10dx1 1/2			MIT49.5	5	Н9
Oloulia i lool							

NOTES:

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

another member using a face-mounted hanger.

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

. Refer to Nascor specifier guide for installation works.

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

. Load transfer blocks to be installed under all point loads.

. It shall be the 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 pracing for lateral stability are the responsibility of Others.

Hatch area represents ceramic tiled floor with an additional dead load

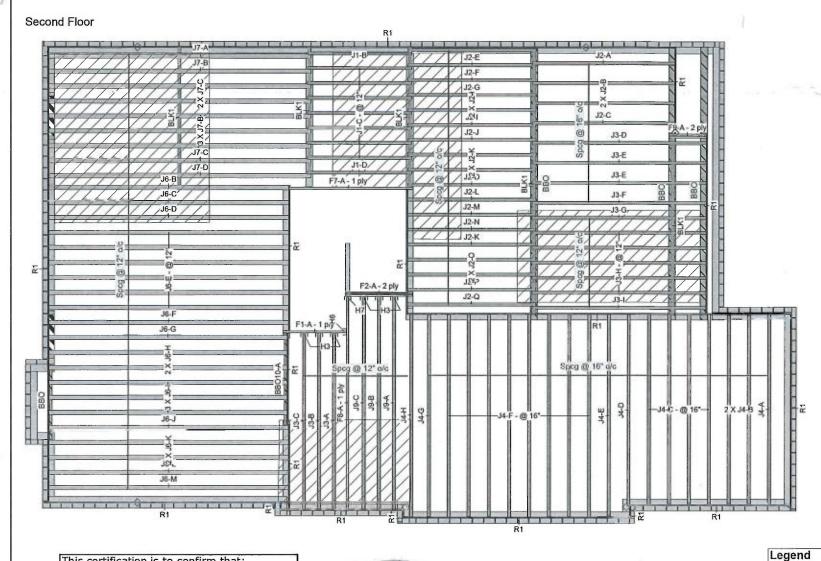
The framing shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and approve the deviation prior

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Rev.2; July 2018 Project No: 17-04-19 Model: Millwood 12

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



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.





Load from Above Wall Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ60U 9.5 **NJH 9.5**

- 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)

LAT/F9	L (Flusii)							л
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	I
F8	Forex 2.0E-3000Fb LVL	1.75	9.5			1	16-0-0	
F7	Forex 2.0E-3000Fb LVL	1.75	9.5			1	10-0-0	
F2	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0	
F1	Forex 2.0E-3000Fb LVL	1.75	9.5			1	6-0-0	1
F9	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	4-0-0	
LVL/LS	L (Dropped)							1
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	1
BBO10	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	8-0-0	1
I Joist (Flush)							1
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	1
J7	NJ60U	3.5	9.5			9	18-0-0	1
J6	NJ60U	3.5	9.5			21	16-0-0	
J9	NJH	2.5	9.5			3	16-0-0	1
J4	NJH	2.5	9.5			19	14-0-0	1
J3	NJH	2.5	9.5			14	12-0-0	Ľ
J2	NJH	2.5	9.5			22	10-0-0	Ľ
J1	NJH	2.5	9.5			9	8-0-0]
Rim Bo	ard							T
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	1
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			18	12	1
Blockin	g		4 =					1
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	1
BLK1	NJH .	2.5	9.5	LinFt		Varies	38-0-0	1
Hanger				Bea	ım/Girde		ported ember	

Second Floor LVL/LSL (Flush)

H7 1 HUCQ1.81/9-SDS NOTES . Framer to verify dimensions on the architectural drawings. 2. Double joist only require filler/backer ply when supporting

Skew Slope

fasteners

4 10dx1 1/2

30 16d

another member using a face-mounted hanger.

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

. Refer to Nascor specifier guide for installation works.

Pcs Description

1 HUS1.81/10

6 LT259

Label

НЗ

- . 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.
- 3. 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 additional 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.

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Rev.2: July 2018 Project No: 17-04-19 Model: Millwood 12

			BIAG	600				
Pcs	Lengt		NAS	COR				
1	16-0-	0						
1	10-0-	0	Layout Name MILLWOOD 12-2					
2	6-0-		Design Method					
1	6-0-	0	Description	F - F - F + -				
2	4-0-	0	MINNISALE HON BRAMPTON, ON					
Doo	Longi	h	Created					
Pcs 2	Lengti 8-0-		June 28, 2018					
	0.0		Builder GREENPARK					
Pcs	Lengt		Sales Rep RM					
9	18-0-	_						
21 3	16-0-		Designer RCO	1				
19	14-0-	_						
14	12-0-	_	Shipping					
22	10-0-		Project					
9	8-0-	0	Builder's Project					
_			Kott Lumbe	r Company				
Pcs	Lengt		14 Anderson Blvd	i				
18	1:	2	Stouffville, Ontari	0				
			Canada					
Pcs	Lengt	h	L4A 7X4					
/aries	38-0-		905-642-4400					
			Job Path					
	ported		S:\CUSTOMERS					
	mber		MINNISALE HO					
	teners		\MILLWOOD 12\MILLWOOD12-2 \FLOOR\REV\MILLWOOD 12-2.isl					
	dx1 1/2 3 16d		Second Floor					
	. 100		Design Method	LSD				
		Ц	Building Code	NBCC 2010 / OBC				
			Floor	2012				
		Ш	Floor					
		П	Loads Live	40				
			Dead	15				
		П	Deflection Joist	,5				
			LL Span L/	480				
		Ш	TL Span L/	360				
		П	LL Cant 2L/	480				
			TL Cant 2L/	360				
			Deflection Girde	er				
		П	LL Span L/	360				
		П	TL Span L/	240				
			LL Cant 2L/	480				
an		П	TL Cant 2L/	360				
			Decking					
		Ш	Deck	SPF Plywood				
			Thickness	5/8"				
		П	Fastener	Nailed & Glued				

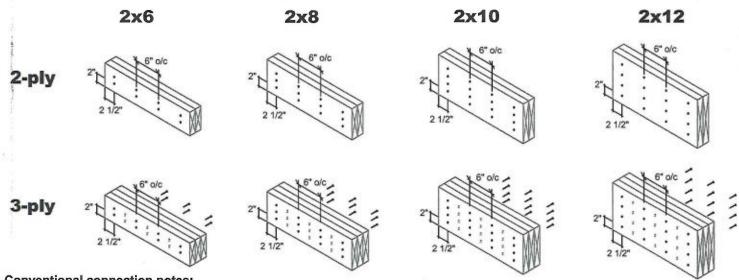
Vibration

Gypsum 1/2"

Ceiling:

MULTIPLE MEMBER CONNECTIONS

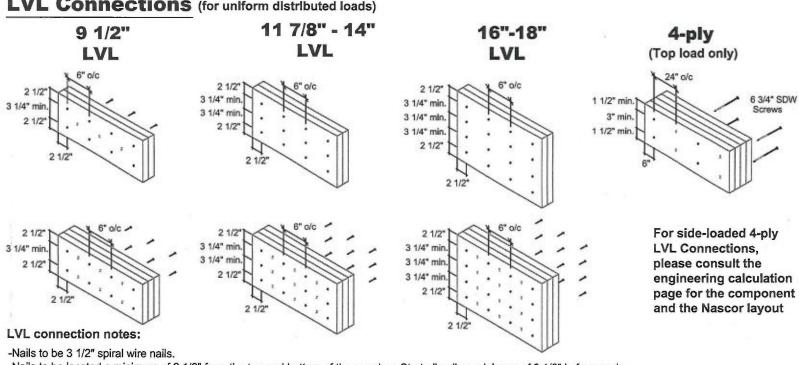
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

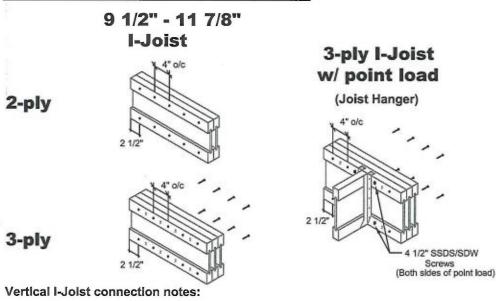
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



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

Vertical I-Joist Connections (for uniform distributed loads)



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

MULTI-PLY CONNECTION DETAILS

Date: November 30, 2016

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

TW0818-149 Page 1 of 38

Engineering Note Page (ENP-2)

MILLWOOD 12-

REVISION 2009-10-09

Please read all notes prior to installation of the component

DESIGN INFORMATION

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

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

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

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

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

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

CODE

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

COMPONENT

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

HANDLING AND INSTALLATION

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



MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)

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

Conventional connection notes:

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

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

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

-"X" represents nail driven from the opposite skle.

LVL Connections (for uniform distributed loads)

11 7/8" - 14" 16"-18" 9 1/2" 4-ply LVL LVL (Top load only) 3 1/4° mln 2 1/2 3 1/4" min For side-loaded 4-ply LVL Connections, 3 1/4" mir please consult the 3 1/4" mi engineering calculation page for the component and the Nascor layout LVL connection notes:

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

-Nalls to be 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.

-Nation to be occasion of the mon.

-Ninimum 3 1/4" spacing between rows.

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

-"X" represents nail or screw driven from the opposite side.

Vertical I-Joist Connections (for uniform distributed loads)

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

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.

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

MULTI -PLY CONNECTION DETAILS

Project: Address:

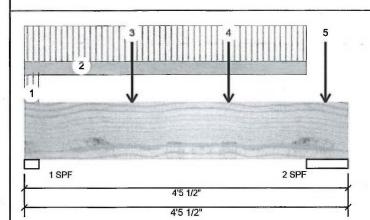
Date: Designer: 8/20/2018 **RCO**

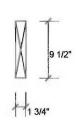
Job Name: MILLWOOD 12-1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Ground Floor





Page 1 of 1

Member Info	rmation			Unfacto	red Reac	tions U	NPATTERN	ED lb (U _l	olift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	1	Design Method:	LSD	1	598		240	0		0
Moisture Conditi	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	678		283	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	s and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total Lo	d. Case	Ld. Comb.
				1 - SPF	2.375"	47%	300 / 897	1197 L		1.25D+1.5L
				2-SPF	6.875"	19%	354 / 1018	1371 L		1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	1328 ft-lb	1'10 3/16"	11362 ft-lb	0.117 (12%)	1.25D+1.5L	L	
Unbraced	1328 ft-lb	1'10 3/16"	9065 ft-lb	0.147 (15%)	1.25D+1.5L	L	
Shear	1017 lb	3'1 7/8"	4638 lb	0.219 (22%)	1.25D+1.5L	L	
Perm Defl in.	0.005 (L/9820)	2' 3/16"	0.127 (L/360)	0.040 (4%)	D	Uniform	
LL Defl inch	0.012 (L/3932)	2' 3/16"	0.127 (L/360)	0.090 (9%)	L	L	
TL Defl inch	0.016 (L/2808)	2' 3/16"	0.191 (L/240)	0.090 (9%)	D+L	L	
							۰



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 0-2-6	(Span)3-4-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-10-10		Тор	45 PLF	120 PLF	0 PLF	0 PLF	
3	Point	1-5-12		Near Face	145 lb	363 lb	0 lb	0 lb	J4
4	Point	2-9-12		Near Face	139 lb	352 lb	0 lb	0 lb	J4
5	Point	4-1-12		Near Face	42 lb	82 lb	0 lb	0 lb	J4
	Self Weight				4 PLF				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

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

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
- fastering detains, because of the provide approvals
 Damaged Beams must not be used
 Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is v

Manufacturer Info Forex APA: PR-L318

READ ALL NOTES ON THIS PAGE AND ON THE 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.



Client: **GREENPARK**

Project: Address: Date: 8/20/2018

RCO

Designer: Job Name: MILLWOOD 12-1

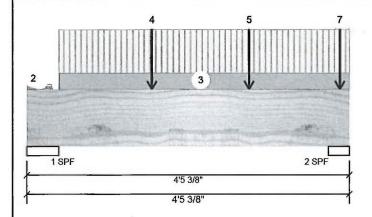
Project #:

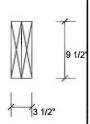
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Page 1 of 2

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

Unfactored Reactions UNPATTERNED Ib (Uplift) Wind Dead Brg Live Snow 1 697 288 0 0 2 1058 435 0 0

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 5.375" 12% 360 / 1046 1405 L 1.25D+1.5L 2-SPF 3.500" 28% 543 / 1587 2130 L 1.25D+1.5L PROFESSIONAL TRADE

Analysis Results

Dead:

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
ı	Moment	1532 ft-lb	2'2 7/8"	22724 ft-lb	0.067 (7%)	1.25D+1.5L	L
l	Unbraced	1532 ft-lb	2'2 7/8"	22724 ft-lb	0.067 (7%)	1.25D+1.5L	L
ŀ	Shear	1081 lb	3'5 1/8"	9277 lb	0.117 (12%)	1.25D+1.5L	L.
	Perm Defl in.	0.003 (L/16770)	2'3 7/16"	0.128 (L/360)	0.020 (2%)	D	Uniform
l	LL Defl inch	0.007 (L/6853)	2'3 7/16"	0.128 (L/360)	0.050 (5%)	L	L
	TL Defl inch	0.009 (L/4865)	2'3 7/16"	0.192 (L/240)	0.050 (5%)	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.

15 PSF

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-4	(Span)0-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-4-2	(Span)0-6-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part, Uniform	0-5-6 to 4-5-6		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
4	Point	1-8-12		Near Face	107 lb	261 lb	0 lb	0 lb	J2
5	Point	3-0-12		Near Face	104 lb	252 lb	0 lb	0 lb	J2

Continued on page 2...

6

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

Tie-In

Lumber

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

Handling & Installation

and Iling & Installation
I.VL beams must not be cut or drilled
Refer to manufacturer's product information
regarding installation requirements, multi-ply
fastening defails, 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

4-3-0 to 4-5-6 (Span)3-4-10 Top

For flat roofs provide proper drainage to prevent ponding

40 PSF

15 PSF

This design

Manufacturer Info

0 PSF

APA: PR-L318

0 PSF

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 L4A 7X4 905-642-4400

100083566

WCE OF ONTA

August 21, 2018



TW0818-149 Page 7 of 38 GREENPARK 8/20/2018 Date: Client: Project: Designer: RCO isDesign™ Address: Job Name: MILLWOOD 12-1 Project #: Level: Ground Floor Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED 5

..Continued from page 1

1 SPF

Location Trib Width Live Wind Comments ID Side Dead Snow Load Type 7 **Point** 4-3-12 Near Face 110 lb 262 lb 0 lb 0 lb J2 8 PLF Self Weight

2 SPF

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

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

Lumber

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

chemicals

4'5 3/8' 4'5 3/8"

Handling & Installation

, 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Manufacturer Info Forex

APA: PR-L318

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

Page 2 of 2

isDesign[™]

GREENPARK Client:

Project: Address:

Date: 8/20/2018

Designer: **RCO**

Job Name: MILLWOOD 12-1

Project #

Forex 2.0E-3000Fb LVL

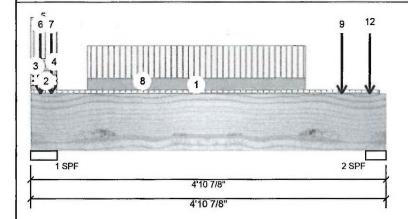
1.750" X 9.500"

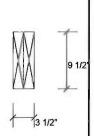
2-Ply - PASSED

1

2

Level: Ground Floor





Page 1 of 2

Member Information					
Girder					
2					
Dry					
360					
240					
Normal					
40 PSF					
15 PSF					

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

Load Sharing: No Deck: Not Checked Not Checked Vibration:

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

1856

1171

Snow

1869

682

Bearings and Factored Reactions Bearing Length Cap. React D/L lb 1 - SPF 4.375" 64% 2320 / 3663

Live

1718

1517

2-SPF 3.500" 54% 1464 / 2617 4081 L

Total Ld. Case Ld. Comb. 5982 L 1.25D+1.5S +0.5L 1.25D+1.5L +0.5S

T.L. WISE 100083566

100083566

WCE OF ONT ACT

August 21, 2018

Wind

0

0

Analysis Results

ı	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	1576 ft-lb	2'6 3/16"	22724 ft-lb	0.069 (7%)	1.25D+1.5L +0.5S	L
	Unbraced	1576 ft-lb	2'6 3/16"	22724 ft-lb	0.069 (7%)	1.25D+1.5L +0.5S	L
	Shear	1686 lb	3'10 5/8"	9277 lb	0.182 (18%)	1.25D+1.5L +0.5S	L
	Perm Defl in.	0.003 (L/16135)	2'6 1/16"	0.146 (L/360)	0.020 (2%)	D	Uniform
l	LL Defl inch	0.008 (L/6442)	2'6 1/16"	0.146 (L/360)	0.060 (6%)	L+0.5S	L
L	TL Defl inch	0.011 (L/4604)	2'6 1/16"	0.219 (L/240)	0.050 (5%)	D+L+0.5S	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.

/ Lateral stende	rness ratio based on	ruii section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-9-12	(Span)1-3-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-4-6		Тор	44 PLF	0 PLF	102 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 0-4-6		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

This desig

Continued on page 2...

Notes

Lumber

chemicals

Handling & Installation

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

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.

L4A 7X4 905-642-4400

Kott Lumber Company 14 Anderson Blvd, Ontario Canada



isDesign™

Client:

Project: Address: GREENPARK

Date: 8/20/2018

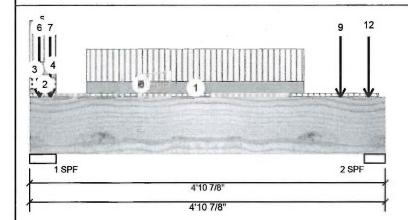
Designer: **RCO**

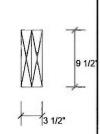
Job Name: MILLWOOD 12-1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" 2-Ply - PASSED Level: Ground Floor





Page 2 of 2

Continued	from page 1							
ID	Load Type	Location Trib V	Width Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	0-0-0 to 0-4-6	Тор	120 PLF	319 PLF	0 PLF	0 PLF	J6
5	Part. Uniform	0-0-0 to 0-4-6	Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Point	0-1-10	Тор	1341 lb	640 lb	1810 lb	0 lb	BBO3 BBO3
7	Point	0-3-7	Near Face	166 lb	360 lb	22 lb	0 lb	J6
8	Part. Uniform	0-9-7 to 3-9-7	Near Face	117 PLF	311 PLF	0 PLF	0 PLF	
9	Point	4-3-7	Near Face	121 lb	324 lb	0 lb	0 lb	J6
10	Point	4-8-2	Тор	19 lb	0 lb	0 lb	0 lb	Wall Self Weight
11	Point	4-8-2	Тор	824 lb	740 lb	682 lb	0 lb	BBO3 BBO3
12	Point	4-8-2	Тор	18 lb	0 lb	0 lb	0 lb	Wall Self Weight
	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 Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the Intended application, and to verify the dimensions and loads.

Lumber

Handling & Installation

Handling & Installation

1. IVI, beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Forex APA: PR-L318

Manufacturer Info



Project: Address:

8/20/2018 Date:

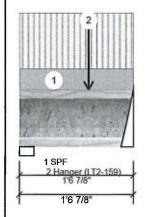
RCO Designer:

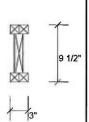
Job Name: MILLWOOD 12-1

Project #:

2-Ply - PASSED NJ 9.500"

Level: Ground Floor





Page 1 of 1

Member Inf	formation						Unfacto	red React	ions U	NPATT	ERNED II	b (Uplift)	
Type: Plies: Moisture Cond Deflection LL: Deflection TL: Importance: General Load	360 240 Normal		Application Design M Building G Load Shat Deck: Vibration:	ethod: L Code: N ring: N	loor (Resident SD IBCC 2010 / O Io Iot Checked Iot Checked	•	Brg 1 2	Live 95 118		Dead 35 44	S	now 0 0	Wind 0 0
Floor Live:	40 PSF						Bearing:	s and Fac	tored	Reactio	ns		
Dead:	15 PSF	<u>-</u>					Bearing 1 - SPF	_	Cap. 7% 9%		142 18	al Ld. Case 36 L 31 L	Ld. Comb. 1.25D+1.5L 1.25D+1.5L
Analysis Re	sults						Hanger						1,222 1172
LL Defl inch TL Defl inch Design Not 1 Fill all hang	(L/28471) 0.001 (L/20731) (es er nailing holes.	11 7/16" 1'5 5/8" 0 11 7/16" 11 7/16"	7340 ft-lb 6912 ft-lb 3080 lb 999.000 (L/0) 0.044 (L/360) 0.067 (L/240)	0.014 (1%) 0.071 (7%) 0.000 (0%) 0.010 (1%) 0.010 (1%)	L	L					LICENISE	T.L. W 100083	1800
3 Multiple plie 4 Top loads n 5 Top flange t 6 Bottom flan	designed to be su es must be fastene nust be supported braced at bearings ge braced at bear	ed together as equally by all s. ings.	per manufacte plies.	ırer's details								gust 21,	-
ID	Load Type			rib Width	Side	Dead	Live			Wind	Comment	s	
1	Tie-In	0-0-0	to 1-6-14 (S	Span)3-3-0	Тор	15 PSF	40 PS	F 0 P	SF	0 PSF			
2	Point		0-11-7		Far Face	41 lb	110	b 0	lb Pa	0 lb ass-Thru	J1 J Framing	Squash Bl	ock is

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

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

chemicals

Handling & Installation

Handling & Installation

1. IJoist flanges must not be cut or drilled

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

3. Damaged Uplists must not be used

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

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lenn-to-3.5 inches
 For flat roofs provided READ ALL NOTES Of ponding

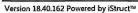
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

This design is v

Manufacturer Info Nascor by Kott

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

requirements





required at all point loads over bearings Refer to Multiple Member Connection Detail for ply to ply nailing or bolting



Project: Address:

8/20/2018 Date:

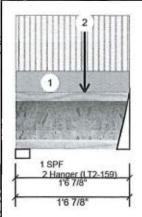
Designer: RCO

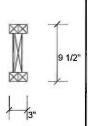
Job Name: MILLWOOD 12-1

Project #:

2-Ply - PASSED NJ 9.500"

Level: Ground Floor





Page 1 of 1

Member Info	rmation						Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder		Application	on: F	loor (Resident	ial)	Brg	Live		Dead	Sno	w	Wind
Plies:	2		Design M	lethod: L	SD		1	92		35		0	0
Moisture Condition	on: Dry		Building (Code: N	IBCC 2010 / C	BC 2012	2	114		43		0	0
Deflection LL:	360		Load Sha	ring: N	ło								
Deflection TL:	240		Deck:	٨	lot Checked		1						
Importance:	Normal		Vibration:		lot Checked		1						
General Load													
Floor Live:	40 PSF						Bearings	s and Fact	ored l	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF	2.375"	7%	43 / 139	182	L	1.25D+1.5L
Analysis Resu	lts						2 - Hanger	2.000"	9%	53 / 171	224	L	1.25D+1.5L
Analysis A	ctual	Location	Allowed	Capacity	Comb.	Case				·			
Moment 93	2 ft-lb	11 7/16"	7340 ft-lb	0.012 (1%)	1.25D+1.5L	L						-	-
Unbraced 93	2 ft-lb	11 7/16"	6912 ft-lb	0.013 (1%)	1.25D+1.5L	L					/	ROFESSI	ONA
Shear 2	11 lb	1'5 5/8"	3080 lb	0.068 (7%)	1.25D+1.5L	L					100	1	ONAL ENGL
Perm Defl in. 0.	.000 (L/999)	0	999.000 (L/0)	0.000 (0%)							15/		10

Design Notes

LL Defl inch 0.001

TL Defl inch 0.001

1 Fill all hanger nailing holes.

(L/29622)

(L/21543)

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

Load Type

Tie-In

Point

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

STOPROFESSIONAL ELEC	
Sa Crain	
T.L. WISE 100083566	
1000003500	
30 MOS DE ONTRE	
August 21, 2018	

Wind Comments 0 PSF

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

ID

1 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 inlended Lumber

Handling & Installation

Location

0-11-7

0-0-0 to 1-6-14

and ling & Installation.

Joist flanges must not be cut or drilled.
Refer to latest copy of the Lioist product information details for framing details, sifflerent tables, web hole chart. bridging details, multi-ply fastening details end handling/erection details.

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

11 7/16" 0.044 (L/360) 0.010 (1%) L

11 7/16" 0.067 (L/240) 0.010 (1%) D+L

Dead

15 PSF

39 lb

Live

40 PSF

104 lb

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing leng to 3.5 hours.
 For fait roots provid READ ALL NOTES O

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

Manufacturer Info

Nascor by Kott

Snow

0 PSF

IN THE DESIGN OF THIS COMPONENT. This design is v

Side

Near Face

Top

Trib Width

(Span)3-3-0





Project: Address: Date:

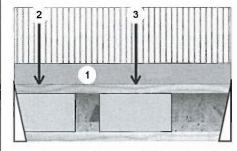
8/20/2018 RCO

Job Name: MILLWOOD 12-1

Project #:

Designer:

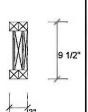
NJ 9.500" 2-Ply - PASSED Level: Ground Floor



1 Hanger (LT2-159)

2 Hanger (LT2-159)

3'



Wind

0

0

Page 1 of 1

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

Bearings and Factored Reactions

Live

358

236

Brg

2

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

134

88

Snow

0

0

Cap. React D/L lb Total Ld. Case Ld. Comb. Bearing Length 167 / 536 704 L 1.25D+1.5L 2.000" 27% Hanger 2.000" 18% 110 / 354 465 L 1.25D+1.5L Hanger

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	506 ft-lb	1'8 1/8"	7340 ft-lb	0.069 (7%)	1.25D+1.5L	L
Unbraced	506 ft-lb	1'8 1/8"	4678 ft-lb	0.108 (11%)	1.25D+1.5L	L
Shear	697 lb	1 1/4"	3080 lb	0.226 (23%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/23286)	1'8 1/8"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/8709)	1'8 1/8"	0.093 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.005 (L/6339)	1'8 1/8"	0.140 (L/240)	0.040 (4%)	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.

15 PSF

- 5 Top flange braced at bearings.

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-4-2		Far Face	72 lb	192 lb	0 lb	0 lb	J3
3	Point	1-8-2		Far Face	111 lb	297 lb	0 lb		u 作aming Squash Block is at all point loads over bearings

This design is

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

Notes

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

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire relardant or corr

Handling & Installation

I. Dist franges must not be cut or drilled
 Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
 Damageet Joists must not be used

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

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

READ ALL NOTES ON THIS PAGE AND ON THE

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

Manufacturer Info

Nascor by Kott

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

T.L. WISE

100083566

WCE OF ONTACH

August 21, 2018





Project:

Address:

8/20/2018 Date:

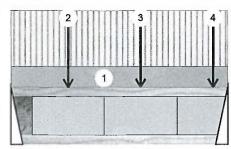
Designer: RCO

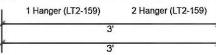
Job Name: MILLWOOD 12-1

Project #:

NJ 2-Ply - PASSED 9.500"

Level: Ground Floor







Page 1 of 1

Member Info	rmation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condit	ion: 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		

Untacto	rea Reactions	SUNPATTER	MED ID (OBIIT	t)
Brg	Live	Dead	Snow	Wind
1	370	139	0	0
2	466	175	0	0

H. C. A. ... I D. ... C. ... HAIDATTEDATED H. (H. 1964)

Analysis Results Location Allowed Capacity Comb. Case Analysis Actual 596 ft-lb 0.081 (8%) 1.25D+1.5L L 1'9 9/16" 7340 ft-lb Moment 596 ft-lb 1'9 9/16" 4678 ft-lb 0.127 (13%) 1.25D+1.5L L 911 lb 2'10 3/4" 3080 lb 0.296 (30%) 1.25D+1.5L L 1'8 15/16" 0.093 (L/360) 0.020 (2%) D Uniform (L/19334)

Bearings and Factored Reactions											
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.					
1 - Hanger	2.000"	28%	173 / 555	729	L	1.25D+1.5L					
2-	2.000"	35%	218 / 700	918	L	1.25D+1.5L					

Wind

0 PSF 0 lb J9

Unbraced Shear Perm Defl in. 0.002 LL Defl inch 0.005 (L/7254) 1'8 7/8" 0.093 (L/360) 0.050 (5%) L TL Defl inch 0.006 (L/5275) 1'8 7/8" 0.140 (L/240) 0.050 (5%) D+L Design Notes



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

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

4 Top loads must be supported equally by all plies.

5 Top flange braced at bearings.

1 Fill all hanger nailing holes.

6 Bottom	flange braced at bearings						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF
2	Point	0-9-9		Near Face	100 lb	268 lb	dl 0
3	Point	1-9-9		Near Face	105 lb	279 lb	0 lb
4	Point	2-9-9		Near Face	69 lb	185 lb	0 lb

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

Comments

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

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

chemicals

Handling & Installation

Induling & Installiation

Justif langes must not be cut or drilled

Refer to latest copy of the Justif product information

detals for framing detals, siftners tables, web hole

chart, bridging detals, multi-ply fastening detals and

handling/inraction details

Demaged Justif 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 lengths. 3.5 triches
 For fat roofs provide READ ALL NOTES CONCINEEDING NOT.

READ ALL NOTES.

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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.

Manufacturer Info

Nascor by Kott





Client:

Project: Address: **GREENPARK**

Date: 8/20/2018

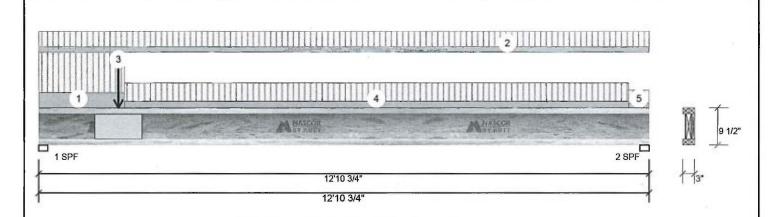
Designer: RCO

Job Name: MILLWOOD 12-1

Project #:

2-Ply - PASSED 9.500" NJ

Level: Ground Floor



Member Info	rmation		Unfactor	Infactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	w	Wind
Plies:	2	Design Method:	LSD	1	612		229		0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	374		140		0	0
Deflection LL:	360	Load Sharing:	No	1						
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	2.375"	45%	286 / 918	1205	L	1.25D+1.5L
				2-SPF	2.375"	27%	175 / 560	735	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2525 ft-lb	5'9 7/8"	7340 ft-lb	0.344 (34%)	1.25D+1.5L	L
Unbraced	2525 ft-lb	5'9 7/8"	2551 ft-lb	0.990 (99%)	1.25D+1.5L	L
Shear	1181 lb	1 5/8"	3080 lb	0.383 (38%)	1.25D+1.5L	L
Perm Defl in.	0.055 (L/2734)	6'3 1/16"	0.421 (L/360)	0.130 (13%)	D	Uniform
LL Defl inch	0.148 (L/1024)	6'3 1/16"	0.421 (L/360)	0.350 (35%)	L	L
TL Defl inch	0.203 (L/745)	6'3 1/16"	0.631 (L/240)	0.320 (32%)	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 4'2" o.c.
- 5 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-10-12	(Span)1-2-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-8-6		Far Face	88 lb	236 lb	0 lb	0 lb	F4
4	Tie-In	1-9-14 to 12-5-10	(Span)1-5-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	u Framing Squash Block is
5	Tie-In	12-5-10 to 12-10-12	(Span)1-0-4	Тор	15 PSF	40 PSF	0 PSF	reqû#êā	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
 Usoist not to be treated with fire retardant or corrosive

Handling & Installation

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Liost flanges must not be cut or drilled.

Refer to latest copy of the Lioist product information details for framing details, elifferer tebles, web hole chart, bridging details, multi-hyp frastening details and handling/erection details.

Damaged Lioist must not be used.

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

Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 Inches
 For flat roofs proven the point load bearing length>= 3.5 Inches

This design is

Manufacturer Info Nascor by Kott

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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

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100083566

August 21, 2018

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Client: **GREENPARK**

Project: Address: Date: 8/20/2018

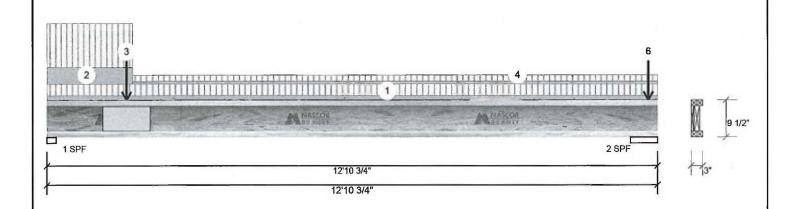
RCO Designer:

Job Name: MILLWOOD 12-1

Project #:

9.500" 2-Ply - PASSED NJ

Level: Ground Floor



Member Inforr	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	W	Wind
Plies:	2	Design Method:	LSD	1	574		215		0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	400		203		0	0
Deflection LL:	360	Load Sharing:	No	1 -						
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored I	Reactions			
Dead:	15 PSF			Bearing I	ength	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF 2	2.375"	42%	269 / 861	1130	L	1.25D+1.5L
			-	2-SPF 6	3.875"	28%	254 / 600	854	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1713 ft-lb	4'3 11/16"	7340 ft-lb	0.233 (23%)	1.25D+1.5L	L-
Unbraced	1713 ft-lb	4'3 11/16"	1720 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	1108 lb	1 5/8"	3080 lb	0.360 (36%)	1.25D+1.5L	L
Perm Defl in.	0.035 (L/4184)	5'9 11/16"	0.408 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.094 (L/1568)	5'9 11/16"	0.408 (L/360)	0.230 (23%)	L	L
TL Defl inch	0.129 (L/1141)	5'9 11/16"	0.612 (L/240)	0.210 (21%)	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' o.c.

5 Bottom flange braced at bearings.



August 21, 2018

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-10-12	(Span)0-10-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-8-6		Near Face	134 lb	358 lb	0 lb	0 lb	F4
4	Tie-In	1-9-14 to 12-10-12	(Span)0-5-10	Тор	15 PSF	40 PSF	0 PSF	Passperi	ı Framing Squash Block is
5	Point	12-8-6		Тор	64 lb	171 lb	0 lb	required a	at all point loads over bearings
6	Point	12-8-6		Тор	53 lb	0 lb	0 lb		ለህዝክៃ)와 (Weigbler Connection ply to ply nailing or bolting ents

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
 Uolst not to be treated with fire retardant or core

Handling & Installation

- Plandling & Installation

 1. Uoist flanges must not be cut or drilled

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

 3. Damaged Iobists 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 prov.

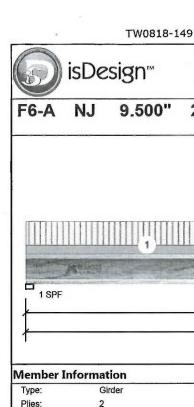
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Manufacturer Info

Nascor by Kott

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





GREENPARK Client: Project:

2-Ply - PASSED

Address:

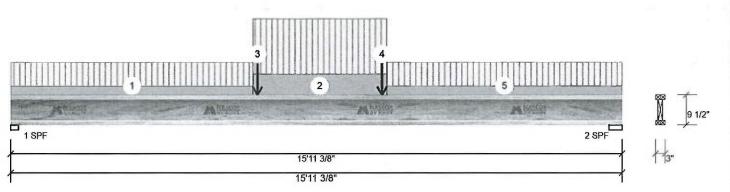
8/20/2018 Date:

Designer: RCO

Job Name: MILLWOOD 12-1

Project #:

Level: Ground Floor



Member Info	rmation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	266		100	0	0	
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	274		103	0	0	
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored l	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total Ld. Case	Ld. Comb.	
				1 - SPF	2.375"	19%	125 / 399	523 L	1.25D+1.5L	

2 - SPF 4.125"

18%

128 / 411

Analysis Results

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	2762 ft-lb	7'10 5/16"	7340 ft-lb	0.376 (38%)	1.25D+1.5L	L
	Unbraced	2762 ft-lb	7'10 5/16"	2786 ft-lb	0.991 (99%)	1.25D+1.5L	L
	Shear	531 lb	15'8"	3080 lb	0.172 (17%)	1.25D+1.5L	L
	Perm Defl in.	0.083 (L/2235)	7'11 1/16"	0.518 (L/360)	0.160 (16%)	D	Uniform
	LL Defl inch	0.222 (L/838)	7'11"	0.518 (L/360)	0.430 (43%)	L	L
	TL Defl inch	0.306 (L/610)	7'11 1/16"	0.777 (L/240)	0.390 (39%)	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' o.c.

5 Bottom flange braced at bearings



1.25D+1.5L

539 L

August 21, 2018

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Сопшень
1	Tie-In	0-0-0 to 6-3-14	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	6-3-14 to 9-9-14	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	6-5-6		Near Face	44 lb	118 lb	0 lb	0 lb	F3
4	Point	9-8-6		Near Face	43 lb	114 lb	0 lb	Pace Thru	F3 I Framing Squash Block is
5	Tie-In	9-9-14 to 15-11-6	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	required a	it all point loads over bearings

This design is vi

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 in suit for dimensions and loads. Lumber

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Handling & Installation

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Notifianges must not be cut or drilled.
Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart. bridging details, multi-ply fastering details end handling/erection details.

Damaged Loists 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 leng 12=3.5 inches
 For flat roofs providing READ ALL NOTES Opending

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

IN THE DESIGN OF THIS COMPONENT.

Manufacturer Info

Nascor by Kott





GREENPARK Client:

Project: Address:

8/20/2018 Date:

RCO Designer:

Job Name: MILLWOOD 12-1

Project #

2-Ply - PASSED NJ 9.500"

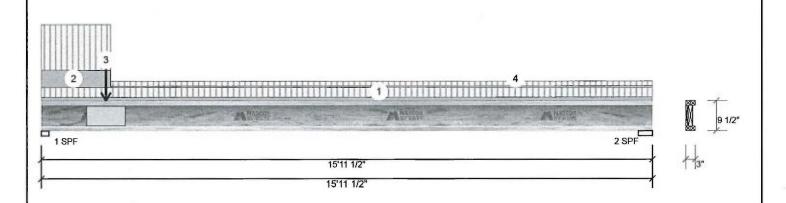
Level: Ground Floor

Harfards and Danadiana HAIDATTEDNED II. (Halifa)

14%

100 / 320

420 L



Viember Info	rmation				Unfactored Reactions UNPATTERNED IB (Uplift)						
Type:	Girder		Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	2		Design Method:	LSD	1	678	255	0	0		
Moisture Condition	n: Dry		Building Code:	NBCC 2010 / OBC 2012	2	214	80	0	0		
Deflection LL:	360		Load Sharing:	No							
Deflection TL:	240		Deck:	Not Checked	1						
Importance:	Normal		Vibration:	Not Checked	1						
General Load											
Floor Live:	40 PSF				Bearings	and Fact	ored Reactions				
Dead:	15 PSF	4			Bearing L	_ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.		
					1-SPF 2	2.375"	50% 318 / 1017	1335 L	1.25D+1.5L		

2 - SPF 4.375"

Analysis Results

_	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	2119 ft-lb	5'3 3/8"	7340 ft-lb	0.289 (29%)	1.25D+1.5L	L
	Unbraced	2119 ft-lb	5'3 3/8"	2138 ft-lb	0.991 (99%)	1.25D+1.5L	L
	Shear	1315 lb	1 5/8"	3080 lb	0.427 (43%)	1.25D+1.5L	L
	Perm Defl in.	0.067 (L/2766)	7'4"	0.517 (L/360)	0.130 (13%)	D	Uniform
	LL Defl inch	0.179 (L/1038)	7'4"	0.517 (L/360)	0.350 (35%)	L	L
	TL Defl inch	0.247 (L/755)	7'4"	0.776 (L/240)	0.320 (32%)	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 4'6" o.c.

5 Bottom flange braced at bearings.



1.25D+1.5L

August 21, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Сопшень
1	Tie-In	0-0-0 to 15-11-8	(Span)0-8-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-8-6		Near Face	175 lb	466 lb	0 lb	0 lb	F4
4	Tie-In	1-9-14 to 15-11-8	(Span)0-3-15	Тор	15 PSF	40 PSF	0 PSF		u Framing Squash Block is 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 variety the displanations of least of the contractor to ensure the component suitability of the intended

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

chemicals

Handling & Installation

- Andling & Installation
 | Joist flanges must not be cut or drilled
 | Refer to latest copy of the | Joiat product information
 | details for framing details, stiffener tables, web hole
 | chart, bridging details, multi-ply fastening details and
 | handling-lerection details
 | Damaged | Joists 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 fat roofs provide READ ALL NOTES O ponding.

 READ ALL NOTES O

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

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Manufacturer Info

Nascor by Kott





Client:

Project: Address:

GREENPARK

Date:

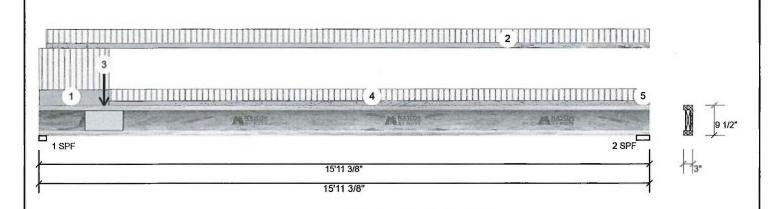
8/20/2018

Designer: RCO MILLWOOD 12-1 Job Name:

Project #

9.500" 2-Ply - PASSED NJ F6-C

Level: Ground Floor



∕lember Info		Unfactored Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	725		272	0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	361		135	0	0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked	1					
General Load									
Floor Live:	40 PSF			Bearings	and Fac	tored l	Reactions		
Dead:	15 PSF	*		Bearing	Length	Cap.	React D/L lb	Total Ld. C	Case Ld. Comb.
				1 - SPF	2.375"	53%	340 / 1088	1428 L	1.25D+1.5L
				2-SPF	4.125"	23%	169 / 541	711 L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3051 ft-lb	6'10 3/8"	7340 ft-lb	0.416 (42%)	1.25D+1.5L	L
Unbraced	3051 ft-lb	6'10 3/8"	3085 ft-lb	0.989 (99%)	1.25D+1.5L	L
Shear	1411 lb	1 5/8"	3080 lb	0.458 (46%)	1.25D+1.5L	L
Perm Defl in.	0.099 (L/1889)	7'7 5/16"	0.518 (L/360)	0.190 (19%)	D	Uniform
LL Defl inch	0.263 (L/709)	7'7 5/16"	0.518 (L/360)	0.510 (51%)	L	L
TL Defl inch	0.362 (L/515)	7′7 5/16"	0.777 (L/240)	0.470 (47%)	D+L	L

Design Notes

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

5 Bottom flange braced at bearings



August 21, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Сопшень
1	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-2-6 to 15-11-6	(Span)1-0-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-8-6		Far Face	139 lb	370 lb	0 lb	0 lb	F4
4	Tie-In	1-9-14 to 15-7-4	(Span)0-11-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	u Framing Squash Block is
5	Tie-In	15-7-4 to 15-11-6	(Span)0-6-13	Тор	15 PSF	40 PSF	0 PSF	required:	at all point loads over bearings

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

Notes

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

Lumber

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

Handling & Installation

- arrusing & Installation.

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

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

Provide faleral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing len 2-3 flores.
 For flat roofs provide READ ALL NOTES O

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 vi

Manufacturer Info

Nascor by Kott



isDesign™

Client:

Address:

Project:

GREENPARK

Designer:

RCO

Job Name: MILLWOOD 12-1 (WOD)

8/20/2018

Project #:

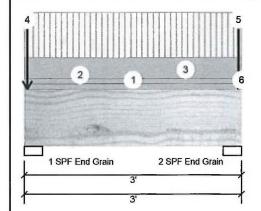
Date:

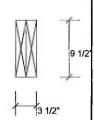
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Page 1 of 2

Member Information								
Туре:	Girder	Application:	Floor (Residential)					
Plies:	2	Design Method:	LSD					
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012					
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF							
Dead:	15 PSF	4						

Location Allowed

2' 1/4" 9277 lb

1'6" 22724 ft-lb

1'6" 22724 ft-lb

Brg	Live	Dead	Snow	Wind
1	1075	839	127	0
Brg 1 2	1075	839	127	0

Unfactored Reactions UNPATTERNED Ib (Uplift)

Bearings and Factored Reactions Bearing Length

Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.000" 35% 1049 / 1676 2725 L 1.25D+1.5L +0.58 End Grain

1049 / 1676

2 - SPF 3.000" End

35% Grain

2725 L

1.25D+1.5L +0.5S

Perm Defl in. 0.001 (L/24450) 0.002 LL Defl inch

Analysis Results

Analysis

Moment

Shear

Unbraced

(L/17678) TL Defl inch 0.003

Actual

721 ft-lb

721 ft-lb

1051 lb

1'6" 0.131 (L/240) 0.020 (2%) D+L+0.5S (L/10260)

1'6" 0.088 (L/360) 0.010 (1%) D 1'6" 0.088 (L/360) 0.020 (2%) L+0.5S

Capacity

Comb.

0.032 (3%) 1.25D+1.5L L

0.032 (3%) 1.25D+1.5L L

0.113 (11%) 1.25D+1.5L L

Uniform

Case

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.

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(LICENSE	T.L.	WIS	E,	NEER
1	13	V.	OFO	SC	1

August 21, 2018

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	Part. Uniform	0-0-0 to 3-0-0		Near Face	164 PLF	348 PLF	0 PLF	0 PLF	J7	

Thì

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

6. For flat roofs provide proper drainage to prevent

Manufacturer Info APA: PR-L318

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



isDesign™

Client:

Address:

GREENPARK Project:

Date:

8/20/2018

Designer: **RCO**

Job Name: MILLWOOD 12-1 (WOD)

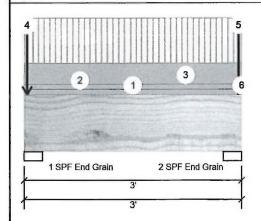
Project #:

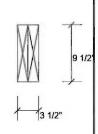
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Page 2 of 2

Continued fr	rom page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Point	0-0-8		Тор	462 lb	553 lb	127 lb	0 lb	Header Column Header Column
5	Point	2-11-8		Тор	462 lb	553 lb	127 lb	0 lb	Header Column Header Column
6	Part, Uniform	3-0-0 to 3-0-0		Near Face	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	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 Structured Designs is responsible only of the structural adequacy of this component based on the design critieria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads. Lumber

Handling & Installation

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

approvals

Damaged Beams must not be used

Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Forex APA: PR-L318

Manufacturer Info



Client:

Project: Address: GREENPARK

8/20/2018 Date:

RCO Designer:

Job Name: MILLWOOD 12-1 (WOD)

Project #:

Forex 2.0E-3000Fb LVL

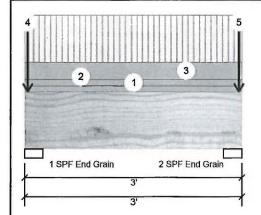
1.750" X 9.500"

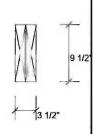
2-Ply - PASSED

Brg

2

End Grain Level: Ground Floor





Wind

0

0

Page 1 of 2

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

Live

980

980

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

704

704

Snow

127

127

Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.				
1 - SPF End Grain	3.000"	31%	881 / 1533	2413	L	1.25D+1.5L +0.5S				
2 - SPF End	3.000"	31%	881 / 1533	2413	L	1.25D+1.5L +0.5S				

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	628 ft-lb	1'6"	22724 ft-lb	0.028 (3%)	1.25D+1.5L	L
Unbraced	628 ft-lb	1'6"	22724 ft-lb	0.028 (3%)	1.25D+1.5L	L
Shear	910 lb	11 3/4"	9277 lb	0.098 (10%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/29920)	1'6"	0.088 (L/360)	0.010 (1%)	D	Uniform
LL Defi inch	0.002 (L/19530)	1'6"	0.088 (L/360)	0.020 (2%)	L+0.5S	L
TL Defl inch	0.003 (L/11817)	1'6"	0.131 (L/240)	0.020 (2%)	D+L+0.5S	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.

/ Laterai	sienderness ratio based of	n tuli 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
3	Part. Uniform	0-0-0 to 3-0-0		Near Face	118 PLF	315 PLF	0 PLF	0 PLF	J6

This design

Continued on page 2...

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

chemicals

Handling & Installation

- andling & 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

 Chamiged Ceams must not be used
- Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

Manufacturer Info Forex APA: PR-L318

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT

CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

T.L. WISE

100083566

NOE OF ONTAR

August 21, 2018





Client:

Address:

GREENPARK Project:

Date:

8/20/2018

Designer: **RCO**

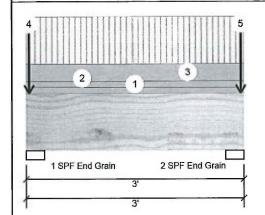
Job Name: MILLWOOD 12-1 (WOD)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" 2-Ply - PASSED

Level: Ground Floor



Page 2 of 2

Continued	from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Point	0-0-8		Тор	396 lb	507 lb	127 lb	0 lb	Header Column Header Column
5	Point	2-11-8		Тор	396 lb	507 lb	127 lb	0 lb	Header Column Header Column
	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

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

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

chemicals

chemicas
Handling & Installation

1. LVI, 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

restering details, bearn 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

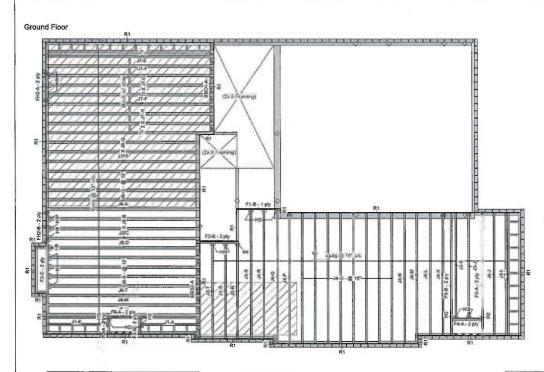
Forex APA: PR-L318

Manufacturer info

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



This design is valid until 7/10/2021



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



Load from Above Wall Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ 9.5 NJ60U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

- 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)

Ground LVL/LS	L (Flush)							DIACCOR
	Description	Width	Depth	Qty	Plies	Pcs	Length	NASCOR
F2	Forex 2.0E-3000Fb LVL	1.75	9,5	2	2	4	6-0-0	
F1	Forex 2.0E-3000Fb LVL	1.75	9.5			1	6-0-0	Layout Name MILLWOOD 12-2 (WOD)
FH2	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	4-0-0	Design Method
Joist (Flush)							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Description
F6	NJ	1.5	9,5	1	2	2	16-0-0	MINNISALE HOMES BRAMPTON, ONT.
F5	NJ	1.5	9,5	2	2	4	14-0-0	
F4	NJ	1,5	9.5	1	2	2	4-0-0	Created
F3	NJ	1.5	9.5	2	2	4	2-0-0	June 28, 2018
J7	NJ60U	3.5	9.5			10	18-0-0	Builder
J6	NJ60U	3.5	9.5			19	16-0-0	GREENPARK
J4	NJH	2.5	9.5			19	14-0-0	Sales Rep
J3	NJH	2.5	9.5			2	12-0-0	RM RM
J2	NJH	2.5	9.5			3	10-0-0	
J1	NJH	2.5	9.5			2	8-0-0	Designer
Rim Bo	ard							RCO
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Shipping
R1	Norbord Rimboard Plus 1,125 X 9.5	1.125	9.5			15	12	Project
Blockin	a							Builder's Project
	Description	Width	Depth	Qty	Plies	Pcs	Length	Kott Lumber Company
	NJH	2.5	9.5	LinFt		Varies	33-0-0	14 Anderson Blvd
Hanger				Be:	am/Girder		ported	Stouffville, Ontario Canada

Ground Floor

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Rev.2; July 2018 Project No: 17-04-19 Aodel: Millwood 12

F2	Descri		Width	Depth	Qty	Plies	Pcs	Length		
	Forex 2.0E-30	00Fb LVL	1.75	9.5	2	2	4	6-0-0		
F1	Forex	DOFF LVL	1.75	9.5			1	6-0-0	Layout Name MILLWOOD 12-2 (WOD)
FH2	Forex	000Fb LVL	1.75	9.5	2	2	4	4-0-0	Design Method	
Lloiet (Flush)	JUUFU LVL J				1			LSD	
		ntine	Width	Depth	Qty	Plies	Pcs	Length	Description	
F6	NJ	puon	1.5	9,5	1	2	2	16-0-0	MINNISALE HOME	ES
F5	NJ		1.5	9,5	2	2	4	14-0-0	BRAMPTON, ONT	
F4	N.I		1.5	9,5	1	2	2	4-0-0	Created	
F3	NJ		1.5	9.5	2	2	4	2-0-0	June 28, 2018	
J7	NJ60U		3.5	9.5	-	-	10	18-0-0	Builder	
J6	NJ60U		3.5	9.5			19	16-0-0	GREENPARK	
J4	NJH		2.5	9.5	-		19	14-0-0		
J3	NJH		2.5	9.5	-		2	12-0-0	Sales Rep	
J2	NJH		2.5	9.5			3	10-0-0	RM	
J1	NJH		2.5	9.5	-	1	2	8-0-0	Designer	
Rim Bo				1	•				RCO	
	Descri	ntion	Width	Depth	Qtv	Piles	Pcs	Length	Shipping	
R1		d Rimboard	1,125	9.5	Giy	Filos	15	12		
N.		125 X 9.5	1.125	5.5			15	, ,,	Project	
Blockin	g								Builder's Project	
Label	Descri	ption	Width	Depth	Qty	Plies	Pcs	Length	Kott Lumber	Company
BLK1	HLN		2.5	9.5	LinFt		Varies	33-0-0	14 Anderson Blvd	
Hange	r								Stouffville, Ontario	
					8e	am/Girde	r Sup	ported	Canada	
							M	ember	14A 7X4	
Label	Pcs	Descriptio	n is	kow S	ope f	asteners	fas	tonors	905-642-4400	
H2	4	LT2-159			4	10dx1 1/2	2 10	dx1 1/2	Job Path	
НЗ	9	LT259			4	10dx1 1/2	2 10	dx1 1/2		
H4	1	LT259		1					S:\CUSTOMERS\C	
H5	4	LT359		1		4 10d	2 10	dx1 1/2	MILLWOOD 12\M	
H8	2	LT359							\FLOOR\REV\WOI	
Н9	5	MIT49.5	\neg		4	10dx1 1/2	4 10	dx1 1/2	Ground Floor	
NOTES:						y 14			Design Method	LSD
										DCC 2010 / ODC
		ify dimensio						ı		BCC 2010 / OBC 2012
2. Doubl	le joist o	nly require fi	ller/back	er ply whe	n supporti			ŀ	Building Code N	BCC 2010 / OBC 2012
2. Doubl	le joist o	nly require fi per using a fi	ller/back	er ply whe	n supporti er	ng	lle.		Building Code N	BCC 2010 / OBC 2012
2. Doubl anoth 3. Install 4. Install	le joist o er memt l 2x4 blo l single-p	nly require fi per using a fi cking @ 24° ply flush wind	ller/back ace-mou o/c unde	er ply whe nted hang er parallel	n supporti er non-load t	ng bearing wa	lls.		Building Code N Floor Loads	2012
2. Doubl anoth 3. Install 4. Install rimbo	le joist o er memt I 2x4 blo I single-p ard/rimjo	nly require fi per using a fi cking @ 24° oly flush wind pist.	ller/back ace-mou o/c unde dow head	er ply whe nted hang or parallel ler along	n supporti er non-load t nside face	ng bearing wa	lls.		Building Code N Floor Loads Live	2012
2. Doubl anoth 3. Install 4. Install rimbo 5. Refer	le joist or er memb I 2x4 blo I single-p ard/rimpo to Nasc	nly require fi per using a fi cking @ 24" ply flush wind pist. or specifier (ller/back ace-mou o/c unde dow head guide for	er ply whe nted hang er parallel der along installatio	n supporti er non-load t nside face n works.	ng pearing wa rof	lis.		Building Code N Floor Loads Live Dead	2012
2. Double anoth 3. Install 4. Install rimbo 5. Refer 6. Square	le joist or er memb I 2x4 blo I single-p ard/rimic to Nasc sh block	nly require fi per using a fi cking @ 24" ply flush wind pist, or specifier (s recommen	ller/back ace-mou o/c unde dow head guide for ded to be	er ply whe nted hang er parallel ler along installetion installed	n supporti er non-load t nside face n works. at end be	ng pearing wa rof aring on	lls.		Building Code N Floor Loads Live Dead Deflection Joist	2012 40 15
2. Double anoth 3. Install 4. Install rimbo 5. Refer 6. Square all firs	le joist or er memb I 2x4 blo I single-p ard/rimic to Nasc sh blocks it level jo	nly require fi per using a fi cking @ 24* by flush wind bist, or specifier (is recommentations which si	ller/back ace-mou o/c unde dow head guide for ded to be	er ply whe nted hang er parallel ler along installetion installed	n supporti er non-load t nside face n works. at end be	ng pearing wa rof aring on	lls.		Building Code N Floor Loads Live Dead Deflection Joist LL Span L/	2012 40 15 480
Double anoth Install Install Install rimbo Refer Square all first two le Load	le joist or er memb I 2x4 blo I single-p ard/rimjo to Nasc sh blocks I level journels transfer	nly require fi per using a fi cking @ 24* bly flush wind bist, or specifier (s recomment bists which si or or roof, blocks to be	lier/back ace-mou o/c unde dow head guide for ded to be upport to installed	er ply whe med hang er parallel ier along installetio e installed ading from under all	n supporti er non-load t nside face n works. at end be n above ex point load	ng pearing wa e of aring on acceeding s.			Building Code N Floor Loads Live Dead Deflection Joist LL Span L/ TL Span L/	2012 40 15 480 360
2. Double anoth 3. Install 4. Install rimbo 5. Refer 6. Square all first two le 7. Load 8. It shall	le joist or er memb I 2x4 blo I single-p ard/rimjo to Nasc sh blocks It level journels transfer Il be the	nly require fi per using a fi cking @ 24° ply flush wind pist, or specifier (is recommen, pists which si or or roof, blocks to be framer's res	lier/back ace-mou o/c unde dow head guide for ded to be upport to installed ponsibilit	er ply whented hanger parallel fer along installetion installed ading from under all y that floo	n supporti er non-load t nside face n works. at end be n above ex point load r joists and	ng pearing wa e of aring on acceeding s.			Building Code N Floor Loads Live Doad Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/	2012 40 15 480 360 480
2. Double anoth 3. Install 4. Install rimbo 5. Refer 6. Square all first two le 7. Load 8. It shall	le joist or er memb I 2x4 blo I single-p ard/rimjo to Nasc sh blocks It level journels transfer Il be the	nly require fi per using a fi cking @ 24* bly flush wind bist, or specifier (s recomment bists which si or or roof, blocks to be	lier/back ace-mou o/c unde dow head guide for ded to be upport to installed ponsibilit	er ply whented hanger parallel fer along installetion installed ading from under all y that floo	n supporti er non-load t nside face n works. at end be n above ex point load r joists and	ng pearing wa e of aring on acceeding s.			Building Code N Floor Loads Live Dead Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/ TL Cant 2L/	2012 40 15 480 360 480 360
Double anoth Install Install Install Install rimbo Square All first Voad It sha faster	le joist of er memb 2x4 blo I single-pard/rimic to Nasc sh blocks if level joi evels floot transfer Il be the ned as p	nly require fi per using a fi cking @ 24* oly flush who bist, or specifier (is recommen- lists which si ir or roof, blocks to be framer's res- er the hange	lier/back ace-mou o/c unde dow head guide for ded to be upport to installed ponsibility manufa	er ply whented hanger parallel ier along installetion installed ading from under all y that floor icturer's s	n supporti er non-load t nside face n works, at end be- n above er point load r joists and andards.	ng pearing wa rof aring on sceeding s. d beams ar			Building Code N Floor Loads Live Doad Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/	2012 40 15 480 360 480 360
Double anoth Install Install Install Install inmbo Refer Squarall firs two le Lisha It sha faster	le joist of er memb 1 2x4 blo I single-pard/rimpo to Nesc sh blocks the lock the lock transfer il be the ned as po Multiple	nly require fi per using a fi cking @ 24" bly flush who bist. or specifier of isits which si ir or roof, blocks to be framer's rea er the hange	lier/back ace-mou o/c unde dow head guide for ded to be upport to installed ponsibility manufa	er ply whented hanger parallel ier along installetion installed ading from under all y that floor icturer's s	n supporti er non-load t nside face n works, at end be- n above er point load r joists and andards.	ng pearing wa rof aring on sceeding s. d beams ar			Building Code N Floor Loads Live Dead Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/ TL Cant 2L/	2012 40 15 480 360 480 360
Double anoth Install Install Install Install inmbo Refer Squarall firs two le Lisha It sha faster	le joist of er memb 2x4 blo I single-pard/rimic to Nasc sh blocks if level joi evels floot transfer Il be the ned as p	nly require fi per using a fi cking @ 24" bly flush who bist. or specifier of isits which si ir or roof, blocks to be framer's rea er the hange	lier/back ace-mou o/c unde dow head guide for ded to be upport to installed ponsibility manufa	er ply whented hanger parallel ier along installetion installed ading from under all y that floor icturer's s	n supporti er non-load t nside face n works, at end be- n above er point load r joists and andards.	ng pearing wa rof aring on sceeding s. d beams ar			Building Code N Floor Loads Live Dead Deflection Joist LL Span L/ TL Spen L/ LL Cant 2L/ TL Cant 2L/ Deflection Girder	40 15 480 360 480 380
Double anoth Install Install	le joist or er memb 1 2x4 blo 1 single-pard/imig to Nesc ish blocks ish block	nly require fi per using a fi cking @ 24" bly flush who bist. or specifier of isits which si ir or roof, blocks to be framer's rea er the hange	iler/back ace-mou o/c undedow head guide for ded to b upport to installed ponsibility manufa	er ply when ted hanger parallel ler along installation installation installation installation installation installation under all y that floor currer's s	n supporti er non-load t nside face n works, at end be a above ex point load r joists and andards.	ng pearing wa r of aring on cceeding s. d beams ar	e		Building Code N Floor Loads Live Dead Deflection Joist LL Span L/ TL Spen L/ LL Cant 2L/ TL Cant 2L/ Deflection Girder LL Span L/ TL Span L/	40 15 480 360 480 360
Double anoth Install Install	le joist or er memb 2x4 blo 1 kingle-pard/mgc to Nasc sh blockst level joves flootransfer il be the led as p Multiple equirem allel to jo h @ 16"	nly require file ocking @ 24* oly flush wind bist. or specifier of s recommentals in or roof. blocks to be framer's rea er the hange Member Coents.	ller/back ace-mou o/c undid dow head guide for ded to b upport to installec ponsibilit er manufa onnection	er ply when the danger parallel ler along installetion installetion installetion installetion installetion installetion adding from under all y that floo incturer's s Detail to with 2"x 4 onenis an	n supporti er non-load t naide face n works. at end be, a tend be, a tend be, point load r joists and tandards. ply to ply r "block (1) d structura	ng bearing wa cof aring on acceding s. d beams at mailing or	re than		Building Code N Floor Loads Live Doad Deflection Joist LL Span U LL Cant 2U Deflection Girder LL Span U LL Cant 2U LL Cant U	40 15 480 360 480 360 240 480
Double anoth Install Install	le joist or er memb 2x4 blo 1 2x4 blo 2x4	nify require fi per using a ficking	ller/back ace-mout o/c unded dow head guide for ded to b upport to installed ponsibilitier manufar medior medior minimoard ier comp	er ply when the dhanger parallel fer along installation installation installation under all y that floo acturer's s Detail to with 2"x 4 prends an earns, we	n supporti er non-load t nside face n works, at end be n above ex point load r joists and tandards. "block (1) d structural ils, column	pearing wa earing on ecceeding s. d beams at mailing or [16" longer le elements is, and	re than		Building Code N Floor Loads Live Doad LL Span U TL Span U LL Cant 2U TL Cont 2U TL Span U LLSpan U LL Cant 2U TL Cont 2U TL Span U TL Cont 2U TL Cont 2U TL Cont 2U	400 15 480 360 480 380 360 240
Double anoth Install Install	le joist or er memb 1 2x4 blo of 12x4 blo of 12x4 blo of 1x4 single-pard/nmjc to Nasc sin blocks sin blocks sin blocks sin blocks sin blocks sin blocks sin be the ned as possible single singl	nly require fi per using a ficking a	iller/back ace-mout of our under dow hear guide for ded to be upport to installed ponsibilitier manufa er manufa er comp such as to such as to such as to	er ply when the dhanger parallel fer along installation installation installation installation under all y that floo cuturer's s Detail to with 2"x 4 oneans, wa g anchors	n supportier or non-load to naide face n works. at end be, above expoint load r joists and and ards. ply to ply r " block (1/4 d structura ills, column up of community up of communi	pearing wa erof aring on cceeding s. d beams at mailing or "16" longer at letements as, and	re than		Building Code N Floor Loads Loads Deflection Joist LL Span U TL Span U TL Cant 2U Deflection Girder LL Span U TL Cant 2U	2012 40 15 480 360 480 380 240 480 360
Double anoth Install Install	le joist or er memb 1 2x4 blo of 12x4 blo of 12x4 blo of 1x4 single-pard/nmjc to Nasc sin blocks sin blocks sin blocks sin blocks sin blocks sin blocks sin be the ned as possible single singl	nify require fi per using a ficking	iller/back ace-mout of our under dow hear guide for ded to be upport to installed ponsibilitier manufa er manufa er comp such as to such as to such as to	er ply when the dhanger parallel fer along installation installation installation installation under all y that floo cuturer's s Detail to with 2"x 4 oneans, wa g anchors	n supportier or non-load to naide face n works. at end be, above expoint load r joists and and ards. ply to ply r " block (1/4 d structura ills, column up of community up of communi	pearing wa erof aring on cceeding s. d beams at mailing or "16" longer at letements as, and	re than		Building Code N Floor Loads Live Dead United Span L/ TL. Span L/ TL. Cant 2L/ TL. Cant 2L/ TL. Span L/ TL. Cant 2L/ Decking Deck	2012 40 15 480 360 480 390 240 480 360 240 58PF Plywood
Doubly anoth Install rimbo Sefer Squarall firstole Load It sharfaster Refer to bolling r Rim parrim dept supportificundati bracing	le joist or er memb 1 244 blo of 1 244 blo of 1 244 blo of 1 245 blo o	nly require fi per using a ficking a	iller/back ace-mou ol/c under dow hear guide for ded to be upport to installect ponsibilitier manufa minection rimboard ier comp such as to such as to such as to such as the res	er ply when the damper ply when the damper plant in the liter along installation installation and all the damper plant in the literal p	n supportier or non-load to nside face n works. at end be n above ex point load r joists and andards. ply to ply r " block (1/d d structura- lis, column upe of com of Others	pearing wa er of aring on cceeding s. d beams at alling or "16" longer at elements as, and	than:		Building Code N Floor Loads Live Dead Deflection Joist LL Span L/ TL Span L/ TL Cant 2L/ TL Cant 2L/ TL Span L/ LL Cant 2L/ TL Cont 2L/ Deckking Deck Thickness	2012 40 15 480 360 480 360 240 480 360 SPF Plywood
Double anoth Install Install	le joist or er memb 1 244 blo of 1 244 blo of 1 244 blo of 1 245 blo o	nly require fi booking a facking @ 24* by Bush wind in the property of the pro	iller/back ace-mou ol/c under dow hear guide for ded to be upport to installect ponsibilitier manufa minection rimboard ier comp such as to such as to such as to such as the res	er ply when the damper ply when the damper plant in the liter along installation installation and all the damper plant in the literal p	n supportier or non-load to nside face n works. at end be n above ex point load r joists and andards. ply to ply r " block (1/d d structura- lis, column upe of com of Others	pearing wa er of aring on cceeding s. d beams at alling or "16" longer at elements as, and	than:		Building Code N Floor Loads Live Dead United Span L/ TL. Span L/ TL. Cant 2L/ TL. Cant 2L/ TL. Span L/ TL. Cant 2L/ Decking Deck	2012 40 15 480 360 480 390 240 480 360 240 58PF Plywood



Project: Address:

8/20/2018

Designer: RCO

Job Name: MILLWOOD 12-2 (WOD)

Project #:

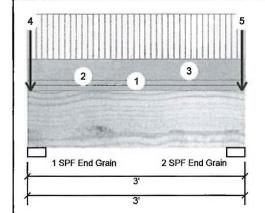
Date:

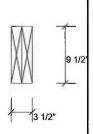
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Page 1 of 2

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

Bearings and Factored Reactions

Live

1075

1075

Cap. React D/L lb Ld. Comb. Total Ld. Case Bearing Length 1-SPF 3.000" 35% 1034 / 1676 2710 L 1.25D+1.5L +0.58 End Grain 2710 L

Brg

2

2-SPF 3.000" 35% 1034 / 1676 End Grain

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

827

827

Snow

127

127

1.25D+1.5L +0.5S

T.L. WISE

100083566

WCE OF ONTAR

August 21, 2018

Wind

0

0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	721 ft-lb	1'6"	22724 ft-lb	0.032 (3%)	1.25D+1.5L	L
Unbraced	721 ft-lb	1'6"	22724 ft-lb	0.032 (3%)	1.25D+1.5L	L
Shear	1051 lb	2' 1/4"	9277 lb	0.113 (11%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/24450)	1'6"	0.088 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/17678)	1'6"	0.088 (L/360)	0.020 (2%)	L+0.5S	L
TL Defl inch	0.003 (L/10260)	1'6"	0.131 (L/240)	0.020 (2%)	D+L+0.58	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 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	
3	Part, Uniform	0-0-0 to 3-0-0		Near Face	164 PLF	348 PLF	0 PLF	0 PLF	J7	

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 loading and the profit the differentiation and loading the different and the component suitability of the intended

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, mutti-ply festening details, beam strength values, and code

This design is valid until 7/10/2021

For flat roofs provide proper drainage to prevent ponding

Forex APA: PR-L318

Manufacturer Info

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



Version 18.40.162 Powered by iStruct™





Client:

Project: Address: GREENPARK

Date: Designer: **RCO**

8/20/2018

Job Name: MILLWOOD 12-2 (WOD)

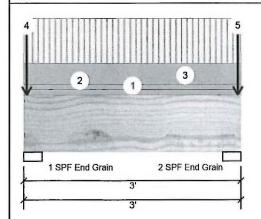
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Page 2 of 2

Continued norn pag	
ID L	oad T

5

уре **Point**

Point

Location Trib Width 0-0-8

2-11-8

Side Тор

Top

Dead 450 lb

Live 553 lb 553 lb Snow 127 lb 127 lb Wind Comments 0 lb

Header Column Header Column

Header Column Header Column

Self Weight

450 lb

8 PLF

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 of the contractor to ensure the component suitability of the intended of the minist the internations 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 delails, 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

APA: PR-L318

Manufacturer Info





Project: Address:

8/20/2018 Date: Designer:

RCO

Job Name: MILLWOOD 12-2 (WOD)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

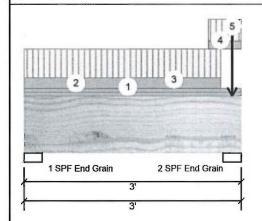
Brg

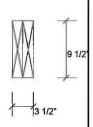
1

2

Grain

Level: Ground Floor





Wind

0

0

Page 1 of 2

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

Bearings and Factored Reactions

Live

471

987

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

308

698

Snow

0

127

Cap. React D/L lb Bearing Length Total Ld. Case Ld. Comb. 1-SPF 3.000" 14% 385 / 706 1091 L 1.25D+1.5L End Grain 2-SPF 3.000" 31% 872 / 1544 2416 L 1.25D+1.5L +0.58 End

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	630 ft-lb	1'6 1/16"	22724 ft-lb	0.028 (3%)	1.25D+1.5L	L
Unbraced	630 ft-lb	1'6 1/16"	22724 ft-lb	0.028 (3%)	1.25D+1.5L	L
Shear	971 lb	11 3/4"	9277 lb	0.105 (10%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/29818)	1'6 1/16"	0.088 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/19455)	1'6 1/16"	0.088 (L/360)	0.020 (2%)	L+0.5S	L
TL Defl inch	0.003 (L/11773)	1'6 1/16"	0.131 (L/240)	0.020 (2%)	D+L+0.5S	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.

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

2 Girders are designed to be supported on the bottom edge only. 3 Multiple plies must be fastened together as per manufacturer's details.

6 Bottom braced at bearings. 7 Lateral slenderness ratio based on full section width. ID Live Wind Trib Width Side Dead Snow Load Type Location Part. Uniform 0-0-0 to 3-0-0 40 PLF 0 PLF 0 PLF Top 1



Comments Wall Self Weight Wall Self Weight

2 Part. Uniform 0-0-0 to 3-0-0 Near Face 40 PLF 0 PLF 0 PLF 0 PLF Part. Uniform 0-0-0 to 2-8-9 117 PLF 312 PLF 0 PLF 0 PLF 3 Near Face

Continued on page 2...

Notes

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

chemicals

Handling & Installation

- anding & 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
 Demnged Beams must not be used

For flat roofs provide proper drainage to prevent ponding

This design is valid until 7/10/2021

Forex

Manufacturer Info APA: PR-L318

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

Version 18.40.162 Powered by iStruct™



isDesign™

Client:

Project: Address: GREENPARK

Date: Designer:

8/20/2018 **RCO**

Job Name: MILLWOOD 12-2 (WOD)

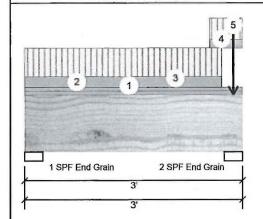
Project #:

Forex 2.0E-3000Fb LVL

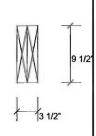
1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Self Weight



Page 2 of 2

...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	2-6-9 to 3-0-0		Near Face	93 PLF	234 PLF	0 PLF	0 PLF	J6
5	Point	2-10-8		Тор	383 lb	505 lb	127 lb	0 lb	Header Column Header Column

8 PLF

Notes

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

chemicals

Handling & Installation

Handling & Installation

1. IVI. beam sust not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

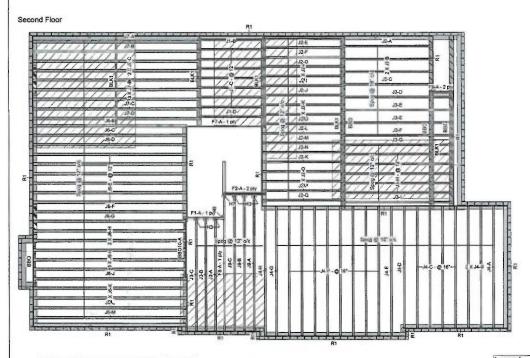
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

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



This design is valid until 7/10/2021



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 1111111

Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ60U 9.5 NJH 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14058-R
- 4 CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

LVL/LS	L (Flush)							BIAC
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	NAS
F8	Forex 2.0E-3000Fb LVL	1.75	9.5			1	16-0-0	
F7	Forex 2.0E-3000Fb LVL	1.75	9.5			1	10-0-0	Layout Name MILLWOOD 12-2
F2	Forex 2,0E-3000Fb LVL	1,75	9.5	1	2	2	6-0-0	Design Method
F1	Forex 2.0E-3000Fb LVL	1.75	9.5			1	6-0-0	Description
F9	Forex 2.0E-3000Fb LVL	1.75	9,5	1	2	2	4-0-0	MINNISALE HOME BRAMPTON, ONT
LVL/LS	L (Dropped)							Created
	Description	Width	Depth	Qty	Plies	Pcs	Length	June 28, 2018
BBO10	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	8-0-0	Builder
l Joist (Flush)							GREENPARK
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Sales Rep
J7	NJ60U	3.5	9.5			9	18-0-0	RM
J6	NJ60U	3.5	9.5			21	16-0-0	Designer
73	NJH	2.5	9.5			3	16-0-0	RCO
J4	NJH	2.5	9.5			19	14-0-0	Shipping
J3	HUN	25	9.5			14	12-0-0	
J2	NJH	2.5	9.5			22	10-0-0	Project
J1	NJH	2.5	9.5			9	8-0-0	Builder's Project
Rim Bo	ard							Kott Lumber
Label	Description	Width	Depth	Qty	Plios	Pcs	Longth	14 Anderson Blvd
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9,5			18	12	Stouffville, Ontano
Blockin	g							Canada
Label	Description	Width	Depth	Oty	Plies	Pcs	Length	L4A 7X4
BLK1	NJH	2.5	9.5	LinFt		Vanes	38-0-0	905-642-4400
Hanger					(0)			Job Path

				Member		
Label	Pcs	Description	Skew	Stope	fasteners	fasteners
нз	6	LT259			4 10dx1 1/2	2 10dx1 1/2
H6	1	HUS1.81/10			30 16d	10 16d
H7	1	HUCO1 81/9-				
DTES		SDS				

- 1. Framer to verify dimensions on the architectural drawings.

Second Floor

- 1. Framer to verify dimensions on the architectural drawings.
 2. Double joist only require iller/backer ply when supporting another member using a face-mounted hanger.
 3. Install 24 blocking @ 24 of our dier parallel non-load bearing walls.
 4. Install single-ply flush window header along inside face of rimboard/imjeld.
 5. Refer to Nescor 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.
- To 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

Rim parallel to joists: 1-1/8" rimboard with 2"x 4" block (1/16" longer than nim depth (9: 16" olc). All other components and structural elements supporting the floor system such as beams, walls, columns, and loundation walls and footings including anchorage of components and bracing for lateral stability are the responsibility of Others.

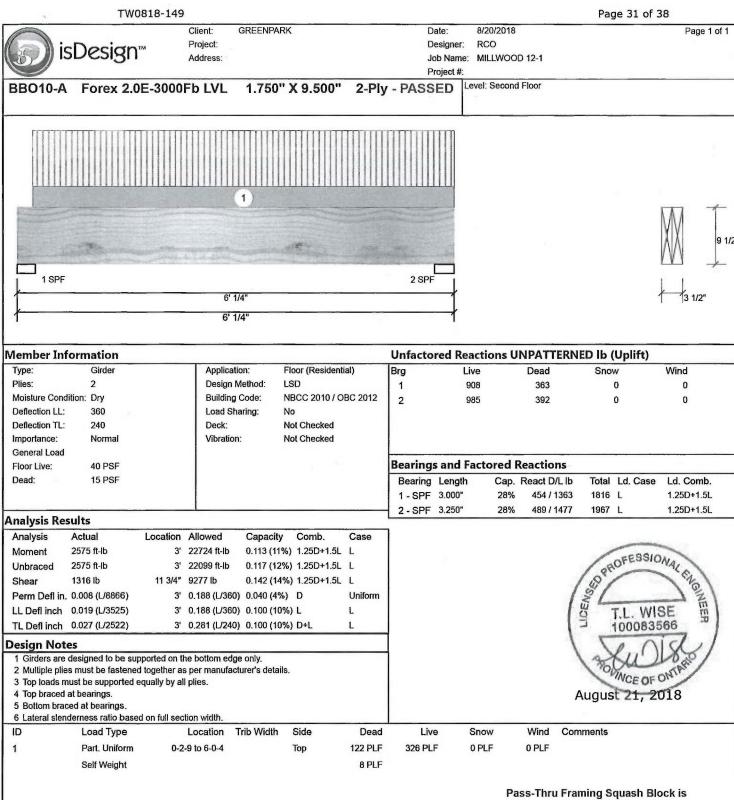
Hatch area represents ceramic tiled floor with an additional dead load of 5 PSF

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

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Rev.2; July 2018 Project No: 17-04-19 Model: Millwood 12

)	Design Method	
Н	LSD	
1	Description	
)	MINNISALE HOM BRAMPTON, ON	
-	Created	
,	June 28, 2018	
)	Builder	
	GREENPARK	
_	Sales Rep	
)	RM RM	
,	Designer	
>	RCO	
j	Shipping	
۲		_
)	Project	
2	Builder's Project	
,	Kott Lumber	
2	14 Anderson Blvd	
	Stouffville, Ontano	>
	Canada L4A 7X4	
1	905-642-4400	
2	Job Path	
	S:\CUSTOMERS\	CDEENDADY
	MINNISALE HOM	JESMODELS
	MILLWOOD 12\N	IILLWOOD12-2
	WILLWOOD 12W VFLOOR/REVMIL	IILLWOOD12-2
	MILLWOOD 12W VFLOOR/REV/MIL Second Floor	ILLWOOD12-2 LWOOD 12-2.isl
	\MILLWOOD 12\W \FLOOR\REVMIL Second Floor Design Method	ILLWOOD 12-2 LWOOD 12-2.isl
	MILLWOOD 12W VFLOOR/REV/MIL Second Floor	ILLWOOD 12-2 LWOOD 12-2.isl
	WILLWOOD 12W VFLOOR/REVMIL Second Floor Design Method Building Code	ILLWOOD 12-2.isl LWOOD 12-2.isl LSD IBCC 2010 / OBC
	\MILLWOOD 12\W \FLOOR\REVMIL Second Floor Design Method	ILLWOOD 12-2.isl LWOOD 12-2.isl LSD IBCC 2010 / OBC
	MILLWOOD 12W IFLOORIREVMIL Second Floor Design Method Building Code	ILLWOOD 12-2.isl LWOOD 12-2.isl LSD IBCC 2010 / OBC
	WILLWOOD 12M VFLOOR\REVMIL Second Floor Design Method Building Code N Floor Loads Live Doad	ILLWOOD 12-2 isl LSD IBCC 2010 / OBC 2012
	WILLWOOD 12M VFLOOR/REVMIL Second Floor Design Method Building Code N Floor Loads Live Doad Deflection Joist	IILLWOOD12-2 LWOOD 12-2.lel LSD IBCC 2010 / OBC 2012 40 15
	WILLWOOD 12M VFLOORNEVMIL Second Floor Design Method Building Code N Floor Loads Live Doad Deflection Joist LL Span L/	ILLWOOD12-2 LWOOD 12-2.isl LSD IBCC 2010 / OBC 2012 40 15
	WILLWOOD 12M VFLOORNEYWHIL Second Floor Design Method Building Code Floor Loads Live Doad Deflection Joist LL Span U LSpan U LSpan U	ILLWOOD12-2 LWOOD 12-2.isl LSD IBCC 2010 / OBC 2012 40 15
	WILLWOOD 12M VFLOOREYMIL Second Floor Design Method Building Code M Floor Loads Live Doad Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/	ILLWOOD12-2 IsI LWOOD 12-2 IsI LSD IBCC 2010 / OBC 2012 40 45 480 360 480
	WILLWOOD 12W FILOORREYMIL Second Floor Design Method Building Code M Floor Loads Live Doad Live Doad LIVE TL Span U TL Span U TL Cant 2U TL Cant 2U TL Cant 2U	ILLWOOD12-2 LWOOD 12-2-lei LSD IBCC 2010 / OBC 2012 40 15 480 360 480 360
	WILLUWOOD 12W FILOORREYMIL Second Floor Design Method Building Code N Floor Loads Live Doad Deflection Joist LL Span U LL Cant 2U Deflection Girde	IILLWOOD12-2.lsi LWOOD 12-2.lsi IBCC 2010 / OBC 2012 40 15 480 360 480
	WILLWOOD 12M FILOORREWMIL Second Floor Design Method Building Code M Floor Loads Live Doad Deflection Joist LL Span U TL Span U TL Cant 2U TL Cant 2U Deflection Girde LL Span U	ILLWOOD12-2 LWOOD 12-2-lei LSD IBCC 2010 / OBC 2012 40 15 480 360 480 360
	WILLUWOOD 12W FILOORREWMIL Second Floor Design Method Building Code M Floor Loads Live Doad Deflection Joist LL Span U TL Span U LL Cant 2U TL Cant 2U TL Span U	ILLWOOD12-2_lel LSD IBCC 2010 / OSC 2012 40 15 480 360 480 360 F
	WILLWOOD 12M FILOORREWMIL Second Floor Design Method Building Code M Floor Loads Live Doad Deflection Joist LL Span U TL Span U TL Cant 2U TL Cant 2U Deflection Girde LL Span U	IILLWOOD12-2_lat LSD IBCC 2010 / OBC 2012 40 15 480 360 480 360 7
	WILLUWOOD 12W FILOORREWMIL Second Floor Design Method Building Code N Floor Loads Live Dead Deflection Joist LL Span U TL Span U TL Cant 2U TL Cant 2U TL Span U TL Cant 2U TL Cant 2U TL TL Cant 2U TL T	ILLWOOD12-2.lsl LSD IBCC 2010 / OBC 2012 40 15 480 360 360 7 360 240 480 480
	WILLWOOD 12M FILOORREWMIL Second Floor Design Method Building Code N Floor Loads Live Doad IL Span L/ TL Span L/ TL Cant 2L/ Deflection Girde LL Span L/ TL Cant 2L/ Cant 2L	ILLWOOD12-2.lsl LSD IBCC 2010 / OBC 2012 40 15 480 360 360 7 360 240 480 480
	WILLUWOOD 12W FILOORREWMIL Second Floor Design Method Building Code M Floor Loads Live Doad Deflection Joist LL Span U TL Span U TL Cant 2U Deflection Girde LL Span U TL Cant 2L TL Cant 2L Decking	IILLWOOD12-2 let LSD IBCC 2010 / OBC 2012 40 15 480 360 7 360 240 48D 360
	WILLWOOD 12M FILOORREWMIL Second Floor Design Method Building Code M Floor Loads Live Doad IL Span L/ TL Span L/ TL Cant 2L/ Decking Deck	IILLWOOD12-2.lsl LSD IBCC 2010 / OBC 2012 40 15 480 360 480 360 F 360 SPF Plywood
	WILLUWOOD 12W FILOORREYMIL Second Floor Design Method Building Code N Floor Loads Live Doad Deflection Joist LL Span U TL Span U TL Cant 2U TL Cant 2U TL Span U TL Cant 2U TL Cant 2U Th Cant 2U Thickness	ILLWOOD12-2.lsl LSD LSD LSC 2010 / OSC 2012 40 45 480 360 480 360 240 480 360 SPF Plywood



required at all point loads over bearings

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

Notes

structural adequacy of this component based on design criteria and loadings shown. It is responsibility of the customer and/or the contracte ensure the component suitability of the internation and to write the dimensions and loading and to write the dimensions and loading. Lumber

Handling & Installation

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

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

For flat roofs provide proper drainage to prevent ponding

This desi

Manufacturer Info

APA: PR-L318

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

Kott Lumber Company 14 Anderson Blvd, Ontario 1.4A 7X4

Client:

Project: Address: GREENPARK

8/20/2018

Designer: RCO

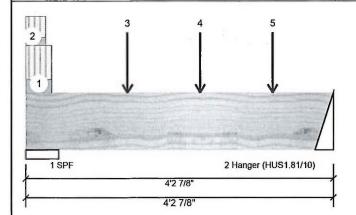
Job Name: MILLWOOD 12-1

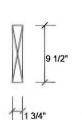
Project #:

Date:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Second Floor





Page 1 of 1

Member Info	rmation		
Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load		11.11.000	
Floor Live:	40 PSF		
Dead:	15 PSF		

Brg	Live	Dead	Snow	Wind
1	323	136	0	0
2	371	155	0	0

-	Analysis Res	sults						
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
	Moment	793 ft-lb	2'4 7/8"	11362 ft-lb	0.070 (7%)	1.25D+1.5L	L	
	Unbraced	793 ft-lb	2'4 7/8"	9250 ft-lb	0.086 (9%)	1.25D+1.5L	L	
	Shear	745 lb	3'3 1/8"	4638 lb	0.161 (16%)	1.25D+1.5L	L	
	Perm Defl in.	0.003 (L/16865)	2'4 7/8"	0.122 (L/360)	0.020 (2%)	D	Uniform	
	LL Defl inch	0.006 (L/6943)	2'4 7/8"	0.122 (L/360)	0.050 (5%)	L	L	
	TL Defl inch	0.009 (L/4918)	2'4 7/8"	0.183 (L/240)	0.050 (5%)	D+L	L	

Bearings and Factored Reactions Cap. React D/L lb Ld. Comb. Total Ld. Case Bearing Length 1 - SPF 5.500" 11% 170 / 485 655 L 1.25D+1.5L 3.000" 19% 193 / 557 750 L 1.25D+1.5L 2 -

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.



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-6	(Span)0-7-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-3-6	(Span)0-4-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-4-14		Near Face	96 lb	243 lb	0 lb	0 ib	J3
4	Point	2-4-14		Near Face	90 lb	228 lb	0 lb	0 lb	J3
5	Point	3-4-14		Near Face	86 lb	217 lb	0 lb	required a	I Framing Squash Block is at all point loads over bearings
	Self Weight				4 PLF			. oquirou .	point round over non-inge

Hanger

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

candinated standards besigns responsible why to 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 acclienction, and to weight the dismersible and loads.

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

chemicals

Handling & Installation

For flat roofs provide proper drainage to prevent ponding

This design is val

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.





Client:

Project: Address: GREENPARK

8/20/2018 Date:

Designer: **RCO**

Job Name: MILLWOOD 12-1

Project #:

1-SPF 3.500"

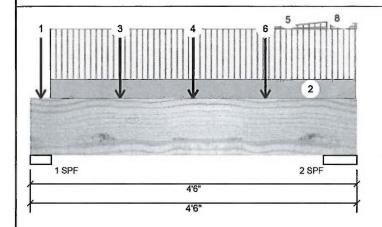
2-SPF 5.500"

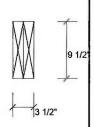
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





1.25D+1.5L

1.25D+1.5L

Page 1 of 2

Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 20
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	Sno	w	Wind	
	1	1581		661		0	0	
2012	2	1014		404		0	0	
	Bearing	s and Fac	tored	Reactions				
	Bearing	Length		React D/L lb	Total	Ld. Case	Ld. Comb.	

826 / 2371

506 / 1521

3197 L

2026 L

Unfactored Reactions UNPATTERNED Ib (Uplift)

42%

17%

Analysis Results

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	1973 ft-lb	2'2 7/8"	22724 ft-lb	0.087 (9%)	1.25D+1.5L	L
	Unbraced	1973 ft-lb	2'2 7/8"	22724 ft-lb	0.087 (9%)	1.25D+1.5L	L
	Shear	1424 lb	3'3 3/4"	9277 lb	0.153 (15%)	1.25D+1.5L	L
	Perm Defl in.	0.003 (L/13554)	2'2 15/16"	0.129 (L/360)	0.030 (3%)	D	Uniform
	LL Defl inch	0.009 (L/5394)	2'2 15/16"	0.129 (L/360)	0.070 (7%)	L	L
L	TL Defl inch	0.012 (L/3859)	2'2 15/16"	0.194 (L/240)	0.060 (6%)	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.

-

August 21, 2018

o Latera o	ionaomobo rano bacca c	in fall coolon main.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Point	0-1-12		Near Face	313 lb	715 lb	0 lb	0 lb	F8	
2	Part. Uniform	0-3-5 to 4-5-13		Тор	90 PLF	240 PLF	0 PLF	0 PLF		
3	Point	1-2-14		Near Face	114 lb	290 lb	0 lb	0 lb	J9	
4	Point	2-2-14		Near Face	108 lb	277 lb	0 lb	0 lb	J9	
5	Tie-In	3-2-14 to 4-1-1	(Span)0-1-12 to 1-3-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF		

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 loading. Lymhor Lumber

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

chemicals

Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

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.





Client: **GREENPARK**

Project: Address: Date: 8/20/2018

RCO Designer:

Job Name: MILLWOOD 12-1

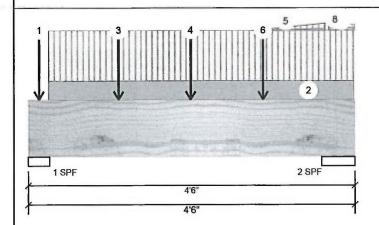
Project #:

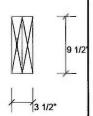
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





Page 2 of 2

Continued fro	m page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	3-2-14		Near Face	110 lb	283 lb	0 lb	0 lb	J9
7	Tie-In	4-1-10 to 4-6-0	(Span)0-3-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
8	Tie-In	4-1-10 to 4-6-0	(Span)0-8-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	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 Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the inlended application, and to verify the dimensions and loads.

Lumber

Handling & Installation

Handling & Installation

1. U/J 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 lateraty 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



Client:

Project:

GREENPARK

Address:

Date:

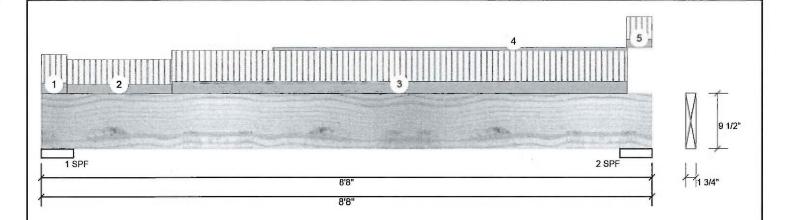
8/20/2018 **RCO**

Designer: MILLWOOD 12-1 Job Name:

Project #:

Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED

Level: Second Floor



lember Info	rmation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	W	Wind
Plies:	1	Design Method:	LSD	1	84		51		0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	88		56		0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings a	and Fac	tored i	Reactions			
Dead:	15 PSF			Bearing L	ength	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF 5	.500"	3%	64 / 127	191	L	1.25D+1.5L
				2-SPF 5	500"	3%	71 / 132	203	1	1.25D+1.5I

Analysis Results

Actual	Location	Allowed	Capacity	Comb.	Case
366 ft-lb	4'4 5/8"	11362 ft-lb	0.032 (3%)	1.25D+1.5L	L
366 ft-lb	4'4 5/8"	4734 ft-lb	0.077 (8%)	1.25D+1.5L	L
150 lb	7'5 3/4"	4638 lb	0.032 (3%)	1.25D+1.5L	L
0.005 (L/18245)	4'4 3/8"	0.263 (L/360)	0.020 (2%)	D	Uniform
0.008 (L/11470)	4'4 1/8"	0.263 (L/360)	0.030 (3%)	L	L
0.013 (L/7043)	4'4 1/4"	0.394 (L/240)	0.030 (3%)	D+L	L
	366 ft-lb 366 ft-lb 150 lb 0.005 (L/18245) 0.008 (L/11470)	366 ft-lb 4'4 5/8" 366 ft-lb 4'4 5/8" 150 lb 7'5 3/4" 0.005 4'4 3/8" (L/18245) 0.008 4'4 1/8"	366 ft-lb 4'4 5/8" 11362 ft-lb 366 ft-lb 4'4 5/8" 4734 ft-lb 150 lb 7'5 3/4" 4638 lb 0.005 4'4 3/8" 0.263 (L/360) (L/18245) 0.008 4'4 1/8" 0.263 (L/360)	366 ft-lb 4'4 5/8" 11362 ft-lb 0.032 (3%) 366 ft-lb 4'4 5/8" 4734 ft-lb 0.077 (8%) 150 lb 7'5 3/4" 4638 lb 0.032 (3%) 0.005 4'4 3/8" 0.263 (L/360) 0.020 (2%) (L/18245) 0.008 4'4 1/8" 0.263 (L/360) 0.030 (3%) (L/11470)	366 ft-lb 4'4 5/8" 11362 ft-lb 0.032 (3%) 1.25D+1.5L 366 ft-lb 4'4 5/8" 4734 ft-lb 0.077 (8%) 1.25D+1.5L 150 lb 7'5 3/4" 4638 lb 0.032 (3%) 1.25D+1.5L 0.005 (L/18245) 0.008 4'4 1/8" 0.263 (L/360) 0.030 (3%) L (L/11470)

RPROFESSIONAL FACE IN THE WISE 100083566 WCE OF ONTER August 21, 2018

UNIDATEDNIED II (II I'C.)

Design Notes

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

2 Top braced at bearings.

3 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind C
1	Tie-In	0-0-0 to 0-4-6	(Span)0-11-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Tie-In	0-4-6 to 1-10-4	(Span)0-10-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF
3	Tie-In	1-10-4 to 8-3-12	(Span)1-0-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF
4	Part. Uniform	3-3-7 to 8-3-12		Тор	2 PLF	0 PLF	0 PLF	0 PLF
5	Tie-In	8-3-10 to 8-8-0	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	Pase Thu Framing Squash Block is required at all point loads over bearings
	Self Weight				4 PLF			required at an point loads over bearings

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

Notes

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

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

Handling & Installation

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

Manufacturer Info Forex APA: PR-L318

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

GREENPARK

Project: Address:

Client:

Date: 8/20/2018

Designer: **RCO**

Job Name: MILLWOOD 12-1

Project #

3.000"

38%

391 / 1072

Wind

Comments

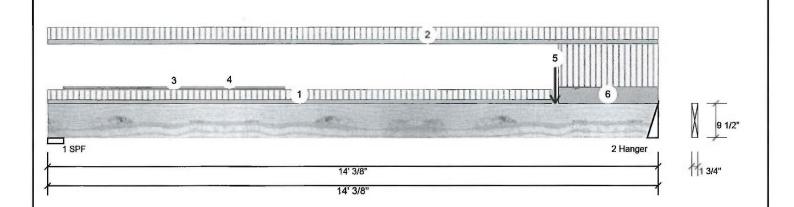
1463 L

2 -

Hanger

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Second Floor



Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	1	Design Method:	LSD	1	352	182	0	0			
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	715	313	0	0			
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked	4							
General Load											
Floor Live:	40 PSF			Bearings	and Fact	ored Reactions					
Dead:	15 PSF			Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1-SPF	4.375"	16% 228 / 528	755 L	1.25D+1.5L			

A	na	lvsis	Resu	lts
		,,,,,,	11444	,

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3003 ft-lb	8'8"	11362 ft-lb	0.264 (26%)	1.25D+1.5L	L
Unbraced	3003 ft-lb	8'8"	3005 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	1266 lb	13' 5/8"	4638 lb	0.273 (27%)	1.25D+1.5L	L
Perm Defl in.	0.096 (L/1694)	7'4 1/4"	0.451 (L/360)	0.210 (21%)	D	Uniform
LL Defl inch	0.203 (L/801)	7'5 1/2"	0.451 (L/360)	0.450 (45%)	L	L
TL Defl inch	0.299 (L/544)	7'5 1/8"	0.677 (L/240)	0.440 (44%)	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 12'4 7/8" o.c.

	4 Bottom bra	ced at bearings.							
Ī	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	
	1	Tie-In	0-0-0 to 11-7-2	(Span) 0-10-14	Тор	15 PSF	40 PSF	0 PSF	
	2	Tie-In	0-0-0 to 14-0-6	(Span)1-1-2	Тор	15 PSF	40 PSF	0 PSF	
	3	Part. Uniform	0-4-5 to 5-5-8		Тор	2 PLF	0 PLF	0 PLF	
	4	Part. Uniform	0-4-5 to 5-5-8		Тор	3 PLF	0 PLF	0 PLF	Pa
	5	Point	11-8-0		Far Face	155 lb	371 lb	0 lb	rec
	6	Tie-In	11-8-14 to 14-0-6	(Span) 3-10-13	Тор	15 PSF	40 PSF	0 PSF	Re

T.L. WISE 100083566

1.25D+1.5L

August 21, 2018

	•							
1	Tie-In	0-0-0 to 11-7-2	(Span) 0-10-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Tie-In	0-0-0 to 14-0-6	(Span)1-1-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF
3	Part. Uniform	0-4-5 to 5-5-8		Тор	2 PLF	0 PLF	0 PLF	0 PLF
4	Part. Uniform	0-4-5 to 5-5-8		Тор	3 PLF	0 PLF	0 PLF	Pas9नीर्पात्प Framing Squash Block is
5	Point	11-8-0		Far Face	155 lb	371 lb	0 lb	required at அl point loads over bearings
6	Tie-In	11-8-14 to 14-0-6	(Span) 3-10-13	Тор	15 PSF	40 PSF	0 PSF	Refer to Multiple Member Connection Detail for ply to ply nailing or bolting
	Self Weight				4 PLF			requirements

This design i

Notes

Lumber

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

chemicals

Handling & Installation

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

For flat roofs provide proper drainage to preven 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.





Client:

Project: Address: GREENPARK

Date: 8/20/2018

Designer: **RCO**

Job Name: MILLWOOD 12-1

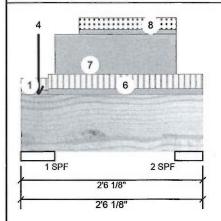
Project #:

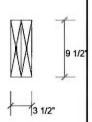
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor . ,





Page 1 of 2

Nember Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
Plies:	2	Design Method:	LSD	1	36		129	1	5	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	36		98	1	8	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored R	leactions			
Dead:	15 PSF	1		Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	5.750"	2%	161 / 54	215	L	1.25D+1.5L
				2-SPF	4.625"	2%	123 / 53	176	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	65 ft-lb	1'3 3/4"	14770 ft-lb	0.004 (0%)	1.25D+1.5S	L	
Unbraced	65 ft-lb	1'3 3/4"	14770 ft-lb	0.004 (0%)	1.25D+1.5S	L	
Shear	18 lb	1'2 1/2"	6030 lb	0.003 (0%)	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 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.

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-10	(Span)1-2-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-3-0		Тор	1 lb	0 lb	3 lb	0 lb	
3	Point	0-3-0		Тор	18 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	0-3-0		Тор	15 lb	0 lb	0 lb	0 lb	Wall Self Weight
6	Tie-In	0-4-10 to 2-6-2	(Span)1-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

Notes

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

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

Handling & Installation

- Handling & Installation

 1. IVL beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is lateraty restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

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

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

T.L. WISE 100083566

100083566

WCE OF ONTARY

August 21, 2018







Client:

Project: Address: GREENPARK

Date:

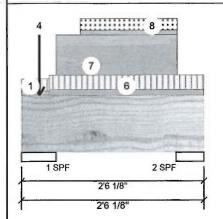
8/20/2018 **RCO**

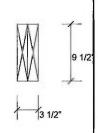
Designer: Job Name: MILLWOOD 12-1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" 2-Ply - PASSED Level: Second Floor





Page 2 of 2

Continued	from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	0-5-12 to 2-1-12		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
8	Part. Uniform	0-9-12 to 2-1-12		Тор	10 PLF	0 PLF	23 PLF	0 PLF	
	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

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 approvate

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

Manufacturer Info Forex APA: PR-L318

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

This design is valid until 7/10/2021