

All work shall conform to Bullding Code O. Reg. 332/12

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.



January 14, 2019

0 Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 LPI 20Plus 11.875 NJ40U 11.875 NJ60U 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

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

	L (Flush)							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	NASCO
F4	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0	
F3	Forex 2.0E-3000Fb LVL	1.75	11.875			1	12-0-0	LOT 19 (SANDSTONE 1A)
F2	Forex 2.0E-3000Fb LVL	1.75	11.875			1	8-0-0	Design Method LSD
FH2	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	4-0-0	Description
F1	Forex 2.0E-3000Fb LVL	1.75	11.875			1	4-0-0	MINNISALE HOMES BRAMPTON, ONT.
I Joist (Flush)							Created
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	June 29, 2018
F9	LPI 20Plus	2.5	11.875			3	18-0-0	Builder
F7	LPI 20Plus	2.5	11.875			1	4-0-0	GREENPARK
F6	LPI 20Plus	2.5	11.875			2	2-0-0	
J8	LPI 20Plus	2.5	11.875			2	16-0-0	Sales Rep
J6	LPI 20Plus	2.5	11.875			16	14-0-0	RM
J5	LPI 20Plus	2.5	11.875	0		5	12-0-0	Designer
J4	LPI 20Plus	2.5	11.875			1	10-0-0	RCO
J3	LPI 20Plus	2.5	11.875			6	8-0-0	5001175
J2	LPI 20Plus	2.5	11.875			1	6-0-0	Shipping
/ J1	LPI 20Plus	2.5	11.875			2	4-0-0	Project
J11	NJ40U	3.5	11.875			13	18-0-0	Builder's Project
J9	NJ60U	3.5	11.875			5	20-0-0	Kott Lumber Compa
J10	NJ60U	3.5	11.875			5	18-0-0	14 Anderson Blvd
Rim Bo	ard							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Stouffville, Ontario
R1	Norbord Rimboard Plus 1.125 X	1.125	11.875			16	12	Canada L4A 7X4
Dianida	11.875							905-642-4400
Blockin	y .	VA 21 - 141	D11		Dr.	-	1	Job Path
	Description	Width	Depth	Qty	Plies	Pcs	Length	D:\Users\rochavillo\WORK FI
	LPI 20 Plus	2.5	11.875	LinFt		Varies	40-0-0	HOME\GREENPARK\MINNIS
Hanger				Bea	m/Girde		ported	HOMES\LOT 19 (SANDSTO) \FLOOR\LOT 19 (SANDSTO)
						Me	ember	

Skew Slope

fasteners

4 10dx1 1/2

H4	L
NOTES	:

Label

H1

НЗ

Ground Floor LVL/LSL (Flush)

. 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

Pcs Description

26 LT251188

1 LT351188

4 LT351188

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

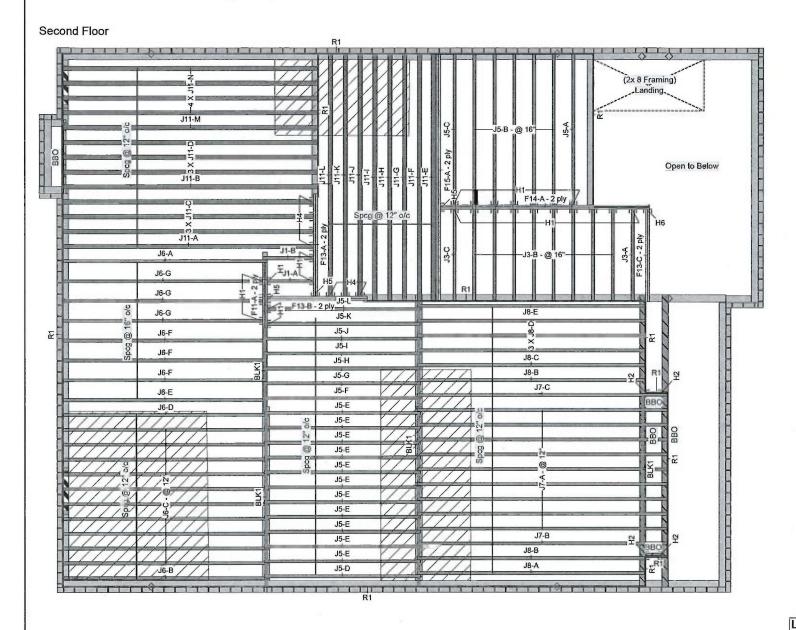
REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Oct 2018 Project No: Model: LOT 19 (SANDSTONE 1A)

tt Lumber Company nderson Blvd Iffville, Ontario ada 7X4 642-4400 Path Jsers\rochavillo\WORK FROM ME\GREENPARK\MINNISALE MESILOT 19 (SANDSTONE 1A) OR\LOT 19 (SANDSTONE 1A).i Ground Floor fasteners Design Method LSD 2 10dx1 1/2 Building Code NBCC 2010 / OBC 2012 4 10dx1 1/2 2 10dx1 1/2 Floor Loads 40 Live Dead 15 Deflection Joist LL Span L/ 480 TL Span L/ 360 LL Cant 2L/ 480 TL Cant 2L/ 360 **Deflection Girder** LL Span L/ 360 TL Span L/ 240 480 LL Cant 2L/ TL Cant 2L/ 360 Decking SPF Plywood Deck Thickness Fastener Nailed & Glued Vibration

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

18-411395-000.00 RR. KOTT



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

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

Building Division

	2.0E-3	000Fb LVL								
F14	Forex 2.0E-3	000Fb LVL	1.75	5 11.	875	1	2	2	16-0-0	Layout Name LOT 19 (SANDSTONE 1A)
F13	Forex 2.0E-3	000Fb LVL	1.75	5 11.	875	3	2	6	8-0-0	Design Method
F11	Forex 2.0E-3	000Fb LVL	1.75	5 11.	875	1	2	2	6-0-0	Description
I Joist	(Flush)									MINNISALE HOMES
Label	Descr	iption	Width	ı De	pth	Qty	Plies	Pcs	Length	BRAMPTON, ONT.
J7	LPI 20	Plus	2.5	11.	875			11	18-0-0	Created
J8	LPI 20	Plus	2.5	11.	875			8	16-0-0	June 29, 2018
J6	LPI 20	Plus	2.5	11.	875			20	14-0-0	Builder
J5	LPI 20	Plus	2.5	11.	875			26	12-0-0	GREENPARK
J3	LPI 20	Plus	2.5	11.	875			10	8-0-0	
J1	LPI 20	Plus	2.5	11.	875			2	4-0-0	Sales Rep
J11	NJ40L		3.5	11.	875			21	18-0-0	RM
Rim Bo	ard									Designer
Label	Descr	iption	Width	De	pth	Qty	Plies	Pcs	Length	RCO
.R1	Norboi Plus 1	d Rimboard	1.125	11.	875			15	12	Shipping
	11.875									Project
Blockin	g									Builder's Project
Label	Descr	iption	Width	De	pth	Qty	Plies	Pcs	Length	Kott Lumber Company
BLK1	LPI 20	Plus	2.5	11.	875	LinFt		Varies	33-0-0	14 Anderson Blvd
Hange						Ве	am/Girde		ported ember	Stouffville, Ontario Canada
Label	Pcs	Description	n	Skew	Slo	pe f	asteners	fas	teners	L4A 7X4
H1	25	LT251188					10dx1 1/2	2 10	dx1 1/2	905-642-4400
H2	4	Unknown Hanger								Job Path D:\Users\rochavillo\WORK FROM
H4	7	LT351188				4	10dx1 1/2	2 10	dx1 1/2	HOME\GREENPARK\MINNISALE
H5	3	HGUS410					46 16d		6 16d	HOMES\LOT 19 (SANDSTONE 1A)
H6	1	HUC410 (N	in)				14 16d	_	10d	\FLOOR\LOT 19 (SANDSTONE 1A).

 Width
 Depth
 Qty
 Plies
 Pcs
 Length

 4.75
 14.875
 1
 2
 2
 18-0-0

Second Floor LVL/LSL (Flush)

F15

Label Description

Forex 2.0E-3000Fb LVL

Framer to verify dimensions on the architectural drawings.

2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.

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

rimboard/rimioist . 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.

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.

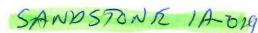
ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Oct. 2018 Project No: Model: LOT 19 (SANDSTONE 1A)

1		
	Second Floor	
	Design Method	LSD
	Building Code	NBCC 2010 / OBC 2012
	Floor	
	Loads	
	Live	40
	Dead	15
	Deflection Joist	
- 1	LL Span L/	480
- 1	TL Span L/	360
- 1	LL Cant 2L/	480
- 1	TL Cant 2L/	360
- 1	Deflection Girde	er
- 1	LL Span L/	360
.	TL Span L/	240
- 1	LL Cant 2L/	480
	TL Cant 2L/	360
- 1	Decking	
- 1	Deck	SPF Plywood
- 1	Thickness	5/8"
- 1	Fastener	Nailed & Glued
or	Vibration	
٠,	Ceiling:	Gypsum 1/2"

Engineering Note Page (ENP-2)

REVISION 2018-10-17



Please read all notes prior to installation of the component

DESIGN INFORMATION

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

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

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

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

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

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

CODE

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

COMPONENT

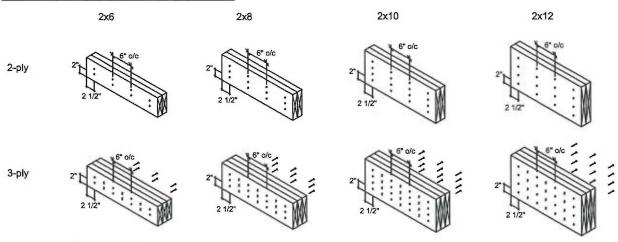
- 1. The building component used in construction must be the same as indicated on the drawings.
- 2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
- 3. Members consisting of multiple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

HANDLING AND INSTALLATION

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



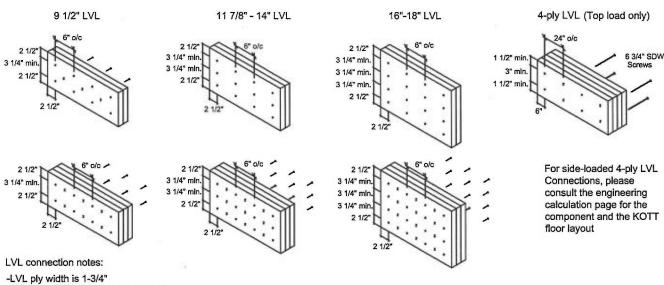
Conventional Connections



Conventional connection notes:

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

LVL Connections



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

Multiple Member Connections

All connections are for uniformly distributed loads.

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



KOTT Inc. 3228 Moodie Drive Ottawa, ON K2H 7V1





Client: **GREENPARK**

Project: Address: Date: 1/10/2019

Designer RCO

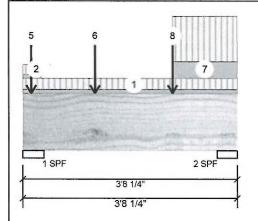
Job Name: LOT 19 (SANDSTONE 1A)

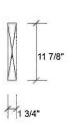
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 2

Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind
Plies:	1	Design Method:	LSD	1	280		156		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	150		65	1	0	0
Deflection LL:	360	Load Sharing:	No	·-						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load								•••		
Floor Live:	40 PSF			Bearing:	s and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	4.375"	13%	195 / 420	615	L	1.25D+1.5L
				2-SPF	4.125"	7%	81 / 225	306	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	173 ft-lb	2'3 5/16"	17130 ft-lb	0.010 (1%)	1.25D+1.5L	L
Unbraced	173 ft-lb	2'3 5/16"	13544 ft-lb	0.013 (1%)	1.25D+1.5L	L
Shear	148 lb	1'3 1/2"	5798 lb	0.025 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.001 (L/48178)	1'11 15/16"	0.103 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/33365)	1'11 3/4"	0.155 (L/240)	0.010 (1%)	D+L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings.

B PROFESSIONAL CAGIL	
T.L. WISE 100083566	
STONE OF ONTRE	
January 14, 2019	

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-8-4	(Span)0-8-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-3-13	(Span)0-7-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-1-12		Тор	56 lb	149 lb	0 lb	0 lb	J6
4	Point	0-1-12		Тор	14 lb	36 lb	0 lb	0 lb	J1
5	Point	0-1-12		Тор	41 lb	0 lb	0 lb	0 lb	Wall Self Weight
6	Point	1-2-14		Near Face	22 lb	58 lb	0 lb	0 lb	J1

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 ensure the component suitability of the investment of the contractor of the component suitability of the investment of the component suitability of the component sui

Lumber

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

chemicals

- 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

fastening details, source, approvals approvals approvals Demagad Bearns must not be used Design assumes top edge is laterally restrained. Provide lateral support at bearing points to svoid 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. This design is







Client: GREENPARK

Project: Address: Date:

1/10/2019

Designer: RCO

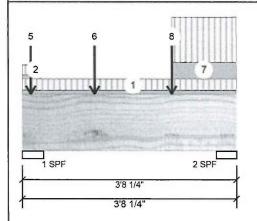
Job Name: LOT 19 (SANDSTONE 1A)

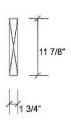
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 2 of 2

Continued	from	page	1

	o page .								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Tie-In	2-6-14 to 3-8-4	(Span)2-9-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
8	Point	2-6-14		Near Face	26 lb	69 lb	0 16	0 lb	J1
	Self Weight				5 PLF				

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

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

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

Lumber

chemicals

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

For flat roofs provide proper drainage to prevent ponding

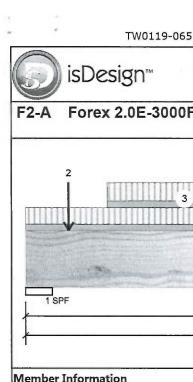
Forex

APA: PR-L318

Manufacturer Info

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

This design is valid until 7/10/2021



GREENPARK

Client: Project:

Address:

1/10/2019 Date:

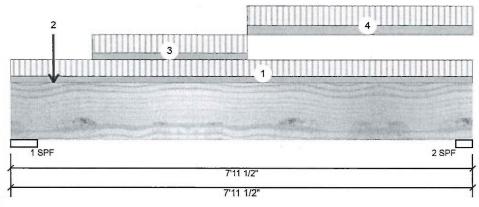
Designer: RCO

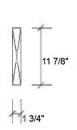
Job Name: LOT 19 (SANDSTONE 1A)

Unfactored Reactions UNPATTERNED Ib (Uplift)

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

Level: Ground Floor





Page 1 of 1

	1144,011			ominicio:	C-01 1 5 C- 11 P		141 741 1 = 10141	10 10	Pilley	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	1	Design Method:	LSD	1	1016		416	0		0
Moisture Condition:	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1004		442	0		0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored I	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total L	_d. Case	Ld. Comb.
				1 - SPF	5.500"	35%	520 / 1525	2044 L		1.25D+1.5L
				2-SPF	3.500"	55%	553 / 1506	2059 L		1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3498 ft-lb	4'1 3/8"	17130 ft-lb	0.204 (20%)	1.25D+1.5L	L
Unbraced	3498 ft-lb	4'1 3/8"	6131 ft-lb	0.570 (57%)	1.25D+1.5L	L
Shear	1999 lb	1'4 5/8"	5798 lb	0.345 (34%)	1.25D+1.5L	L
Perm Defl in.	0.019 (L/4742)	4'1 5/16"	0.244 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.044 (L/2016)	4' 7/8"	0.244 (L/360)	0.180 (18%)	L	L
TL Defl inch	0.062 (L/1415)	4'1"	0.367 (L/240)	0.170 (17%)	D+L	L

T.L. WISE 100083566 100083566 January 14, 2019

Design Notes

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

2 Top brain	ced at bearings.			
3 Bottom	braced at bearings.			
ID	Load Type	Location	Trib Width	5

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	C
1	Part. Uniform	0-0-0 to 7-11-8		Тор	45 PLF	120 PLF	0 PLF	0 PLF	
2	Point	0-8-14		Near Face	62 lb	165 lb	0 lb	0 lb	J3
3	Part, Uniform	1-4-14 to 4-0-14		Near Face	51 PLF	135 PLF	0 PLF	0 PLF	
4	Part. Uniform	4-0-14 to 7-11-8		Near Face	68 PLF	139 PLF	0 PLF	0 PLF	
	Self Weight				5 PLF				

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

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

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

Lumber

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

chemicals

Handling & Installation

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

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**

1/10/2019 Date:

RCO Designer:

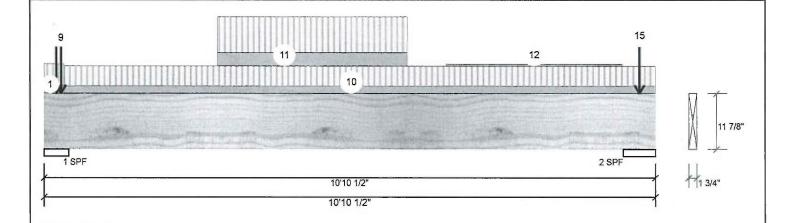
Job Name: LOT 19 (SANDSTONE 1A)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor



Member Info	rmation			Unfactore	d React	ions U	NPATTERNE	D lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
Plies:	1	Design Method:	LSD	1	355		194		0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	367		221		0	0
Deflection LL:	360	Load Sharing:	No	-						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings a	and Fact	tored F	Reactions			
Dead:	15 PSF			Bearing L	ength	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF 5	.250"	14%	243 / 533	776	L	1.25D+1.5L
				2-SPF 6	.875"	11%	276 / 550	827	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1172 ft-lb	5'1 11/16"	17130 ft-lb	0.068 (7%)	1.25D+1.5L	L
Unbraced	1172 ft-lb	5'1 11/16"	4501 ft-lb	0.260 (26%)	1.25D+1.5L	L
Shear	350 lb	1'4 3/8"	5798 lb	0.060 (6%)	1.25D+1.5L	L
Perm Defl in.	0.011 (L/10685)	5'3 13/16"	0.333 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.023 (L/5309)	5'3 5/16"	0.333 (L/360)	0.070 (7%)	L	L
TL Defl inch	0.034 (L/3547)	5'3 1/2"	0.499 (L/240)	0.070 (7%)	D+L	L



- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings.

DPROFESSIONAL CITY
T.L. WISE 100083566
Swills /
January 14, 2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-4	(Span)1-2-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-2-10		Тор	4 lb	10 lb	0 lb	0 lb	J6
3	Point	0-2-10		Тор	2 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	0-3-10		Тор	31 lb	72 lb	0 lb	0 lb	J6
5	Point	0-3-10		Тор	21 lb	55 lb	0 lb	0 lb	J5
6	Point	0-3-10		Тор	21 lb	0 lb	0 lb	0 lb	Wall Self Weight
7	Point	0-3-10		Тор	3 lb	7 lb	0 lb	0 lb	J6
continued on p	page 2								

Notes

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

Lumber

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

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

For flat roofs provide proper drainage to prevent ponding

This design is

Manufacturer Info Forex

APA: PR-L318

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



Page 2 of 2



GREENPARK Client:

Project-Address:

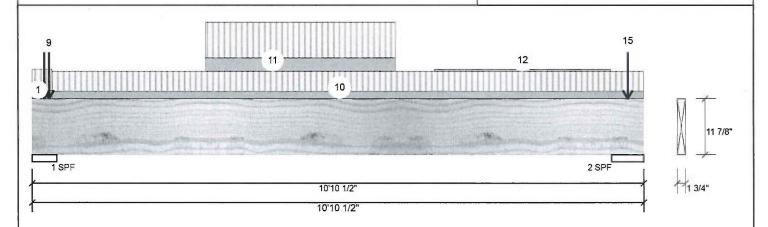
Date: 1/10/2019 Designer: RCO

Job Name: LOT 19 (SANDSTONE 1A)

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor



Continued fr	om page 1	•							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
8	Point	0-3-10		Тор	6 lb	15 lb	0 lb	0 lb	J5
9	Point	0-3-10		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
10	Tie-In	0-4-4 to 10-10-8	(Span)1-1-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
11	Part. Uniform	3-1-2 to 6-5-10		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
12	Part. Uniform	7-1-15 to 10-3-8		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
13	Point	10-7-2		Тор	42 lb	101 lb	0 lb	0 lb	J5
14	Point	10-7-2		Тор	34 lb	83 lb	0 lb	0 lb	
15	Point	10-7-2		Тор	45 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				5 PLF				

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

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

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

Lumber

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

chemicals

Handling & Installation

- and ling & Installation

 LinL beams must not be cut or drilled

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

 Demaged Beams must not be used

 Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

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

This design is valid until 7/10/2021

11 7/8"

Wind

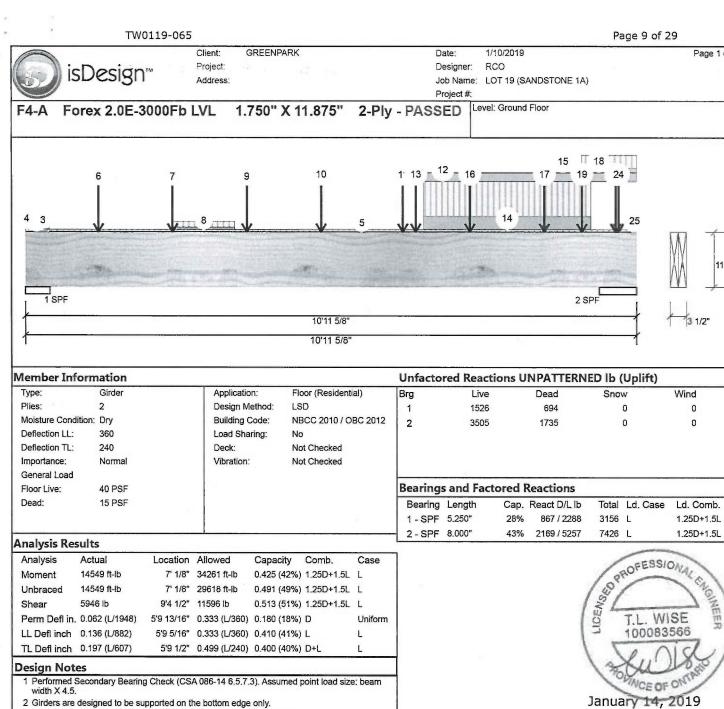
0

0

Ld. Comb

1 25D+1 5L

1.25D+1.5L



- 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

,	Titling illiant land bacca	or ron occupit man.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	_
1	Tie-In	0-0-0 to 0-4-11	(Span)0-9-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Part. Uniform	0-0-0 to 0-1-1		Тор	2 PLF	0 PLF	0 PLF	0 PLF		
3	Tie-In	0-0-0 to 0-5-2	(Span)0-6-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
4	Part. Uniform	0-0-0 to 0-1-1		Тор	1 PLF	0 PLF	0 PLF	0 PLF		
5	Tie-In	0-5-2 to 10-10-8	(Span)0-10-1	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 werify the dimensions and loads.

Lumber

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

chemicals

Handling & Installation

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

fastening outers, comproved the approvals personnel of the approval of the app

For flat roofs provide proper drainage to prevent ponding

This design is v

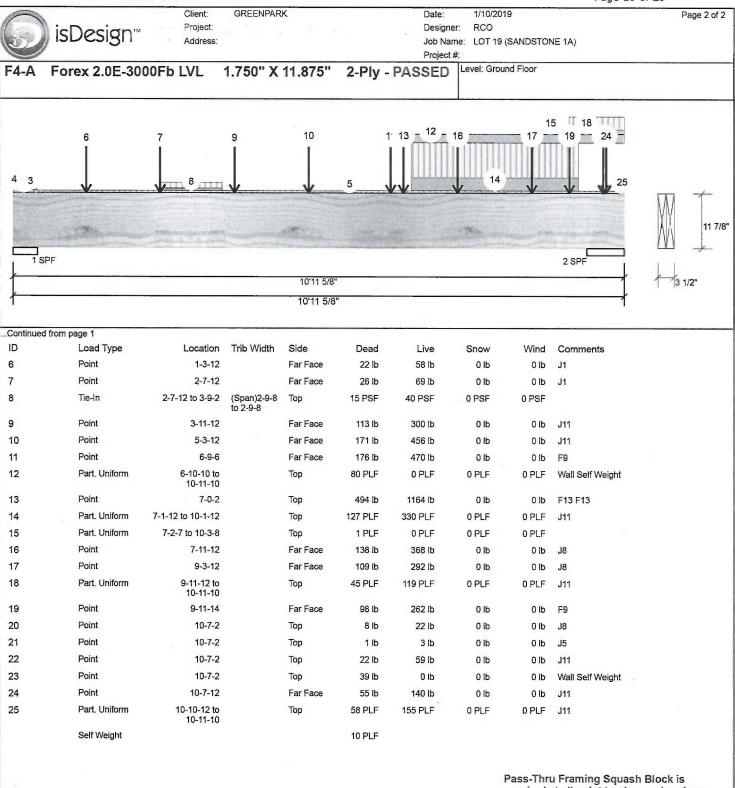
Manufacturer Info

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.







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 Lumber

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

chemicals

Handling & Installation

ns must not be cut or drilled to manufacturer's product information g installation requirements, multi-ply detalls, 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

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

Manufacturer Info



Client: GREENPARK

Project: Address: Date: 1/10/2019

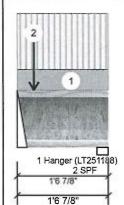
RCO Designer:

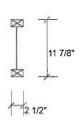
Job Name: LOT 19 (SANDSTONE 1A)

Project #:

11.875" - PASSED LPI 20Plus

Level: Ground Floor





Page 1 of 1

Nember Inf	ormation						Unfacto	red React	ions U	NPATTERN	ED lb ((Uplift)	
Type:	Girder		Applicatio	n: F	loor (Resident	ial)	Brg	Live		Dead	Snov	W	Wind
Plies:	1		Design M	ethod: L	SD		1	112		42		0	0
Moisture Cond	tion: Dry		Building (Code: N	IBCC 2010 / O	BC 2012	2	61		23		0	0
Deflection LL:	360		Load Sha	ring: N	lo		-	•		20			
Deflection TL:	240		Deck:	N	lot Checked								
Importance:	Normal		Vibration:	N	lot Checked								
General Load													
Floor Live:	40 PSF						Bearing	s and Fact	ored F	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - Hanger	2.000"	14%	52 / 169	221	L	1.25D+1.5L
nalysis Res	ults						2-SPF	2.375"	7%	29 / 92	121	L	1.25D+1.5L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case							
Moment	43 ft-lb	7 3/8"	6250 ft-lb	0.007 (1%)	1.25D+1.5L	L					1	SERSIC	
Shear	208 lb	1 1/4"	2345 lb	0.089 (9%)	1.25D+1.5L	L					108	0	"VAL
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)							10		13
LL Defl inch	0.000 (L/38315)	7 1/2"	0.044 (L/360)	0.010 (1%)	L	L				1	TENS	T 1 10/19	SE SE
TL Defl inch	0.001 (L/27904)	7 1/2"	0.067 (L/240)	0.010 (1%)	D+L	L				1	3 _	100083	566
Design Not	es						1			1	1	1.0	1801
1 Provide rest	raint at supports	to ensure late	ral stability.				7			100	135	Du	1000
	Deflection: Instan	t = 0.000", Lo	ong Term = 0.00	0"							10	VINCE OF	ON
-	er nailing holes.						January 14, 2019						
4 Girders are	rders are designed to be supported on the bottom edge only.									-	unua	1 A TAL 5	LUIJ

- 5 Top flange braced at bearings.

6 Bottom flange braced at bearings

	January
Wind	Comments
0 PSF	

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-3-7		Far Face	27 lb	73 lb	0 lb	0 lb	J2

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

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

Notes

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219

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

This design is valid until 10/31/2020

Manufacturer Info

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







GREENPARK Client:

Project: Address:

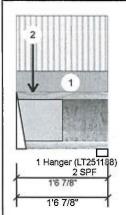
1/10/2019 Date:

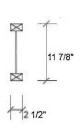
RCO Designer:

Job Name: LOT 19 (SANDSTONE 1A)

11.875" - PASSED LPI 20Plus

Level: Ground Floor





Page 1 of 1

Member Inf	ormation						Unfacto	red React	ions U	NPATTERNI	ED lb (Uplift)	
Type:	Girder		Applicatio	n: F	oor (Resident	ial)	Brg	Live		Dead	Snow	Wind
Plies:	1		Design M	ethod: L	SD		1	184		69	0	0
Moisture Cond	tion: Dry		Building C	Code: N	BCC 2010 / O	BC 2012	2	73		27	0	0
Deflection LL:	360		Load Sha	ring: N	0							
Deflection TL:	240		Deck:	N	ot Checked							
Importance:	Normal		Vibration:	N	ot Checked							
General Load												
Floor Live:	40 PSF						Bearing	s and Fact	ored	Reactions		
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total Ld. Case	Ld. Comb.
							1 - Hanger	2.000"	23%	87 / 276	363 L	1.25D+1.5L
Analysis Res	ults						2-SPF	2.375"	9%	34 / 109	143 L	1.25D+1.5L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case						
Moment	63 ft-lb	5 1/4"	6250 ft-1b	0.010 (1%)	1.25D+1.5L	L					EESSIC	14.
Shear	350 lb	1 1/4"	2345 lb	0.149 (15%) 1.25D+1.5L	L					PROFES	MAZ
Perm Defl in.	0.000 (L/69521)	5 11/16"	0.044 (L/360)	0.010 (1%)	D	Uniform				/	30	10
LL Defl inch	0.001 (L/26213)	5 11/16"	0.044 (L/360)	0.010 (1%)	L	L					T.L. WI	SE ER
TL Defl inch	0.001 (L/19036)	5 11/16"	0.067 (L/240)	0.010 (1%)	D+L	L				1	100083	167
Design Note	25									1	(»Xu')	1000/
	raint at supports						7				OMMODE	ONTR
	Deflection: Instar	nt = 0.000", Lo	mg Term = 0.00	0"						-	NOT OF	2010
	er nailing holes.		4 5 - 4 75 41							J	anuary 14,	2019
	cture installation designed to be s	•										

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-3-7		Near Face	59 lb	156 lb	0 lb		u Framing So

Squash Block is loads over bearings

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

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

Copyright 2016 All rights reserved by Louislana Pacific Corp. 414 Union St Suite 2000, Nashville. TN 37219

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

This design is valid until 10/31/2020

Manufacturer Info

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





isDesign™

Client: GREENPARK

Project: Address:

1/10/2019 Date:

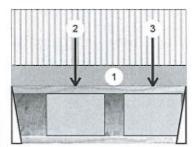
RCO Designer:

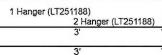
Job Name: LOT 19 (SANDSTONE 1A)

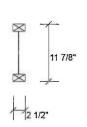
LPI 20Plus

11.875" - PASSED

Level: Ground Floor







Wind

0

0

Page 1 of 1

Mem	ber I	nform	ation
-----	-------	-------	-------

Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Classic Const	10 000

Floor Live: 40 PSF Dead: 15 PSF

Application: Floor (Residential) Design Method: LSD

NBCC 2010 / OBC 2012

Load Sharing: Deck: Not Checked Vibration: Not Checked

Building Code:

Brg Live Dead Snow 338 127 0 1 2 425 159 0

Unfactored Reactions UNPATTERNED Ib (Uplift)

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	42%	158 / 507	666	L	1.25D+1.5L
2 - Hanger	2.000"	53%	199 / 638	836	L	1.25D+1.5L

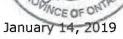
Analysis Results

_	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	619 ft-lb	1'1 1/8"	6250 ft-lb	0.099 (10%)	1.25D+1.5L	L
	Shear	829 lb	2'10 3/4"	2345 lb	0.354 (35%)	1.25D+1.5L	L
	Perm Defl in.	0.003 (L/12916)	1'1 3/16"	0.093 (L/360)	0.030 (3%)	D	Uniform
	LL Defl inch	0.007 (L/4840)	1'1 3/16"	0.093 (L/360)	0.070 (7%)	L	L
	TL Defl inch	0.010 (L/3520)	1'1 3/16"	0.140 (L/240)	0.070 (7%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.003", Long Term = 0.004"
- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange braced at bearings.

La Carte de la Car	



T.L. WISE MAN 100083566

100083566

7 Bottom	flange	braced.	at bearing	IS

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11 to 1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-1-2		Near Face	138 lb	368 lb	0 lb	0 lb	J8
3	Point	2-5-2		Near Face	109 lb	292 lb	0 lb		u Fgraming Squash Block is at all point loads over bearings

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

Notes

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219

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

This design is valid until 10/31/2020

Manufacturer Info

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







Client:

Project: Address: GREENPARK

Date: Designer:

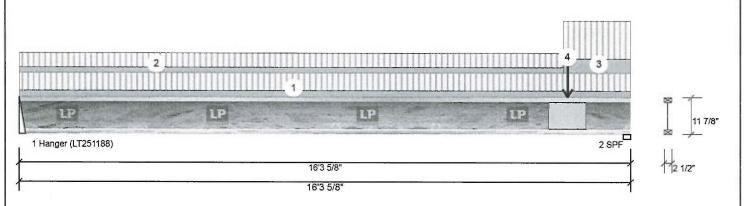
RCO

Job Name: LOT 19 (SANDSTONE 1A)

1/10/2019

11.875" - PASSED LPI 20Plus

Level: Ground Floor



Member Inf	ormation						Unfactored Reactions UNPATTERNED lb (Uplift)						
Туре:	Girder		Application	n: F	loor (Resident	ial)	Brg	Live		Dead	Snov	W	Wind
Plies:	1		Design M	ethod: L	SD		1	470		176		0	0
Moisture Cond	ition: Dry		Building (Code: N	IBCC 2010 / O	BC 2012	2	809		304		0	0
Deflection LL:	360		Load Sha	ring: N	lo								-
Deflection TL:	240		Deck:	N	lot Checked								
Importance:	Normal		Vibration:	N	lot Checked								
General Load													
Floor Live:	40 PSF						Bearing	s and Fact	ored	Reactions			
Dead:	15 PSF						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1-	2.000"	58%		925		1.25D+1.5L
							Hanger						
Analysis Re	sults						2-SPF	2.375"	97%	380 / 1214	1594	L	1.25D+1.5L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	1					Van der van de State van de	
Moment	3977 ft-lb	8'9 11/16"	6250 ft-lb	0.636 (64%) 1.25D+1.5L	L					1	-5991	The state of the s
Shear	1569 lb	16'2"	2345 lb	0.669 (67%) 1.25D+1.5L	L					108	OFECON	INAL
Perm Defl in.	0.127 (L/1520)	8'4 5/16"	0.535 (L/360)	0.240 (24%	6) D	Uniform	1				10		100
LL Defl inch	0.338 (L/570)	8'4 5/16"	0.535 (1/360)	0.630 (63%	o) L	L	1			- 1	5/		12
TL Defl inch	0.465 (L/415)	8'4 5/16"	0.803 (L/240)	0.580 (58%) D+I	I				1	<u> </u>	TI MI	SF E
					,		-			1	Ĭ.	100083	SE SE
Design Not	The state of the s						4			1	-	~	7-7
	raint at supports t									1	. \	1.1	1801
	Deflection: Instan	$t = 0.127^{\circ}$, Lo	ong Term = 0.19	3U"			1			13	12	MI	1000
-	er nailing holes.	mulala make 🖵	4 f an imakalla **								10	NCEOF	ONTR
4 See manura	cture installation	guide note E	+ ior installation	details							-	-CE OF	-

- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange must be laterally braced at a maximum of 5'2" o.c.
- 7 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-3-10	(Span)1-5-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 14-6-4	(Span)1-2-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	14-6-4 to 16-3-10	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	14-7-8		Near Face	127 lb	338 lb	0 lb		Framing Squash Block is at all point loads over bearings

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

Notes

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219

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

This design is valid until 10/31/2020

Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C Kott Lumber Company 14 Anderson Blvd, Ontario 14A7X4

January 14, 2019







GREENPARK

Client: Project:

Address:

Date: 1/10/2019

RCO Designer:

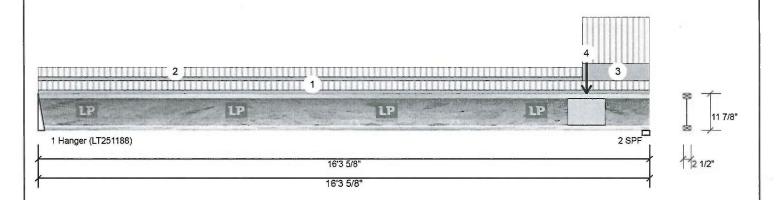
Job Name: LOT 19 (SANDSTONE 1A)

Project #:

LPI 20Plus

11.875" - PASSED

Level: Ground Floor



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

	U	nfa	ctored	Reacti	ons Ul	NPATT	TERNED	lb (Uplift)	١
-									

ī	Brg	Live	Dead	Snow	Wind
	1	262	98	0	0
	2	688	258	0	0

Bea	Bearings and Factored Reactions											
Bea	aring	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.					
1 - Hai	nger	2.000"	32%	123 / 393	516	L	1.25D+1.5L					
2-	SPF	2.375"	83%	322 / 1032	1354	L	1.25D+1.5L					

Analysis Results											
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case					
Moment	2480 ft-lb	9'9 7/8"	6250 ft-lb	0.397 (40%)	1.25D+1.5L	L					
Shear	1333 lb	16'2"	2345 lb	0.569 (57%)	1.25D+1.5L	L					
Perm Defl in	. 0.079 (L/2433)	8'7 1/4"	0.535 (L/360)	0.150 (15%)	D	Uniform					
LL Defl inch	0.211 (L/912)	8'7 1/4"	0.535 (L/360)	0.390 (39%)	L	L					
TL Defl inch	0.291 (L/663)	8'7 1/4"	0.803 (L/240)	0.360 (36%)	D+L	L					



- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.079", Long Term = 0.119"
- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange must be laterally braced at a maximum of 6'8" o.c.

7 Bottom flange braced at bearings.

PROFESSIONAL FLANISE	
T.L. WISE 100083566	
SOMOE DE ONTRE	
January 14, 2019	

Comments

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-3-10	(Span)0-7-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 14-6-4	(Span)0-8-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	14-6-4 to 16-3-10	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	14-7-8		Far Face	159 lb	425 lb	0 lb		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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219

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

This design is valid until 10/31/2020

Manufacturer Info

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







GREENPARK

Client: Project:

Address:

1/10/2019 Date:

RCO Designer:

Job Name: LOT 19 (SANDSTONE 1A)

Project #:

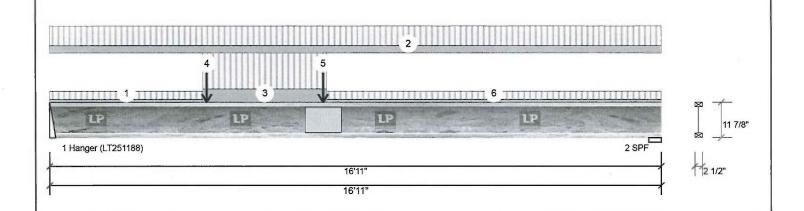
11.875" - PASSED LPI 20Plus

Level: Ground Floor

Unfactored Reactions UNPATTERNED Ib (Uplift)

40%

174 / 558



Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dea	d Sno	W	Wind
Plies:	1	Design Method:	LSD	1	466	17	5	0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	372	13	9	0	0
Deflection LL:	360	Load Sharing:	No	_					
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF			Bearings	and Fac	tored React	ions		
Dead:	15 PSF			Bearing	Length	Cap. Read	D/L lb Total	Ld. Case	Ld. Comb.
				1 -	2.000"	58% 2	19 / 699 918	L	1.25D+1.5L
				Hanger					

Dead

15 PSF

15 PSF

15 PSF

42 lb

69 lb

15 PSF

2 - SPF 4.125"

Live

40 PSF

40 PSF

40 PSF

112 lb

184 lb

40 PSF

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	4349 ft-lb	7'6 3/4"	6250 ft-lb	0.696 (70%)	1.25D+1.5L	L
	Shear	912 lb	1 1/4"	2345 lb	0.389 (39%)	1.25D+1.5L	L
	Perm Defl in.	0.133 (L/1493)	7'10 11/16"	0.551 (L/360)	0.240 (24%)	D	Uniform
	LL Defl inch	0.354 (L/560)	7'10 11/16"	0.551 (L/360)	0.640 (64%)	L	L
	TL Defl inch	0.487 (L/407)	7'10 11/16"	0.827 (L/240)	0.590 (59%)	D+L	L
_							

Location

0-0-0 to 4-3-0

4-3-0 to 7-8-0

7-8-0 to 16-11-0

4-4-4

7-6-12

0-0-0 to 16-11-0

Trib Width

to 0-11-5

to 1-8-11

to 0-4-11

(Span)0-4-11 Top

(Span)0-11-5 Top

(Span)1-8-11 Top

(Span)0-4-11 Top

Far Face

Far Face

Design Notes

Analysis Results

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.133", Long Term = 0.199"
- 3 Fill all hanger nailing holes.

Member Information

- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange must be laterally braced at a maximum of 4'10" o.c.

7 Bottom flange braced at bearings.

Load Type

Tie-In

Tie-In

Tie-In

Point

Point

Tie-In



1.25D+1.5L

732 L

PSF	0 PSF
PSF	0 PSF
PSF	Pass-Thru Framing Squash Block is
0 lb	required at all point loads over bearings
0 lb	Refercto Muttiple Member Connection
PSF	Detail for ply to ply nailing or bolting requirements

Comments

ID

2

3

5

6

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

Copyright 2016 All rights reserved by Louislana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219

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

This design is valid until 10/31/2020

Manufacturer Info

Snow

0

0

0

0

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

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





GREENPARK Client:

Project: Address:

1/10/2019 Date:

RCO Designer:

Job Name: LOT 19 (SANDSTONE 1A)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

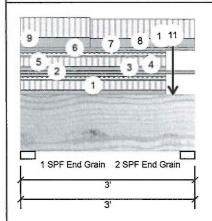
2-Ply - PASSED Level: Ground Floor

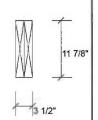
Brg

1

2

End Grain





Wind

0

0

+0.58

Page 1 of 2

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

	Bearings	s and Fac	tored F	Reactions				
	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
_	1 - SPF End Grain	3.000"	29%	909 / 1351	2260	L	1.25D+1.5L +0.5S	
-	2-SPF	3.000"	37%	1180 / 1741	2922	1	1 25D+1 5I	

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

727

944

Snow

128

199

Live

858

1094

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	1343 ft-lb	1'6 9/16"	34261 ft-lb	0.039 (4%)	1.25D+1.5L +0.5S	L
	Unbraced	1343 ft-lb	1'6 9/16"	34261 ft-lb	0.039 (4%)	1.25D+1.5L +0.5S	L
	Shear	1646 lb	1'9 7/8"	11596 lb	0.142 (14%)	1.25D+1.5L +0.5S	L
	Perm Defl in.	0.002 (L/17953)	1'6 7/16"	0.088 (L/360)	0.020 (2%)	D	Uniform
	LL Defl inch	0.002 (L/14168)	1'6 7/16"	0.088 (L/360)	0.030 (3%)	L+0.5S	L
	TL Defl inch	0.004 (L/7919)	1'6 7/16"	0.131 (L/240)	0.030 (3%)	D+L+0.5S	L
Г							

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.



Calculated Shuctured 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

Handling & Installation

- Handling & Installation

 1. LVL beams must not be cut or drilled

 2. Refer to manufacturer's product information regarding installation requirements, mutil-ryl statening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design essumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is

Manufacturer Info

Forex APA: PR-L318

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





Client:

Project: Address: GREENPARK

Date: 1/10/2019

Designer: **RCO**

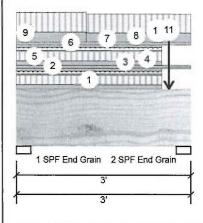
Job Name: LOT 19 (SANDSTONE 1A)

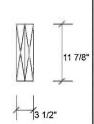
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





Page 2 of 2

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	_
1	Part. Uniform	0-0-0 to 2-6-0		Тор	64 PLF	138 PLF	0 PLF	0 PLF	J6	
2	Part, Uniform	0-0-0 to 2-6-0		Тор	17 PLF	0 PLF	40 PLF	0 PLF		
3	Part. Uniform	0-0-0 to 2-6-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
4	Part, Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
5	Part. Uniform	0-0-0 to 2-6-0		Near Face	64 PLF	138 PLF	0 PLF	0 PLF	J6	
6	Part. Uniform	0-0-0 to 2-6-0		Near Face	17 PLF	0 PLF	40 PLF	0 PLF		
7	Part. Uniform	0-0-0 to 2-6-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
8	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
9	Part. Uniform	0-0-0 to 1-2-7		Near Face	141 PLF	283 PLF	0 PLF	0 PLF	J6	
10	Part, Uniform	1-2-7 to 3-0-0		Near Face	131 PLF	270 PLF	0 PLF	0 PLF	J6	
11	Point	2-7-8		Тор	393 lb	437 lb	127 lb	0 lb	Header Column Header Column	
	Self Weight				10 PLF					

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

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

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

Lumber

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

chemicals

- Handling & Installation

 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

Forex APA: PR-L318

Manufacturer Info

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

This design is valid until 7/10/2021



Client:

Project: Address: GREENPARK

Date:

1/10/2019

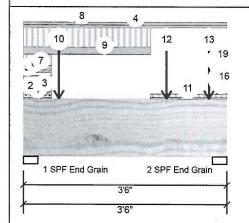
Designer: RCO

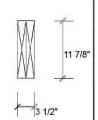
Job Name: LOT 19 (SANDSTONE 1A)

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

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	1	

Brg	Live	Dead	Snow	Wind
1	1186	813	140	0
2	1186	816	140	0

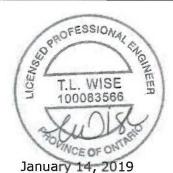
Analysis Re	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1430 ft-lb	1'9 7/16"	34261 ft-lb	0.042 (4%)	1.25D+1.5L +0.5S	L
Unbraced	1430 ft-lb	1'9 7/16"	34261 ft-lb	0.042 (4%)	1.25D+1.5L +0.5S	L
Shear	1983 lb	2'3 7/8"	11596 lb	0.171 (17%)	1.25D+1.5L +0.5S	L
Perm Defl in.	0.002 (L/20554)	1'8 11/16"	0.104 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.003 (L/12671)	1'9 3/8"	0.104 (L/360)	0.030 (3%)	L+0.5S	L
TL Defl inch	0.005 (L/7841)	1'9 1/16"	0.156 (L/240)	0.030 (3%)	D+L+0.5S	L

Bearings and Factored Reactions

_						
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	37%	1017 / 1849	2866	L	1.25D+1.5L +0.5S
2 - SPF End Grain	3.000"	41%	1019 / 1849	2869	L	1.25D+1.5L +0.5S

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.



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 loaded. Lumber

chemicals

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex

APA: PR-L318

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

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



This design is



isDesign™

Client: GREENPARK Project:

Address:

Date:

1/10/2019

Page 2 of 2

RCO Designer:

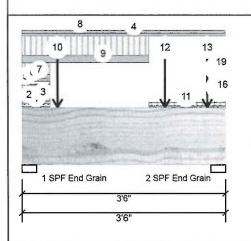
Job Name: LOT 19 (SANDSTONE 1A)

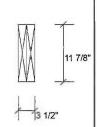
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 0-5-13		Тор	17 PLF	0 PLF	40 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 0-5-13		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	0-0-0 to 0-5-13		Тор	65 PLF	171 PLF	0 PLF	0 PLF	J11
4	Part. Uniform	0-0-0 to 3-6-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
5	Part. Uniform	0-0-0 to 0-5-13		Near Face	17 PLF	0 PLF	40 PLF	0 PLF	
6	Part. Uniform	0-0-0 to 0-5-13		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
7	Part. Uniform	0-0-0 to 0-5-13		Near Face	65 PLF	171 PLF	0 PLF	0 PLF	J11
8	Part. Uniform	0-0-0 to 3-6-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
9	Part. Uniform	0-0-0 to 2-2-4		Near Face	109 PLF	290 PLF	0 PLF	0 PLF	J10
10	Point	0-7-5		Тор	356 lb	486 lb	113 lb	0 lb	Header Column Header Column
11	Part. Uniform	2-2-4 to 3-6-0		Near Face	21 PLF	55 PLF	0 PLF	0 PLF	J2
12	Point	2-5-9		Тор	175 lb	466 lb	0 lb	0 lb	F9 F9
13	Point	3-2-5		Тор	356 lb	486 lb	113 lb	0 lb	Header Column Header Column
14	Part. Uniform	3-3-13 to 3-6-0		Тор	17 PLF	0 PLF	40 PLF	0 PLF	
15	Part. Uniform	3-3-13 to 3-6-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
16	Part. Uniform	3-3-13 to 3-6-0		Тор	65 PLF	171 PLF	0 PLF	0 PLF	J11
17	Part. Uniform	3-3-13 to 3-6-0		Near Face	17 PLF	0 PLF	40 PLF	0 PLF	
18	Part. Uniform	3-3-13 to 3-6-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
19	Part. Uniform	3-3-13 to 3-6-0		Near Face	65 PLF	171 PLF	0 PLF	0 PLF	J11
	Self Weight				10 PLF				

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

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

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

Lumber

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

chemicals

Handling & Installation

landling & Installation

LVL beams must not be cut or drilled

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

Demanged Beams must not be used

Design assumes top edge is laterally restricted

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

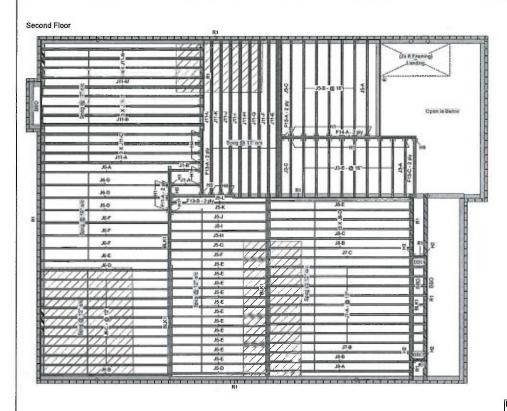
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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

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.





Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 LPI 20Plus 11.875 NJ40U 11,875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

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

2. Nascor CCMC - 13535-R 3. LVL CCMC -14056-R

4. CAN/CSA-086-09

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

LVL/LS											DIACCOR
	Descr		Wid	16	Dei	ath 1	Qty	Plies	Pcs	Length	NASCOR
F15	Forex	000Fb LVL		75	11.8		1	2	2	18-0-0	
F14	Forex 2.0E-3	Ю00Fb LVL	1.3	75	11.6	375	1	2	2	16-0-0	Layout Name LOT 19 (SANDSTONE 1A)
F13	Forex 2.0E-3	000Fb LVL		75	11.8		3	2	6	8-0-0	Design Method
F11		000Fb LVL	1.7	75	11.8	375	1	2	2	6-0-0	Description
I Joist											MINNISALE HOMES
Label			Wid	th	De		Qty	Plies	Pcs	Length	BRAMPTON, ONT.
J7	LPI 20	Plus	2	5	11.8	175			11	18-0-0	Created
J8	LPI 20			.5	11.8				8	16-0-0	June 29. 2018
J6	LPI 20	Plus	2	5	11.8	75			20	14-0-0	Builder
J5	LPI 20	Plus		5	11.8	75			26	12-0-0	GREENPARK
J3	LPI 20			.5	11.8				10	8-0-0	Sales Rep
J1	LPI 20			25	11.6				2	4-0-0	RM RM
J11	NJ40L	į.	3	.5	11.8	75			21	18-0-0	
Rim Bo											Designer
Label	Descr	iption	Wid	th	De	oth	Qty	Plies	Pcs	Length	RCO
R1		rd Rimboard .125 X	1.1:	25	11.8	175			15	12	Shipping Project
Blockir					_						Builder's Project
	Descr	detion	Wid	11.	Dat	Alfa	Qty	Plies	Pcs	Length	
	LPI 20			5			LinFt	Files	Varies	33-0-0	Kott Lumber Company
Hange		rius		.0	11.0	10	Dirt		varies	1 3500	14 Anderson Bhrd
nange							Ве	am/Girde		ported ember	Stouffville, Ontario Canada L4A 7X4
Label	Pcs	Descriptio	n	SI	(ew	Slop	e f	asteners	fas	teners	
H1	25	LT251188					4	10dx1 1/2	2 10	dx1 1/2	905-642-4400
H2	4 Unknown Hanger									Job Path D:\Users\rochavilio\WORK FROM	
H4	7	LT351188					4	10dx1 1/2	210	kdx1 1/2	HOMEIGREENPARKIMINNISALE
H5	Э	HGUS410					1	46 16d		6 16d	HOMESILOT 19 (SANDSTONE 1A)
H6	1	HUC410 (N	lin)					14 16d	1 6	3 10d	IFLUORILOT 19 (SANDSTONE TA).II
NOTES:											Second Floor

Framer to verify dimensions on the architectural drawings.

Second Floor

. Framer to veinty dimensions on the accritication orwings.

Double joist only require filterhacker by when supporting another member using a face-mounted hanger.

I. Install 24 blocking @ 24 for ourder parafel non-load bearing walls.

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

Itistati style-by main manufacture and another state into artifaction in the artifacture of the state of

two levels floor or roof.

7. Load transfer blooks to be installed under all point loads.

8. It shat 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 nating or

Rim parallel to joists: 1-1/8" rimboard with 2"x 4" block (1/16" longer than ruin paraset to pass. 1-10 Immorate while 2x 4 book (170 boyer of middle) of 16 kg). All other components and structural elements supporting the floor system such as bearns, walls, columns, and foundation walls and footings including anothorage of components and bracing for lateral stability are the responsibility of Others.

Hatch area represents ceramic filed 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. REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: Oct. 2018 Project No: Model: LOT 19 (SANDSTONE 1A)

VFLOORILOT 19	SANDSTONE IA
Second Floor	
Design Method	LSD
Building Code 1	NBCC 2010 / OBC 2012
Floor	
Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	480
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girde	r
LL Span 1/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	SPF Plywood
Thickness	5/8*
Fastener	Naifed & Glued
Vibration	
Ceiling:	Gypsum 1/2°



Client: GREENPARK

Project: Address:

RCO Designer:

Job Name: LOT 19 (SANDSTONE 1A)

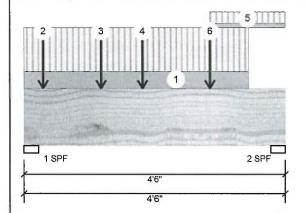
Project #:

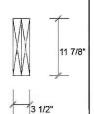
Date:

Forex 2.0E-3000Fb LVL

2-Ply - PASSED Level: Second Floor 1.750" X 11.875"

1/10/2019





Page 1 of 1

Member Infor	rmation			Unfactored Reactions UNPATTERNED lb (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	,	Wind
Plies:	2	Design Method:	LSD	1	1335		553	0)	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	948		403	0)	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fact	tored R	leactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	3.000"	42%	691 / 2002	2694	L	1.25D+1.5L
				2-SPF	3.000"	30%	503 / 1422	1925	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2931 ft-lb	2' 1/2"	34261 ft-lb	0.086 (9%)	1.25D+1.5L	L
Unbraced	2931 ft-lb	2' 1/2"	34261 ft-lb	0.086 (9%)	1.25D+1.5L	L
Shear	2341 lb	1'2 1/8"	11596 lb	0.202 (20%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/14371)	2' 1/2"	0.138 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.008 (L/6128)	2' 1/2"	0.138 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.012 (L/4296)	2' 1/2"	0.206 (L/240)	0.060 (6%)	D+L	L



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

186	PROFESSIONAL	2
LICENS	T.L. WISE 100083566	WEER
13	SuD18	6
Janu	VOE OF ON 1	

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments		
1	Part. Uniform	0-0-0 to 3-10-7		Far Face	103 PLF	273 PLF	0 PLF	0 PLF			
2	Point	0-3-15		Near Face	76 lb	203 lb	0 lb	0 lb	J5		
3	Point	1-3-15		Near Face	65 lb	172 lb	0 lb		-TJūru Framing Squash Block is		
4	Point	2-0-8		Near Face	308 lb	679 lb	0 lb	requi	ed at all point loads over bearings		
5	Tie-In	3-2-7 to 4-6-0	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	9Reler	to Multiple Member Connection		
6	Point	3-2-7		Near Face	32 lb	84 lb	0 lb	Detai	I for ply to ply nailing or bolting		
	Self Weight				10 PLF			requi	rements		

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 end/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

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

Handling & Installation

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

 Damaged Beams must not be used

 Design assumes top edge is laterally restrained

 Provide lateral support at bearing points to avoid

 lateral displacement and rotation

This design is valid IN THE DESIGN OF THIS COMPONENT.

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





isDesign™

GREENPARK Client:

Address:

Project:

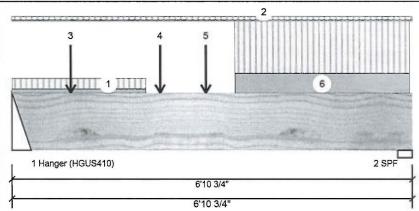
1/10/2019 Date:

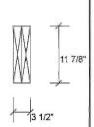
Designer: RCO

Job Name: LOT 19 (SANDSTONE 1A)

Project #:

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





Page 1 of 2

Member Inf	ormation						Unfactored Reactions UNPATTERNED lb (Uplift)						
Type:	Girder		Applicatio	n: Fl	oor (Residenti	al)	Brg	Live		Dead	Snow	Wind	
Plies:	2		Design M	ethod: LS	SD		1	709		300	0	0	
Moisture Cond	ition: Dry		Building C	Code: NI	BCC 2010 / O	BC 2012	2	1069		434	0	0	
Deflection LL:	360		Load Sha	ring: No	0								
Deflection TL:	240		Deck:	No	ot Checked								
Importance:	Normal		Vibration:	No	ot Checked								
General Load													
Floor Live:	40 PSF						Bearing	s and Fact	ored l	Reactions			
Dead:	15 PSF		-				Bearing	Length	Cap.	React D/L lb	Total Ld. Case	Ld. Comb.	
							1 - Hanger	4.000"	14%	375 / 1063	1438 L	1.25D+1.5L	
Analysis Res	sults						2-SPF	3.000"	33%	542 / 1603	2145 L	1.25D+1.5L	
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case						-	
Moment	2953 ft-lb	3'5 1/2"	34261 ft-lb	0.086 (9%)	1.25D+1.5L	L					OFESSI	ONA	
Unbraced	2953 ft-lb	3'5 1/2"	32333 ft-lb	0.091 (9%)	1.25D+1.5L	L					PRO	150	
Shear	1852 lb	1'3 1/8"	11596 lb	0.160 (16%)	1.25D+1.5L	L				/	0/	121	
Perm Defl in.	0.006 (L/12576)	3'6 13/16"	0.215 (L/360)	0.030 (3%)	D	Uniform				1	PROFESSI T.L. W	ISE E	
							1				· · · · · · · · · · · · · · · · · · ·	100	

Design Notes

1 Fill all hanger nailing holes.

LL Defl inch 0.015 (L/5152)

TL Defl inch 0.021 (L/3655)

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 2-3-12	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 6-10-12	(Span)1-0-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-0-3		Far Face	32 lb	84 lb	0 lb	0 lb	J1
4	Point	2-6-11		Far Face	29 lb	77 lb	0 lb	0 lb	J1
5	Point	3-4-3		Far Face	120 lb	320 lb	0 lb	0 lb	J11

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 sulfability of the linead application, and to verify the dimensions and loads.

Lumber

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

Handling & Installation

3'6 15/16" 0.215 (L/360) 0.070 (7%) L

3'6 7/8" 0.322 (L/240) 0.070 (7%) D+L

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

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.

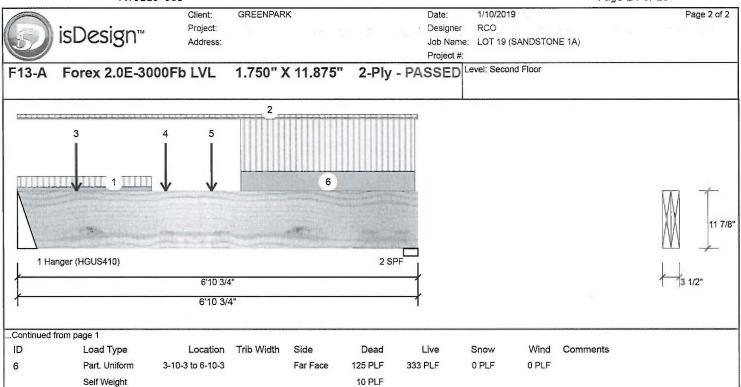
Kott Lumber Company 14 Anderson Blvd, Ontario 14A7X4

100083566

January 14, 2019







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 wrift the dimensions and loads.

Lumber

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

Handling & Installation

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

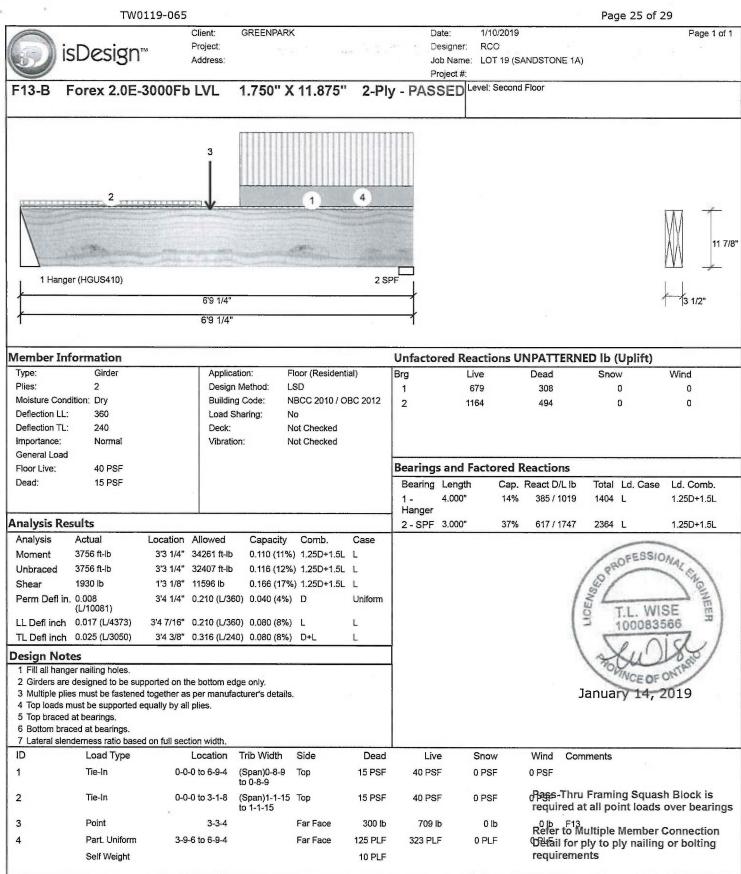
approvals
Damaged Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

This design is valid until 7/10/2021

Manufacturer Info

Forex APA: PR-L318





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

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

Handling & Installation

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

Manufacturer Info

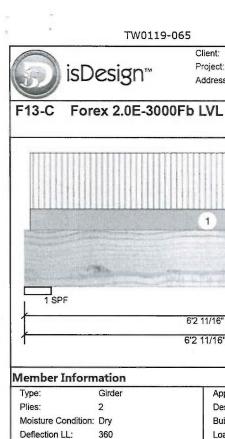
Forex APA: PR-L318

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, Ontario L4A 7X4







Client: GREENPARK

Project: Address:

1/10/2019 Date:

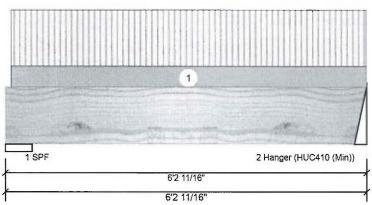
Designer: RCO

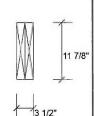
Job Name: LOT 19 (SANDSTONE 1A)

Project #:

Brg

2-Ply - PASSED Level: Second Floor 1.750" X 11.875"





Wind

Page 1 of 1

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

	• .		•	_
2	60	51	0	0

55

Dead

Snow

n

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

64

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 209 ft-lb 3'2 13/16" 34261 ft-lb 0.006 (1%) 1.25D+1.5L L Moment 209 ft-lb 3'2 13/16" 32759 ft-lb 0.006 (1%) 1.25D+1.5L L Unbraced 96 lb Shear 1'4 5/8" 11596 lb 0.008 (1%) 1.25D+1.5L L Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) LL Defl inch 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) TL Defl inch 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%)

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 5.500" 1% 68 / 95 164 L 1.25D+1.5L 2 -2.500" 2% 64/91 154 L 1.25D+1.5L Hanger



January 14, 2019

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-1-2 to 6-2-11	(Span)1-0-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				10 PLF				

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

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

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

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

 Damaged Beams must not be used

 Design assumss top edge is laterally restrained

 Provide lateral support at bearing points to avoid

 lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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

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



This design





GREENPARK

Client: Project:

Address:

1/10/2019

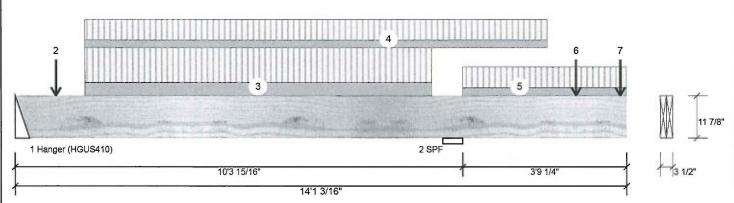
RCO Designer:

Job Name: LOT 19 (SANDSTONE 1A)

Project #:

Date:

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



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						

	Unfactored	Reactions	UNPATTERNED	lb (Uplift)
_	Bra	Live	Dead	Snow

Brg	Live	Dead	Snow	Wind
1	1352	538	0	0
2	2545	1082	0	0

Bearings and Factored Reactions												
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.						
1 - Hanger	4.000"	28%	672 / 2284	2956	L_	1.25D+1.5L						
2-SPF	5.500"	44%	1353 / 3818	5171	LL	1.25D+1.5L						

Analysis Res	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-3506 ft-lb	10'3 15/16"	29807 ft-lb	0.118 (12%)	1.25D+1.5L	L
Unbraced	-3506 ft-lb	10'3 15/16"	29807 ft-lb	0.118 (12%)	1.25D+1.5L	_L
Pos Moment	7156 ft-lb	5' 5/16"	34261 ft-lb	0.209 (21%)	1.25D+1.5L	L_
Unbraced	7156 ft-lb	5' 5/16"	30068 ft-lb	0.238 (24%)	1.25D+1.5L	L_
Shear	3368 lb	1'3 1/8"	11596 lb	0.290 (29%)	1.25D+1.5L	L_
Perm Defl in.	0.023 (L/5076)	4'11 5/16"	0.328 (L/360)	0.070 (7%)	D	Uniform
LL Defl inch	0.078 (L/1505)	5'2 1/4"	0.328 (L/360)	0.240 (24%)	L	L_
TL Defl inch	0.102 (L/1161)	5'1 9/16"	0.491 (L/240)	0.210 (21%)	D+L	L_
LL Cant	-0.083 (2L/1089)	Rt Cant	0.200 (2L/480)	0.415 (42%)	L	L_
TL Cant	-0.091 (2L/995)	Rt Cant	0.300 (2L/360)	0.303 (30%)	D+L	L_



Design Notes

- 1 Fill all hanger nailing holes.
- 2 Warning Note: right cant exceeds 1/3 of back span, wind uplift may need to be checked.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on full section width.

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

Lumber

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

chemicals

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318

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

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



This design



isDesign™

GREENPARK Client:

Project: Address:

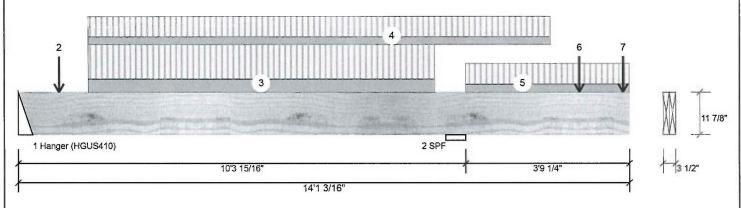
1/10/2019 Date:

RCO Designer:

Job Name: LOT 19 (SANDSTONE 1A)

Page 2 of 2

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-11-5		Far Face	90 lb	241 lb	0 lb	0 lb	J5
2	Point	0-11-5		Near Face	54 lb	144 lb	0 lb	0 lb	J3
3	Part. Uniform	1-7-5 to 9-7-5		Far Face	75 PLF	199 PLF	0 PLF	0 PLF	
4	Part, Uniform	1-7-5 to 12-3-5		Near Face	44 PLF	119 PLF	0 PLF	0 PLF	
5	Part. Uniform	10-3-15 to 14-1-3		Тор	45 PLF	120 PLF	0 PLF	0 PLF	
6	Point	12-11-5		Near Face	52 lb	139 lb	0 lb	0 ib	J3
7	Point	13-11-7		Near Face	51 lb	60 lb	0 lb	0 lb	F13
	Self Weight				10 PLF				

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

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

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

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

Handling & Installation

- Handling & Installation

 1. LVL beams must not be cut or drilled

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

 3. Damagad 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

Forex APA: PR-L318

Manufacturer Info

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

This design is valid until 7/10/2021

GREENPARK Client:

Project: Address:

1/10/2019 Date:

Designer: **RCO**

Job Name: LOT 19 (SANDSTONE 1A)

Project #:

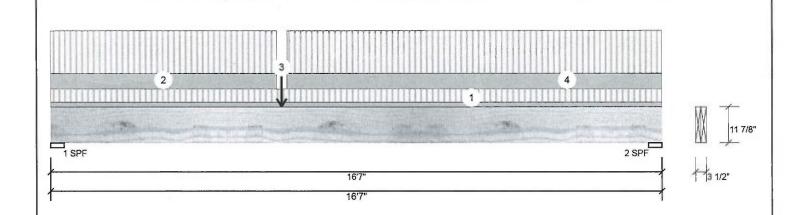
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor

Unfactored Reactions UNPATTERNED lb (Uplift)



Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	1078	502	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	738	367	0	0
Deflection LL:	360	Load Sharing:	No	-				
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	and Facto	red Reactions		
Dead:	15 PSF			Bearing L	ength.	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1-SPF 4	.375"	24% 628 / 1616	2245 L	1.25D+1.5L
				2-SPF 4	.375"	17% 459 / 1107	1566 L	1.25D+1.5L

Analysis Results

Member Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	12076 ft-lb	6'3 5/16"	34261 ft-lb	0.352 (35%)	1.25D+1.5L	L
Unbraced	12076 ft-lb	6'3 5/16"	22510 ft-lb	0.536 (54%)	1.25D+1.5L	L
Shear	2157 lb	1'3 1/2"	11596 lb	0.186 (19%)	1.25D+1.5L	L
Perm Defl in.	0.111 (L/1734)	7'9"	0.533 (L/360)	0.210 (21%)	D	Uniform
LL Defl inch	0.243 (L/791)	7'8 1/8"	0.533 (L/360)	0.460 (46%)	L	L
TL Defl inch	0.353 (L/543)	7'8 7/16"	0.799 (L/240)	0.440 (44%)	D+L	L

Design Notes

- 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.

Load Type

Tie-In

Point

Tie-In

Self Weight

EPROFESSIONAL END	\
T.L. WISE 100083566	(EED)
STOWN OF OUT PRIOR	/
January 14, 2019	

0 PSF		
0 PSF		
0 lb	F14	
a gap gihr	u Framing Squash Block is	

0 lb C Pass 0 PSF required at all point loads over bearings

Comments

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

Notes	
-------	--

ID

1

2

3

4

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

Lumber

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

chemicals

Handling & Installation

Location

6-3-5

0-0-0 to 16-7-0

0-0-0 to 6-1-9

Trib Width

(Span)1-1-1

(Span)0-3-15 Top

Side

Top

Near Face

landling & Installation

LVL beams must not be cut or drilled

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

Damaged Beams must not be used

Dealign assumes top edge is laterally restrelned

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

6-5-1 to 16-7-0 (Span)1-1-1 Top

For flat roofs provide proper drainage to prevent ponding

This design is va

Dead

15 PSF

15 PSF

538 lb

15 PSF

10 PLF

Live

40 PSF

40 PSF

1352 lb

40 PSF

Manufacturer Info Forex

Snow

0 PSF

0 PSF

Wind

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.

