# **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.

# <u>CODE</u>

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**

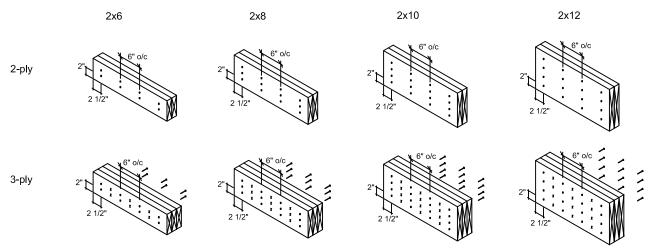
- 1. The building component used in construction must be the same as indicated on the drawings.
- 2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
- 3. Members consisting of multiple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



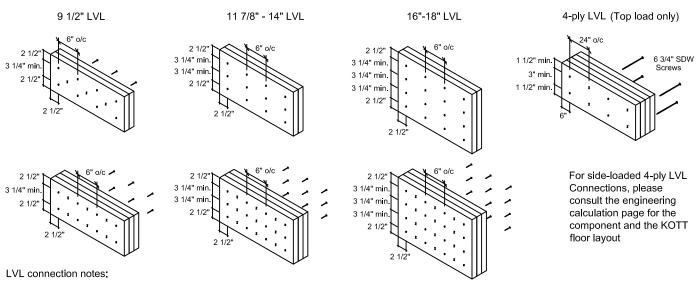
# **Conventional Connections**



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**



- -LVL ply width is 1-3/4"
- -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.

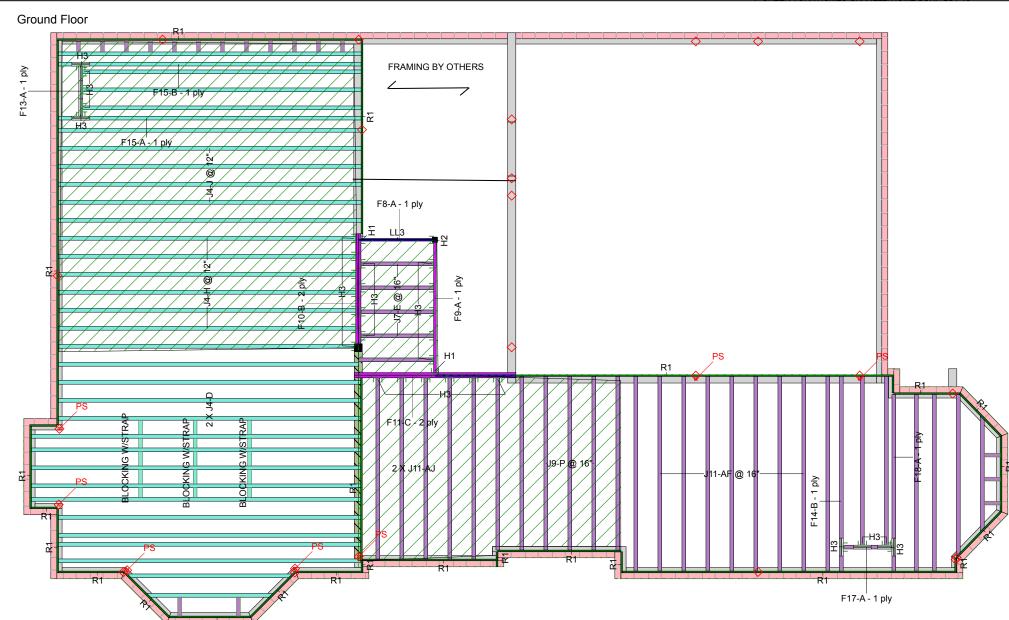
# **Multiple Member Connections**

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 613-838-2775



Architectural Drawing Info

JARDIN DESIGN GROUP INC 64 JARDIN DR,SUITE 3A VAUGHAN,ON, L4K 3P3

Project # 17-55 Model: LOT-13 (AMELIA 12 -Date: AUG 30 2018

JOISTS SPACING 16"O/C NOTED OTHERWISE

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -12904-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

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 KOTT span table for the loads and spacing shown on this layout.

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

I.MATIJEVIC 100528832 January 02, 2019

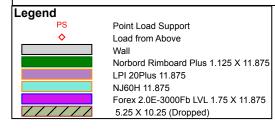
										Page 3 of 27 IM0119-003
Ground	Floor									
LVL/LS	L									
Label	Descri	ption	Width	Dep	oth	Qty	Plies	Pcs	Length	NASCOR
F11	Forex 2.0E-30	000Fb LVL	1.75	11.8	75	1	2	2	10-0-0	
F10	F10 Forex 2.0E-3000Fb LVL		1.75	11.8	75	1	2	2	8-0-0	Layout Name LOT -13 (AMELIA 12 EL- 1)
F9	F9 Forex 2.0E-3000Fb LVL		1.75	11.8	75			1	8-0-0	Design Method
F8 Forex 2.0E-3000Fb LVL			1.75	11.8	75			1	6-0-0	LSD Description
I Joist										GREEN YORK HOMES
Label	Descri	ption	Width	Dep	oth	Qty	Plies	Pcs	Length	GRANELLI HOMES PROJECT
F14	LPI 20F	•	2.5	11.8		,		1	12-0-0	BRAMPTON,ON
F18	LPI 20F		2.5	11.8	_			1	10-0-0	Created
F17	LPI 20F		2.5	11.8	_			1	4-0-0	May 31, 2018
J11	LPI 20F	Plus	2.5	11.8	75			14	12-0-0	Builder
J9	LPI 20F	Plus	2.5	11.8	75			11	10-0-0	
J8	LPI 20F	Plus	2.5	11.8	75			1	8-0-0	Sales Rep
J7	LPI 20F	Plus	2.5	11.8	75			5	6-0-0	Designer
F15	NJ60H		2.5	11.8	75			2	18-0-0	SB
F13	NJ60H		2.5	11.8	75			1	4-0-0	Shipping
J5	NJ60H		2.5	11.8	75			5	20-0-0	Project
J4 NJ60H		2.5	11.8	75			22	18-0-0		
J3 NJ60H			2.5	11.8	_			3	16-0-0	Builder's Project
J2	NJ60H		2.5	11.8	_			1	10-0-0	Kott Lumber Company
J1 NJ60H 2.5 11.875							1	8-0-0	14 Anderson Blvd	
Rim Board				_	1		T =		ı	Stouffville, Ontario
Label	Descri	•	Width	Dep	_	Qty	Plies	Pcs	Length	Canada
R1		d Rimboard	1.125	11.8	75			14	12	L4A 7X4
	Plus 1. 11.875	125 X								905-642-4400
Blockin									l	Ground Floor
	Descri	ntion	Width	Der	oth	Qty	Plies	Pcs	Length	Design Method LSD
BLK2	LPI 20		2.5	11.8		LinFt	1 1100	Varies	13-0-0	Building Code NBCC 2010 / OBC
BLK1	NJ60H		2.5	11.8	_	LinFt		Varies	11-0-0	2012
Hanger							1			Floor
						Be	am/Girde	r Sur	ported	Loads
									ember	Live 40
Label	Pcs	Descriptio	n S	kew	Slo	pe fa	asteners	fas	teners	Dead 15
H1	2	HUS1.81/1				<b>'</b>	30 16d	10	) 16d	Deflection Joist
H2	1	HUS1.81/1	0							LL Span L/ 480
H3	31	LF2511				12	10dx1 1/2	1 #8x	1 1/4WS	TL Span L/ 360
NOTES:						•		•		LL Cant 2L/ 480
										TL Cant 2L/ 360
		rify dimensi								Deflection Girder
	Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.								LL Span L/ 360	
	nstall 2x4 blocking @ 24" o/c under parallel non-loadbearing walls.							1		
	nstall single-ply flush window header along inside face of rimboard/rimjoist						st	- r -		
	Refer to Nascor specifier guide for installation details.						.	LL Cant 2L/ 480		
	6. Squash blocks recommended to be installed at end bearing on all first level							TL Cant 2L/ 360		
	joists which support loading from above exceeding two levels floor or roof.  7. Load transfer blocks to be installed under all point loads.							Decking		
8. It sha	all be the	e framer's re	sponsibi	ity tha	t floo	r joists a	nd beams			Deck OSB
are fa	stened	as per the h	anger ma	anufac	turer	's standa	rds.			Thickness 3/4"
Dofor to	Multiple	Member Co	nnootic	Doto:	l to r	ly to ply	acilina or b	olting		Fastener Nailed & Glued
requirem		MEHIDEI CO	in iectioi	Delai	ιωρ	iy to piy i	iaiiiig Ui D	oming		Vibration

requirements. Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than rim depth) @ 16" o/c. All other components and structural elements supporting

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

Hatch area represents ceramic tiled floor with an additional dead load

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







Client: Project: Address:

12/18/2018 Date:

Designer: S B

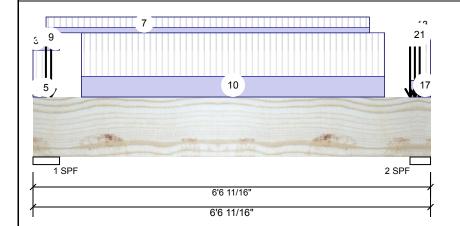
Job Name: LOT -13 (AMELIA 12 EL- 1)

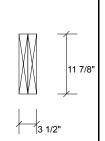
Project #:

Forex 2.0E-3000Fb LVL F10-B

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





Wind

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		

# **Unfactored Reactions UNPATTERNED Ib (Uplift)**

1	3755	1798	0	0
2	2610	1252	0	0

# **Bearings and Factored Reactions**

Bearing Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
1 - SPF 5.250"	70% 2247 / 5633	7880 L	1.25D+1.5L
2 - SPE 4 063"	63% 1565 / 3915	5480 I	1 25D+1 5I

### **Analysis Results**

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3714 ft-lb	3'3 3/4"	34261 ft-lb	0.108 (11%)	1.25D+1.5L	L
Unbraced	3714 ft-lb	3'3 3/4"	32638 ft-lb	0.114 (11%)	1.25D+1.5L	L
Shear	2285 lb	5'3 1/2"	11596 lb	0.197 (20%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/8835)	3'3 7/8"	0.197 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.016 (L/4425)	3'3 7/8"	0.197 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.024 (L/2948)	3'3 7/8"	0.295 (L/240)	0.080 (8%)	D+L	L

## **Design Notes**

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- $\,3\,$  Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.

15 PSF

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

7 Lateral slenderness ratio based on full section width.

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.



January 02, 2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
2	Part. Uniform	0-0-0 to 0-2-9		Тор	107 PLF	248 PLF	0 PLF	0 PLF	J4
3	Part. Uniform	0-0-0 to 0-2-9		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Point	0-2-9		Тор	1091 lb	2391 lb	0 lb	0 lb	F10 F10 F11 F11
5	Part. Uniform	0-2-9 to 0-2-9		Тор	107 PLF	248 PLF	0 PLF	0 PLF	J4
6	Part. Uniform	0-2-9 to 0-5-4	Pass-Thru F	raming	Squash Block	k is OPLF	0 PLF	0 PLF	Wall Self Weight

required at all point loads over bearings

Continued on page 2...

Refer to Multiple Member Connection
chemicals
Handling & Install Alexa il for ply to ply mailing or boiling

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

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.

Notes

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- 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 10/18/2021

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



Manufacturer Info

APA: PR-L318

Page 2 of 2

isDesign™

Client: Project: Address:

Date: 12/18/2018

Designer: S B

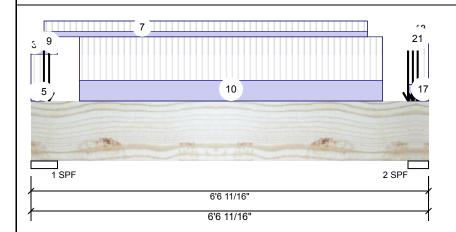
Job Name: LOT -13 (AMELIA 12 EL- 1)

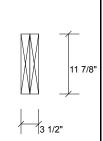
Project #:

Forex 2.0E-3000Fb LVL F10-B

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





Continued from	page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	0-2-9 to 5-6-9		Near Face	39 PLF	81 PLF	0 PLF	0 PLF	
9	Point	0-3-9		Far Face	101 lb	229 lb	0 lb	0 lb	J4
10	Part. Uniform	0-9-9 to 5-9-9		Far Face	157 PLF	330 PLF	0 PLF	0 PLF	
16	Point	6-2-10		Тор	2 lb	6 lb	0 lb	0 lb	
17	Part. Uniform	6-2-10 to 6-6-11		Тор	125 PLF	334 PLF	0 PLF	0 PLF	J4
18	Part. Uniform	6-2-10 to 6-6-11		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
19	Point	6-2-10		Near Face	59 lb	133 lb	0 lb	0 lb	F8
20	Point	6-3-9		Far Face	96 lb	203 lb	0 lb	0 lb	J4
21	Point	6-4-8		Тор	518 lb	1155 lb	0 lb	0 lb	F10 F10
	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
- LVL beams must not be cut or drilled
  Refer to manufacturer's product information
  regarding installation requirements, multi-ply
  fastening details, beam strength values, and code
- approvals

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

6. For flat roofs provide proper drainage to prevent ponding

READ ALL NOTES ON THIS PAGE AND ON THE

IS AN INTEGRAL PART OF THIS DRAWING AS IT

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

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

Manufacturer Info

APA: PR-L318

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



Client: Project: Address:

12/18/2018 Date: Designer: SB

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

# Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Brg

1

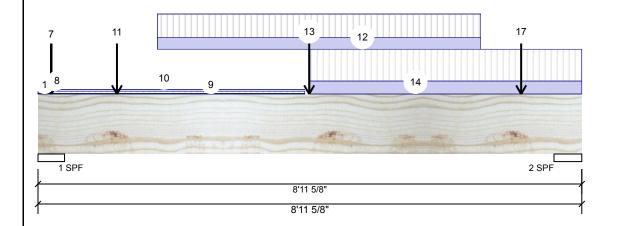
2

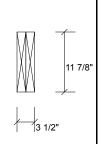
Bearing Length

1 - SPF 5.250"

2 - SPF 5.500"

Level: Ground Floor





0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Member Inform	ation
Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	

40 PSF 15 PSF

Application: Floor (Residential) Design Method: **Building Code:** NBCC 2010 / OBC 2012 Load Sharing: No Deck:

Not Checked

Not Checked

**Bearings and Factored Reactions** 

Live

1357

1908

Dead

717

907

Cap. React D/L lb

34%

897 / 2035

1134 / 2862

### **Unfactored Reactions UNPATTERNED Ib (Uplift)** Wind 0 0

0

Total Ld. Case

2931 I

3996 I

# **Analysis Results**

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7299 ft-lb	4'8 7/16"	34261 ft-lb	0.213 (21%)	1.25D+1.5L	L
Unbraced	7299 ft-lb	4'8 7/16"	31134 ft-lb	0.234 (23%)	1.25D+1.5L	L
Shear	3228 lb	7'7"	11596 lb	0.278 (28%)	1.25D+1.5L	L
Perm Defl in.	0.025 (L/3939)	4'6 7/8"	0.273 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.051 (L/1942)	4'7 5/16"	0.273 (L/360)	0.190 (19%)	L	L
TL Defl inch	0.076 (L/1301)	4'7 3/16"	0.410 (L/240)	0.180 (18%)	D+L	L

Vibration:

# **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

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.



January 02, 2019

Comments

Wind

L	7 Lateral dicitae	incoc ratio bacca on it	an oconon whatm.					
ĺ	ID	Load Type	Location	Trib Width	Side	Dead	Live	
	1	Tie-In	0-0-0 to 0-2-14	(Span)0-7-4	Тор	15 PSF	40 PSF	
	2	Tie-In	0-0-0 to 0-4-2	(Span)0-4-12	Тор	15 PSF	40 PSF	
	3	Point	0-2-10		Тор	3 lb	7 lb	
	4	Point	0-2-10		Тор	2 lb	0 lb	
	5	Point	0-2-10		Тор	46 lb	113 lb	

0 PSF 0 PSF 0 PSF Pass-Thiu Framing Squash Block is о в required at all point loads over bearings

O lb Refer to Multiple Member Connection
O lb Detail ferbply to ply nailing or bolting requirements

Continued on page 2...

### Notes

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

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Snow

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



Page 2 of 2

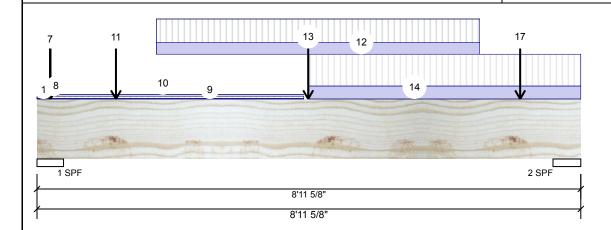
isDesign™

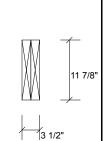
Client: Project: Address: Date: 12/18/2018 Designer: S B

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

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





Contir	nued from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	0-2-10		Тор	12 lb	28 lb	0 lb	0 lb	J4
7	Point	0-2-10		Тор	36 lb	0 lb	0 lb	0 lb	Wall Self Weight
8	Part. Uniform	0-2-12 to 0-4-2		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
9	Tie-In	0-2-14 to 4-4-13	(Span)0-10-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
10	Part. Uniform	0-2-14 to 4-4-13		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
11	Point	1-3-10		Near Face	110 lb	225 lb	0 lb	0 lb	J11
12	Part. Uniform	1-11-10 to 7-3-10		Near Face	98 PLF	201 PLF	0 PLF	0 PLF	
13	Point	4-5-11		Far Face	154 lb	281 lb	0 lb	0 lb	F9
14	Part. Uniform	4-5-13 to 8-11-10		Тор	110 PLF	270 PLF	0 PLF	0 PLF	
17	Point	7-11-10		Near Face	123 lb	251 lb	0 lb	0 lb	J9
	Self Weight				10 PLF				40



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.

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

- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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



Client: Project: Address:

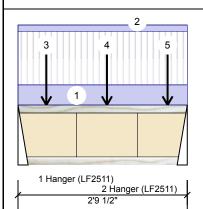
12/18/2018 Date: Designer: SB

Job Name: LOT -13 (AMELIA 12 EL- 1)

Level: Ground Floor

Project #:

#### NJ60H 11.875" - PASSED



2'9 1/2"

11 7/8"

Wind

0

0

0

0

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

### **Unfactored Reactions UNPATTERNED Ib (Uplift)** Brg

Dead

192

205

Live

404

430

2

Hanger

l								
	Bearing	s and Fa	ctored l	Reactions				
I	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
	1 - Hanger	2.000"	53%	240 / 606	846	L	1.25D+1.5L	
١	2 -	2.000"	56%	256 / 645	901	L	1.25D+1.5L	

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	595 ft-lb	1'5 5/8"	7350 ft-lb	0.081 (8%)	1.25D+1.5L	L
Unbraced	595 ft-lb	1'5 5/8"	6470 ft-lb	0.092 (9%)	1.25D+1.5L	L
Shear	896 lb	2'8 1/4"	2350 lb	0.381 (38%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/13242)	1'5 5/8"	0.086 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.005 (L/6309)	1'5 5/8"	0.086 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.007 (L/4273)	1'5 5/8"	0.129 (L/240)	0.060 (6%)	D+L	L

# **Design Notes**

ID

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

Load Type



January 02, 2019

1	Tie-In	0-0-0 to 2-9-8	(Span)1-3-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Part. Uniform	0-0-0 to 2-9-8		Тор	3 PLF	0 PLF	0 PLF	0 PLF
3	Point	0-5-10		Near Face	113 lb	239 lb	0 lb	0 lb
4	Point	1-5-10		Near Face	145 lb	305 lb	0 lb	ass-Thru I
5	Point	2-5-10		Near Face	104 lb	218 lb		quire@ <sup> </sup> at

-Thru Framing Squash Block is reθ at alβpoint loads over bearings

READ ALL NOTES ON THIS PAGE AND ON THE **Refer to Multiple Member Connection** ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE Detail for ply to ply nailing or bolting IS AN INTEGRAL PART OF THIS DRAWING AS IT requirements **CONTAINS SPECIFICATIONS AND CRITERIA USED** 

Live

Snow

Wind

0 lb J3

#### Notes

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

- Dry service conditions, unless noted otherwise
   IJoist not to be treated with fire retardant or corrosive
- Handling & Installation
- IARIGHING & INSEGUATION

  Lost flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

IN THE DESIGN OF THIS COMPONENT.

Location Trib Width

- 5. Provide lateral support at bearing points to avoid

Dead

- lateral displacement and rotation
  6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
  7. For flat roofs provide proper drainage to prevent

CCMC: 12787

Manufacturer Info

KOTT Inc.

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



Client: Project: Address:

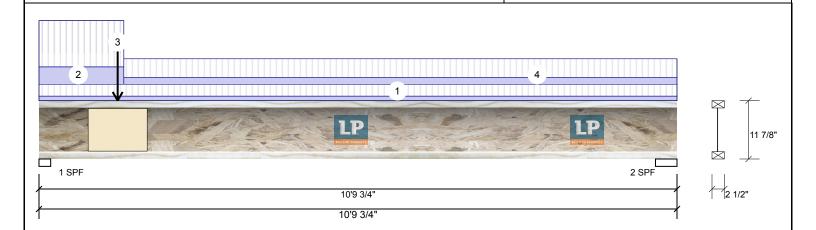
12/18/2018 Date: Designer: SB

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

#### 11.875" - PASSED LPI 20Plus

Level: Ground Floor



Member Info	rmation			Unfactored Reactions UNPATTERNED lb (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	1	Design Method:	LSD	1	421	158	0	0			
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	235	88	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	ored Reactions					
Dead:	15 PSF			Bearing L	.ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1 - SPF 2	375"	51% 197 / 632	829 L	1.25D+1.5L			
				2-SPF 4	.375"	25% 110 / 353	464 L	1.25D+1.5L			

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1287 ft-lb	4'8 1/16"	6250 ft-lb	0.206 (21%)	1.25D+1.5L	L
Shear	810 lb	1 5/8"	2345 lb	0.345 (35%)	1.25D+1.5L	L
Perm Defl in.	0.020 (L/6303)	5' 15/16"	0.346 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.053 (L/2363)	5' 15/16"	0.346 (L/360)	0.150 (15%)	L	L
TL Defl inch	0.072 (L/1719)	5' 15/16"	0.519 (L/240)	0.140 (14%)	D+L	L

Location

1-4-0

1-5-4 to 10-9-12 (Span)1-2-0

0-0-0 to 10-9-12

0-0-0 to 1-5-4

Trib Width

(Span)0-9-0

(Span)2-11-0 Top

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.

Side

Top

Top

Near Face

# **Design Notes**

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.020", Long Term = 0.030"
- 3 See manufacture installation guide note E4 for installation details
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange must be laterally braced at a maximum of 8'9" o.c.

6 Bottom flange braced at bearings.

Load Type

Tie-In

Tie-In

Point

Tie-In



40 PSF 0 PSF 0 PSF 40 PSF 0 PSF 0 PSF 192 lb 0 lb 0 lb F17 40 PSF 0 PSF 0 PSF

Wind

Snow

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

Comments

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

ID

2

3

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

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Dead

15 PSF

15 PSF

**15 PSF** 

72 lb

Live

This design is valid until 10/31/2020

### Manufacturer Info

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

CCMC: 12412-R APA: PR-L238C

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







Client: Project: Address:

Date: Designer: SB

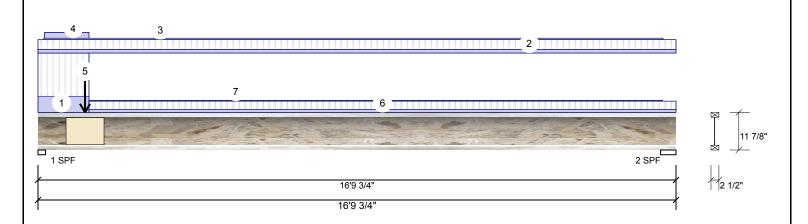
12/18/2018

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

#### NJ60H 11.875" - PASSED

Level: Ground Floor



<b>Member Info</b>	rmation			Unfactore	d Reacti	ons UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	647	313	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	242	118	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	ored Reactions		
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 2	.375"	81% 391 / 971	1362 L	1.25D+1.5L
				2-SPF 4	.875"	27% 148 / 363	511 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2308 ft-lb	7'1 5/8"	7350 ft-lb	0.314 (31%)	1.25D+1.5L	L
Unbraced	2308 ft-lb	7'1 5/8"	2322 ft-lb	0.994 (99%)	1.25D+1.5L	L
Shear	1342 lb	1 5/8"	2350 lb	0.571 (57%)	1.25D+1.5L	L
Perm Defl in	. 0.075 (L/2618)	7'11 7/16"	0.544 (L/360)	0.140 (14%)	D	Uniform
LL Defl inch	0.153 (L/1285)	7'11 5/16"	0.544 (L/360)	0.280 (28%)	L	L
TL Defl inch	0.227 (L/862)	7'11 3/8"	0.817 (L/240)	0.280 (28%)	D+L	L

# **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top flange must be laterally braced at a maximum of 6'6" o.c.
- 3 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Win	January 02, 2019
1	Tie-In	0-0-0 to 1-4-2	(Span)3-0-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-9-12	(Span)0-8-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-1-14 to 16-5-10		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-1 to 1-4-2		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-2-14		Far Face	192 lb	404 lb	0 lb		F13
6	Tie-In	1-4-2 to 16-9-12	(Span)0-6-14	Тор	15 PSF	40 PSF	0 PSF	Pass-Thyp F	Framing Squash Block is all point loads over bearings
7	Part. Uniform	1-4-2 to 16-5-9		Тор	1 PLF	0 PLF	0 PLF	0 PLF	all pollit loads over bearings

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.

PROFESSIONAL LICENSES **I.MATIJEVIC** 100528832 SHOWINGE OF ONTRH

January 02, 2019

**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
   Idoist not to be treated with fire retardant or corrosive
- Handling & Installation
- anoling & installation

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

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

KOTT Inc.

Manufacturer Info

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





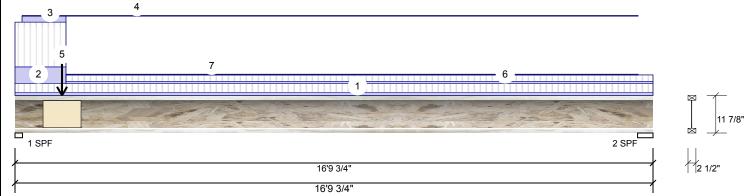
Client: Project: Address: Date: 12/18/2018 Designer:

SB Job Name: LOT -13 (AMELIA 12 EL- 1)

Level: Ground Floor

Project #:

#### 11.875" - PASSED NJ60H



Member Infor	rmation	Unfactore	d Reacti	ions UNPATT	<b>ERNED</b> Ib	(Uplift)			
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Sne	ow	Wind
Plies:	1	Design Method:	LSD	1	634	302		0	0
Moisture Conditio	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	202	95		0	0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF			Bearings a	and Fact	ored Reactio	ns		
Dead:	15 PSF			Bearing L	ength	Cap. React D	/L lb Tota	Ld. Case	Ld. Comb.
				1 - SPF 2	.375"	79% 378	951 1329	) L	1.25D+1.5L
A l . d . D l				2-SPF 4	.875"	22% 119	302 42	L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1986 ft-lb	6'8 3/4"	7350 ft-lb	0.270 (27%)	1.25D+1.5L	L
Unbraced	1986 ft-lb	6'8 3/4"	2003 ft-lb	0.991 (99%)	1.25D+1.5L	L
Shear	1310 lb	1 5/8"	2350 lb	0.557 (56%)	1.25D+1.5L	L
Perm Defl in.	0.063 (L/3108)	7'10 1/4"	0.544 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.132 (L/1480)	7'10 1/4"	0.544 (L/360)	0.240 (24%)	L	L
TL Defl inch	0.195 (L/1003)	7'10 1/4"	0.817 (L/240)	0.240 (24%)	D+L	L

### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top flange must be laterally braced at a maximum of 7' o.c.
- 3 Bottom flange braced at bearings.

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.

				-			
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 16-9-12	(Span)0-6-14	Тор	15 PSF	40 PSF	0 PSF
2	Tie-In	0-0-0 to 1-4-2	(Span)3-0-0	Тор	15 PSF	40 PSF	0 PSF
3	Part. Uniform	0-2-4 to 1-4-2		Тор	8 PLF	0 PLF	0 PLF
4	Part. Uniform	0-2-4 to 16-5-0		Тор	1 PLF	0 PLF	0 PLF
5	Point	1-2-14		Near Face	205 lb	430 lb	0 lb
6	Tie-In	1-4-2 to 16-9-12	(Span)0-5-2	Тор	15 PSF	40 PSF	0 PSF
7	Part. Uniform	1-4-2 to 16-5-1		Тор	1 PLF	0 PLF	0 PLF



January 02, 2019

0 lb F13 Pass Ծիչբµ 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
   IJoist not to be treated with fire retardant or corrosive
- Handling & Installation
- IARIGHING & INSEGUATION

  Lost flanges must not be cut or drilled

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

  Damaged IJoists must not be used

  Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.
- 5. Provide lateral support at bearing points to avoid

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

Manufacturer Info

0 PSF 0 PSF 0 PLF 0 PLF

KOTT Inc. CCMC: 12787 Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400





Client: Project: Address: Date:

Designer: S B

Job Name: LOT -13 (AMELIA 12 EL- 1)

12/18/2018

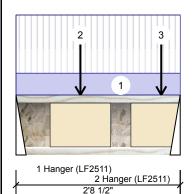
Level: Ground Floor

Project #:

Brg

1

#### 11.875" - PASSED LPI 20Plus



2'8 1/2"

11 7/8"

Wind

O

0

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

# **Unfactored Reactions UNPATTERNED Ib (Uplift)**

Dead

72

Live

192

	Journal of the state of the sta
	Bearings and Factored Reactions
ı	
ı	
	2 273 105 0 0

### **Analysis Results**

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	332 ft-lb	1' 3/4"	6250 ft-lb	0.053 (5%)	1.25D+1.5L	L
Shear	534 lb	2'7 1/4"	2345 lb	0.228 (23%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/22280)	1' 3/4"	0.083 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/8395)	1' 3/4"	0.083 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.005 (L/6098)	1' 3/4"	0.125 (L/240)	0.040 (4%)	D+L	L

### **Design Notes** 1 Provide restraint at supports to ensure lateral stability.

- 2 Dead Load Deflection: Instant = 0.001", Long Term = 0.002"
- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange braced at bearings.
- 7 Bottom flange braced at bearings

Bearing	Bearings and Factored Reactions											
Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.						
1 -	2.000"	24%	90 / 288	378	L	1.25D+1.5L						

Hanger 2.000" 34% 131 / 409 540 L 1.25D+1.5L Hanger



January 02, 2019

L										
ĺ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 2-8-8	(Span)1-4-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Point	1-0-12		Far Face	86 lb	229 lb	0 lb	0 lb	J9
	3	Point	2-4-12		Far Face	63 lb	161 lb	0 lb	0 lb	J9
		Pass-Thru Framing Squash Block is								

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

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

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This design is valid until

### Manufacturer Info

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CCMC: 12412-R APA: PR-L238C

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







Client: Project: Address:

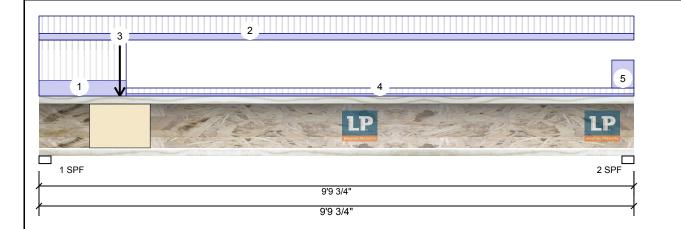
12/18/2018 Date: Designer: S B

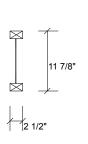
Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

#### 11.875" - PASSED LPI 20Plus

Level: Ground Floor





Wind

0

0

1.25D+1.5L

1.25D+1.5L

0

0

928 L

417 L

**I.MATIJEVIC** 

100528832

2, 2019

### Member Information

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

#### **Unfactored Reactions UNPATTERNED Ib (Uplift)** Brg Dead

26%

179

91

Live 470

202

2

1 - SPF 2.375"

2 - SPF 2.375"

Bearings a	Bearings and Factored Reactions									
Bearing Le	ength Cap.	React D/L lb	Total Ld. Case	e Ld. Comb.						

223 / 705

113 / 303

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1158 ft-lb	3'8 7/8"	6250 ft-lb	0.185 (19%)	1.25D+1.5L	L
Shear	906 lb	1 5/8"	2345 lb	0.386 (39%)	1.25D+1.5L	L
Perm Defl in.	0.016 (L/7308)	4'6 3/16"	0.318 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.041 (L/2770)	4'6 3/16"	0.318 (L/360)	0.130 (13%)	L	L
TL Defl inch	0.057 (L/2009)	4'6 3/16"	0.477 (L/240)	0.120 (12%)	D+L	L

## **Design Notes**

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.016", Long Term = 0.024"
- 3 See manufacture installation guide note E4 for installation details
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange must be laterally braced at a maximum of 9'1" o.c.

6 Bottom flan	ge braced at bearings								9
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	January 02
1	Tie-In	0-0-0 to 1-5-4	(Span)2-11-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 9-9-12	(Span)1-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-4-0		Far Face	105 lb	273 lb	0 lb	0 lb	F17
4	Tie-In	1-5-4 to 9-9-12	(Span)0-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Part. Uniform	9-5-6 to 9-9-12		Тор	40 PLF	0 PLF	0 PLF	Pass Officer	FWall Self Weightsh

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.

Pass-गामिप मिक्सिमिस अवंशिवं Block is required at all point loads over bearings

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

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Manufacturer Info

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

CCMC: 12412-R APA: PR-L238C

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







Client: Project: Address:

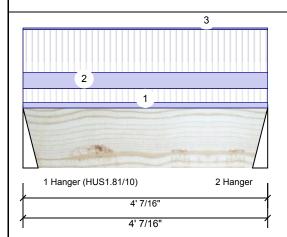
12/18/2018 Date: Designer: S B

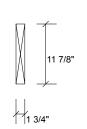
Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

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

Level: Ground Floor





Wind

O

0

0

0

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

#### **Unfactored Reactions UNPATTERNED Ib (Uplift)** Brg Live Dead

215

215

2

l												
l												
l												
I												
I												
Bear	Bearings and Factored Reactions											
						<b>-</b>						

96

96

### Analysis Results

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	368 ft-lb	2' 3/16"	17130 ft-lb	0.021 (2%)	1.25D+1.5L	L
Unbraced	368 ft-lb	2' 3/16"	12143 ft-lb	0.030 (3%)	1.25D+1.5L	L
Shear	185 lb	1'2 1/8"	5798 lb	0.032 (3%)	1.25D+1.5L	L
Perm Defl in	. 0.001 (L/52355)	2' 1/4"	0.122 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/23440)	2' 1/4"	0.122 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.003 (L/16191)	2' 1/4"	0.183 (L/240)	0.010 (1%)	D+L	L

Dearing.	J unu i u	ictorca i	Cuctions				
Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	11%	121 / 323	444	L,	1.25D+1.5L	
2 - Hanger	3.000"	11%	121 / 323	444	L	1.25D+1.5L	

### **Design Notes**

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



January 02, 2019

	Self Weight				5 PLF		Pa	ass-Thru I	Framing Sq
3	Part. Uniform	0-0-0 to 4-0-7		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 4-0-7		Тор	30 PLF	80 PLF	0 PLF	0 PLF	
1	Tie-In	0-0-0 to 4-0-7	(Span)1-4-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments

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.

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

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





Client: Project: Address:

12/18/2018 Date:

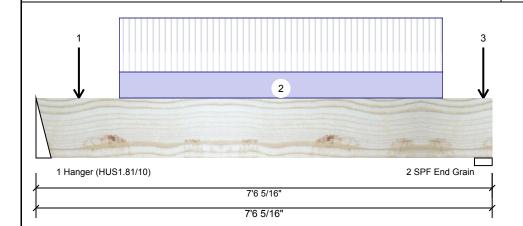
Designer: S B

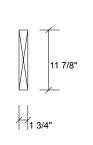
Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

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

Level: Ground Floor





#### Member Information

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

### **Unfactored Reactions UNPATTERNED Ib (Uplift)**

ı	Brg	Live	Dead	Snow	vvina	
I	1	281	154	0	0	
l	2	244	135	0	0	
l						
1						

### Analysis Results

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1087 ft-lb	3'8 13/16"	17130 ft-lb	0.063 (6%)	1.25D+1.5L	L
Unbraced	1087 ft-lb	3'8 13/16"	6326 ft-lb	0.172 (17%)	1.25D+1.5L	L
Shear	676 lb	1'2 1/8"	5798 lb	0.117 (12%)	1.25D+1.5L	L
Perm Defl in.	0.007 (L/13076)	3'8 7/8"	0.237 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.012 (L/7091)	3'8 7/8"	0.237 (L/360)	0.050 (5%)	L	L
TL Defl inch	0.019 (L/4598)	3'8 7/8"	0.355 (L/240)	0.050 (5%)	D+L	L

### **Bearings and Factored Reactions**

- · · · · · · · · · · · · · · · · · · ·							
Bearing	Length	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	16%	192 / 422	614	L	1.25D+1.5L	
2 - SPF End Grain	3.500"	12%	169 / 366	534	L	1.25D+1.5L	

# **Design Notes**

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



January 02, 2019

	Self Weight				5 PLF		Pa	iss-Thru l	Framing Sq	J
3	Point	7-4-8		Тор	1 lb	3 lb	0 lb	0 lb		
2	Part. Uniform	1-4-8 to 6-8-8		Far Face	39 PLF	81 PLF	0 PLF	0 PLF		
1	Point	0-8-8		Far Face	44 lb	90 lb	0 lb	0 lb	J7	
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	

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.

quash Block is required at all point loads over bearings

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

### Notes

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

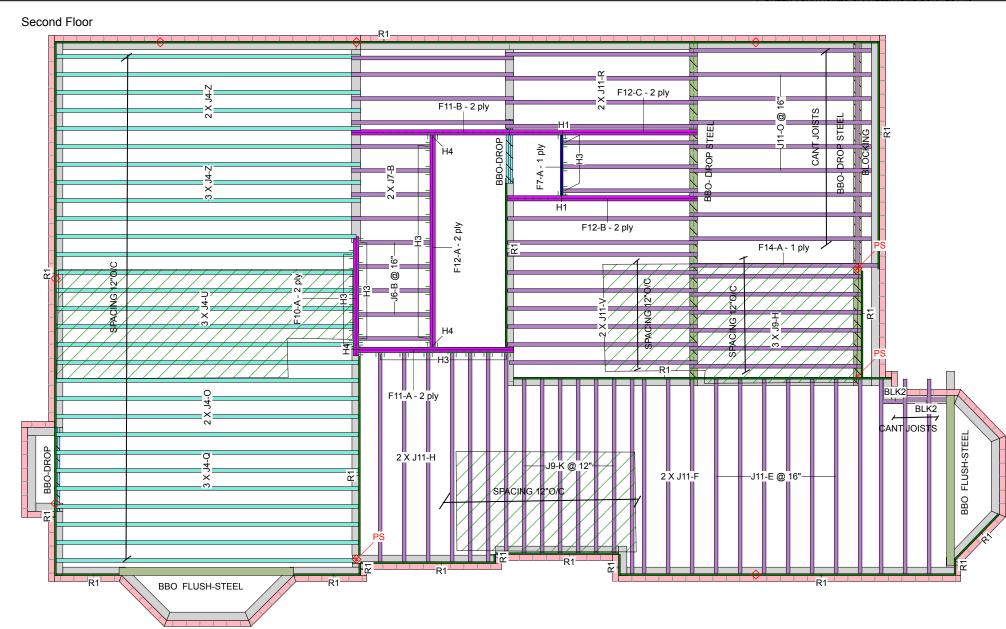
6. For flat roofs provide proper drainage to prevent ponding

APA: PR-L318

Manufacturer Info

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





JOISTS SPACING 16"O/C UNLESS NOTED OTHERWISE

Architectural Drawing Info

JARDIN DESIGN GROUP INC 64 JARDIN DR.SUITE 3A VAUGHAN,ON, L4K 3P3

Proiect # 17-55 Model: LOT-13 (AMELIA 12 EL-1) Date: AUG 30 2018

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -12904-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

This certification is to confirm that:

approved components conform to the floor assembly

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

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



Second Floor LVL/LSL Label Description Width Depth Qty Plies Pcs Length F12 1.75 11.875 6 2.0E-3000Fb LVL F11 10-0-0 Forex 1.75 11.875 2.0E-3000Fb LVL LOT -13 (AMELIA 12 EL- 1) F10 Forex 1.75 11.875 2 8-0-0 Design Method 2.0E-3000Fb LVL LSD F7 1.75 11.875 4-0-0 Forex 2.0E-3000Fb LVL Description GREEN YORK HOMES l Joist GRANELLI HOMES PROJECT Label Description Width Depth Qty Plies Pcs Length BRAMPTON,ON J11 LPI 20Plus 2.5 11.875 43 12-0-0 Created 2.5 11.875 16 10-0-0 J9 LPI 20Plus 2.5 11.875 8-0-0 May 31, 2018 J8 LPI 20Plus J7 LPI 20Plus 2.5 11.875 6-0-0 4 Builder J6 LPI 20Plus 2.5 11.875 5 4-0-0 Sales Rep 2.5 11.875 F14 LPI 20Plus 1 12-0-0 2.5 11.875 Designer J4 NJ60H 29 18-0-0 Rim Board Plies Width Depth Pcs Length Qty Label Description Shipping Norbord Rimboard 1.125 11.875 Project Plus 1.125 X 11.875 Builder's Project Blocking **Kott Lumber Company** Plies Pcs Length Label Description Width Depth Qty 14 Anderson Blvd BLK2 LPI 20 Plus 2.5 11.875 LinFt Varies 14-0-0 Stouffville, Ontario Hanger Canada Beam/Girder Supported L4A 7X4 Member 905-642-4400 Label Pcs Description Skew Slope fasteners fasteners **Second Floor** H1 2 HUS1.81/10 30 16d 10 16d LSD Design Method Н3 30 LF2511 1 #8x1 1/4WS 12 10d 2 #8x1 1/4WS Building Code NBCC 2010 / OBC H4 3 LF3511 12 10d 2012 NOTES: Floor Loads Framer to verify dimensions on the architectural drawings. Double joist only require filler/backer ply when supporting another Live member using a face-mounted hanger. 15 Dead Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls. Deflection Joist Install single-ply flush window header along inside face of rimboard/rimjoist Refer to Nascor specifier guide for installation details. LL Span L/ 480 Squash blocks recommended to be installed at end bearing on all first level 360 TL Span L/ joists which support loading from above exceeding two levels floor or roof. 480 LL Cant 2L/ Load transfer blocks to be installed under all point loads. TL Cant 2L/ 360 It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards. Deflection Girder LL Span L/ 360 Refer to Multiple Member Connection Detail to ply to ply nailing or bolting TL Span L/ 240 reauirements. LL Cant 2L/ 480 Rim parallel to joists: 1-1/8" rimboard with TL Cant 2L/ 360 2"x4" block (1/16" longer than rim depth) @ 16" o/c. Decking All other components and structural elements supporting OSB the floor system such as beams, walls, columns and Deck foundation walls and footings including anchorage of 5/8" Thickness components and bracing for lateral stability are the Fastener Nailed & Glued esponsibility of others. Vibration

1. The loads used in the calculation of the attached shown on this layout.

Norbord Rimboard Plus 1.125 X 11.875 LPI 20Plus 11.875 NJ60H 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875 1.5 X 9.5 (Dropped) 1.75 X 9.5 (Dropped) 5 X 10.25 (Dropped) 5 X 10.25 5.25 X 10.25

to construction

Legend

Hatch area represents ceramic tiled floor with an additional dead load

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

Point Load Support

Load from Above



Ceiling:

Gypsum 1/2"



Client: Project: Address:

12/18/2018 Date:

Designer: SB

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Brg

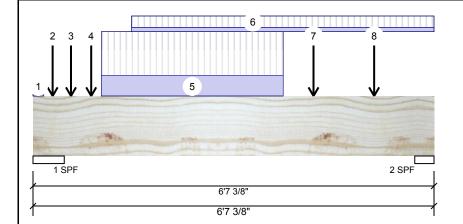
1 2

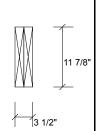
Bearing Length

1 - SPF 6.188"

2 - SPF 3.813"

Level: Second Floor





Wind

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Mem		

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

### **Unfactored Reactions UNPATTERNED Ib (Uplift)**

Dead

932

518

Cap. React D/L lb

Wind

0 PSF 0 lb F11

> 0 lb J4

Comments

29%

Live

2030

1155

Be	arings and F	actored Re	actions		

1165 / 3045

648 / 1732

Snow

O

0

Total Ld. Case

4210 L

2380

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3687 ft-lb	3'4 7/8"	34261 ft-lb	0.108 (11%)	1.25D+1.5L	L
Unbraced	3687 ft-lb	3'4 7/8"	32638 ft-lb	0.113 (11%)	1.25D+1.5L	L
Shear	2653 lb	1'5 5/16"	11596 lb	0.229 (23%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/9333)	3'4 13/16"	0.197 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.016 (L/4353)	3'4 15/16"	0.197 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.024 (L/2968)	3'4 7/8"	0.295 (L/240)	0.080 (8%)	D+L	L

Allalysis	Actual	Location	Allowed	Capacity	COITID.	Casc
Moment	3687 ft-lb	3'4 7/8"	34261 ft-lb	0.108 (11%)	1.25D+1.5L	L
Unbraced	3687 ft-lb	3'4 7/8"	32638 ft-lb	0.113 (11%)	1.25D+1.5L	L
Shear	2653 lb	1'5 5/16"	11596 lb	0.229 (23%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/9333)	3'4 13/16"	0.197 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.016 (L/4353)	3'4 15/16"	0.197 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.024 (L/2968)	3'4 7/8"	0.295 (L/240)	0.080 (8%)	D+L	L

## **Design Notes**

Continued on page 2...

- 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.

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.



January 02, 2019

ı	C Edicial dichaemics falls based on fall coolish with.							
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
I	1	Tie-In	0-0-0 to 0-2-2	(Span)1-4-0	Тор	15 PSF	40 PSF	0 PSF
I	2	Point	0-3-14		Near Face	318 lb	722 lb	0 lb
I	3	Point	0-7-8		Far Face	145 lb	326 lb	0 lb
I	4	Point	0-11-8		Near Face	29 lb	78 lb	0 lb
I	5	Part. Uniform	1-1-8 to 4-1-8		Far Face	155 PLF	326 PLF	0 PLF
I	6	Part. Uniform	1-7-8 to 6-7-6		Near Face	32 PLF	85 PLF	0 PLF

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

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

Manufacturer Info

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

6. For flat roofs provide proper drainage to prevent ponding

APA: PR-L318

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



Page 2 of 2



Client:

Project: Address: Date: 12/18/2018 Designer: S B

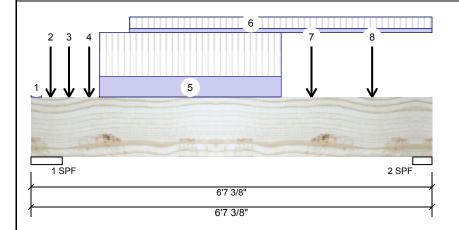
Job Name: LOT -13 (AMELIA 12 EL- 1)

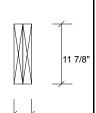
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor





Continued	from	nage	1	

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Point	4-7-8		Far Face	147 lb	326 lb	0 lb	0 lb	J4
8	Point	5-7-8		Far Face	122 lb	326 lb	0 lb	0 lb	J4
	Self Weight				10 PLF				

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

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

NOtes

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- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
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- L. UV. beams must not be cut or drilled
   Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
   Damaged Beams must not be used

- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

APA: PR-L318

Manufacturer Info

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







Client: Project: Address:

Date: Designer: SB

12/18/2018

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

Forex 2.0E-3000Fb LVL

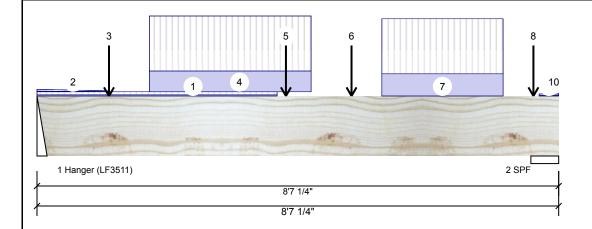
1.750" X 11.875"

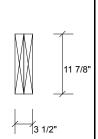
2-Ply - PASSED

1

2

Level: Second Floor





Wind

0

0

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

15 PSF

Application: Floor (Residential) Design Method: **Building Code:** NBCC 2010 / OBC 2012 Load Sharing: No

Not Checked

Not Checked

#### **Unfactored Reactions UNPATTERNED Ib (Uplift)** Brg Live Dead

477

482

1083

1067

Snow

0 PSF

0 PSF

L												
	Bearings and Factored Reactions											
ſ	Bearing	Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.					
ı	1 - Hanger	2.000"	43%	597 / 1624	2221	L	1.25D+1.5L					
l	2 - SPF	5.500"	19%	603 / 1600	2203	L	1.25D+1.5L					

### Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5768 ft-lb	4'1 1/4"	34261 ft-lb	0.168 (17%)	1.25D+1.5L	L
Unbraced	5768 ft-lb	4'1 1/4"	31205 ft-lb	0.185 (18%)	1.25D+1.5L	L
Shear	2383 lb	1'1 1/8"	11596 lb	0.206 (21%)	1.25D+1.5L	L
Perm Defl in.	0.018 (L/5535)	4'1 5/16"	0.270 (L/360)	0.070 (7%)	D	Uniform
LL Defl inch	0.039 (L/2465)	4'1 5/16"	0.270 (L/360)	0.150 (15%)	L	L
TL Defl inch	0.057 (L/1705)	4'1 5/16"	0.405 (L/240)	0.140 (14%)	D+L	L

Deck: Vibration:

# **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

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



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January 02, 2019

ı	/ Eater at cicil activities that a backa cit fall cocacit matrix							
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	
ı	1	Tie-In	0-0-0 to 3-11-8	(Span)0-7-10	Тор	15 PSF	40 PSF	
	2	Tie-In	0-0-0 to 1-2-4	(Span)0-4-7 to 0-1-12	Тор	15 PSF	40 PSF	
ı	3	Point	1-2-4		Near Face	106 lb	283 lb	
ı	4	Part. Uniform	1-10-4 to 4-6-4		Near Face	86 PLF	228 PLF	
ı	5	Point	4-1-4		Far Face	227 lb	457 lb	

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

Comments

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

### Notes

Continued on page 2...

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

6. For flat roofs provide proper drainage to prevent ponding

APA: PR-L318

**Manufacturer Info** 

Wind

0 PSF

0 PSF

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



Page 2 of 2



Client: Project:

Address:

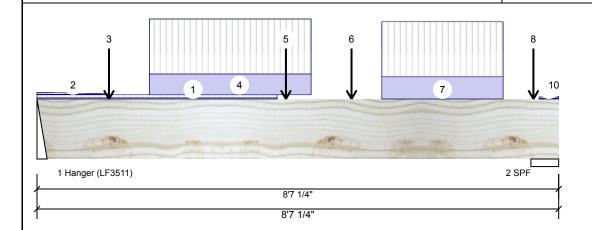
Date: Designer: S B

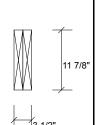
12/18/2018

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

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





Continued from p	age 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	5-2-4		Near Face	101 lb	267 lb	0 lb	0 lb	J11
7	Part. Uniform	5-8-4 to 7-8-4		Near Face	92 PLF	228 PLF	0 PLF	0 PLF	
8	Point	8-2-4		Near Face	7 lb	17 lb	0 lb	0 lb	J11
9	Tie-In	8-3-6 to 8-7-4	(Span)0-3-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
10	Tie-In	8-4-8 to 8-7-4	(Span)0-8-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				10 PLF				



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.

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

- Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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





Client: Project: Address:

12/18/2018 Date: Designer:

SB Job Name: LOT -13 (AMELIA 12 EL- 1)

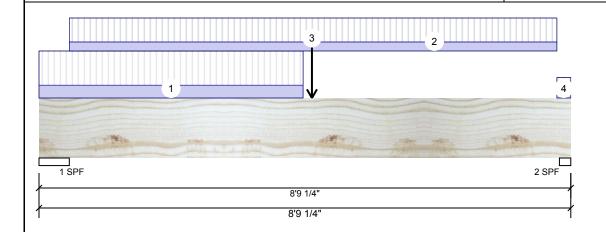
Project #

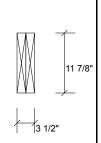
Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED

Level: Second Floor





Wind

0

0

Member	Information
Type:	Girder

Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal General Load 40 PSF Floor Live: 15 PSF Dead:

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

Load Sharing: No Deck: Not Checked Vibration: Not Checked **Unfactored Reactions UNPATTERNED Ib (Uplift)** Brg Live Dead 326 194 1 2 284 175

# **Bearings and Factored Reactions**

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 6.000" 243 / 489 6% 732 L 1.25D+1.5L 2 - SPF 2.250" 13% 218 / 426 644 I 1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2373 ft-lb	4'6"	34261 ft-lb	0.069 (7%)	1.25D+1.5L	L
Unbraced	2373 ft-lb	4'6"	31126 ft-lb	0.076 (8%)	1.25D+1.5L	L
Shear	651 lb	1'5 1/8"	11596 lb	0.056 (6%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/12337)	4'6"	0.274 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.014 (L/6978)	4'6"	0.274 (L/360)	0.050 (5%)	Ĺ	L
TL Defl inch	0.022 (L/4457)	4'6"	0.410 (L/240)	0.050 (5%)	D+L	L

### **Design Notes**

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

Self Weight

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



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January 02, 2019

ı	טו	Load Type	Location	Trib Wiath	Side	Dead	Live	Snow	vvina	Comments
	1	Tie-In	0-0-0 to 4-4-4	(Span)0-9-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Tie-In	0-6-0 to 8-6-8	(Span)0-6-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	3	Point	4-6-0		Near Face	226 lb	452 lb	0 lb	0 lb	F12 raming Squash Block is
	4	Tie-In	8-6-8 to 8-9-4	(Span)0-4-2	Тор	15 PSF	40 PSF	<sup>0</sup> PSF requi	red at a	Ill point loads over bearings

10 PLF

**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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info APA: PR-L318

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



Client: Project: Address: Date: 12/18/2018

Designer: S B

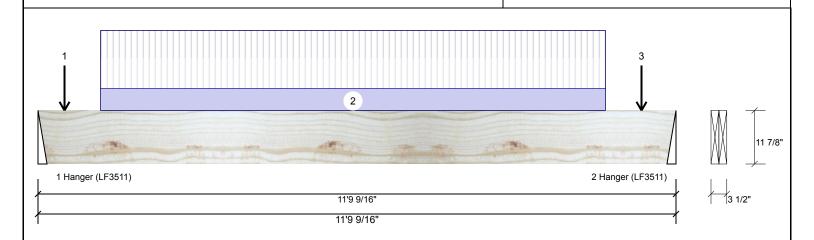
Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor



Member Inforn	nation				Unfactored Reactions UNPATTERNED Ib (Uplift)					
Type:	Girder		Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2		Design Method:	LSD	1	457		227	0	0
Moisture Condition:	: Dry		Building Code:	NBCC 2010 / OBC 2012	2	452		226	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 Re	eactions		
Dead:	15 PSF				Bearing	Length	Cap. F	React D/L lb	Total Ld. Case	Ld. Comb.
					1 -	2.000"	19%	284 / 686	970 L	1.25D+1.5L
					Hanger					
Analysis Result	s				2 -	2.000"	18%	282 / 678	961 L	1.25D+1.5L
Analysis Act	ual l	ocation All	lowed Capac	ity Comb. Case	Hanger					

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2817 ft-lb	5'10 13/16"	34261 ft-lb	0.082 (8%)	1.25D+1.5L	L
Unbraced	2817 ft-lb	5'10 13/16"	28015 ft-lb	0.101 (10%)	1.25D+1.5L	L
Shear	957 lb	1'1 1/8"	11596 lb	0.083 (8%)	1.25D+1.5L	L
Perm Defl in.	0.018 (L/7688)	5'10 13/16"	0.386 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.037 (L/3809)	5'10 13/16"	0.386 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.055 (L/2547)	5'10 13/16"	0.579 (L/240)	0.090 (9%)	D+L	L

# **Design Notes**

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

	hanger nailing holes.								12 (11)	
2 Girder	s are designed to be supp	orted on the bottom ed	dge only.						TO, W	-
3 Multipl	e plies must be fastened t	together as per manufa	acturer's detail	S.					INCO	CNI
4 Top bra	aced at bearings.								OF OF	0
5 Botton	n braced at bearings.								1	2010
6 Latera	l slenderness ratio based	on full section width.							January 02,	2019
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Point	0-5-14		Far Face	29 lb	78 lb	0 lb	0 lb	J6	
2	Part. Uniform	1-1-14 to 10-5-14		Far Face	30 PLF	80 PLF	0 PLF	0 PLF		
3	Point	11-1-14		Far Face	32 lb	85 lb	0 lb	0 lb	J7	
	Self Weight				10 PLF		Pa	ss-Thru F	raming Squash E	Block is

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.

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

6. For flat roofs provide proper drainage to prevent ponding

APA: PR-L318

Manufacturer Info

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

PROFESSIONAL

**I.MATIJEVIC** 100528832







Client: Project: Address: Date: 12/18/2018 Designer: SB

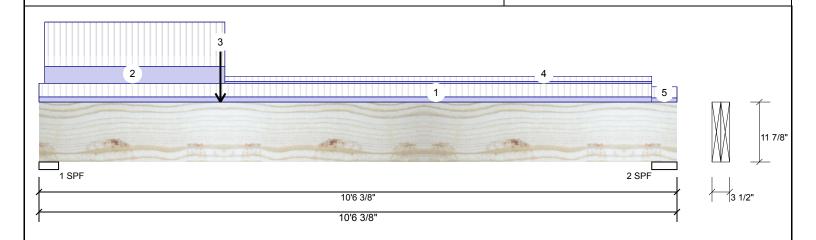
Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Second Floor



Member Info	rmation			Unfactore	D lb (Uplift)			
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	854	386	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	385	201	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	ored Reactions		
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 3	.875"	21% 483 / 1281	1763 L	1.25D+1.5L
				2-SPF 5	.000"	8% 251 / 577	829 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3967 ft-lb	2'11 15/16"	34261 ft-lb	0.116 (12%)	1.25D+1.5L	L
Unbraced	3967 ft-lb	2'11 15/16"	29686 ft-lb	0.134 (13%)	1.25D+1.5L	L
Shear	1526 lb	1'3"	11596 lb	0.132 (13%)	1.25D+1.5L	L
Perm Defl in.	0.016 (L/7566)	4'8 1/4"	0.331 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.034 (L/3536)	4'7 1/8"	0.331 (L/360)	0.100 (10%)	L	L
TL Defl inch	0.049 (L/2410)	4'7 1/2"	0.496 (L/240)	0.100 (10%)	D+L	L

### **Design Notes**

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

6 Lateral slenderness ratio based on full section width.

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.



January 02, 2019

o Lateral Sichael	incoo ratio basca on	idii Sectioni Widin.			I					
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 10-1-6	(Span)1-1-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-1-2 to 3-0-13	(Span)3-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Point	2-11-15		Far Face	295 lb	727 lb	0 lb	0 lb	F7	
4	Tie-In	3-0-13 to 10-1-6	(Span)0-5-1	Тор	15 PSF	40 PSF	0 PSF F	asesThr	u Framing Squash Block is	
5	Tie-In	10-1-6 to 10-6-6	(Span) 0-10-15	Тор	15 PSF	40 PSF	0 PSF	required at all point loads over bearings		

10 PLF

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

Self Weight

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
  - LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
  - approvals

    Damaged Beams must not be used

  - Design assumes top edge is laterally restrained
    Provide lateral support at bearing points to avoid
    lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info APA: PR-L318

requirements

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



**Refer to Multiple Member Connection** 

Detail for ply to ply nailing or bolting



2

Client: Project: Address:

3

12/18/2018 Date: Designer: SB

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

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

Application:

Design Method:

**Building Code:** 

Load Sharing:

Deck:

Vibration:

10'5 1/4' 10'5 1/4"

Floor (Residential)

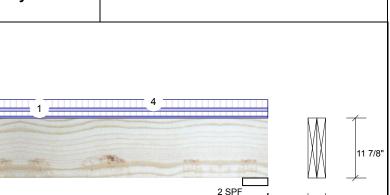
Not Checked

Not Checked

NBCC 2010 / OBC 2012

LSD

No



Member Information					
Type:	Girder				
Plies:	2				

1 SPF

Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Normal

General Load 40 PSF Floor Live: 15 PSF Dead:

# **Unfactored Reactions UNPATTERNED Ib (Uplift)**

Brg	Live	Dead	Snow	Wind
1	742	344	0	0
2	312	174	0	0
1				

# **Bearings and Factored Reactions**

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 430 / 1113 1 - SPF 2.250" 32% 1542 L 1.25D+1.5L 2 - SPF 5.000" 6% 218 / 468 686 1.25D+1.5L

### Analysis Results

Importance:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3569 ft-lb	2'10 13/16"	34261 ft-lb	0.104 (10%)	1.25D+1.5L	L
Unbraced	3569 ft-lb	2'10 13/16"	29647 ft-lb	0.120 (12%)	1.25D+1.5L	L
Shear	1353 lb	1'1 3/8"	11596 lb	0.117 (12%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/8394)	4'6 7/16"	0.332 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.029 (L/4056)	4'5"	0.332 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.044 (L/2735)	4'5 1/2"	0.498 (L/240)	0.090 (9%)	D+L	L

### **Design Notes**

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

5 Bottom braced	d at bearings.								January 02, 2019	
6 Lateral slende	rness ratio based or	n full section width.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 10-5-4	(Span)0-4-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-0-0 to 2-11-11	(Span)3-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Point	2-10-13		Near Face	278 lb	679 lb	0 lb	0 lb	F7	
4	Tie-In	2-11-11 to 10-5-4	(Span)0-6-14	Тор	15 PSF	40 PSF	0 PSF		ru Framing Squash Block is	
Self Weight	Self Weight	10 PLF						required at all point loads over bearings		

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.

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

### Notes

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

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

6. For flat roofs provide proper drainage to prevent ponding

APA: PR-L318

**Manufacturer Info** 

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

ENGINEER

**I.MATIJEVIC** 100528832

SOVINCE OF





Client: Project: Address:

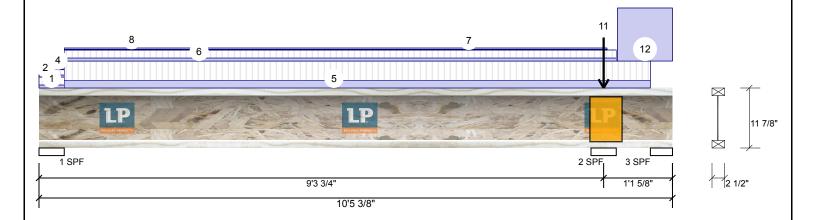
12/18/2018 Date: Designer: SB

Job Name: LOT -13 (AMELIA 12 EL- 1)

Project #:

#### 11.875" - PASSED LPI 20Plus

Level: Second Floor



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

Unfactored	Reactions	<b>UNPA</b>	TTERNED	lb	(Uplift)
------------	-----------	-------------	---------	----	----------

Brg	Live	Dead	Snow	Wind
1	174	75	0	0
2	415	328	224	0
3	0 (-184)	(-26)	0	0

### **Bearings and Factored Reactions**

I	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
l	1 - SPF	5.000"	17%	80 / 225	305	L_	1.25D+1.5L
1	2 - SPF	5.000"	43%	568 / 1166	1734	LL	1.25D+1.5L +0.5S
١	3 - SPF	4.375"	47%	-198 / -667	-865 (-865)	L_	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-783 ft-lb	9'3 3/4"	6250 ft-lb	0.125 (13%)	1.25D+1.5L	LL
Pos Moment	507 ft-lb	3'9 3/4"	6250 ft-lb	0.081 (8%)	1.25D+1.5L	L_
Shear	990 lb	9'3 3/4"	2345 lb	0.422 (42%)	1.25D+1.5L	LL
Perm Defl in.	0.010 (L/11145)	4'8 9/16"	0.299 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.022 (L/4841)	4'8 7/16"	0.299 (L/360)	0.070 (7%)	L+0.5S	L_
TL Defl inch	0.032 (L/3375)	4'8 1/2"	0.448 (L/240)	0.070 (7%)	D+L+0.5S	L_

# **Design Notes**

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Applied loads over end bearings and loads exceeding 250 lbs over intermediate bearings must be transferred directly to the support by rim board, blocking, squash blocks, or other
- 3 Dead Load Deflection: Instant = 0.010", Long Term = 0.014"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Tie-down connection required at bearing 3 for uplift 865 lb (Combination 1.25D+1.5L, Load
- 6 Top flange braced at bearings.
- 7 Bottom flange braced at bearings



Comments Passarhru Framing Squash Block is

Kott Lumber Company 14 Anderson Blvd, Ontario

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

required at all point loads over bearings

Canada

905-642-4400

1	Tie-In	0-0-0 to 0-5-0
2	Tie-In	0-0-0 to 0-5-0
4	Part. Uniform	0-0-0 to 0-5-0

Load Type

0-0-0 to 0-5-0 Top Continued on page 2... READ ALL NOTES ON THIS PAGE AND ON THE IS AN INTEGRAL PART OF THIS DRAWING AS IT

Location

Trib Width

(Span)0-7-3

(Span)0-4-13 Top

### Notes

ID

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

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ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

Side

Top



This design is valid until 10/31/2020

Live

40 PSF

40 PSF

0 PLF

Dead

15 PSF

15 PSF

1 PLF

### **Manufacturer Info**

Snow

0 PSF

0 PSF

0 PLF

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

CCMC: 12412-R APA: PR-L238C

Wind







Page 2 of 2



Client: Project: Address:

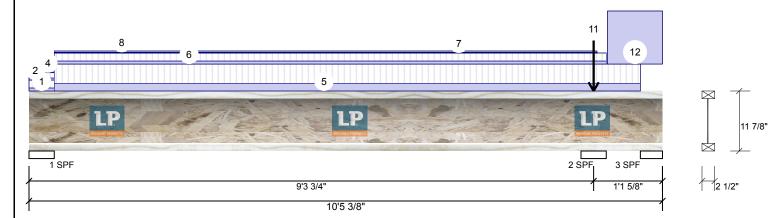
12/18/2018 Designer: S B

Job Name: LOT -13 (AMELIA 12 EL- 1)

Level: Second Floor

Project #:

#### 11.875" - PASSED LPI 20Plus



.Continued	from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Tie-In	0-5-0 to 10-1-0	(Span)1-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	0-5-0 to 9-6-4	(Span)0-7-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Tapered Start	0-5-0		Тор	0 PLF	0 PLF	0 PLF	0 PLF	
	End	9-4-7			1 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	0-5-0 to 9-4-7		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
9	Point	9-3-12		Тор	108 lb	0 lb	224 lb	0 lb	F3 F3
	Bearing Length	0-3-0							
10	Point	9-3-12		Тор	21 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-0							
11	Point	9-3-12		Тор	1 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-0							
12	Part. Uniform	9-6-8 to 10-5-6		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight



January 02, 2019

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

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.

**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.

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### Manufacturer Info

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

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

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







Client: Project: Address:

12/18/2018 Date:

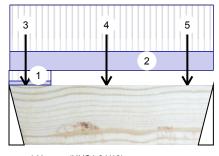
Designer: SB

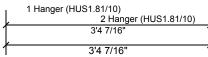
Job Name: LOT -13 (AMELIA 12 EL- 1)

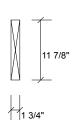
Project #:

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

Level: Second Floor







Wind

O

0

1366 L

0

0

1.25D+1.5L

# Member Information Type: Plies:

Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal General Load

40 PSF Floor Live: Dead: 15 PSF

#### Floor (Residential) Application: Design Method:

NBCC 2010 / OBC 2012 No

Load Sharing: Deck: Not Checked Vibration: Not Checked

**Building Code:** 

# **Bearings and Factored Reactions**

35%

3.000"

Live

727

679

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 368 / 1090 1.25D+1.5L 1 -3.000" 1458 L Hanger

347 / 1019

J8

.18

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Dead

295

278

2 -Hanger

Brg

1

2

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	947 ft-lb	1'7 5/16"	17130 ft-lb	0.055 (6%)	1.25D+1.5L	L
Unbraced	947 ft-lb	1'7 5/16"	13790 ft-lb	0.069 (7%)	1.25D+1.5L	L
Shear	736 lb	1'2 1/8"	5798 lb	0.127 (13%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/21549)	1'7 5/16"	0.100 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/8786)	1'7 5/16"	0.100 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.006 (L/6241)	1'7 5/16"	0.150 (L/240)	0.040 (4%)	D+L	L

# **Design Notes**

ΙD

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

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January 02, 2019

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind
1	Tie-In	0-0-0 to 0-8-5	(Span)3-1-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Part. Uniform	0-0-3 to 3-4-7		Тор	110 PLF	270 PLF	0 PLF	0 PLF
3	Point	0-3-5		Near Face	47 lb	127 lb	0 lb	0 lb
4	Point	1-7-5		Near Face	72 lb	192 lb	0 lb	0 lb
5	Point	2-11-5		Near Face	52 lb	138 lb	0 lb	0 lb
	Self Weight	READ ALL NOTES ON THIS PAGE AND ON THE						Pass

0 lb J8 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

IN THE DESIGN OF THIS COMPONENT.

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

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** 

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info APA: PR-L318

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

