LIANA 1 (ELEV.1)

GRANELLI HOME CORP.

**GREEN YORK HOMES** 

**Kott Lumber Company** 

D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES

**\GRANELLI HOME CORP\MODELS** 

LSD

2012

15

480

360

480

360

360

240

480

360

OSB

3/4"

Nailed & Glued

\LIANA 1\LIANA 1 ELEV 1\FLOOR

Building Code NBCC 2010 / OBC

14 Anderson Blvd

Stouffville, Ontario

\LIANA 1 (ELEV.1).isl

Canada

L4A 7X4

905-642-4400

Design Method

**Deflection Joist** 

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

Deflection Girder

Floor

Loads

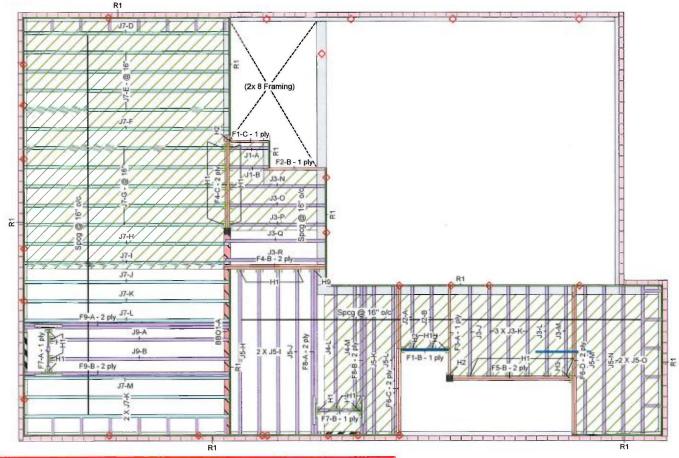
Live

Dead

BRAMPTON, ONT.

May 29, 2018

#### Ground Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY SHOWN ON THIS LAYOUT.

2. THE FLOOR JOISTS COMPLY WITH THE NASCOR SPAN TABLE FOR THE LOADS AND SPACING SHOWN ON THIS LAYOUT.

THE FLOOR SYSTEM MUST BE ASSEMBLED IN ACCORDANCE TO THE NASCOR SPECIFIER GUIDE. MULTI-PLY MEMBERS MUST BE ATTACHED TOGETHER AS PER THE INCLUDED MULTIPLE MEMBER CONNECTION DETAIL.

ALL OTHER COMPONENTS AND STRUCTURAL ELEMENTS SUPPORTING THE FLOOR SYSTEM SUCH AS BEAMS, WALLS, **COLUMNS AND FOUNDATION WALLS AND FOOTINGS** INCLUDING ANCHORAGE OF COMPONENTS AND BRACING FOR LATERAL STABILITY ARE THE RESPONSIBILITY OF OTHERS.

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL **POINT LOADS OVER BEARINGS.** 





Load from Above Wall Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ60H 9.5

- 2. Nascor CCMC 13535-R
- 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)



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





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

3. LVL CCMC -14056-R



LVL/LSL (Flush) Pcs Length Qty Plies Label Description Width Depth F6 1.75 9.5 4 12-0-0 .0E-3000Fb LVL Layout Name F5 1.75 9.5 2 2 10-0-0 Forex 2.0E-3000Fb LVL F4 Forex 1.75 9.5 2 4 8-0-0 Design Method 2.0E-3000Fb LVL F3 1.75 9.5 8-0-0 orex .0E-3000Fb LVL Description F2 Forex 1.75 9.5 1 6-0-0 2.0E-3000Fb LVL 1.75 2 4-0-0 Created 2.0E-3000Fb LVL Joist (Flush) Builder Label Description Width Depth Qty Plies Pcs Length J7 NJ60H 2.5 9.5 19 16-0-0 F9 9.5 16-0-0 Sales Rep NJH 2.5 4 F8 NJH 2.5 9.5 12-0-0 F7 NJH 2.5 9.5 4-0-0 2 Designer J9 NJH 2.5 9.5 2 14-0-0 J5 NJH 2.5 10 12-0-0 9.5 Shipping J4 NJH 2.5 9.5 10-0-0 J3 NJH 2.5 9.5 11 8-0-0 Project 2 6-0-0 Builder's Project J2 NJH 2.5 9.5 J1 NJH 2.5 9.5 2 4-0-0 Rim Board Label Description Width Depth Qty Plies Pcs Length Norbord Rimboard 1.125 9.5 12 Plus 1.125 X 9.5

Hanger

					Beam/Girder	Supported	905-642-4400		
						Member	Job Path		
Label	Pcs	Description	Skew	Slope	fasteners	fasteners	D:\Users\rochavillo		
H1	30	LT259			4 10dx1 1/2	2 10dx1 1/2	HOME\GREEN YO		
H2	4	HUS1.81/10			30 16d	10 16d	\GRANELLI HOME		
НЗ	1	HGUS410			46 16d	16 16d	\LIANA 1\LIANA 1		
H9	1	THAI-2 (Min)			2 10d	2 10dx1 1/2	\LIANA 1 (ELEV.1).		
NOTES:							Ground Floor		

#### NOTES:

. Framer to verify dimensions on the architectural drawings.

2. Double joist only require filler/backer ply when supporting

another member using a face-mounted hanger.

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

rimboard/rimjoist. 5. Refer to Nascor specifier guide for installation works.

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

Load transfer blocks to be installed under all point loads.

8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: Rev.2; May 22,2018

Project No: 17-55 Model: Liana 1

M-2057

**EWP Studio** Simpson Strong-Tie® Component Solutions™



the Ontario 332/12 as amended

19-447187.000.00 RR.

\GRANELLI HOME CORP\MODELS \LIANA 1\LIANA 1 ELEV 1\FLOOR

LSD

2012

40

15

480

360

480

360

360

240

480

360

OSB

5/8"

Nailed & Glued

Gypsum 1/2"

\LIANA 1 (ELEV.1).isl

Second Floor

Design Method

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Deckina

Thickness

Vibration

Fastener

Deck

Deflection Girder

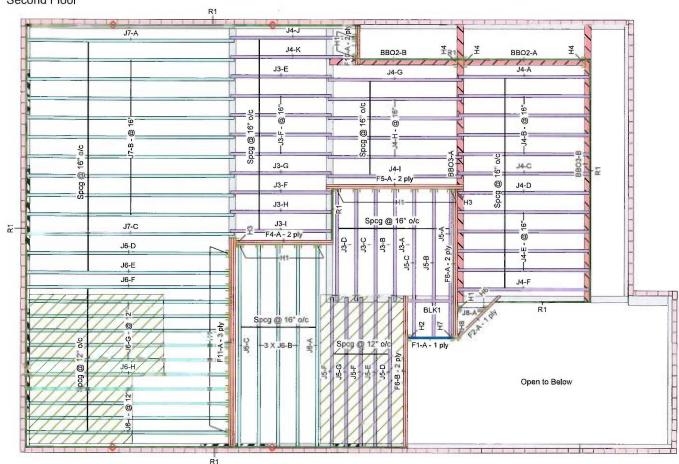
Floor

oads

Live

Dead

#### Second Floor



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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS



#### 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.

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### Legend



Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ60H 9.5 NJH 9.5

- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)



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

										TAOL ZZ OI JU
Second			-							
LVL/LS								_		
Label	Descr	iption	Width	De	pth	Qty	Plies	Pcs	Length	NASCOR
F11	Forex 2.0E-3	000Fb LVL	1.75		9.5	1	3	3	16-0-0	
F6	Forex 2.0E-3	000Fb LVL	1.75		9.5	2	2	4	12-0-0	Layout Name LIANA 1 (ELEV.1)
F5	Forex 2.0E-3	000Fb LVL	1.75		9.5	1	2	2	10-0-0	Design Method
F4	Forex 2.0E-3	000Fb LVL	1.75		9.5	1	2	2	8-0-0	Description
F2	Forex 2.0E-3	000Fb LVL	1.75		9.5			1	6-0-0	GRANELLI HOME CORP. BRAMPTON, ONT.
F10	Forex 2.0E-3	000Fb LVL	1.75		9.5	1	2	2	4-0-0	Created
F1	Forex 2.0E-3	000Fb LVL	1.75		9.5			1	4-0-0	May 29, 2018 Builder
I Joist (	Flush)		_				·			GREEN YORK HOMES
Label	Descr	iption	Width	De	pth	Qty	Plies	Pcs	Length	Sales Rep
J7	NJ60H		2.5		9.5			11	16-0-0	RM
J6	NJ60H		2.5		9.5			18	14-0-0	
J5	NJH		2.5		9.5			8	12-0-0	Designer
J4	NJH		2.5		9.5			20	10-0-0	RCO
J3	NJH		2.5		9.5			13	8-0-0	Shipping
J8	ИЈН		2.5		9.5			1	2-0-0	Project
Rim Bo	ard									Builder's Project
Label	Descr	iption	Width	De	pth	Qty	Plies	Pcs	Length	
R1		d Rimboard 125 X 9.5	1.125		9.5			11	12	Kott Lumber Company 14 Anderson Blvd
Blockin	g									Stouffville, Ontario
Label	Descri	iption	Width	De	pth	Qty	Plies	Pcs	Length	Canada
BLK1	NJH		2.5	15	9.5	LinFt		Varies	3-0-0	L4A 7X4
Hanger										905-642-4400
						Bea	am/Girder		ported ember	Job Path
Label	Pcs	Description	n S	kew	Slope	fa	asteners		teners	D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES
114			-			1		1		100 MEDITORICATION OF THE PROPERTY OF THE PROP

H2 1 HUS1.81/10 30 16d 10 16d НЗ 2 HGUS410 46 16d H4 Unknown 3 Hanger H<sub>6</sub> 1 SUR2.56/9 (Min) Right 14 10dx1 1/2 2 10dx1 1/2 Building Code NBCC 2010 / OBC H7 HUCQ1.81/9-1

4 10dx1 1/2

#### H8 1 LSSUI25 NOTES:

H1

28 LT259

. Framer to verify dimensions on the architectural drawings.

Right

- 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. 4. Install single-ply flush window header along inside face of
- rimboard/rimioist . Refer to Nascor specifier guide for installation works.
- 6. Squash blocks recommended to be installed at end bearing on
- all first level joists which support loading from above exceeding two levels floor or roof.
- . Load transfer blocks to be installed under all point loads.
- 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

#### ARCHITECTURAL DRAWINGS

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: Rev.2; May 22,2018 Project No: 17-55

Model: Liana 1

M-2057

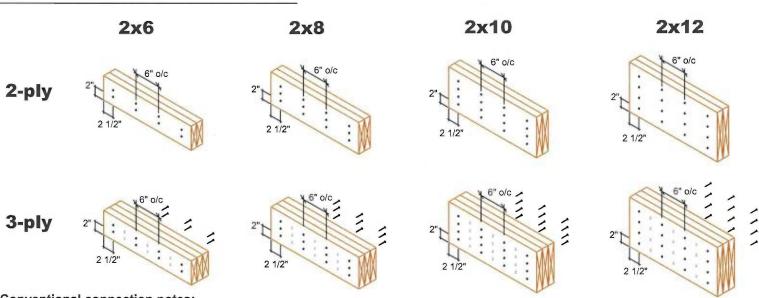




**EWP Studio** Simpson Strong-Tie® Component Solutions™

# **MULTIPLE MEMBER CONNECTIONS**

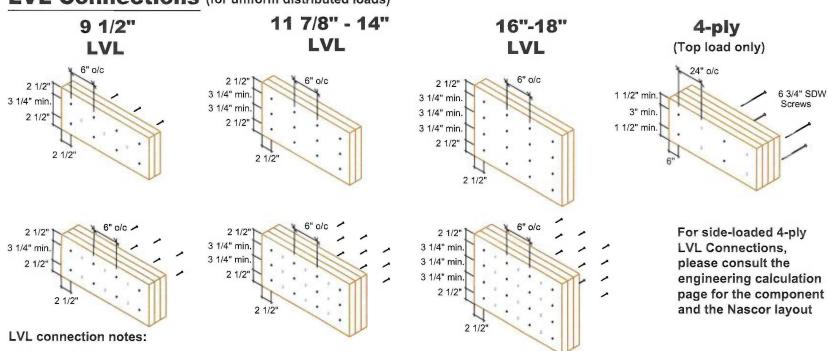
### Conventional Connections (for uniform distributed loads)



### Conventional connection notes:

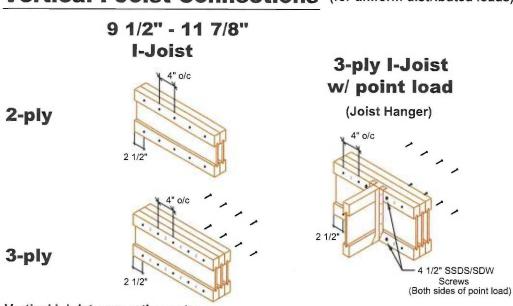
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

### LVL Connections (for uniform distributed loads)



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

## Vertical I-Joist Connections (for uniform distributed loads)



### Vertical I-Joist connection notes:

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



**MULTI-PLY** CONNECTION DETAILS

Scale: NTS

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

Fx: 613-838-4751

### **Engineering Note Page (ENP-2)**

**REVISION 2009-10-09** 

### Please read all notes prior to installation of the component

### **DESIGN INFORMATION**

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

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

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

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

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

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

### CODE

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

### **COMPONENT**

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

### **HANDLING AND INSTALLATION**

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



**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: Project:

Address:

GREEN YORK HOMES

5/31/2018 Date: RCO Designer:

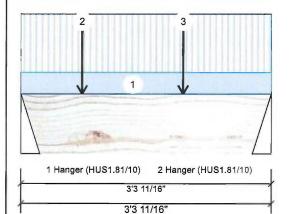
Job Name: LIANA 1 (ELEV.1)

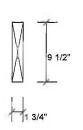
Project #:

Forex 2.0E-3000Fb LVL F1-B

1.750" X 9.500" - PASSED

Level: Ground Floor





Mind

Member	Information
Type:	Girder
D. (1)	

. ) po.	Circoi
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Floor Live:	40 PSF
Dead:	15 P\$F

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

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

Unfactored	Reactions	UNPAT	TERNED	lb	(Uplift)

n g	LIVE	Dead	SHOW	VVIIIG
1	171	82	0	0
2	152	74	0	0

### Analysis Results

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	259 ft-lb	2' 5/16"	11362 ft-lb	0.023 (2%)	1.25D+1.5L	L
ı	Unbraced	259 ft-lb	2' 5/16"	10006 ft-lb	0.026 (3%)	1.25D+1.5L	L
l	Shear	277 lb	11 3/4"	4638 lb	0.060 (6%)	1.25D+1.5L	L
	Perm Defl in.	0.001 (L/45050)	1'9 1/16"	0.098 (L/360)	0.010 (1%)	D	Uniform
	LL Defl inch	0.002 (L/21849)	1'9"	0.098 (L/360)	0.020 (2%)	L	L
	TL Defl inch	0.002 (L/14713)	1'9"	0.146 (L/240)	0.020 (2%)	D+L	L

### **Bearings and Factored Reactions**

Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	9%	103 / 256	359	L	1.25D+1.5L	
2 - Hanger	3.000"	8%	92 / 229	321	L	1.25D+1.5L	

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REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

### **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

T DOMOITI DI GOCK	a at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-3-11		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
2	Point	0-9-11		Far Face	44 lb	90 lb	0 lb	0 lb	J2
3	Point	2-1-11		Far Face	50 lb	101 lb	0 lb	0 lb	J2
	Self Weight				4 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.

- 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

- approvals
  Damaged Bearns 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







**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: Project: Address:

GREEN YORK HOMES

Date: 5/31/2018

RCO Designer:

Job Name: LIANA 1 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL F1-C

Level: Ground Floor 1.750" X 9.500" - PASSED

Brg

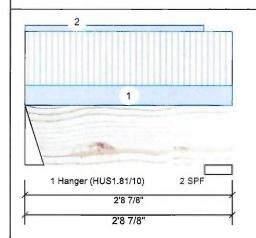
1

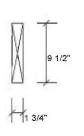
2

Hanger

2 - SPF 4.375"

0 PLF





Wind

0

1.25D+1.5L

	-				10							
ın	A 4	em	l In	or.		7.1	_	m	3	PB	^	m
181	/ 1		ישוו	SI.			v	ш	a	S.E	u	

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

### Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

11

11

Live

12

13

Bearings	s and Fac	tored Rea	actions			
Bearing	Length	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.
1 -	3.000"	1%	13 / 17	31	L	1.25D+1.5L

14/19

Snow

0

33 L

#### **Analysis Results**

Design Notes

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	15 ft-lb	1'3 3/4"	11362 ft-lb	0.001 (0%)	1.25D+1.5L	L
l	Unbraced	15 ft-lb	1'3 3/4"	10562 ft-lb	0.001 (0%)	1.25D+1.5L	L
	Shear	8 lb	17 3/4"	4638 lb	0.002 (0%)	1.25D+1.5L	L
	Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
	LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
	TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

1%

REFER TO MULTIPLE MEMBER TO MEMBER **CONNECTION DETAIL FOR PLY TO PLY** NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

0 PLF

3 Top braced at bearings.

1 Fill all hanger nailing holes.

4 B	ottom b	oraced	at	bearings.
-----	---------	--------	----	-----------

ID	Load Type	Location
1	Tie-In	0-0-0 to 2-8-14

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

1	He-In	0-0-0 to 2-8-14	(Span)0-5-5	Гор	15 PSF
2	Part. Uniform	0-0-0 to 2-4-6		Тор	1 PLF
	Self Weight				4 PLF

Live Snow Wind Comments 40 PSF 0 PSF 0 PSF



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- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- andling & Installation
  LVL beams must not be out 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

Trib Width

Side

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

Dead

Manufacturer Info

APA: PR-L318



0 PLF





**EWP** Studio Simpson Strong-Tie® Component Solutions™

Client: Project:

Address:

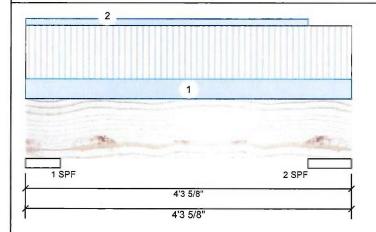
**GREEN YORK HOMES** 

5/31/2018 Date: RCO Designer:

Job Name: LIANA 1 (ELEV.1)

Project #:

1.750" X 9.500" - PASSED Level: Ground Floor F2-B Forex 2.0E-3000Fb LVL



Wind

Total Ld. Case

117 L

121 L

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Mem	ber	Info	rma	tion
IAI CITE				CIVII

Туре:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Floor Live:	40 PSF
Dead:	15 PSF

Floor (Residential) Application: Design Method: LSD NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No Deck: Not Checked

Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Live Dead Snow 50 33 0 2 53 0

**Bearings and Factored Reactions** 

Bearing Length

1 - SPF 5.500"

2 - SPF 6.875"

Vibration:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	81 ft-lb	2'1 1/8"	11362 ft-lb	0.007 (1%)	1.25D+1.5L	L.
Unbraced	81 ft-lb	2'1 1/8"	9540 ft-lb	0.008 (1%)	1.25D+1.5L	L
Shear	51 lb	3'	4638 lb	0.011 (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	0.001 (L/46449)	2'1 3/16"	0.170 (L/240)	0.010 (1%)	D+L	L

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

2%

2%

Cap. React D/L lb

41 / 76

42 / 80

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS** 

#### **Design Notes**

**Analysis Results** 

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

3 Bottom braced at bearings.

l	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 4-3-10	(Span)1-2-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Part. Uniform	0-0-0 to 3-8-12		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
I		Self Weight				4 PLF				
ı										



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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318





**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client:

**GREEN YORK HOMES** 

Project: Address:

5/31/2018 Date:

RCO Designer:

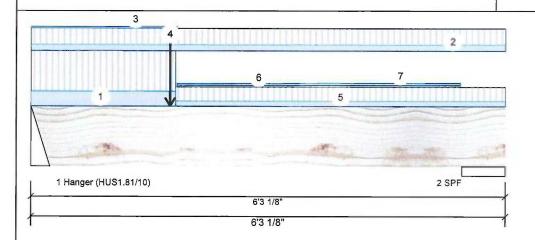
Job Name: LIANA 1 (ELEV.1)

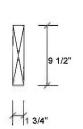
Level: Ground Floor

Project #:

F3-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED

Brg





Wind

Total Ld. Case Ld. Comb.

h	lam	hor	Inform	nation
и	лепп	Del	miorii	lauon

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	1	
Dead:	15 PSF		

### Unfactored Reactions UNPATTERNED Ib (Uplift)

1	340	164	0	0
2	233	122	0	0

Dead

#### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	842 ft-lb	1'11 5/8"	11362 ft-lb	0.074 (7%)	1.25D+1.5L	L.
Unbraced	842 ft-lb	1'11 5/8"	6701 ft-lb	0.126 (13%)	1.25D+1.5L	L
Shear	517 lb	11 3/4"	4638 lb	0.111 (11%)	1.25D+1.5L	L
Perm Defl in.	0.006 (L/11851)	2'9 1/16"	0.185 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.011 (L/6054)	2'8 9/16"	0.185 (L/360)	0.060 (6%)	L,	L.
TL Defl inch	0.017 (L/4007)	2'8 3/4"	0.278 (L/240)	0.060 (6%)	D+L	L

**Bearings and Factored Reactions** Bearing Length Cap. React D/L lb

Live

1 - Hanger	3.000"	18%	205 / 511	716	L	1.25D+1.5L
2 - SPF	6.875"	7%	152 / 349	501	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.

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

4	Bottom	braced	at bearings.
10			1 17

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-10-15	(Span)3-6-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 6-3-2	(Span)1-5-2	Тор	15 P\$F	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-0-0 to 1-11-2		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
4	Point	1-10-1		Far Face	74 lb	152 lb	0 lb	0 lb	F1
5	Tie-In	1-10-15 to 6-3-2	(Span)1-2-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	1-11-2 to 5-8-0		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
7	Tapered Start	1-11-2		Тор	3 PLF	0 PLF	0 PLF	0 PLF	C
Continued on page	2								70



Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design orderie 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
- andling & Installation
  LVL beams must not be cut or drilled
  Refer to manufacturer's product information
  regarding installation requirements, multi-ply
  fastening details, beam strength values, and code
  approvals
  Damaged Beams must not be used
  Design assumes top edge is laterally restrained
  Provide lateral support at bearing points to avoid
  lateral displacement and rotation

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

Manufacturer Info

Forex APA: PR-L318





Page 2 of 2

**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: **GREEN YORK HOMES** 

Project: Address:

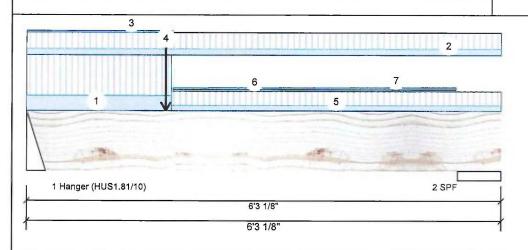
5/31/2018 Date:

Designer: RCO

Job Name: LIANA 1 (ELEV.1)

Project #:

F3-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED Level: Ground Floor



.Continued from page 1

ID Load Type

End

Self Weight

5-8-0

Location Trib Width Side Dead 4 PLF

4 PLF

Live 0 PLF Snow 0 PLF

Wind Comments

0 PLF

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

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

- andling & Installation

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

Manufacturer Info For flat roofs provide proper drainage to prevent ponding

Forex APA: PR-L318



**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client: Project: Address:

**GREEN YORK HOMES** 

Date: 5/31/2018 Designer: RCO

Job Name: LIANA 1 (ELEV.1)

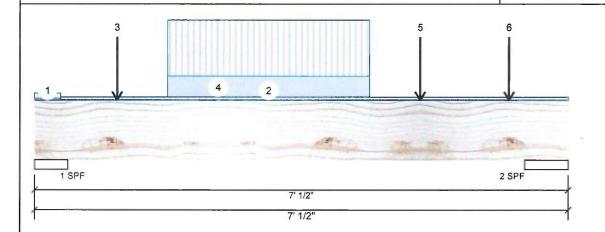
Level: Ground Floor

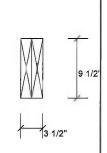
Project #:

F4-B Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED





#### Girder Туре: Plies: Moisture Condition: Dry Deflection LL: 360 Deflection TL:

Member Information

240 Normal 40 PSF

15 PSF

Application: Design Method: **Building Code:** 

Load Sharing:

Deck:

Vibration:

Floor (Residential) LSD NBCC 2010 / OBC 2012

No

Not Checked Not Checked

### Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	669	277	0	0
2	862	354	0	0

### Bearings and Factored Reactions

I	Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
I	1 - SPF	5.250"	12%	347 / 1004	1350	L	1.25D+1.5L
l	2 - SPF	6.875"	12%	442 / 1293	1735	L	1.25D+1.5L

#### Analysis Results

Importance:

Floor Live:

Dead:

General Load

Actual	Location	Allowed	Capacity	Comb.	Case
2222 ft-lb	3'5 13/16"	22724 ft-lb	0.098 (10%)	1.25D+1.5L	L
2222 ft-lb	3'5 13/16"	21975 ft-lb	0.101 (10%)	1.25D+1.5L	L
1698 lb	5'8 7/8"	9277 lb	0.183 (18%)	1.25D+1.5L	L
0.008 (L/9570)	3'5 5/8"	0.205 (L/360)	0.040 (4%)	D	Uniform
0.019 (L/3901)	3'5 5/8"	0.205 (L/360)	0.090 (9%)	L	L
0.027 (L/2771)	3'5 5/8"	0.308 (L/240)	0.090 (9%)	D+L	L
	2222 ft-lb 2222 ft-lb 1698 lb 0.008 (L/9570) 0.019 (L/3901)	2222 ft-lb 3'5 13/16" 2222 ft-lb 3'5 13/16" 1698 lb 5'8 7/8" 0.008 (L/9570) 3'5 5/8" 0.019 (L/3901) 3'5 5/8"	2222 ft-lb 3'5 13/16" 22724 ft-lb 2222 ft-lb 3'5 13/16" 21975 ft-lb 1698 lb 5'8 7/8" 9277 lb 0.008 (L/9570) 3'5 5/8" 0.205 (L/360) 0.019 (L/3901) 3'5 5/8" 0.205 (L/360)	2222 ft-lb       3'5 13/16"       22724 ft-lb       0.098 (10%)         2222 ft-lb       3'5 13/16"       21975 ft-lb       0.101 (10%)         1698 lb       5'8 7/8"       9277 lb       0.183 (18%)         0.008 (L/9570)       3'5 5/8"       0.205 (L/360)       0.040 (4%)         0.019 (L/3901)       3'5 5/8"       0.205 (L/360)       0.090 (9%)	2222 ft-lb       3'5 13/16"       22724 ft-lb       0.098 (10%)       1.25D+1.5L         2222 ft-lb       3'5 13/16"       21975 ft-lb       0.101 (10%)       1.25D+1.5L         1698 lb       5'8 7/8"       9277 lb       0.183 (18%)       1.25D+1.5L         0.008 (L/9570)       3'5 5/8"       0.205 (L/360)       0.040 (4%)       D         0.019 (L/3901)       3'5 5/8"       0.205 (L/360)       0.090 (9%)       L

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

### **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

o Eatorai	old lide lilled based o	ii iali ocodoli widali.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 0-4-2	(Span)1-0-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-4-2 to 7-0-8	(Span)0-5-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Point	1-1-1		Near Face	88 lb	234 lb	0 lb	0 lb	J5	
4	Part. Uniform	1-9-1 to 4-5-1		Near Face	86 PLF	230 PLF	0 PLF	0 PLF		
5	Point	5-1-1		Near Face	108 lb	288 lb	0 lb	0 lb	J5	
6	Point	6-3-2		Near Face	125 lb	323 lb	0 lb	0 lb	F8	0
	Self Weight				8 PLF					



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

APA: PR-L318









Client: **GREEN YORK HOMES** 

Project: Address: Date: 5/31/2018 RCO Designer:

Job Name: LIANA 1 (ELEV.1)

Project #:

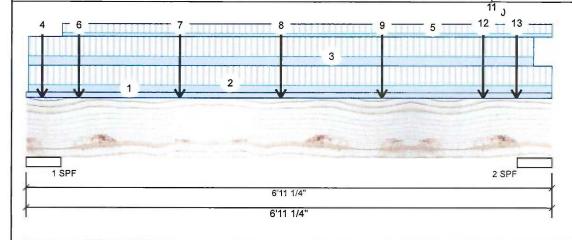
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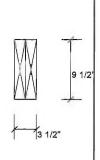
1

2 - SPF 5.500"

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

Level: Ground Floor





Wind

0

1.25D+1.5L

#### Member Information

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

### Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

2698

47% 1737 / 3833

Live

5607

2	2555	5	1390		0	0	
Bearings	s and Fac	ctored I	Reactions				
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - SPF	5.500"	99%	3372 / 8411	11783	L	1.25D+1.5L	

Snow

5570 L

0

#### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7859 ft-lb	3'4 11/16"	22724 ft-lb	0.346 (35%)	1.25D+1.5L	L
Unbraced	7859 ft-lb	3'4 11/16"	21978 ft-lb	0.358 (36%)	1.25D+1.5L	L
Shear	4616 lb	1'2 1/4"	9277 lb	0.498 (50%)	1.25D+1.5L	L
Perm Defl in.	0.033 (L/2213)	3'5 7/16"	0.205 (L/360)	0.160 (16%)	D	Uniform
LL Defl inch	0.062 (L/1195)	3'5 3/8"	0.205 (L/360)	0.300 (30%)	L	L
TL Defl inch	0.095 (L/776)	3'5 3/8"	0.307 (L/240)	0.310 (31%)	D+L	L

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

**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.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS



/ Lateral S	sienderness ratio based t	on full section wiath.						
ID	Load Type	Location Trib Widt	n Side	Dead	Live	Snow	Wind	Comments
1	Part, Uniform	0-0-0 to 6-11-4	Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-5 to 6-11-4	Тор	106 PLF	283 PLF	0 PLF	0 PLF	J7
3	Part, Uniform	0-0-5 to 6-8-5	Far Face	136 PLF	280 PLF	0 PLF	0 PLF	
4	Point	0-2-8	Тор	1254 lb	2945 lb	0 lb	0 lb	F11 F11
5	Part. Uniform	0-5-11 to 6-11-4	Тор	50 PLF	133 PLF	0 PLF	0 PLF	J3
Continued on	n page 2							

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

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 regarding installation requirements, multi-ply fastening details, beam strength values, and code fastening details, bearn strength values, and wood 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





Page 2 of 2

**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: Project:

Address:

**GREEN YORK HOMES** 

5/31/2018

RCO Designer:

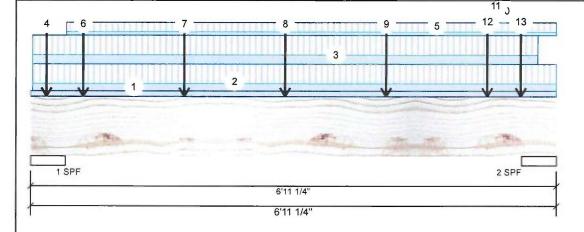
Job Name: LIANA 1 (ELEV.1)

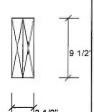
Project #:

F4-C Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Continued	from page 1									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
6	Point	0-8-5		Near Face	73 lb	154 lb	0 lb	0 lb	J3	
7	Point	2-0-5		Near Face	82 lb	167 lb	0 lb	dI 0	J3	
8	Point	3-4-5		Near Face	29 lb	59 lb	0 lb	0 lb	J3	
9	Point	4-8-5		Near Face	32 lb	68 lb	0 lb	0 lb	J1	
10	Tie-In	6-0-5 to 6-6-8	(Span)2-11-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
11	Part. Uniform	6-0-5 to 6-5-1		Тор	7 PLF	0 PLF	0 PLF	0 PLF		
12	Point	6-0-5		Near Face	22 lb	45 lb	0 lb	0 lb	J1	
13	Point	6-5-10		Near Face	11 lb	12 lb	0 lb	dl 0	F1	
	Self Weight				8 PLF					

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318





**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client:

Project: Address: **GREEN YORK HOMES** 

Date: Designer:

5/31/2018 RCO

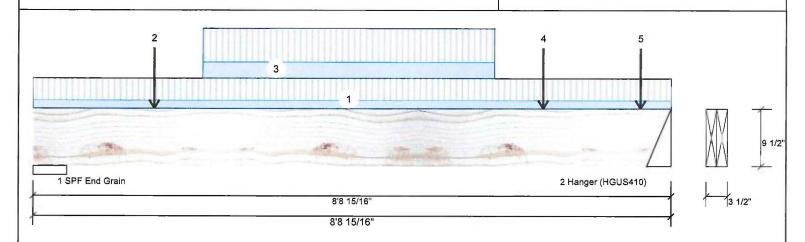
Job Name: LIANA 1 (ELEV.1)

Project #:

F5-B Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



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

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

Brg	Live	Dead	Snow	Wind
1	795	379	0	0
2	1170	525	0	0

### **Bearings and Factored Reactions**

Bearing	Length	Cap. R	teact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.500"	12%	474 / 1192	1666	L	1.25D+1.5L
2 -	4.000"	23%	656 / 1755	2412	L	1.25D+1.5L

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

**PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3661 ft-lb	4'7 3/4"	22724 ft-lb	0.161 (16%)	1.25D+1.5L	L
Unbraced	3661 ft-lb	4'7 3/4"	21435 ft-lb	0.171 (17%)	1.25D+1.5L	L
Shear	2241 lb	7'8 3/16"	9277 lb	0.242 (24%)	1.25D+1.5L	L
Perm Defl in.	0.022 (L/4321)	4'5 15/16"	0.269 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.048 (L/2031)	4'6 3/16"	0.269 (L/360)	0.180 (18%)	L	L
TL Defl inch	0.070 (L/1381)	4'6 1/16"	0.404 (L/240)	0.170 (17%)	D+L	L

### **Design Notes**

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

7 Lateral	slenderness ratio based on	full section width.	
ID	Load Type	Location	Trib W

ᆫ	, Editoral piorido	meso rado pasca sir	Tun Scotlon Width.								
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
	1	Tie-In	0-0-0 to 8-8-15	(Span)3-10-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
l	2	Point	1-7-14		Far Face	81 lb	162 lb	0 lb	0 lb	J3	
	3	Part. Uniform	2-3-14 to 6-3-14		Far Face	57 PLF	117 PLF	0 PLF	0 PLF		
	4	Point	6-11-14		Far Face	162 lb	386 lb	0 lb	0 lb	J3	
	5	Point	8-3-14		Far Face	114 lb	275 lb	0 lb	0 lb	J3	_
		Self Weight				8 PLF				C	1

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

APA: PR-L318



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



Jun 049 2018

EL-MASRI



**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: Project:

Address:

**GREEN YORK HOMES** 

5/31/2018

RCO Designer:

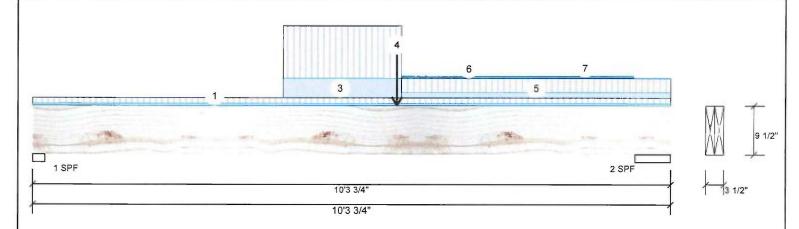
Job Name: LIANA 1 (ELEV.1)

Project #:

F6-C Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Member Infor	mation			Unfactor	ed Reac	tions L	INPATTERN	ED lb (	(Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
Plies:	2	Design Method:	LSD	1	188		118		0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	279		165		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	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	2.375"	8%	147 / 282	430	L	1.25D+1.5L
				2 - SPF	6.875"	4%	206 / 418	624	L	1.25D+1.5L
malyeria Danul										

#### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	_
Moment	1815 ft-lb	5'10 11/16"	22724 ft-lb	0.080 (8%)	1.25D+1.5L	L	
Unbraced	1815 ft-lb	5'10 11/16"	20878 ft-lb	0.087 (9%)	1.25D+1.5L	L	
Shear	541 lb	9' 1/8"	9277 lb	0.058 (6%)	1.25D+1.5L	L	
Perm Defl in.	0.015 (L/7593)	5'2 3/8"	0.322 (L/360)	0.050 (5%)	D	Uniform	
LL Defl inch	0.027 (L/4220)	5'2 11/16"	0.322 (L/360)	0.090 (9%)	L	L	
TL Defl inch	0.043 (L/2713)	5'2 9/16"	0.483 (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 at bearings

6 Lateral slenderness ratio based on full section width.

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-3-12	(Span)0-4-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	4-0-10 to 5-11-9	(Span)3-6-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	5-10-11		Near Face	82 lb	171 lb	0 lb	0 lb	F1
5	Tie-In	5-11-9 to 10-3-12	(Span)0-11-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	5-11-10 to 9-8-9		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	5-11-10 to 9-8-9		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				8 PLF				

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

Forex APA: PR-L318

Manufacturer Info

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



EL-MASRI

Jun 04 2018



**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client: Project: Address: **GREEN YORK HOMES** 

5/31/2018

Designer: RCO

Job Name: LIANA 1 (ELEV.1)

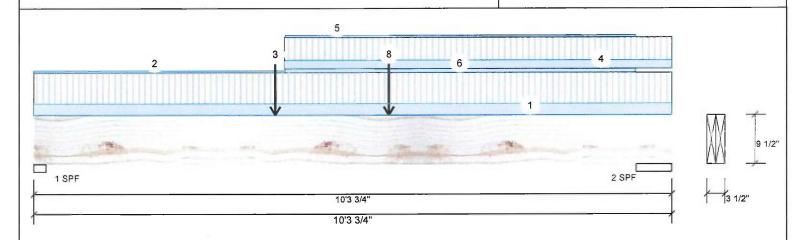
Project #:

Date:

F6-D Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Brg

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		

Unfactored Reactions	UNPATTERNED	lb	(Uplift)
----------------------	-------------	----	----------

Dead

Cap. React D/L lb

428

Live

876

	d Factor		10			
	683	683		343	0	0
	683	683		343	0	0

534 / 1315 429 / 1024 Snow

0

Total Ld. Case

1849 L

1453 L

Wind

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

### Bearing Length 1 - SPF 2.375" 2 - SPF 6.875"

Analysis Results

Member Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6659 ft-lb	3'10 7/8"	22724 ft-lb	0.293 (29%)	1.25D+1.5L	L
Unbraced	6659 ft-lb	3'10 7/8"	20878 ft-lb	0.319 (32%)	1.25D+1.5L	L
Shear	1811 lb	11 1/8"	9277 lb	0.195 (20%)	1.25D+1.5L	L
Perm Defl in.	0.048 (L/2432)	4'7 3/4"	0.322 (L/360)	0.150 (15%)	D	Uniform
LL Defl inch	0.100 (L/1158)	4'7 9/16"	0.322 (L/360)	0.310 (31%)	L	L
TL Defl inch	0.148 (L/784)	4'7 5/8"	0.483 (L/240)	0.310 (31%)	D+L	L

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

36%

10%

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

#### **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.

D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-3-12	(Span)0-9-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 4-0-13		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
3	Point	3-10-14		Far Face	525 lb	1170 lb	0 lb	0 lb	F5
4	Tie-In	4-0-10 to 10-3-12	(Span)0-6-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Part. Uniform	4-0-13 to 9-8-12		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
6	Part. Uniform	4-0-13 to 9-8-12		Тор	2 PLF	0 PLF	0 PLF	0 PLF	0

Continued on page 2...

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

### Lumber

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

### Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding





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



Jun 04 2018



Page 2 of 2

**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client:

Project: Address:

**GREEN YORK HOMES** 

Date: 5/31/2018

RCO Designer:

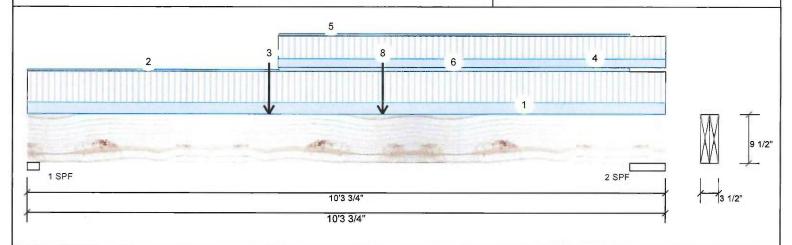
Job Name: LIANA 1 (ELEV.1)

Project #:

F6-D Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



.Continued from page 1

ID Trib Width Side Load Type Location Dead Live Wind Comments Snow 7 Point 5-8-15 Top 25 lb 68 lb 0 lb 0 lb 8 Point 5-8-15 35 lb 92 lb 0 lb 0 lb Тор Self Weight 8 PLF

> REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

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

- andling & installation

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

6. For flat roofs provide proper drainage to prevent ponding

### Manufacturer Info

Forex APA: PR-L318







Client: Project: Address:

GREEN YORK HOMES

5/31/2018 Date: RCO Designer:

Job Name: LIANA 1 (ELEV.1)

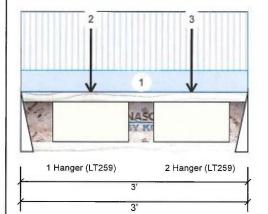
Project #:

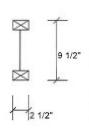
Brg

2

#### 9.500" - PASSED F7-A NJH

Level: Ground Floor





Wind

0

### Member Information

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

### Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

331

358

Dead

124

134

Snow

0

0

Bearings	s and Fac	tored F	Reactions			
Bearing			React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	41%	155 / 497	652	L	1.25D+1.5L
2 - Hanger	2.000"	45%	168 / 537	705	L	1.25D+1.5L

#### **Analysis Results**

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
l	Moment	505 ft-lb	11 1/16"	3830 ft-lb	0.132 (13%)	1.25D+1.5L	L	
	Unbraced	505 ft-lb	11 1/16"	3411 ft-lb	0.148 (15%)	1.25D+1.5L	L	
	Shear	698 lb	2'10 3/4"	1580 lb	0.442 (44%)	1.25D+1.5L	L	
	Perm Defl in.	0.003 (L/12051)	1'3 15/16"	0.093 (L/360)	0.030 (3%)	D	Uniform	
ı	LL Defl inch	0.007 (L/4523)	1'3 15/16"	0.093 (L/360)	0.080 (8%)	L	L	
	TL Defl inch	0.010 (L/3288)	1'3 15/16"	0.140 (L/240)	0.070 (7%)	D+L	L	

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

### **Design Notes**

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top flange unbraced.

4 Bottom	flange braced at bearings	S.				I OHT LOP	DO OTEN
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-11-1		Near Face	114 lb	304 lb	0 lb	0 lb	J9
3	Point	2-3-1		Near Face	106 lb	282 lb	0 lb	0 lb	J9



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

- andling & Installation
  Loist flanges must not be out or drilled
  Refer to latest copy of the IJoist product information
  details for framing details, stiffener tables, web hole
  chart, bridging details, multi-byl 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.

- 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.

Manufacturer Info

Nascor by Kott







Wind 0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client:

Project:

GREEN YORK HOMES

Address:

5/31/2018 Date:

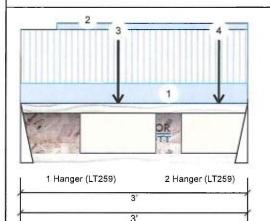
Designer: RCO

Job Name: LIANA 1 (ELEV.1)

Level: Ground Floor

Project #:

#### 9.500" - PASSED F7-B NJH





Total Ld. Case

421 L

612 L

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

	Brg	Live	Dead	Snow
	1	200	97	0
3	2	290	142	0
	Bearings	and Factore	d Reactions	

Unfactored Reactions UNPATTERNED Ib (Uplift)

Cap. React D/L lb

122 / 300

177 / 435

Analysis Res	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	441 ft-lb	1'3 7/16"	3830 ft-lb	0.115 (12%)	1.25D+1.5L	L
Unbraced	441 ft-lb	1'3 7/16"	3411 ft-lb	0.129 (13%)	1.25D+1.5L	L
Shear	604 lb	2'10 3/4"	1580 lb	0.382 (38%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/11617)	1'3 7/16"	0.093 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.006 (L/5760)	1'3 7/16"	0.093 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.009 (L/3850)	1'3 7/16"	0.140 (L/240)	0.060 (6%)	D+L	L

Hanger READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS

27%

39%

CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. REFER TO MULTIPLE MEMBER TO MEMBER

CONNECTION DETAIL FOR PLY TO PLY

NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

Bearing Length

Hanger

2.000"

2.000"

### **Design Notes**

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top flange unbraced.

4 Bottom	4 Bottom hange braced at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11 to 1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part, Uniform	0-5-12 to 3-0-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
3	Point	1-3-7		Far Face	115 lb	230 lb	0 lb	0 lb	J4
4	Point	2-7-7		Far Face	75 lb	156 lb	0 lb	dl 0	J4



Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design orderia 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
   Upost not to be treated with fire retardant or corrosive
- chemicals

#### Handling & Installation

- andling & Installation

  Loist flanges must not be cut or drilled
  Refer to latest copy of the Lioist product information
  details for framing details, stiffener tables, web hole
  chart, bridging details, multi-ply fastening details and
  handling/erection details
  Darraged Loists 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
- ponding
- alteral 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

### Manufacturer Info

Nascor by Kott









**GREEN YORK HOMES** 

Project: Address:

5/31/2018

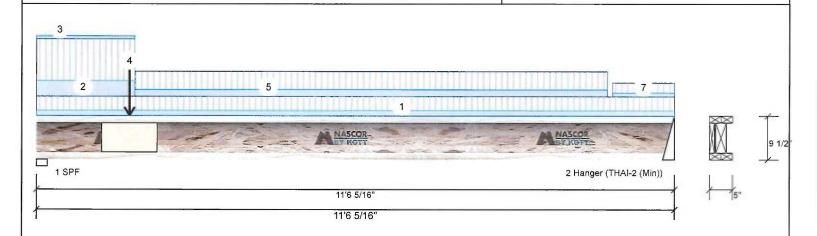
RCO Designer:

Job Name: LIANA 1 (ELEV.1)

Project #:

9.500" 2-Ply - PASSED F8-A NJH

Level: Ground Floor



Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2013
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)

ind
0
0

### **Bearings and Factored Reactions**

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	35%	289 / 814	1103	L	1.25D+1.5L
2 - Hanger	2.500"	20%	156 / 484	640	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2054 ft-lb	5'1 3/16"	7660 ft-lb	0.268 (27%)	1.25D+1.5L	L
Unbraced	2054 ft-lb	5'1 3/16"	2056 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	1077 lb	1 5/8"	3160 lb	0.341 (34%)	1.25D+1.5L	L
Perm Defl in.	0.031 (L/4411)	5'6 1/16"	0.375 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.077 (L/1754)	5'6 5/8"	0.375 (L/360)	0.210 (21%)	L	L
TI Deflinch	0 108 (1/1255)	5'6 1/2"	0.562 (1/240)	0.190 (19%)	D+I	1

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

### **Design Notes**

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top flange must be laterally braced at a maximum of 7'10" o.c.

nge braced at bearing	S.							
Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
Tie-In	0-0-0 to 11-6-5	(Span)1-2-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
Part. Uniform	0-0-0 to 1-9-6		Тор	5 PLF	0 PLF	0 PLF	0 PLF	
Point	1-8-2		Near Face	97 lb	200 lb	0 lb	dl 0	F7
Tie-In	1-9-6 to 10-3-12	(Span)1-5-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
Tie-In	10-4-14 to 11-6-5	(Span)0-9-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	C
	Load Type Tie-In Tie-In Part. Uniform Point Tie-In	Tie-In 0-0-0 to 11-6-5 Tie-In 0-0-0 to 1-9-6 Part. Uniform 0-0-0 to 1-9-6 Point 1-8-2 Tie-In 1-9-6 to 10-3-12	Load Type         Location         Trib Width           Tie-In         0-0-0 to 11-6-5         (Span)1-2-1           Tie-In         0-0-0 to 1-9-6         (Span)3-5-0           Part. Uniform         0-0-0 to 1-9-6           Point         1-8-2           Tie-In         1-9-6 to 10-3-12         (Span)1-5-15	Load Type         Location         Trib Width         Side           Tie-In         0-0-0 to 11-6-5         (Span)1-2-1         Top           Tie-In         0-0-0 to 1-9-6         (Span)3-5-0         Top           Part. Uniform         0-0-0 to 1-9-6         Top           Point         1-8-2         Near Face           Tie-In         1-9-6 to 10-3-12         (Span)1-5-15         Top	Load Type         Location         Trib Width         Side         Dead           Tie-In         0-0-0 to 11-6-5         (Span)1-2-1         Top         15 PSF           Tie-In         0-0-0 to 1-9-6         (Span)3-5-0         Top         15 PSF           Part. Uniform         0-0-0 to 1-9-6         Top         5 PLF           Point         1-8-2         Near Face         97 lb           Tie-In         1-9-6 to 10-3-12         (Span)1-5-15         Top         15 PSF	Load Type         Location         Trib Width         Side         Dead         Live           Tie-In         0-0-0 to 11-6-5         (Span)1-2-1         Top         15 PSF         40 PSF           Tie-In         0-0-0 to 1-9-6         (Span)3-5-0         Top         15 PSF         40 PSF           Part. Uniform         0-0-0 to 1-9-6         Top         5 PLF         0 PLF           Point         1-8-2         Near Face         97 lb         200 lb           Tie-In         1-9-6 to 10-3-12         (Span)1-5-15         Top         15 PSF         40 PSF	Load Type         Location         Trib Width         Side         Dead         Live         Snow           Tie-In         0-0-0 to 11-6-5         (Span)1-2-1         Top         15 PSF         40 PSF         0 PSF           Tie-In         0-0-0 to 1-9-6         (Span)3-5-0         Top         15 PSF         40 PSF         0 PSF           Part. Uniform         0-0-0 to 1-9-6         Top         5 PLF         0 PLF         0 PLF           Point         1-8-2         Near Face         97 lb         200 lb         0 lb           Tie-In         1-9-6 to 10-3-12         (Span)1-5-15         Top         15 PSF         40 PSF         0 PSF	Load Type         Location         Trib Width         Side         Dead         Live         Snow         Wind           Tie-In         0-0-0 to 11-6-5         (Span)1-2-1         Top         15 PSF         40 PSF         0 PSF         0 PSF           Tie-In         0-0-0 to 1-9-6         (Span)3-5-0         Top         15 PSF         40 PSF         0 PSF         0 PSF           Part. Uniform         0-0-0 to 1-9-6         Top         5 PLF         0 PLF         0 PLF         0 PLF           Point         1-8-2         Near Face         97 lb         200 lb         0 lb         0 lb           Tie-In         1-9-6 to 10-3-12         (Span)1-5-15         Top         15 PSF         40 PSF         0 PSF         0 PSF



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
   Uolst not to be treated with fire retardant or corrosive

#### Handling & Installation

- Handling & Installation

  1. Julist flanges must not be out or drilled

  2. Refer to latest copy of the IJoist product information details, stiffener tables, web hole chart, bridging details, multi-ply fasterining details and handling/erection details

  3. Damaged Lioists must not be used

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

- Provide lateral support at bearing points to avoid lateral displacement and rotation
   Web stifferers for point load as shown Minimum point load bearing length>= 3,5 inches
   For flat roofs provide proper drainage to prevent ponding

Manufacturer info

Nascor by Kott









GREEN YORK HOMES Client:

Project: Address: Date: Designer:

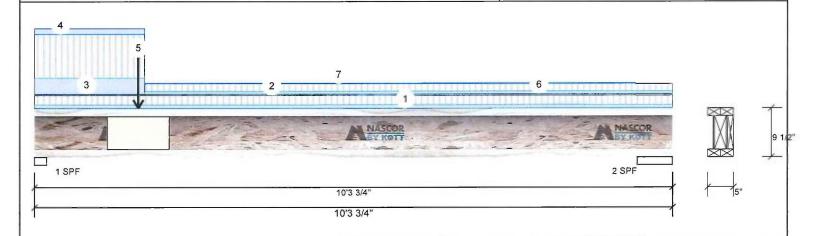
5/31/2018 RCO

Job Name: LIANA 1 (ELEV.1)

Project #:

9.500" 2-Ply - PASSED F8-B NJH

Level: Ground Floor



Member Info	rmation			Unfactore	d Reacti	ons UN	PATTERNI	ED lb (	Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	v	Wind
Plies:	2	Design Method:	LSD	1	469		232		0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	197		94	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			Bearings a	and Fact	ored Re	actions			
Dead:	15 PSF			Bearing L	ength	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF 2	.375"	31%	290 / 704	993	L	1.25D+1.5L
				2 - SPF 6.	.875"	13%	118 / 295	413	L	1.25D+1.5L
1 . 0										

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1328 ft-lb	2'11 1/8"	7660 ft-lb	0.173 (17%)	1.25D+1.5L	L
Unbraced	1328 ft-lb	2'11 1/8"	1333 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	969 lb	1 5/8"	3160 lb	0.307 (31%)	1.25D+1.5L	L
Perm Defl in.	0.017 (L/6740)	4'5 13/16"	0.322 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.035 (L/3306)	4'5 7/8"	0.322 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.052 (L/2218)	4'5 13/16"	0.483 (L/240)	0.110 (11%)	D+L	L

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 9'5" o.c.

5 Bottom flange braced at bearings.

3 Dolloin	nange braced at bearing	3,							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-3-12	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 9-8-8		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
3	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Part. Uniform	0-0-0 to 1-9-6		Тор	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Far Face	142 lb	290 lb	0 lb	0 lb	F7
6	Tie-In	1-9-6 to 10-3-12	(Span)0-7-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 9-8-8		Тор	1 PLF	0 PLF	0 PLF	0 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.

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

#### Handling & Installation

- andling & Installation

  Joist flanges must not be cut or drilled
  Refer to latest copy of the Jusist product information
  details for framing details, stiffener tables, web hole
  chart, bndging details, multi-ply fastening details and
  handling/erection details
  Damaged Jusists 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
- 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

Manufacturer Info

Nascor by Kott







Wind

0

0

1 d. Comb.

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client:

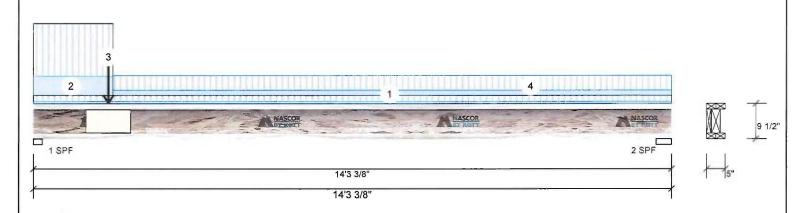
Project: Address: GREEN YORK HOMES

Date: 5/31/2018 Designer: RCO

Job Name: LIANA 1 (ELEV.1)

Project #:

F9-A NJH 9.500" 2-Ply - PASSED Level: Ground Floor



#### Unfactored Reactions UNPATTERNED Ib (Uplift) Member Information Girder Floor (Residential) Live Dead Snow Type: Application: Brg Plies: 2 Design Method: LSD 590 221 0 1 NBCC 2010 / OBC 2012 Moisture Condition: Dry **Building Code:** 2 237 89 0 Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Importance: Normal Vibration: Not Checked General Load Floor Live: 40 PSF Bearings and Factored Reactions Dead: 15 PSF Bearing Length Cap. React D/L lb Total Ld. Case 1 - SPF 2.375" 37% 276 / 884 1161 L 111 / 355 2 - SPF 4.125" 467 L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1944 ft-lb	5'4 3/4"	7660 ft-lb	0.254 (25%)	1.25D+1.5L	L
Unbraced	1944 ft-lb	5'4 3/4"	1951 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	1140 lb	1 5/8"	3160 lb	0.361 (36%)	1.25D+1.5L	L
Perm Defl in.	0.040 (L/4158)	6'7 5/8"	0.462 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.107 (L/1558)	6'7 5/8"	0.462 (L/360)	0.230 (23%)	L	L
TL Defl inch	0.147 (L/1134)	6'7 5/8"	0.693 (L/240)	0.210 (21%)	D+L	L

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 8' o.c.

5 Bottom flange braced at bearings

L	3 Dolloin hange	braceu at bearings.								
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 14-3-6	(Span)0-4-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	3	Point	1-8-2		Near Face	134 lb	358 lb	0 lb	0 lb	F7
	4	Tie-In	1-9-6 to 14-3-6	(Span)0-11-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	



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

chemicals

### Handling & Installation

- Lost flanges must not be cut or drilled.

  Nost flanges must not be cut or drilled.

  Refer to latest copy of the Isloist product information details for framing details, stiffener tables, web hole chart, brudging details, multi-ply fastening details and handling/erection details.

  Damaged losts 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
- lateral displacement and rotation

  8. Web stiffeners for point load as shown Minimum point load bearing length>= 3,5 inches

  7. For flat roofs provide proper drainage to prevent

### Manufacturer Info

Nascor by Kott







Client:

Project: Address: GREEN YORK HOMES

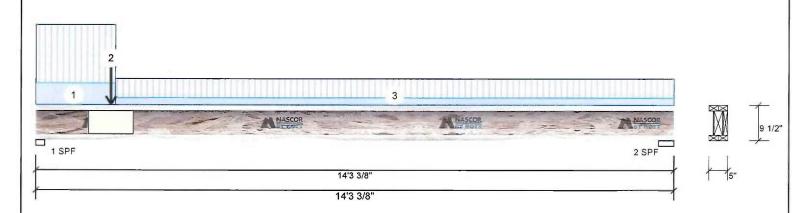
5/31/2018 Date:

RCO Designer: Job Name: LIANA 1 (ELEV.1)

Project #:

9.500" F9-B 2-Ply - PASSED NJH

Level: Ground Floor



nation			Unfacto	red Reac	tions U	INPATTERN	ED lb (	(Uplift)	
Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
2	Design Method:	LSD	1	531		199		0	0
: Dry	Building Code:	NBCC 2010 / OBC 2012	2	204		77		0	0
360	Load Sharing:	No	-						
240	Deck:	Not Checked							
Normal	Vibration:	Not Checked							
40 PSF			Bearings	and Fac	tored l	Reactions			
15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
			1 - SPF	2.375"	33%	249 / 796	1045	L	1.25D+1.5L
			2-SPF	4.125"	13%	96 / 306	402	L	1.25D+1.5L
	2 : Dry 360 240 Normal	Girder 2 Design Method: 2 Design Method: 360 Load Sharing: 240 Deck: Normal Vibration: 40 PSF	Girder Application: Floor (Residential)  2 Design Method: LSD  Building Code: NBCC 2010 / OBC 2012  360 Load Sharing: No  240 Deck: Not Checked  Normal Vibration: Not Checked	Application: Floor (Residential)   Brg   1	Application: Floor (Residential)   Brg   Live	Application: Floor (Residential)   Brg   Live	Application: Floor (Residential)   Brg   Live   Dead	Application: Floor (Residential)   Brg   Live   Dead   Snot	Application:   Floor (Residential)   Brg   Live   Dead   Snow

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1707 ft-lb	5'2 15/16"	7660 ft-lb	0.223 (22%)	1.25D+1.5L	L
Unbraced	1707 ft-lb	5'2 15/16"	1714 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	1027 lb	1 5/8"	3160 lb	0.325 (32%)	1.25D+1.5L	L
Perm Defl in.	0.035 (L/4746)	6'7 5/16"	0.462 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.094 (L/1779)	6'7 5/16"	0.462 (L/360)	0.200 (20%)	L	L
TL Defl inch	0.129 (L/1294)	6'7 5/16"	0.693 (L/240)	0.190 (19%)	D+L	L

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 8'6" o.c.

5 Bottom flange braced at bearings.

I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Point	1-8-2		Far Face	124 lb	331 lb	0 lb	0 lb	F7
l	3	Tie-In	1-9-6 to 14-3-6	(Span)1-1-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	



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
 Upoist not to be treated with fire retardant or corrosive

#### Handling & Installation

- Handling & Installation

  1. IJoist flanges must not be cut or drilled

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

  3. Damaged IJoists must not be used

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

- Provide lateral support at bearing points to avoid lateral displacement and rotation
   Web stiffeners for point load as shown Minimum point load bearing length>= 3,5 inches
   For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Nascor by Kott







Client: Project: Address:

**GREEN YORK HOMES** 

Date: 5/31/2018 Designer: RCO

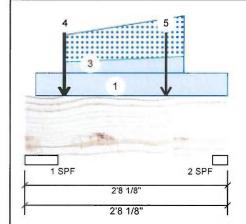
Job Name: LIANA 1 (ELEV.1)

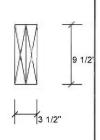
F10-A Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





Ld. Comb.

1.25D+1.5S +0.5L

1.25D+1.5L

#### Member Information

Туре:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Floor Live:	40 PSF
Dead:	15 PSF

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

Not Checked Not Checked

Unfactored	Reactions	UNPATTERNED	lb	(Uplift)
------------	-----------	-------------	----	----------

e	Dead	Snow	Wind
2	654	1044	0
.3	197	132	0

Cap. React D/L lb

818 / 1702

246 / 214

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	391 ft-lb	1'1 9/16"	22724 ft-lb	0.017 (2%)	1.25D+1.5S +0.5L	L
Unbraced	391 ft-lb	1'1 9/16"	22724 ft-lb	0.017 (2%)	1.25D+1.5S +0.5L	L
Shear	637 lb	1'2"	7792 lb	0.082 (8%)	1.25D+1.5L	L
Perm Deff in.	0.001 (L/39759)	1'4 11/16"	0.072 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/29660)	1'3 1/16"	0.072 (L/360)	0.010 (1%)	S+0.5L	L
TL Defl inch	0.002 (L/17032)	1'3 13/16"	0.108 (L/240)	0.010 (1%)	D+S+0.5L	L

Deck:

Vibration:

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

25%

11%

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

**Bearings and Factored Reactions** 

Bearing Length

1 - SPF 5.250"

2 - SPF 2.375"

#### **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.

# PROFESSIONA EL-MASRI

Total Ld. Case

2520 L

460 L

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-ply fastening details, beam strength values, and code
- papervalls. Dearn strenger varies, 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.

Manufacturer Info 6. For flat roofs provide proper drainage to prevent

Forex APA: PR-L318







Page 2 of 2



**EWP Studio** 

Simpson Strong-Tie® Component Solutions™

Client: Project: Address: GREEN YORK HOMES

5/31/2018 Date:

Designer: RCO

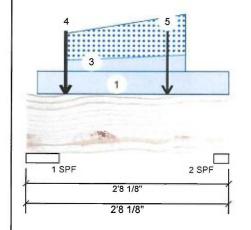
Job Name: LIANA 1 (ELEV.1)

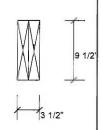
Project #:

F10-A Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-1-12 to 2-8-2		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Point	0-6-2		Тор	452 lb	0 lb	1026 lb	0 lb	F13 F13
3	Tapered Start	0-6-2		Тор	31 PLF	0 PLF	75 PLF	0 PLF	
	End	2-1-3			47 PLF	0 PLF	114 PLF	0 PLF	
4	Point	0-6-5		Far Face	86 lb	230 lb	0 lb	0 lb	J4
5	Point	1-10-5		Far Face	69 lb	185 lb	0 lb	0 lb	J4
	Self Weight				8 PLF				

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

### 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

  1. LVL beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318





**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client: Project: Address:

**GREEN YORK HOMES** 

5/31/2018

RCO Designer:

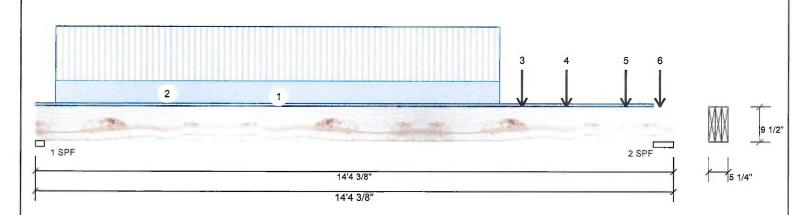
Job Name: LIANA 1 (ELEV.1)

Project #:

F11-A Forex 2.0E-3000Fb LVL 1.750" X 9.500"

3-Ply - PASSED

Level: Second Floor



Member Inform	nation	Unfactored Reactions UNPATTERNED Ib (Uplift)								
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind
Plies:	3	Design Method:	LSD	1	1909		863		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	2945		1254		0	0
Deflection LL:	360	Load Sharing:	Yes							
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	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	2.375"	51%	1079 / 2864	3943	L	1.25D+1.5L
			_	2-SPF	5.500"	34%	1567 / 4417	5984	L	1.25D+1.5L

**Analysis Results** 

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14206 ft-lb	7' 5/8"	35449 ft-lb	0.401 (40%)	1.25D+1.5L	L
Unbraced	14206 ft-lb	7' 5/8"	34190 ft-lb	0.416 (42%)	1.25D+1.5L	L
Shear	4299 lb	13'2 1/8"	13915 lb	0.309 (31%)	1.25D+1.5L	L
Perm Det	fl in. 0.149 (L/1117)	7' 1/2"	0.461 (L/360)	0.320 (32%)	D	Uniform
LL Defl in	ch 0.333 (L/499)	7' 11/16"	0.461 (L/360)	0.720 (72%)	L	L
TL Defl in	ich 0.481 (L/345)	7' 11/16"	0.692 (L/240)	0.700 (70%)	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 clanderness ratio based on full coation width

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

6 Lateral	slenderness ratio based	on full section width.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Commen	s
1	Tie-In	0-0-0 to 13-10-15	(Span)0-6-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Part. Uniform	0-5-7 to 10-5-7		Far Face	115 PLF	278 PLF	0 PLF	0 PLF		
3	Point	10-11-7		Far Face	104 lb	278 lb	0 lb	0 lb	J6	
4	Point	11-11-7		Far Face	122 lb	324 lb	0 lb	0 lb	J6	
5	Point	13-3-7		Far Face	139 lb	371 lb	0 lb	0 lb	J6	
6	Point	14-0-11		Near Face	384 lb	959 lb	0 lb	0 lb	F4	0
	Self Weight				11 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.

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

Forex

APA: PR-L318



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



Jun 040 2018

EL-MASRI



**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client:

Project: Address: **GREEN YORK HOMES** 

5/31/2018

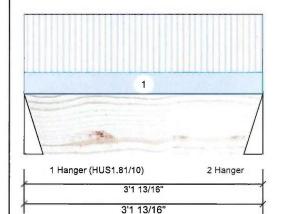
Date: Designer: RCO

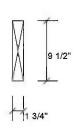
Job Name: LIANA 1 (ELEV.1)

Project #:

F1-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED

Level: Second Floor





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Total Ld. Case

752 L

752 L

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

Brg	Live	Dead	Snow	Wind
1	378	148	0	0
2	378	148	0	0
Bearing:	s and Factore	d Reactions		

Cap. React D/L lb

185 / 567

185 / 567

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Analysis Results										
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case				
Moment	460 ft-lb	1'6 15/16"	11362 ft-lb	0.040 (4%)	1.25D+1.5L	L				
Unbraced	460 ft-lb	1'6 15/16"	10144 ft-lb	0.045 (5%)	1.25D+1.5L	L				
Shear	285 lb	2'2 1/16"	4638 lb	0.061 (6%)	1.25D+1.5L	L				
Perm Defl in.	0.001 (L/29538)	1'6 15/16"	0.093 (L/360)	0.010 (1%)	D	Uniform				
LL Defl inch	0.003 (L/11546)	1'6 15/16"	0.093 (L/360)	0.030 (3%)	L	L				
TL Defl inch	0.004 (L/8301)	1'6 15/16"	0.139 (L/240)	0.030 (3%)	D+L	L				

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

19%

19%

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

Bearing Length

Hanger

Hanger

3.000"

3,000"

### **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

- Dottom bi	acca at bearings.				l l					
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	_
1	Part. Uniform	0-0-0 to 3-1-13		Тор	90 PLF	240 PLF	0 PLF	0 PLF		
	Self Weight				4 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.

### 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

papervals
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

Manufacturer Info

Forex APA: PR-L318







**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: **GREEN YORK HOMES** 

> Project: Address:

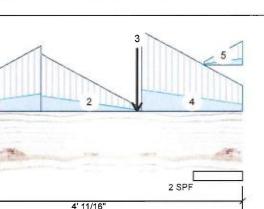
5/31/2018 Date: **RCO** Designer:

Job Name: LIANA 1 (ELEV.1)

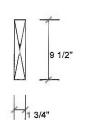
Level: Second Floor

Project #:

F2-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED



4' 11/16"



Member Inform	nation
Туре:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Floor Live:	40 PSF
Dead:	15 PSF

1 Hanger

Floor (Residential) Application: Design Method: LSD NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No Not Checked

Dead Snow Wind Brg Live 42 23 0 0 2 80 39 0 0

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

# Deck: Vibration: Not Checked

**Bearings and Factored Reactions** Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 3.000" 2% 29 / 63 92 | 1.25D+1.5L Hanger 1.25D+1.5L 2 - SPF 7.778" 2% 48 / 121 169 L

Analysis Location Allowed Capacity Comb. Moment 94 ft-lb 2'2 7/16" 11362 ft-lb 0.008 (1%) 1.25D+1.5L L 94 ft-lb Unbraced 2'2 7/16" 9657 ft-lb 0.010 (1%) 1.25D+1.5L L Shear 88 lb 2'8 3/16" 4638 lb 0.019 (2%) 1.25D+1.5L L Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) LL Defl inch 0.001 1'11 13/16" 0.109 (L/360) 0.010 (1%) L L (L/60406)TL Deflinch 0.001 1'11 5/8" 0.164 (L/240) 0.010 (1%) D+L L (L/40550)

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

READ ALL NOTES ON THIS PAGE AND ON

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

### **Design Notes**

**Analysis Results** 

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

4 Bottom	braced at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-4-13	(Span)0-2-8 to 1-7-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	1-4-13 to 2-8-11	(Span)1-4-13 to 0-0-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	2-8-0		Far Face	15 lb	40 lb	0 lb	0 lb	J8
4	Tie-In	2-8-11 to 4-0-11	(Span)1-11-8 to 0-7-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	3-6-9 to 4-0-11	(Span)0-0-14 to 0-7-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				4 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.

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

### Handling & Installation

- anoling & 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

#### Manufacturer Info

Forex APA: PR-L318









**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client:

Project: Address: GREEN YORK HOMES

Date: 5/31/2018

Designer: RCO

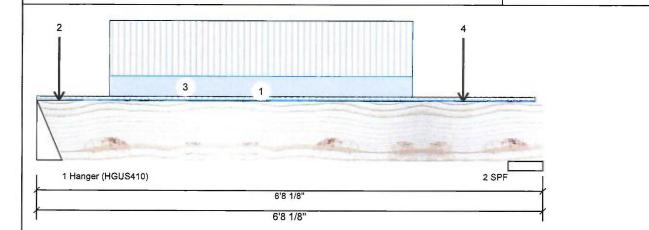
Job Name: LIANA 1 (ELEV.1)

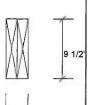
Project #:

F4-A Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





Member Information

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

40 PSF

15 PSF

Deck: Vibration:

Application: Floor (Residential) Design Method: LSD NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No Not Checked

Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead Snow Wind 1 959 384 0 0 2 855 349

Bearings and Factored Reactions Bearing Length

Hanger

2 - SPF 5.500"

Cap. React D/L lb Total Ld. Case Ld. Comb. 4.000" 18% 481 / 1439 1919 L 1.25D+1.5L

1720 L

437 / 1283

**Analysis Results** 

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2571 ft-lb	3'3 5/8"	22724 ft-lb	0.113 (11%)	1.25D+1.5L	L
Unbraced	2571 ft-lb	3'3 5/8"	22010 ft-lb	0.117 (12%)	1.25D+1.5L	L
Shear	1733 lb	5'5 7/8"	9277 lb	0.187 (19%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/8511)	3'3 1/2"	0.200 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.021 (L/3423)	3'3 1/2"	0.200 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.030 (L/2441)	3'3 1/2"	0.301 (L/240)	0.100 (10%)	D+L	L

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

15%

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS

**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.

al slenderness ratio based on full section width

/ Laterar S	deligerness rado based	on full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 6-6-14	(Span)0-9-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-3-8		Near Face	96 lb	256 lb	0 lb	0 lb	J6
3	Part. Uniform	0-11-8 to 4-11-8		Near Face	104 PLF	278 PLF	0 PLF	0 PLF	
4	Point	5-7-8		Near Face	133 lb	345 lb	0 lb	0 lb	J6
	Self Weight				8 PLF				

POFESSIONA

1.25D+1.5L

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

Forex APA: PR-L318







Client: Project: Address:

GREEN YORK HOMES

Date: 5/31/2018

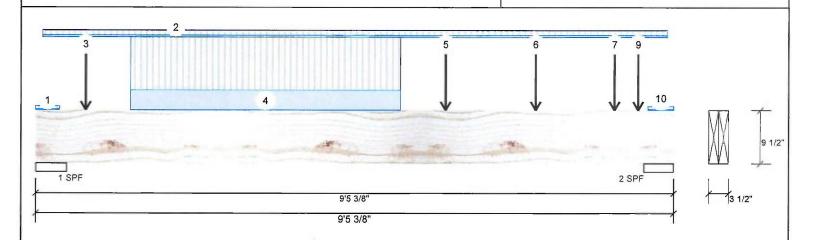
Designer: RCO Job Name: LIANA 1 (ELEV.1)

Project #:

F5-A Forex 2.0E-3000Fb LVL 1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Inforn	nation			Unfacto	red React	ions U	NPATTERN	ED lb (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	708 (-2)		303	0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	649 (-115)		259	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 Fact	tored I	Reactions		
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	5.500"	12%	379 / 1063	1441 L	1.25D+1.5L
		L		2-SPF	5.250"	11%	324 / 974	1297 L	1.25D+1.5L

**Analysis Results** 

ட								
Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
ĺ	Moment	3030 ft-lb	4'8 3/16"	22724 ft-lb	0.133 (13%)	1.25D+1.5L	L	
l	Unbraced	3030 ft-lb	4'8 3/16"	21237 ft-lb	0.143 (14%)	1.25D+1.5L	L	
١	Shear	1394 lb	1'2 1/4"	9277 lb	0.150 (15%)	1.25D+1.5L	L	
l	Perm Defl in.	0.019 (L/5399)	4'8 11/16"	0.289 (L/360)	0.070 (7%)	D	Uniform	
l	LL Defl inch	0.046 (L/2287)	4'8 11/16"	0.289 (L/360)	0.160 (16%)	L	L	
ĺ	TL Defl inch	0.065 (L/1607)	4'8 11/16"	0.434 (L/240)	0.150 (15%)	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 **ENGINEERING NOTE PAGE ENP-2. THIS** NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT **CONTAINS SPECIFICATIONS AND CRITERIA** USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 0-4-4	(Span)0-4-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-1-4 to 9-4-4	(Span)0-8-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Point	0-8-14		Near Face	55 lb	145 lb	0 lb	0 lb	J3	
4	Part. Uniform	1-4-14 to 5-4-14		Near Face	57 PLF	151 PLF	0 PLF	0 PLF		
5	Point	6-0-14		Near Face	72 lb	191 lb	0 lb	0 lb	J5	
6	Point	7-4-14		Near Face	65 lb	174 lb	0 lb	0 lb	J5	
Continued o	n 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 venfy the dimensions and loads.

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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318





Page 2 of 2

**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client: Project: Address: GREEN YORK HOMES

Date: 5/31/2018

RCO Designer:

Job Name: LIANA 1 (ELEV.1)

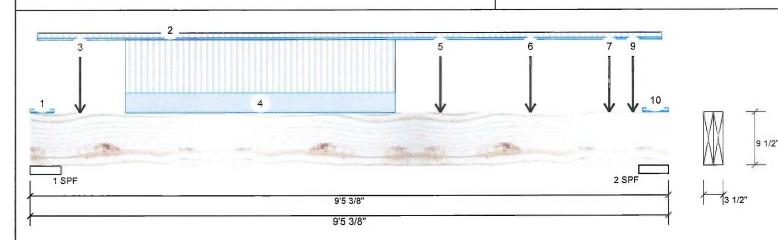
Project #:

Forex 2.0E-3000Fb LVL F5-A

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Continued fr	rom page 1									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
7	Point	8-6-14		Near Face	40 lb	105 lb	0 lb	0 lb	J5	
8	Point	8-11-1		Near Face	-22 lb	0 lb	0 lb	0 lb	F6	
9	Point	8-11-1		Near Face	0 lb	-117 lb	0 lb	0 lb	F6	
10	Tie-In	9-0-13 to 9-5-6	(Span)0-4-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
	Self Weight				8 PLF					

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

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

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







**EWP Studio** Simpson Strong-Tie® Component Solutions™ Client:

Address:

Project:

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Vibration:

**GREEN YORK HOMES** 

5/31/2018 Date:

RCO Designer:

Job Name: LIANA 1 (ELEV.1)

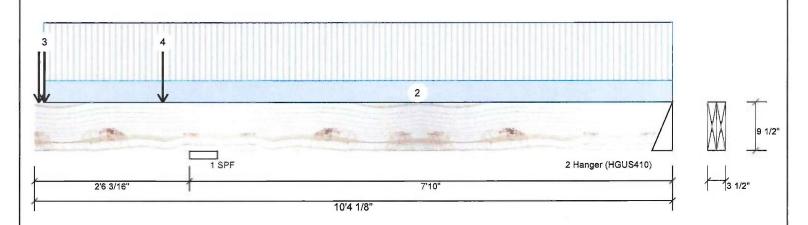
Project #:

Forex 2.0E-3000Fb LVL F6-A

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Floor (Residential)

Not Checked

Not Checked

NBCC 2010 / OBC 2012

LSD

No

Member Information Girder Type:

Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240

Importance: Normal General Load Floor Live: 40 PSF Dead:

15 PSF

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	658	316	0	0
2	0 (-117)	(-22)	0	0

### **Bearings and Factored Reactions**

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 5.500" 12% 395 / 987 1382 LL 1.25D+1.5L 4.000" 0% -20 / 41 22 (-242) \_L 0.9D+1.5L Hanger

**Analysis Results** 

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-2162 ft-lb	2'8 15/16"	22724 ft-lb	0.095 (10%)	1.25D+1.5L	L_
Unbraced	-2162 ft-lb	2'8 15/16"	21662 ft-lb	0.100 (10%)	1.25D+1.5L	L_
Pos Moment	7 ft-lb	9'2 15/16"	14770 ft-lb	0.000 (0%)	0.9D+1.5L	_L
Unbraced	7 ft-lb	9'2 15/16"	14770 ft-lb	0.000 (0%)	0.9D+1.5L	_L
Shear	978 lb	1'8 11/16"	9277 lb	0.105 (11%)	1.25D+1.5L	L_
Perm Defl in.	0.004 (L/22511)	5'7 5/16"	0.244 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.013 (L/6952)	5'10 1/8"	0.244 (L/360)	0.050 (5%)	L	L_
TL Defl inch	0.017 (L/5316)	5'9 7/16"	0.367 (L/240)	0.050 (5%)	D+L	L_
LL Cant	0.035 (2L/1727)	Lt Cant	0.200 (2L/480)	0.175 (17%)	L	L_
TL Cant	0.048 (2L/1247)	Lt Cant	0.300 (2L/360)	0.161 (16%)	D+L	L_

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

#### **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 Tie-down connection required at bearing 2 for uplift 242 lb (Combination 1.25D+1.5L, Load Case L\_).
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on full section width.

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

chemicals

### Handling & Installation

- andling & Installation

  LVL beams must not be cut or drilled

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

  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



POFESSION



Page 2 of 2

**EWP Studio** Simpson Strong-Tie® Component Solutions™

Client: Project:

Address:

**GREEN YORK HOMES** 

Date: 5/31/2018 Designer: RCO

Job Name: LIANA 1 (ELEV.1)

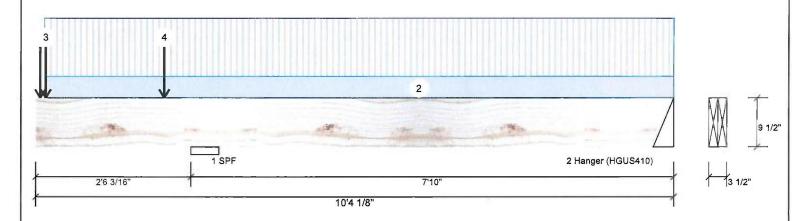
Project #:

Forex 2.0E-3000Fb LVL F6-A

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-0-14		Far Face	148 lb	378 lb	0 lb	0 lb	F1
2	Tie-In	0-1-12 to 10-4-2	(Span)0-4-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-1-15		Near Face	23 lb	42 lb	0 lb	0 lb	F2
4	Point	2-1-0		Near Face	18 lb	49 lb	0 lb	dl 0	J8
	Self Weight				8 PLF				

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

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### Lumber

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

chemicals

#### Handling & Installation

- andling & Installation

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

APA: PR-L318







Client: GREEN YO

Project: Address: GREEN YORK HOMES

Desire

Date: 5/31/2018

Designer: RCO

Job Name: LIANA 1 (ELEV.1)

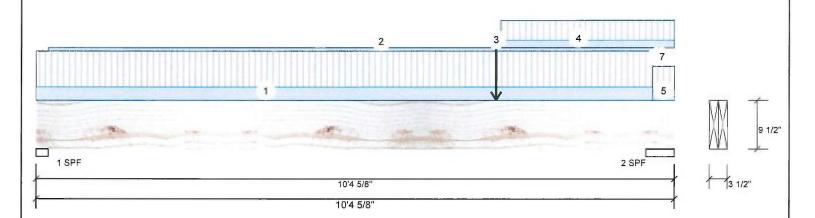
Project #:

F6-B Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



#### **Unfactored Reactions UNPATTERNED lb (Uplift)** Member Information Type: Girden Floor (Residential) Brg Dead Snow Application: Live Wind Plies: 2 Design Method: LSD 208 128 0 0 1 NBCC 2010 / OBC 2012 Moisture Condition: Dry **Building Code:** 2 424 214 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 Factored Reactions** Dead: 15 PSF Cap. React D/L lb Total Ld. Case Bearing Length Ld. Comb. 1 - SPF 2.375" 9% 160 / 312 472 L 1.25D+1.5L 2 - SPF 5.500" 8% 268 / 636 904 L 1.25D+1.5L

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1955 ft-lb	7'5 13/16"	22724 ft-lb	0.086 (9%)	1.25D+1.5L	L
Unbraced	1955 ft-lb	7'5 13/16"	20806 ft-lb	0.094 (9%)	1.25D+1.5L	L
Shear	817 lb	9'2 3/8"	9277 lb	0.088 (9%)	1.25D+1.5L	L
Perm Defl in.	0.016 (L/7225)	5'5 1/8"	0.328 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.031 (L/3827)	5'6 3/4"	0.328 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.047 (L/2502)	5'6 1/4"	0.493 (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 ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

o Eateral Stellaemess ratio based on run Section with.									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-0-6	(Span)1-0-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-6 to 10-0-6		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
3	Point	7-5-13		Near Face	148 lb	378 lb	0 lb	dl 0	F1
4	Tie-In	7-6-11 to 10-4-10	(Span)0-7-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-in	10-0-6 to 10-4-10	(Span)0-8-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	10-0-6 to 10-1-14		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
ontinued on	page 2								

Jun 140F 2018

Notes

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#### 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 out or drilled
   Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- Instenting versions, approvals approvals approvals Damagaed Bearns 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

Manufacturer Info

Forex APA: PR-L318







Dead

Live

Snow

7 Tapered Start 0 PLF 10-1-14 Тор 1 PLF 0 PLF 0 PLF End 10-2-14 0 PLF 0 PLF 0 PLF 0 PLF Self Weight 8 PLF

Side

Location Trib Width

10'4 5/8' 10'4 5/8"

> REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

1 SPF

.Continued from page 1

Load Type

ID

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

#### Handling & Installation

- IANGLING & INSTALIATION.

  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.
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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



9 1/2"

2 SPF

Comments

Wind