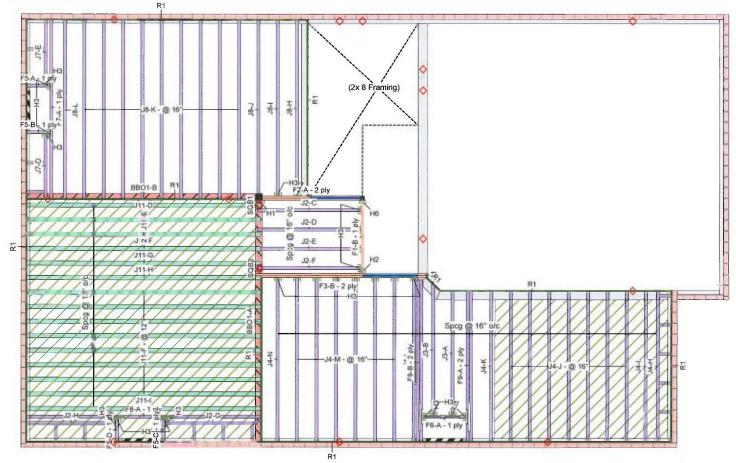
### Ground Floor





### 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 Opening Norbord Rimboard Plus 1.125 X 9.5 NJ60U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 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.

### LVL/LSL (Flush) Label Description

F2 Forex

2.0E-3000Fb LVL

12	2.0E-3000Fb LVL	1.75	5.5			2	0-0-0	LIANA 3 (ELEV.1 &
F1	Forex 2.0E-3000Fb LVL	1.75	9.5			1	6-0-0	Design Method
I Joist (	Flush)							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Description
J11	NJ60U	3.5	9.5			15	18-0-0	GRANELLI HOME
F8	NJH	2.5	9.5			1	18-0-0	BRAMPTON, ONT.
F7	NJH	2.5	9.5			1	14-0-0	Created
F9	NJH	2.5	9.5	2	2	4	12-0-0	May 29, 2018
F6	NJH	2.5	9.5			1	4-0-0	Builder
F5	NJH	2.5	9.5			4	2-0-0	GREEN YORK HO
J8	NJH	2.5	9.5			13	14-0-0	Sales Rep
J4	NJH	2.5	9.5			18	12-0-0	
J3	NJH	2.5	9.5			2	10-0-0	RM
J2	NJH	2.5	9.5			6	8-0-0	Designer
J7	NJH	2.5	9.5			2	6-0-0	RCO
Rim Bo	ard							Shipping
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Project
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			14	12	Builder's Project
Blockin	g						-1-	Kott Lumber

Width Depth

9.5

9.5

1.75

Qty

Plies

2

Pcs Length

Varies 15-0-0

12-0-0

Layout Name

LIANA 3 (ELEV.1 & 2)

GRANELLI HOME CORP.

**GREEN YORK HOMES** 

**Kott Lumber Company** 

D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \LIANA 3\LIANA 3 ELEV 1\FLOOR

Building Code NBCC 2010 / OBC

LSD

2012

40

15

480

360

480

360

360

240

480

360

OSB

3/4"

Nailed & Glued

14 Anderson Blvd

Stouffville, Ontario

**Ground 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/

Decking

Thickness

Fastener

Vibration

Deck

Deflection Girder

Floor

Loads

Live

Dead

Canada

L4A 7X4 905-642-4400 Job Path

2

2 2 8-0-0

### Label Description BLK1 NJH Hanger

					Dearn Olider	Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H1	1	Unknown Hanger				
H2	1	HUS1.81/10			30 16d	10 16d
НЗ	26	LT259			4 10dx1 1/2	2 10dx1 1/2
H6	1	HUCQ1.81/9-				

Width Depth Qty Plies Pcs Length

Ream/Girder

9.5 LinFt

### NOTES:

Framer to verify dimensions on the architectural drawings.

2.5

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

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

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

Hatch area represents ceramic tiled floor with an additional dead load

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

# ARCHITECTURAL DRAWINGS

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

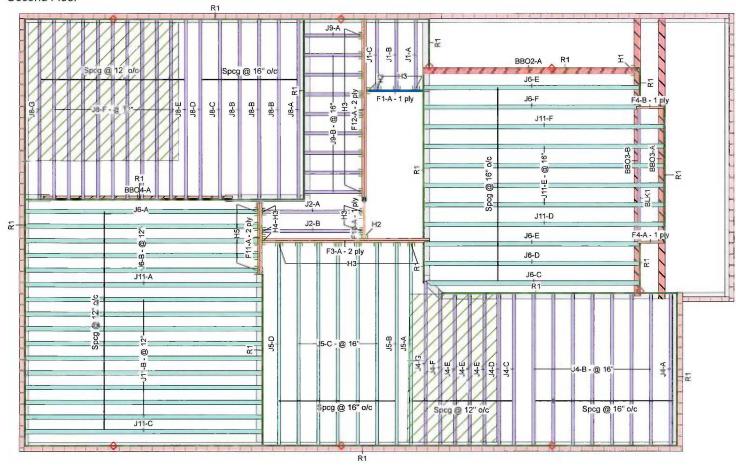
M-2057

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

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

19-447191.000.00RK

### Second 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.

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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



### ARCHITECTURAL DRAWINGS:

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

### Legend



NJ60H 9.5

NJ60U 9.5 NJH 9.5

Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped)

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

JARDIN DESIGN GROUP INC. Model: Liana 3



Load from Above

Norbord Rimboard Plus 1.125 X 9.5

Forex 2.0E-3000Fb LVL 1.75 X 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09

								_			PAGE 2	20 UF 3U
Second LVL/LS												
	Descr		Width	De	pth	1	Qty	Plies	Pcs	Length	NAS	COR
F12	Forex	000Fb LVL	1.75		9.5		1	2	2	14-0-0	41-10	CON
F3	Forex	000Fb LVL	1.75		9.5		1	2	2	12-0-0	Layout Name LIANA 3 (ELEV.2)	) ~
F11	Forex	000Fb LVL	1.75		9.5		1	2	2	6-0-0	Design Method	
F1	Forex	000Fb LVL	1.75		9.5				1	6-0-0	LSD Description	
F10	Forex 2.0E-3	000Fb LVL	1.75		9.5			61	1	4-0-0	GRANELLI HOMI BRAMPTON, ON	
F4	Forex 2.0E-3	000Fb LVL	1.75		9.5				2	2-0-0	Created May 29, 2018	
LVL/LS			25								Builder	
	Descr	iption	Width	De	pth	(	Qty	Plies	Pcs	Length	GREEN YORK H	OMES
BBO4		000Fb LVL	1.75		9.5		1	2	2	14-0-0		OWES
L loist	(Flush)	OUUFD LVL		L						1	Sales Rep	
	Descr	iption	Width	De	pth	(	Qty	Plies	Pcs	Length		
J5	NJ60H		2.5	-	9.5				8	14-0-0	Designer	
J11	NJ60U		3.5	İ	9.5				17	18-0-0	RCO	
J6	NJ60U		3.5		9.5				10	16-0-0	Shipping	
J8	NJH		2.5		9.5				17	14-0-0	Project	
J4	NJH		2.5	-	9.5	_			15	12-0-0	Builder's Projec	:t
J2 J1	NJH		2.5	-	9.5 9.5				3	8-0-0 6-0-0	Kott Lumber	r Company
-			4-0-0	14 Anderson Blvd	ı							
Rim Bo			2.0		5.5				3	4-0-0	Stouffville, Ontari	0
	Descri	iption	Width	TDe	pth	(	Qty	Plies	Pcs	Length	Canada	
R1		d Rimboard	1.125	100	9,5	ı `	~.,	, ,,,,	19	12	L4A 7X4	
	Plus 1.	125 X 9.5									905-642-4400	
Blockin	_										Job Path	-
	Descri	ption	Width	De	pth	_	Qty	Plies	Pcs	Length	D:\Users\rochavill	Io\WORK FROM
BLK1	NJH		2.5		9.5	L	inFt		Varies	8-0-0	HOME\GREEN Y	
Hange	r						Bor	am/Girder	Cur	ported	\GRANELLI HOM \LIANA 3\LIANA 3	IE CORP\MODELS B ELEV 2\FLOOR
							Dec	iii/Girdei		ember	Second Floor	
Label	Pcs	Descriptio	n S	kew	Slo	ne	fa	steners	_	teners	Design Method	LSD
H1	1	Unknown				,,,,		0,011010	100	torioro		NBCC 2010 / OBC
		Hanger									•	2012
H2	2	HUS1.81/1	0					30 16d	-	) 16d	Floor	
H3	24	LT259			-	_		0dx1 1/2		dx1 1/2	Loads	
H4 H5	5	HGUS410 LT359	-			-		46 16d 4 10d		6 16d dx1 1/2	Live	40
Пэ	- 5	111339	- 55	- 8				4 100	210	QX 1 1/2	Dead	15
NOTES:							_				Deflection Joist	
NOTES.											LL Span L/	480
		ify dimensio									TL Span L/	360
		nly require fil					portin	g			LL Cant 2L/	480
		er using a fa cking @ 24"					oad b	earing wal	ls.		TL Cant 2L/	360
4. Install	single-p	ly flush wind									Deflection Girde	
	ard/rimjo			m. e 4 · 11	a#:-		den				LL Span L/	360
		or specifier o recommen						ring on			TL Span L/	240
		ists which so									LL Cant 2L/	480
two le	vels floo	r or roof.		Ť							TL Cant 2L/	360
		blocks to be framer's res									Decking	000
		ramers resp or the hange						nealls ar	<b>-</b>		Deck	OSB
											Thickness	5/8"
		Member Co	nnection	Deta	il to p	ly to	ply na	ailing or			Fastener	Nailed & Glued
bolting re	equirem	ents.									Vibration	

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

foundation walls and footings including anchorage of components and

Hatch area represents ceramic tiled floor with an addtional dead load

The framing shown on this layout may deviate from the architectural

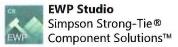
and structural drawings. Project Engineer to review and approve the deviation prior

supporting the floor system such as beams, walls, columns, and

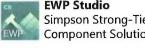
bracing for lateral stability are the responsibility of Others.

to construction

Ceiling:



EWP Studio Version 18.32.085 Powered by iStruct™

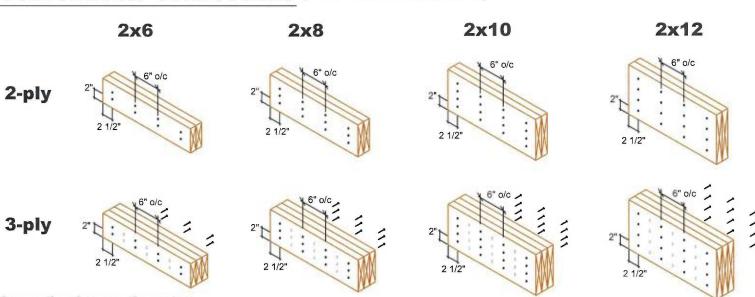




Gypsum 1/2"

# **MULTIPLE MEMBER CONNECTIONS**

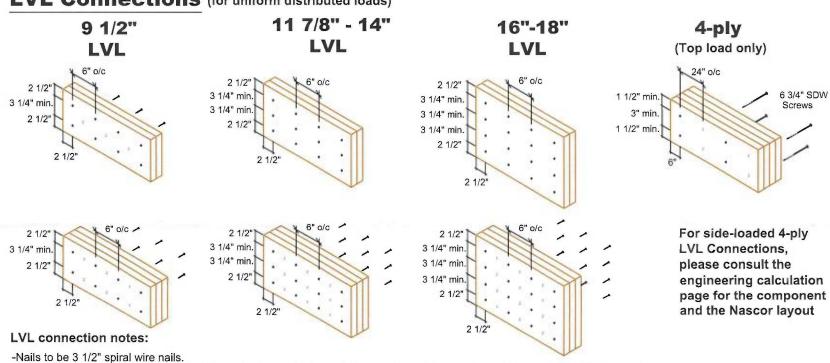
# Conventional Connections (for uniform distributed loads)



### Conventional connection notes:

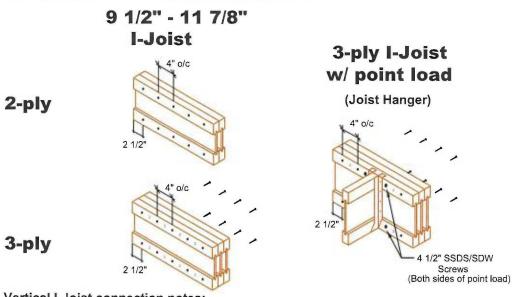
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

# LVL Connections (for uniform distributed loads)



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

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



# 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** 

Date: November 30, 2016

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:

GREEN YORK HOMES

Project: Address:

5/31/2018 Date:

Designer: **RCO** 

Job Name: LIANA 3 (ELEV.1)

F1-B Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED Level: Ground Floor

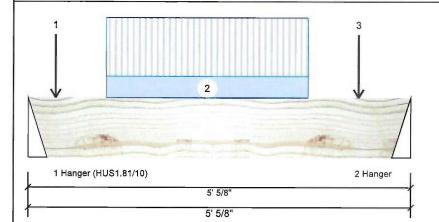
Brg

1

Hanger

Hanger

2 -



Wind

0

1.25D+1.5L

1.25D+1.5L

### Member Information

	Member Intorn	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		
ı				

### Unfactored Reactions UNPATTERNED Ib (Uplift)

338

...

3.000"

3.000"

Dead

136

2	314	127		0	0	
Bearings a	nd Factore	d Reactions				
Bearing Le	ength Ca	p. React D/L lb	Total	Ld. Case	Ld. Comb.	

170 / 507

159 / 471

Snow

629 L

0

### **Analysis Results**

l	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	716 ft-lb	2'6 7/16"	11362 ft-lb	0.063 (6%)	1.25D+1.5L	L
l	Unbraced	716 ft-lb	2'6 7/16"	7908 ft-lb	0.091 (9%)	1.25D+1.5L	L
ı	Shear	672 lb	11 3/4"	4638 lb	0.145 (14%)	1.25D+1.5L	L
	Perm Defl in.	0.003 (L/17255)	2'6 7/16"	0.156 (L/360)	0.020 (2%)	D	Uniform
ĺ	LL Defl inch	0.008 (L/6957)	2'6 7/16"	0.156 (L/360)	0.050 (5%)	L	L
ļ	TL Defl inch	0.011 (L/4958)	2'6 7/16"	0.234 (L/240)	0.050 (5%)	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

17%

16%

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

CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH



**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.

REFER TO MULTIPLE MEMBER TO MEMBER

**BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.

н							FORT LOAD	20 OAFK DEV	AIXII4GG.		
l	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
l	1	Point	0-4-6		Far Face	48 lb	128 lb	0 lb	0 lb	J2	
l	2	Part. Uniform	1-0-6 to 3-8-6		Far Face	52 PLF	139 PLF	0 PLF	0 PLF		
l	3	Point	4-4-6		Far Face	57 lb	153 lb	0 lb	0 lb	J2	
l		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
- payprovals

  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





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

**GREEN YORK HOMES** Project:

5/31/2018

Designer: RCO

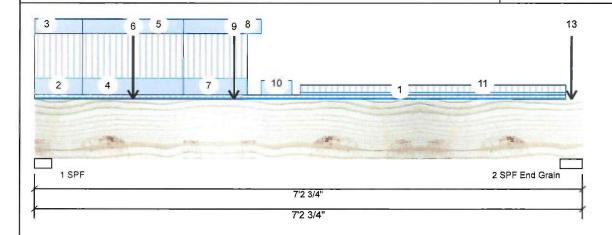
Job Name: LIANA 3 (ELEV.1)

Project #:

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

2-Ply - PASSED

Level: Ground Floor

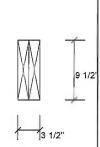


Floor (Residential)

NBCC 2010 / OBC 2012

LSD

No Not Checked Not Checked



Mem	her	Informa	tion

Туре:	Girder	Application:
Plies:	2	Design Method:
Moisture Condition:	Dry	Building Code:
Deflection LL:	360	Load Sharing:
Deflection TL:	240	Deck:
Importance:	Normal	Vibration:
General Load		
Floor Live:	40 PSF	
Dead:	15 PSF	

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Brg	Live	Dead	Snow	Wind
1	1088	645	0	0
2	1613	756	0	0

# Analysis Results

ı	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
ı	Moment	3003 ft-lb	2'7 9/16"	22724 ft-lb	0.132 (13%)	1.25D+1.5L	L
l	Unbraced	3003 ft-lb	2'7 9/16"	21802 ft-lb	0.138 (14%)	1.25D+1.5L	L
l	Shear	1838 lb	11 1/2"	9277 lb	0.198 (20%)	1.25D+1.5L	L
l	Perm Defl in.	0.014 (L/5673)	3'1 13/16"	0.228 (L/360)	0.060 (6%)	D	Uniform
ı	LL Defl inch	0.024 (L/3355)	3'1 9/16"	0.228 (L/360)	0.110 (11%)	L	L
	TL Defl inch	0.039 (L/2108)	3'1 5/8"	0.342 (L/240)	0.110 (11%)	D+L_	L

## **Bearings and Factored Reactions**

Bearing	Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.750"	41%	807 / 1632	2438	L	1.25D+1.5L
2 - SPF End Grain	3.500"	37%	945 / 2419	3364	L	1.25D+1.5L

### **Design Notes**

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

READ ALL NOTES ON THIS PAGE AND ON 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 7-0-2	(Span)0-10-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-7-9		Тор	92 PLF	246 PLF	0 PLF	0 PLF	J8
3	Part. Uniform	0-0-0 to 0-7-9		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-7-9 to 1-11-9		Тор	92 PLF	246 PLF	0 PLF	0 PLF	J8
5	Part. Uniform	0-7-9 to 1-11-9		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
Continued on	page 2								

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design cnterna 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

- 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







Page 2 of 2

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

Address:

**GREEN YORK HOMES** 

Date:

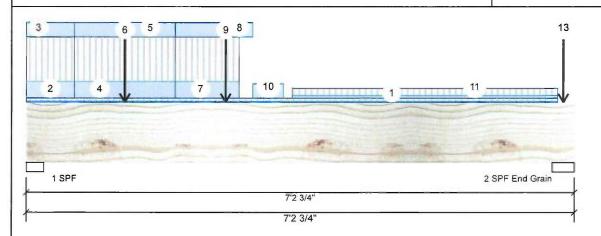
5/31/2018 Designer: RCO

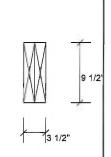
Job Name: LIANA 3 (ELEV.1)

Project #:

1.750" X 9.500" 2-Ply - PASSED F2-A Forex 2.0E-3000Fb LVL

Level: Ground Floor





	Continued fi	rom page 1								
	ID	Load Type	Location Tr	rib Width	Side	Dead	Live	Snow	Wind	Comments
	6	Point	1-3-9		Far Face	121 lb	322 lb	0 lb	d1 0	J8
	7	Part. Uniform	1-11-9 to 2-9-11		Тор	92 PLF	246 PLF	0 PLF	0 PLF	J8
1	8	Part. Uniform	1-11-9 to 2-11-14		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	9	Point	2-7-9		Far Face	93 lb	248 lb	0 lb	0 lb	J8
	10	Part, Uniform	2-11-14 to 3-4-12		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	11	Part. Uniform	3-6-2 to 7-0-2		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
	12	Point	7-1-0		Near Face	127 lb	314 lb	0 lb	0 lb	F1
	13	Point	7-1-0		Тор	379 lb	869 lb	0 lb	0 lb	C3
		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

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







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

Project: Address: **GREEN YORK HOMES** 

5/31/2018

Date: Designer: RCO

Job Name: LIANA 3 (ELEV.1)

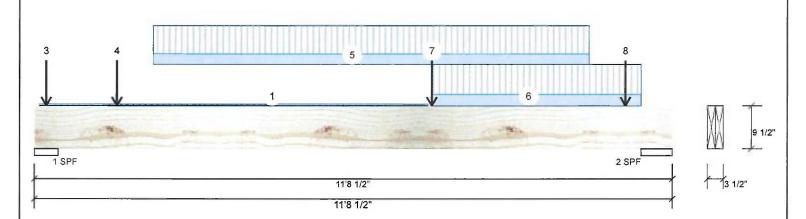
Level: Ground Floor

Project #:

Forex 2.0E-3000Fb LVL F3-B

1.750" X 9.500"

2-Ply - PASSED



Member Info	ormation			Unfactor	ed React	tions U	NPATTERN	ED lb (Up	lift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	2	Design Method:	LSD	1	1523		642	0		0
Moisture Conditi	ion: Dry	Building Code:	NBCC 2010 / OBC 2012	2	2170		865	0		0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored I	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total Ld.	Case	Ld. Comb.
				1 - SPF	5.250"	27%	803 / 2285	3088 L		1.25D+1.5L
		1		2 - SPF	6.875"	29%	1081 / 3255	4335 L		1.25D+1.5L

**Analysis Results** 

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10162 ft-lb	6'11 3/4"	22724 ft-lb	0.447 (45%)	1.25D+1.5L	L
Unbraced	10162 ft-lb	6'11 3/4"	20411 ft-lb	0.498 (50%)	1.25D+1.5L	L
Shear	3978 lb	10'4 7/8"	9277 lb	0.429 (43%)	1.25D+1.5L	L
Perm Defl in.	0.091 (L/1425)	6'	0.361 (L/360)	0.250 (25%)	D	Uniform
LL Defl inch	0.227 (L/571)	6' 1/8"	0.361 (L/360)	0.630 (63%)	L	L
TL Defl inch	0.319 (L/408)	6' 1/8"	0.541 (L/240)	0.590 (59%)	D+L	L

**Design Notes** 

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on full section width

READ ALL NOTES ON THIS PAGE AND ON 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



/ Lateral Sleri	derness ratio based t	on full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-1-2 to 7-2-12	(Span)0-6-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-2-10		Тор	37 lb	99 lb	0 lb	dl 0	J11
3	Point	0-2-10		Тор	24 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	1-6-3		Near Face	103 lb	276 lb	0 lb	0 lb	J4
5	Part, Uniform	2-2-3 to 10-2-3		Near Face	84 PLF	224 PLF	0 PLF	0 PLF	
ontinued on pag	ge 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 atherwise
   LVL not to be treated with fire retardant or corrosive
- chemicals Handling & Installation
- And in the control of 
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info







Page 2 of 2

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

Address:

**GREEN YORK HOMES** Project:

5/31/2018 Date:

Designer: RCO

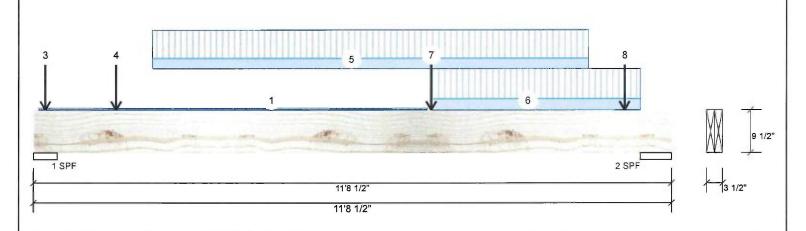
Job Name: LIANA 3 (ELEV.1)

Project #:

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

2-Ply - PASSED

Level: Ground Floor



ı	Continued from p	age 1									
ı	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
ı	6	Part, Uniform	7-3-10 to 11-1-10		Тор	90 PLF	240 PLF	0 PLF	0 PLF		
ı	7	Point	7-3-10		Far Face	136 lb	338 lb	0 lb	dl 0	F1	
ı	8	Point	10-10-3		Near Face	73 lb	195 lb	0 lb	0 lb	J4	
I		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 venify the dimensions and loads.

### Lumber

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- chemicals
- Handling & Installation
- 1. LVL beams must not be cut or drilled
  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fasterning 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







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

**GREEN YORK HOMES** 

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

Job Name: LIANA 3 (ELEV.1)

Project #:

Brg

1

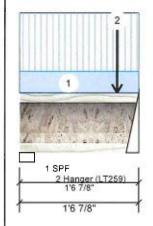
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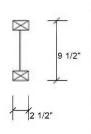
2 -

Hanger

2.000"

F5-A NJH 9.500" - PASSED Level: Ground Floor





Wind

0

0

1.25D+1.5L

0

0

226 |

NAP	Shor	Intor	mation
IAICII	IDCI	BULLOT	uiation

Type:	Girder	Application:	Floor (Residential)
	Gildei		,
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	31110505		
Floor Live:	40 PSF		
Dead:	15 PSF		

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

23

43

62

115

Bearings and F	actored R	eactions				_
Bearing Length	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 CDE 2375"	8%	29 / 93	122	T .	1 25D+1 5I	

53 / 173

### **Analysis Results**

ı	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
l	Moment	43 ft-lb	11 9/16"	3830 ft-lb	0.011 (1%)	1.25D+1.5L	L	
	Unbraced	43 ft-lb	11 9/16"	3779 ft-lb	0.011 (1%)	1.25D+1.5L	L	
	Shear	213 lb	1'5 5/8"	1580 lb	0.135 (13%)	1.25D+1.5L	L	
	Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
	LL Defl inch	0.001 (L/31491)	11 3/8"	0.044 (L/360)	0.010 (1%)	L	L	
	TL Defl inch	0.001 (L/22944)	11 3/8"	0.067 (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.

14%

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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-3-7		Far Face	28 lb	76 lb	0 lb	0 lb	J7

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

  1. Dioist flanges must not be cut or drilled

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

  3. Damaged Dioists must not be used

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

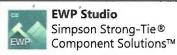
Manufacturer Info

Nascor by Kott









Client: Project: Address:

**GREEN YORK HOMES** 

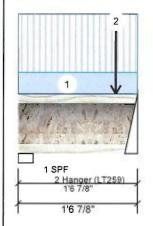
5/31/2018 Designer: **RCO** 

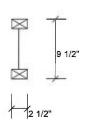
Job Name: LIANA 3 (ELEV.1)

Project #:

9.500" - PASSED F5-B NJH

Level: Ground Floor





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Member	Information
T	01-1

Туре:	Girder
Plies:	1
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 NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No Deck: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Snow Live Dead Wind 62 23 0 0 2 113 0

Cap. React D/L lb

29 / 92

53 / 170

8%

14%

# Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	43 ft-lb	11 1/2"	3830 ft-lb	0.011 (1%)	1.25D+1.5L	L
Unbraced	43 ft-lb	11 1/2"	3779 ft-lb	0.011 (1%)	1.25D+1.5L	L
Shear	210 lb	1'5 5/8"	1580 lb	0.133 (13%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.001 (L/31811)	11 3/8"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/23114)	11 3/8"	0.067 (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.

**Bearings and Factored Reactions** 

Bearing Length

2.000"

1 - SPF 2.375"

2 -

Hanger

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



Total Ld. Case

121 L

223 L

### **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.

, Dotton	i nange bracea at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-3-7		Near Face	28 lb	74 lb	0 lb	0 lb	J1

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. Noist flanges must not be cut or drilled

  2. Refer to latest copy of the Moist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening 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 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** 

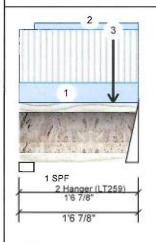
5/31/2018

Designer: **RCO** 

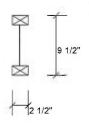
Job Name: LIANA 3 (ELEV.1)

Project #:

### 9.500" - PASSED F5-C NJH



Level: Ground Floor



Member	Information
Type:	Girder

31	
Plies:	1
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

NBCC 2010 / OBC 2012 Building Code: Load Sharing: No Deck:

Not Checked Vibration: Not Checked

### Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	70	33	0	0
2	141	69	0	0

# Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	63 ft-lb	1'1 1/8"	3830 ft-lb	0.016 (2%)	1.25D+1.5L	L
Unbraced	63 ft-lb	1'1 1/8"	3779 ft-lb	0.017 (2%)	1.25D+1.5L	L
Shear	283 lb	1'5 5/8"	1580 lb	0.179 (18%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/47832)	1' 5/8"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/23647)	1' 5/8"	0.044 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.001 (L/15824)	1' 5/8"	0.067 (L/240)	0.020 (2%)	D+L	L

**Bearings and Factored Reactions** 

Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	9%	42 / 106	147	L	1.25D+1.5L
2 - Hanger	2.000"	19%	87 / 211	298	L	1.25D+1.5L

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.

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

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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-6 to 1-6-14		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
3	Point	1-2-14		Near Face	54 lb	110 lb	0 lb	0 lb	J2

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

- Handling & Installation

  1. Noist flanges must not be cut or drilled

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

  3. Damaged Libists 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:

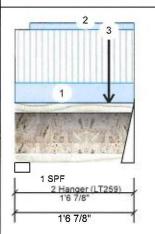
Project: Address: **GREEN YORK HOMES** 

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

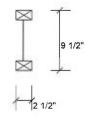
Job Name: LIANA 3 (ELEV.1)

Project #:

### 9.500" - PASSED F5-D NJH



Level: Ground Floor



Wind

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Mem	ber	Information	1

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

Cap. React D/L lb

9%

18%

33

67

Live

70

136

Brg

1

B

2 -

Hanger

Bearing Length

2.000"

1 - SPF 2.375"

2	130	07	U	U	
earings	and Factored	Reactions			

41 / 104

84 / 205

Snow

0

Ο

Total Ld. Case

145 L

288 L

### **Analysis Results**

ı	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	61 ft-lb	1'1"	3830 ft-lb	0.016 (2%)	1.25D+1.5L	L
ı	Unbraced	61 ft-lb	1'1"	3779 ft-lb	0.016 (2%)	1.25D+1.5L	L
	Shear	274 lb	1'5 5/8"	1580 lb	0.173 (17%)	1.25D+1.5L	L
	Perm Defl in.	0.000 (L/49408)	1' 7/16"	0.044 (L/360)	0.010 (1%)	D	Uniform
	LL Defl inch	0.001 (L/24289)	1' 9/16"	0.044 (L/360)	0.010 (1%)	L	L
	TL Defl inch	0.001 (L/16284)	1' 1/2"	0.067 (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.

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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Part. Uniform	0-2-6 to 1-6-14		Тор	8 PLF	0 PLF	0 PLF	0 PLF		
3	Point	1-2-14		Far Face	51 lb	105 lb	0 lb	0 lb	J2	

### 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
 Upist not to be treated with fire retardant or corrosive

- Handling & Installation
- Andling & Installation
  Loist flanges must not be cut or drilled
  Refer to latest copy of the Joist product information
  details for framing details, stiffener tables, web hole
  chart, bndigng details, multi-livy fastening details and
  handling/erection details
  Damaged blosts 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

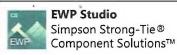
### Manufacturer Info

Nascor by Kott









Client: Project: Address:

**GREEN YORK HOMES** 

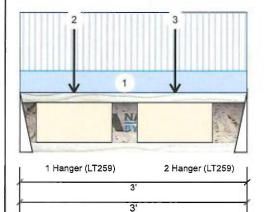
5/31/2018 RCO Designer:

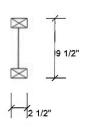
Job Name: LIANA 3 (ELEV.1)

Project #:

### 9.500" - PASSED F6-A NJH







Ld. Comb.

1.25D+1.5L

1.25D+1.5L

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						

Unfacto	red Reaction	s UNPATTER	NED lb (Uplif	t)	
Brg	Live	Dead	Snow	Wind	
1	260	97	0	0	
2	233	88	0	0	
Bearing	s and Factore	ed Reactions			

122 / 390

109 / 350

Total Ld. Case

512 L

459 L

Cap. React D/L lb

ľ	Allalysis Kesutis								
Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case		
	Moment	360 ft-lb	2' 9/16"	3830 ft-lb	0.094 (9%)	1.25D+1.5L	L		
l	Unbraced	360 ft-lb	2' 9/16"	3411 ft-lb	0.105 (11%)	1.25D+1.5L	L		
ı	Shear	505 lb	1 1/4"	1580 lb	0.319 (32%)	1,25D+1,5L	L		
l	Perm Defl in.	0.002 (L/16963)	1'8 1/4"	0.093 (L/360)	0.020 (2%)	D	Uniform		
l	LL Defl inch	0.005 (L/6359)	1'8 1/4"	0.093 (L/360)	0.060 (6%)	L	L		
l	TL Defl inch	0.007 (L/4625)	1'8 1/4"	0.140 (L/240)	0.050 (5%)	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.

32%

29%

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

Bearing Length

Hanger

Hanger

2.000

2.000"

# POFESSIONA A. EL-MASRI 040F 2018

### **Design Notes**

Analysis Results

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

_4	Bottom hange braced at bearings.					POINT LOADS OVER BEARINGS.			
IE	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	0-8-9		Far Face	70 lb	188 lb	0 lb	dl 0	J3
3	Point	2-0-9		Far Face	76 lb	202 lb	0 lb	0 lb	J3



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
 Up is that to be treated with fire retardant or corrosive

- Handling & Installation

  1. Upist flanges must not be cut or drilled

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

  1. Damaged bloists must not be used

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

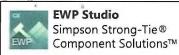
Manufacturer Info

Nascor by Kott









Client: **GREEN YORK HOMES** 

Project: Address:

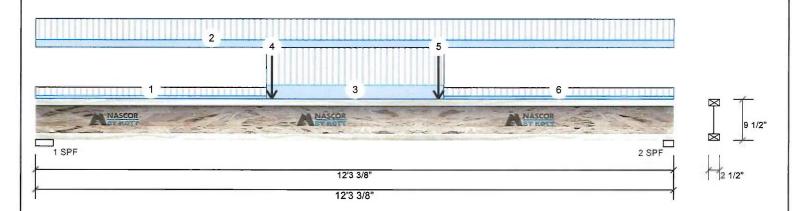
Date: 5/31/2018 RCO Designer:

Job Name: LIANA 3 (ELEV.1)

Project #:

### 9.500" - PASSED F7-A NJH

Level: Ground Floor



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

### Unfactored Reactions UNPATTERNED Ib (Uplift)

*	1	327	123	0	0
2	2	320	120	0	0

Snow

Dead

### **Bearings and Factored Reactions**

Bearing	Length	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.	
1 - SPF	4.125"	41%	154 / 490	644	L	1.25D+1.5L	
2 - SPF	2.375"	40%	150 / 480	630	1	1.25D+1.5I	

### **Analysis Results**

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2352 ft-lb	6'2 11/16"	3830 ft-lb	0.614 (61%)	1.25D+1.5L	L
Unbraced	2352 ft-lb	6'2 11/16"	2368 ft-lb	0.993 (99%)	1.25D+1.5L	L
Shear	629 lb	3 3/8"	1580 lb	0.398 (40%)	1.25D+1.5L	L
Perm Defl in.	0.071 (L/2010)	6'2 1/2"	0.395 (L/360)	0.180 (18%)	D	Uniform
LL Defl inch	0.188 (L/756)	6'2 9/16"	0.395 (L/360)	0.480 (48%)	L	L
TL Defl inch	0.259 (L/549)	6'2 9/16"	0.593 (L/240)	0.440 (44%)	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.



Wind

### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top flange must be laterally braced at a maximum of 4'9" o.c.

3 Bottom flange braced at bearings.

O DOLLO	in hange bracea at bearing	J							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-5-5	(Span)0-4-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-3-6	(Span)0-11-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	4-5-5 to 7-10-5	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	4-6-9		Far Face	43 lb	113 lb	0 lb	0 lb	F5
5	Point	7-9-1		Far Face	43 lb	115 lb	0 lb	0 lb	F5
6	Tie-In	7-10-5 to 12-3-6	(Span)0-4-11	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 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.

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

### Handling & Installation

- Libist flanges must not be cut or drilled
   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
   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 appoiling.

Manufacturer Info

Nascor by Kott







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

Project: Address: GREEN YORK HOMES

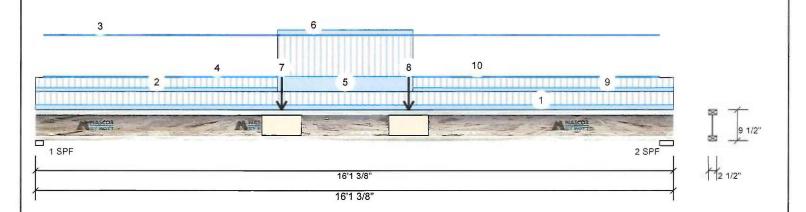
Date: 5/31/2018 **RCO** Designer:

Job Name: LIANA 3 (ELEV.1)

Project #:



Level: Ground Floor



Member Information

Girder Type: 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

**Building Code:** NBCC 2010 / OBC 2012 Load Sharing: No

Deck: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	345	167	0	0
2	342	164	0	0

### **Bearings and Factored Reactions**

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" 46% 208 / 518 726 | 1.25D+1.5L 2 - SPF 4.125" 45% 206 / 513 718 L 1.25D+1.5L

Analysis Results

Analysis Actual Location Allowed Capacity Comb. Case 0.984 (98%) 1.25D+1.5L L Moment 3768 ft-lb 8' 3/16" 3830 ft-lb 3768 ft-lb 8' 3/16" 3771 ft-lb 0.999 Unbraced 1.25D+1.5L L (100%) 721 lb 1 5/8" 1580 lb 0.456 (46%) 1.25D+1.5L L Shear Perm Defl in. 0.221 (L/852) 7'11 5/8" 0.523 (L/360) 0.420 (42%) D Uniform LL Defl inch 0.456 (L/413) 7'11 5/8" 0.523 (L/360) 0.870 (87%) L L 7'11 5/8" 0.785 (L/240) 0.860 (86%) D+L TL Defl inch 0.677 (L/278) 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 BEARING



### Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top flange must be laterally braced at a maximum of 1'5" o.c.

3 000011	nange braced at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-1-6	(Span)0-6-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 6-1-6	(Span)0-5-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 15-9-1		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 6-1-6		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
5	Tie-In	6-1-6 to 9-6-6	(Span)1-8-11 to 1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	6-1-6 to 9-6-6		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
7	Point	6-2-10		Near Face	67 lb	136 lb	0 lb	0 lb	F5

### Notes

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.

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

### Handling & Installation

- andling & Installation

  Lloist flanger must not be cut or drilled
  Refer to latest copy of the Libist product information
  details for framing details, stiffener tables, web hole
  chart, bridging details, multi-liby festering details and
  handling/erection details
  Damaged bloists 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

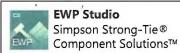
Nascor by Kott







Page 2 of 2



Client:

Project: Address: **GREEN YORK HOMES** 

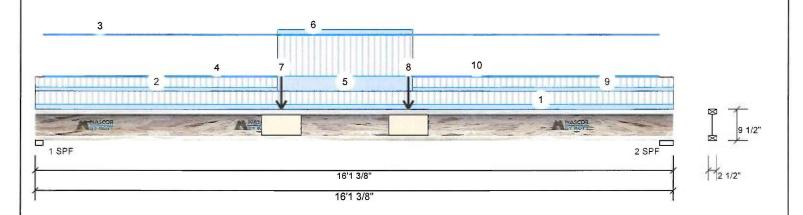
Date: 5/31/2018 RCO Designer:

Job Name: LIANA 3 (ELEV.1)

Project #:

### F8-A 9.500" - PASSED NJH

Level: Ground Floor



Continued	from	page	1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
8	Point	9-5-2		Near Face	69 lb	141 lb	0 lb	0 lb	F5
9	Tie-In	9-6-6 to 16-1-6	(Span)0-5-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
10	Part. Uniform	9-6-6 to 15-9-1		Тор	1 PLF	0 PLF	0 PLF	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

### 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 oustomer 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

- Handling & Installation

  1. Usist flanges must not be out or drilled

  2. Refer to latest copy of the IJoist product information details for framing details, stiffener tables, web hole chart, brodging details, multi-ply fastering 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 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







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

**GREEN YORK HOMES** 

Project: Address: Date:

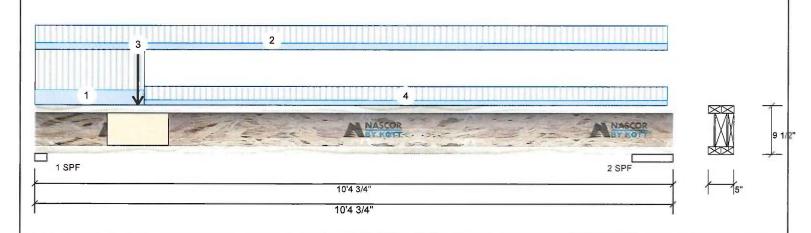
5/31/2018 RCO Designer:

Job Name: LIANA 3 (ELEV.1)

Project #:

9.500" F9-A 2-Ply - PASSED NJH

Level: Ground Floor



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 Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	535	201	0	0
2	328	123	0	0
-				•

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" 33% 251 / 802 1053 L 1.25D+1.5L

154 / 492

646 L

1.25D+1.5L

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
ı	Moment	1673 ft-lb	4'1 3/4"	7660 ft-lb	0.218 (22%)	1.25D+1.5L	L
ı	Unbraced	1673 ft-lb	4'1 3/4"	1685 ft-lb	0.993 (99%)	1.25D+1.5L	L
ı	Shear	1027 lb	1 5/8"	3160 lb	0.325 (32%)	1.25D+1.5L	L
ı	Perm Defl in.	0.018 (L/6275)	4'8 7/16"	0.322 (L/360)	0.060 (6%)	D	Uniform
ı	LL Defl inch	0.049 (L/2357)	4'8 7/16"	0.322 (L/360)	0.150 (15%)	L	L
	TL Defl inch	0.068 (L/1713)	4'8 7/16"	0.483 (L/240)	0.140 (14%)	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.

20%

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.

2 - SPF 8.000"

EL-MASRI

### **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 8'7" o.c.

5 Bottom flange braced at bearings

	Dottom nange	braceu at bearings.						O O TEIT DE		
I	D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1		Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2		Tie-In	0-0-0 to 10-3-9	(Span)1-6-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3		Point	1-8-2		Far Face	88 lb	233 lb	0 lb	0 lb	F6
4		Tie-In	1-9-6 to 10-3-9	(Span)1-1-15	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 enteria 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
   Upist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

  1. Joist flanges must not be cut or drilled

  2. Refer to latest copy of the Moist product information details for framing 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 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







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

Project: Address: **GREEN YORK HOMES** 

5/31/2018

Date: Designer: RCO

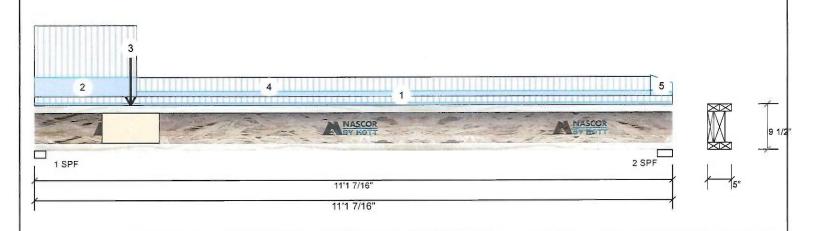
Job Name: LIANA 3 (ELEV.1)

Project #:

9.500" F9-B NJH

2-Ply - PASSED

Level: Ground Floor



nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	٧	Wind
2	Design Method:	LSD	1	453		169	1	D	0
: Dry	Building Code:	NBCC 2010 / OBC 2012	2	192		72	1)	0	0
360	Load Sharing:	No							
240	Deck:	Not Checked							
Normal	Vibration:	Not Checked							
40 PSF			Bearing:	s and Fac	tored R	eactions			
15 PSF			Bearing	Length	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
			1 - SPF	2.375"	28%	212 / 679	891	L	1.25D+1.5L
			2-SPF	3.188"	12%	90 / 288	377	L	1.25D+1.5L
	Girder 2 Dry 360 240 Normal	Girder Application: Design Method: Building Code: Load Sharing: Deck: Normal Vibration:  40 PSF 15 PSF	Girder Application: Floor (Residential)  Design Method: LSD  Dry Building Code: NBCC 2010 / OBC 2012  Load Sharing: No  Deck: Not Checked  Normal Vibration: Not Checked	Application: Floor (Residential)   Brg	Girder         Application:         Floor (Residential)         Brg         Live           2         Design Method:         LSD         1         453           Dry         Building Code:         NBCC 2010 / OBC 2012         2         192           360         Load Sharing:         No         2         192           240         Deck:         Not Checked         Not Checked           Normal         Vibration:         Not Checked           40 PSF         Bearings and Fac           15 PSF         Bearing Length           1 - SPF 2.375"         2 - SPF 3.188"	Application: Floor (Residential)   Brg   Live	Application: Floor (Residential)   Brg   Live   Dead	Application: Floor (Residential)   Brg	Application: Floor (Residential)   Brg   Live   Dead   Snow

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	-
Moment	1293 ft-lb	3'10 13/16"	7660 ft-lb	0.169 (17%)	1.25D+1.5L	L	
Unbraced	1293 ft-lb	3'10 13/16"	1300 ft-lb	0.994 (99%)	1.25D+1.5L	L	
Shear	871 lb	1 5/8"	3160 lb	0.275 (28%)	1.25D+1.5L	L	
Perm Defl in.	0.017 (L/7653)	5'1 5/16"	0.359 (L/360)	0.050 (5%)	D	Uniform	
LL Defl inch	0.045 (L/2865)	5'1 1/4"	0.359 (L/360)	0.130 (13%)	L	L	
TL Defl inch	0.062 (L/2084)	5'1 1/4"	0.539 (L/240)	0.120 (12%)	D+L	L	

**Design Notes** 

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 9'6" o.c.

5 Bottom flange braced at bearings

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



3 DOLLOII	mange braced at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-1-7	(Span)0-4-15	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	97 lb	260 lb	0 lb	0 lb	F6
4	Tie-In	1-9-6 to 10-8-14	(Span)0-11-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	10-8-14 to 11-1-7	(Span) 0-11-14 to 0-7-4	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
 Joist not to be treated with fire retardant or corrosive

### Handling & Installation

- andling & installation.

  Note flanges must not be out or drilled.
  Refer to latest copy of the Libist product information details for framing details, sufferier tables, web hole chart, bridging details, multi-hip fastening details and handling/erection details.

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

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

Manufacturer Info

Nascor by Kott







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

**GREEN YORK HOMES** 

5/31/2018

RCO Designer: Job Name: LIANA 3 (ELEV.1)

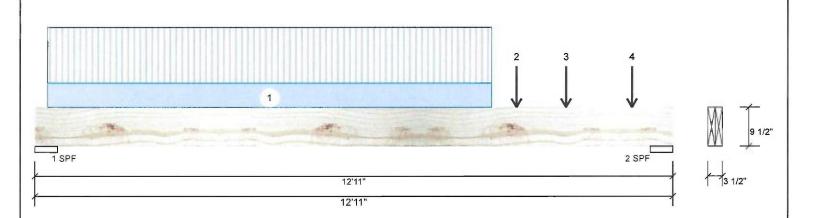
Project #:

BBO4-A Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



incinioci inioni	ila cioni			omaccor			- '- (- b)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	1515	707	0	0
Moisture Condition:	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1536	676	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck;	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings	and Fact	ored Reactions		
Dead:	15 PSF			Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	5.500"	27% 884 / 2273	3156 L	1.25D+1.5L
				2 - SPF	5.500"	27% 845 / 2304	3148 L	1.25D+1.5L

**Analysis Results** 

Member Information

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	9326 ft-lb	6'5 3/8"	22724 ft-lb	0.410 (41%)	1.25D+1.5L	L
	Unbraced	9326 ft-lb	6'5 3/8"	19820 ft-lb	0.471 (47%)	1.25D+1.5L	L
	Shear	2846 lb	11'8 3/4"	9277 lb	0.307 (31%)	1,25D+1,5L	L
	Perm Defl in.	0.116 (L/1250)	6'5 5/16"	0.404 (L/360)	0.290 (29%)	D	Uniform
	LL Defl inch	0.253 (L/574)	6'5 1/2"	0.404 (L/360)	0.630 (63%)	L	L
	TL Defl inch	0.370 (L/393)	6'5 1/2"	0.606 (L/240)	0.610 (61%)	D+L	L

**Design Notes** 

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on full section width.

READ ALL NOTES ON THIS PAGE AND ON 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.

Unfactored Reactions UNPATTERNED Ib (Uplift)

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 Sit	enderness ratio based o	it full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-3-1 to 9-3-1		Тор	107 PLF	244 PLF	0 PLF	0 PLF	
2	Point	9-9-1		Тор	92 lb	244 lb	0 lb	0 lb	J8
3	Point	10-9-1		Тор	107 lb	285 lb	0 lb	0 lb	J8
4	Point	12-1-1		Тор	122 lb	326 lb	0 lb	0 lb	J8
	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 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







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

**GREEN YORK HOMES** 

Date: 5/31/2018 RCO Designer:

Job Name: LIANA 3 (ELEV.1)

Project #:

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

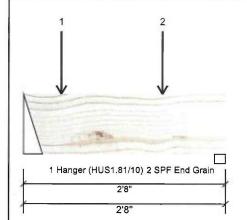
Brg

1

2

2 - SPF 1.750"

Fnd Grain Level: Second Floor



Wind

0

0

1.25D+1.5L

### Member Information

Type:	Girder
Plies:	1
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: No Deck: Not Checked

Not Checked

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

Dead

70

57

Snow

280 L

0

0

Live

174

139

Rearings	s and Fac	tored Re	actions				
Bearing			eact D/L lb	Total	Ld. Case	Ld. Comb.	_
1 - Hanger	3.000"	9%	88 / 261	349	L	1.25D+1.5L	

71 / 209

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	208 ft-lb	1'10"	11362 ft-lb	0.018 (2%)	1.25D+1.5L	L
Unbraced	208 ft-lb	1'10"	10456 ft-lb	0.020 (2%)	1.25D+1.5L	L
Shear	344 lb	11 3/4"	4638 lb	0.074 (7%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/68055)	1'9 1/8"	0.080 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/27103)	1'9 7/8"	0.080 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/19389)	1'9 11/16"	0.120 (L/240)	0.010 (1%)	D+L	L

Vibration:

**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.

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.

12%

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	Point	0-6-0		Far Face	51 lb	136 lb	0 lb	0 lb	J2
2	Point	1-10-0		Far Face	66 lb	177 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-bly 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







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

Address:

**GREEN YORK HOMES** 

Date:

5/31/2018 Designer: RCO

Job Name: LIANA 3 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Brg

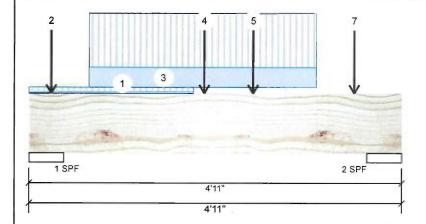
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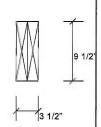
2

2 - SPF 5.500"

2

Level: Second Floor





Wind

0

0

1.25D+1.5L

### Member Information

Wellber Illorination									
Туре:	Girder	Application:	Floor (Residential)						
Plies:	2	Design Method:	LSD						
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 201:						
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF								
Dead:	15 PSF								

### Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

666

664

Live

1661

1662

Bearings and Factored Reactions									
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.			
1-SPF	5.500"	28%	833 / 2492	3325	L	1.25D+1.5L			

830 / 2493

Snow

3324 L

0

0

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4701 ft-lb	2'3 3/4"	22724 ft-lb	0.207 (21%)	1.25D+1.5L	L
Unbraced	4701 ft-lb	2'3 3/4"	22724 ft-lb	0.207 (21%)	1.25D+1.5L	L
Shear	3520 lb	3'8 3/4"	9277 lb	0.379 (38%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/5989)	2'3 3/4"	0.138 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.021 (L/2406)	2'3 3/4"	0.138 (L/360)	0,150 (15%)	L	L
TL Defl inch	0.029 (L/1716)	2'3 3/4"	0.206 (L/240)	0.140 (14%)	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.

28%

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.

ı	טו	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 2-2-0	(Span)1-3-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Point	0-3-8		Far Face	79 lb	211 lb	0 lb	0 lb	J6
l	3	Part, Uniform	0-9-8 to 3-9-8		Far Face	119 PLF	316 PLF	0 PLF	0 PLF	
	4	Point	2-3-12		Near Face	616 lb	1523 lb	0 lb	0 lb	F3
l	5	Point	2-11-8		Near Face	51 lb	136 lb	0 lb	0 lb	J2
ĺ	6	Point	4-3-8		Far Face	108 lb	287 lb	0 lb	0 lb	J6

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

- LVL beams must not be cut or drilled
   Refer to manufacturer's produ 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







Page 2 of 2

**EWP Studio** Component Solutions™

Simpson Strong-Tie®

Client: Project: Address:

**GREEN YORK HOMES** 

Date: 5/31/2018 Designer: RCO

Job Name: LIANA 3 (ELEV.1)

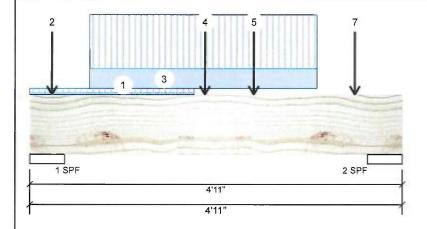
Project #:

Forex 2.0E-3000Fb LVL F11-A

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



9 1/2

.Continued from page 1

7

ID Load Type

Point

Self Weight

Location 4-3-8

Trib Width

Side Near Face Dead 61 lb 8 PLF

Live 162 lb

Snow 0 lb Wind Comments

0 lb

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



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 fasterning 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 beaming 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: Project: Address:

**GREEN YORK HOMES** 

5/31/2018 Date:

RCO Designer:

Job Name: LIANA 3 (ELEV.1)

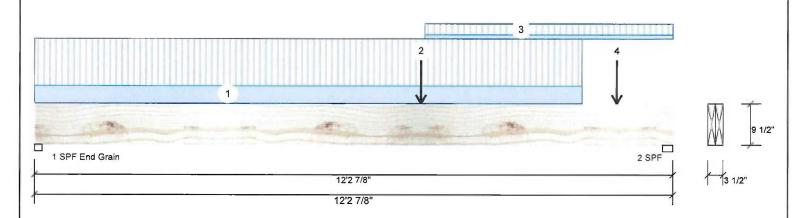
Project #:

Forex 2.0E-3000Fb LVL F12-A

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



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

NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No Deck: Not Checked

Vibration: Not Checked

## Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	730	322	0	0
2	894	386	0	0

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

Total Ld. Case Ld. Comb. 1 - SPF 1.750" 33% 403 / 1095 1497 I 1.25D+1.5L End Grain

2 - SPF 2.375" 36% 482 / 1340 1.25D+1.5L 1822 I

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6660 ft-lb	7'4 15/16"	22724 ft-lb	0.293 (29%)	1.25D+1.5L	L
Unbraced	6660 ft-lb	7'4 15/16"	19870 ft-lb	0.335 (34%)	1.25D+1.5L	L
Shear	1898 lb	11'3 3/4"	9277 lb	0.205 (20%)	1.25D+1.5L	L
Perm Defl in.	0.070 (L/2071)	6'4 7/16"	0.401 (L/360)	0.170 (17%)	D	Uniform
LL Defl inch	0.163 (L/883)	6'4 3/4"	0.401 (L/360)	0.410 (41%)	L	L
TL Defl inch	0.233 (L/619)	6'4 5/8"	0.601 (L/240)	0.390 (39%)	D+L	L

### **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top 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	Part, Uniform	0-0-0 to 10-6-0		Far Face	28 PLF	75 PLF	0 PLF	0 PLF	
2	Point	7-4-15		Near Face	255 lb	661 lb	0 lb	0 lb	F1
3	Tie-In	7-5-13 to 12-2-14	(Span)0-10-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	11-2-0		Far Face	34 lb	91 lb	0 lb	0 lb	19
	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
- 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

- 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:

**GREEN YORK HOMES** 

Project:

Date: 5/31/2018

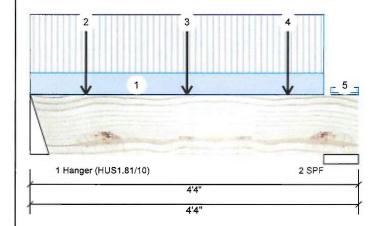
Designer: RCO

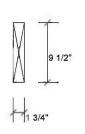
Job Name: LIANA 3 (ELEV.1)

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

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		

	Unfacto	red Reactions	S UNPATTER	NED lb (Uplif	t)
	Brg	Live	Dead	Snow	Wind
	1	661	255	0	0
2	2	604	235	0	0
	Bearing	s and Factore	d Reactions		

Cap. React D/L lb

34%

20%

319 / 992

294 / 907

•	Analysis Results										
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case				
	Moment	1179 ft-lb	2' 13/16"	11362 ft-lb	0.104 (10%)	1.25D+1.5L	L				
	Unbraced	1179 ft-lb	2' 13/16"	9138 ft-lb	0.129 (13%)	1.25D+1.5L	L				
	Shear	844 lb	11 3/4"	4638 lb	0.182 (18%)	1.25D+1.5L	L				
	Perm Defl in.	0.004 (L/11669)	2' 7/8"	0.125 (L/360)	0.030 (3%)	D	Uniform				
	LL Defl inch	0.010 (L/4503)	2' 7/8"	0.125 (L/360)	0.080 (8%)	L	L				

2' 7/8" 0.188 (L/240) 0.070 (7%) D+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

Bearing Length

2 - SPF 5.500"

Hanger

3.000"

Sec.	OFESSIONAL SE
LICENS	A. EL-MASRI S
X	at Etyash
Jun	04% 2018

Total Ld. Case

1311 L

1200 L

## **Design Notes**

Analysis Posults

1 Fill all hanger nailing holes.

TL Defl inch 0.014 (L/3249)

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

4 Bottom b	raced at bearings.					POINT LOAD	OS OVER BEA	ARINGS.	
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-10-8		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
2	Point	0-8-13		Far Face	39 lb	105 lb	0 lb	dl 0	J7
3	Point	2-0-13		Far Face	47 lb	126 lb	0 lb	0 lb	J7
4	Point	3-4-13		Far Face	36 lb	96 lb	0 lb	0 lb	J7
5	Tie-In	3-11-10 to 4-4-0	(Span)1-1-8	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.

- 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 beaming points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

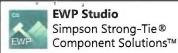
Manufacturer Info

Forex APA: PR-L318









Client: Project: Address:

**GREEN YORK HOMES** 

5/31/2018 Date:

RCO Designer:

Job Name: LIANA 3 (ELEV.1)

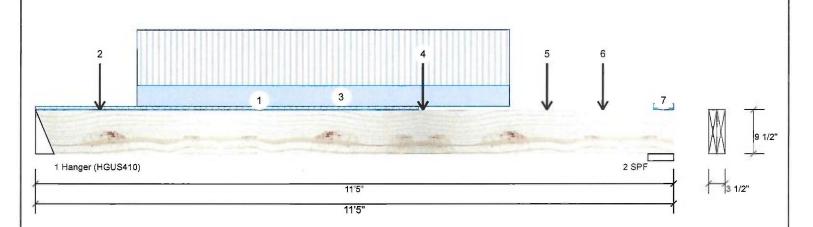
Project #:

F3-A Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



### Member Information Type: Girder Floor (Residential) Application: Plies: 2 Design Method: LSD Moisture Condition: Dry NBCC 2010 / OBC 2012 **Building Code:** 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				
ı	1	1523	616	0	0				
	2	1514	622	0	0				

Analysis Res	sults						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	8863 ft-lb	5'10"	22724 ft-lb	0.390 (39%)	1.25D+1.5L	L	
Unbraced	8863 ft-lb	5'10"	20442 ft-lb	0.434 (43%)	1.25D+1.5L	L	
Shear	3021 lb	10'2 3/4"	9277 lb	0.326 (33%)	1,25D+1,5L	L	
Perm Defl in.	0.080 (L/1615)	5'8 3/16"	0.358 (L/360)	0.220 (22%)	D	Uniform	
LL Defl inch	0.198 (L/650)	5'8 1/8"	0.358 (L/360)	0.550 (55%)	L	L	
TL Defl inch	0.278 (L/464)	5'8 1/8"	0.538 (L/240)	0.520 (52%)	D+L	L	

2 - SPF 5.500" 26% 777 / 2271 3048 L

29%

Cap. React D/L lb

770 / 2284

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 ENGINEERING NOTE PAGE ENP-2. THIS

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

Hanger

4.000"



Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Total Ld. Case

3055 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 Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 6-10-6	(Span)0-7-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Point	1-1-13		Near Face	129 lb	344 lb	0 lb	0 lb	J5
ı	3	Part. Uniform	1-9-13 to 8-5-13		Near Face	103 PLF	275 PLF	0 PLF	0 PLF	
	4	Point	6-11-4		Far Face	70 lb	174 lb	0 lb	0 lb	F10
	5	Point	9-1-13		Near Face	120 lb	321 lb	0 lb	0 lb	J5
	6	Point	10-1-13		Near Face	109 lb	268 lb	0 lb	0 lb	J5

Continued on page 2...

### Notes

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

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

### Handling & Installation

- 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





Page 2 of 2

Component Solutions™

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

**GREEN YORK HOMES** 

Date: 5/31/2018

RCO Designer:

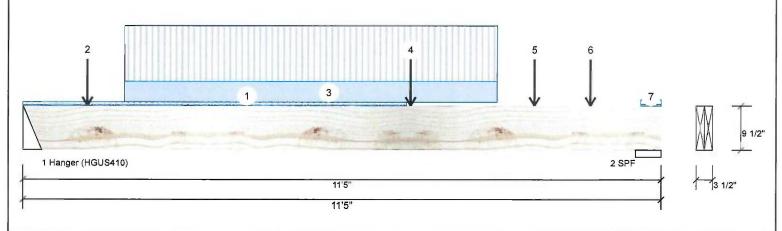
Job Name: LIANA 3 (ELEV.1)

Project #:

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

2-Ply - PASSED

Level: Second Floor



.Continued from page 1

7

ID Load Type

Tie-In

Self Weight

Location Trib Width 11-0-10 to 11-5-0 (Span)1-1-3

Side Top

Dead

8 PLF

Live 40 PSF 15 PSF

Snow 0 PSF Wind

0 PSF

Comments

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
- Handling & Installation

  1. IVI beams must not be out 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

Forex APA: PR-L318







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

Client: Project:

Address:

**GREEN YORK HOMES** 

Date: 5/31/2018 RCO

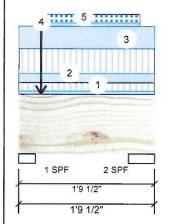
Designer: Job Name: LIANA 3 (ELEV.2)

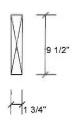
Project #:

F4-A Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Second Floor





Member Info	rmation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Conditi	ion: Dry	Building Code:	NBCC 2010 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead Snow Wind 78 255 323 0 1 2 90 124 53 0

### **Bearings and Factored Reactions** Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.625" 1.25D+1.5S 33% 319 / 524 843 L +0.5L 2 - SPF 4.125" 1.25D+1.5L 8% 156 / 135 290 L

**Analysis Results** Analysis Location Allowed Capacity Comb. Moment 114 ft-lb 6" 11362 ft-lb 0.010 (1%) 1.25D+1.5S L +0.5L Unbraced 114 ft-lb 6" 11362 ft-lb 1.25D+1.5S L 0.010 (1%) +0.5L 54 lb 8 5/8" 4638 lb Shear 0.012 (1%) 1.25D+1.5S L Perm Defl in. 0.000 8 7/16" 0.045 (L/360) 0.010 (1%) D Uniform (L/49777) LL Defl inch 0.000 6 3/16" 0.045 (L/360) 0.010 (1%) S+0.5L (L/43590) TL Defl inch 0.001 7 1/2" 0.068 (L/240) 0.010 (1%) D+S+0.5L (L/23529)

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**

General Load Floor Live:

Dead:

40 PSF

15 PSF

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

+ DOMONI DIE	ced at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-8	(Span)1-2-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-8	(Span)3-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part, Uniform	0-0-0 to 1-9-8		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Point	0-3-8		Тор	182 lb	0 lb	345 lb	0 lb	F14 F14
5	Part. Uniform	0-3-10 to 1-7-2		Тор	10 PLF	0 PLF	24 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.

- 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 duit 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:

**GREEN YORK HOMES** 

Date: 5/31/2018 Designer: RCO

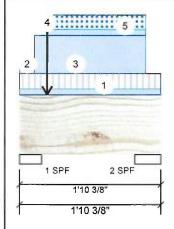
Job Name: LIANA 3 (ELEV.2)

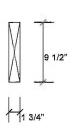
Project #:

Forex 2.0E-3000Fb LVL F4-B

1.750" X 9.500" - PASSED







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

Brg	Live	Dead	Snow	Wind
1	24	231	323	0
2	25	87	53	0

### Dead: 15 PSF Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.500" 25% 289 / 497 786 L 1.25D+1.5S +0.5L 1.25D+1.5L 2 - SPF 4.125" 5% 109/38 147 L **Analysis Results** Location Allowed Canacity

ı	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	104 ft-lb	5 1/4"	11362 ft-lb	0.009 (1%)	1.25D+1.5S +0.5L	L
	Unbraced	104 ft-lb	5 1/4"	11362 ft-lb	0.009 (1%)	1.25D+1.5S +0.5L	L
	Shear	57 lb	9 1/2"	4638 lb	0.012 (1%)	1.25D+1.5S	L
	Perm Defl in.	0.000 (L/57884)	9"	0.045 (L/360)	0.010 (1%)	D	Uniform
	LL Defl inch	0.000 (L/49057)	5 1/16"	0.045 (L/360)	0.010 (1%)	S+0.5L	L
	TL Defl inch	0.001 (L/27348)	7 3/8"	0.068 (L/240)	0.010 (1%)	D+\$+0.5L	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.

**Bearings and Factored Reactions** 

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

T DOLLOTT DIAC	ed at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-10-6	(Span)1-3-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-2-6		Тор	21 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part, Uniform	0-2-6 to 1-8-0		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Point	0-4-6		Тор	182 lb	0 lb	345 lb	0 lb	F14 F14
5	Part. Uniform	0-4-8 to 1-8-0		Тор	10 PLF	0 PLF	24 PLF	0 PLF	
	Self Weight				4 PLF				

### Notes

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- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
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  LVL beams must not be cut or drilled
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  Design assumes top edge is laterally restrained
  Provide lateral support at beaming points to avoid
  lateral displacement and rotation

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

Manufacturer Info

APA: PR-L318





