NE0618-021 PAGE 1 OF 32

GREEN YORK HOMES-GRANELLI HOME CORP-LIANA 2 (ELEV.1&2

## **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.

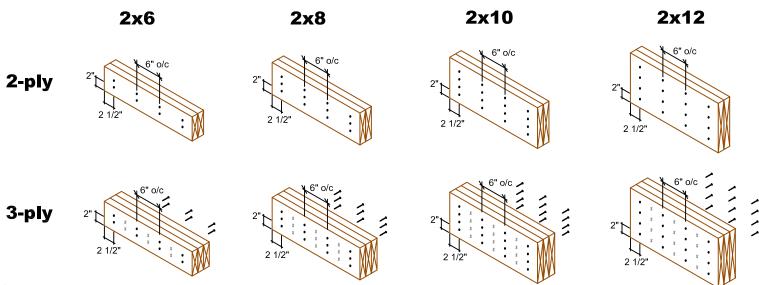


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# LTIPLE MEMBER CONNECTIONS

GREEN YORK HOMES-GRANELLI HOME CORP-LIANA 2 (ELEV.1&2

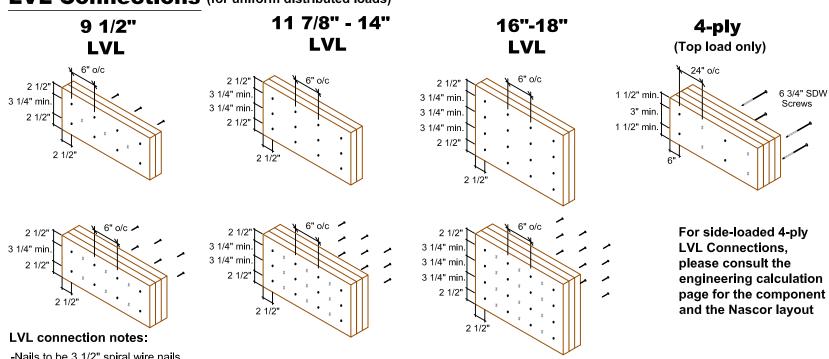
# Conventional Connections (for uniform distributed loads)



## **Conventional connection notes:**

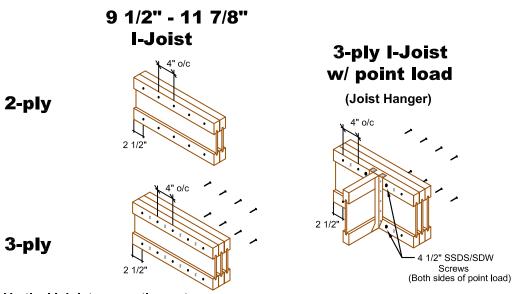
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

# LVL Connections (for uniform distributed loads)



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

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



## **Vertical I-Joist connection notes:**

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

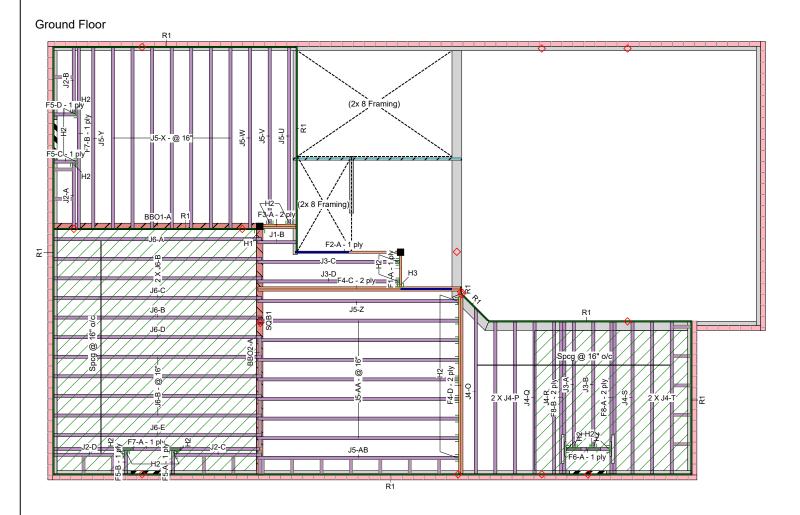


**MULTI-PLY** CONNECTION **DETAILS** 

Date: November 30, 2016 Scale: NTS

**KOTT** 3228 Moodie Drive Ottawa, ON K2H 7V1 Ph: 613-838-2775 Fx: 613-838-4751

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### 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 MEMBED CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL

POINT LOADS OVER BEARINGS







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)



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

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

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

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

. Refer to Nascor specifier guide for installation works. . Squash blocks recommended to be installed at end bearing on

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

fastened as per the hanger manufacturer's standards

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

all first level joists which support loading from above exceeding

8. It shall be the framer's responsibility that floor joists and beams are

another member using a face-mounted hanger.

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

### ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: Rev.1; May 22,2018

Project No: 17-55 Model: Liana 2

Ground Floor						
LVL/LS	L (Flush)					
Label	Description	Width	Depth	Qty	Plies	Pcs
F4	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4
F2	Forex 2.0E-3000Fb LVL	1.75	9.5			1

Width Depth

9.5

9.5

9.5

9.5

9.5

9.5

9.5

9.5

9.5

9.5

9.5

9.5

Skew Slope

Qty

Qty

Qty

Beam/Girder

fasteners

4 10dx1 1/2

30 16d

LinFt

1.75

2.5

2.5

2.5

2.5

2.5

2.5

2.5

2.5

2.5

2.5

1.125

2.5

Width Depth

Width | Depth |

2.0E-3000Fb LVL

2.0E-3000Fb LVL

Forex

Label Description

Joist (Flush)

F7 NJH

F8 NJH

F6 NJH

F5 NJH

J6 NJH

J5 NJH

J4 NJH

J3 NJH

J2 NJH

J1 NJH

Label Description

Label Description

1

rimboard/rimjoist.

two levels floor or roof.

Norbord Rimboard

Plus 1.125 X 9.5

Pcs Description

Unknown

Hanger

1 HUS1.81/10

25 LT259

Rim Board

R1

Blocking

Hanger

Label

H1

H2

Н3

NOTES

BLK1 NJH

			NIACO
lies	Pcs	Length	NASC
2	4	14-0-0	
			Layout Name
	1	8-0-0	1
			LIANA 2 (ELEV.1BG)
2	2	4-0-0	Design Method
			LSD
	1	4-0-0	
			Description
			GRANELLI HOMES C
			RRAMPTON ONT

4

4

20

8

13

Plies Pcs Length

4 6-0-0 RCO

1 4-0-0

Pcs Length

Varies 29-0-0

Supported

Member

fasteners

2 10dx1 1/2

10 16d

	GRANELLI HOMES CORI BRAMPTON, ONT.		
Length	BRAINFTON, ONT.		
14-0-0	Created		
12-0-0	May 29, 2018		
4-0-0	Builder		
2-0-0	GREEN YORK HOMES		
16-0-0			
14-0-0	Sales Rep		
12-0-0	RM		
10-0-0	Designer		

Shipping

### Project Builder's Project **Kott Lumber Company** 14 Anderson Blvd

Stouffville, Ontario Canada I 4A 7X4 905-642-4400

### Job Path D:\LIsers\rochavillo\WORK FROM HOME\GREEN YORK HOMES

\GRANELLI HOME CORP\MODELS \LIANA 2\LIANA 2 ELEV 1\FLOOR

## **Ground Floor**

Design Method	LSD
Building Code	NBCC 2010 / OBC
, and the second	2012

# Floor

Vibration

Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	480
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girder	
LL Span L/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	OSB
Thickness	3/4"
Fastener	Nailed & Glued



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2



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

Client:

Project: Address:

**GREEN YORK HOMES** 

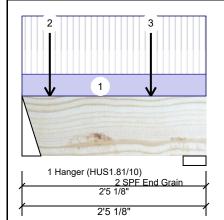
5/31/2018 Designer: RCO

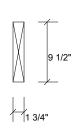
Job Name: LIANA 2 (ELEV.1)

Project #:

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

Level: Ground Floor





Page 1 of 1

Member	Information

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

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

Brg	Live	Dead	Snow	Wind
1	299	116	0	0
2	258	101	0	0

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	214 ft-lb	1'6 7/8"	11362 ft-lb	0.019 (2%)	1.25D+1.5L	L
Unbraced	214 ft-lb	1'6 7/8"	10729 ft-lb	0.020 (2%)	1.25D+1.5L	L
Shear	438 lb	11 3/4"	4638 lb	0.094 (9%)	1.25D+1.5L	L
Perm Defl in	. 0.000 (L/58713)	1'4 3/8"	0.067 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/23005)	1'4 9/16"	0.067 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.001 (L/16529)	1'4 7/16"	0.100 (L/240)	0.010 (1%)	D+L	L

### **Bearings and Factored Reactions**

Bearing	Length	Cap. Re	eact D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	15%	145 / 449	594	L	1.25D+1.5L	
2 - SPF End Grain	3.625"	11%	127 / 387	514	L	1.25D+1.5L	

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

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

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



### **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.

	J								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 2-5-2	(Span)3-11-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-4-6		Far Face	65 lb	175 lb	0 lb	0 lb	J3
3	Point	1-8-6		Far Face	72 lb	192 lb	0 lb	0 lb	J3
	Self Weight				4 PLF				

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

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

### Handling & Installation

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







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

Project: Designer: Address:

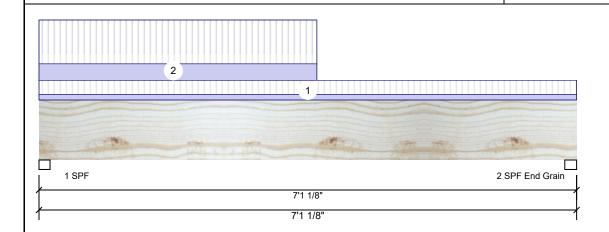
RCO Job Name: LIANA 2 (ELEV.1)

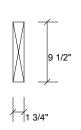
Project #:

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

Level: Ground Floor

5/31/2018





Page 1 of 1

### Member Information

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

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

Brg	Live	Dead	Snow	Wind
1	156	72	0	0
2	84	45	0	0

# Analysis Results

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	453 ft-lb	2'11 9/16"	11362 ft-lb	0.040 (4%)	1.25D+1.5L	L
Unbraced	453 ft-lb	2'11 9/16"	5389 ft-lb	0.084 (8%)	1.25D+1.5L	L
Shear	228 lb	10 1/2"	4638 lb	0.049 (5%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/20045)	3'4 1/8"	0.231 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.009 (L/9718)	3'3 1/2"	0.231 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.013 (L/6545)	3'3 11/16"	0.346 (L/240)	0.040 (4%)	D+L	L

### **Bearings and Factored Reactions**

Bearing	Length	Cap. Rea	ct D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	1.750"	17%	90 / 234	324	L	1.25D+1.5L
2 - SPF End Grain	1.875"	7%	56 / 125	182	L	1.25D+1.5L

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

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

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



## **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 7-1-2	(Span)0-7-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-8-0		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
	Self Weight				4 PLF				

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

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







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

Client: **GREEN YORK HOMES** Project:

Address:

5/31/2018

Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #: Level: Ground Floor

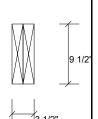
### F3-A Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED



2



Wind

0

0

0

Page 1 of 2

7 5	8
3	
2 1 4 6	
The state of the s	N. Prince Control
1 SPF	2 SPF
1 SPF 2'8 3/8"	

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

### **Unfactored Reactions UNPATTERNED Ib (Uplift)** Brg Live Dead 669 380 O 1

292

Bearings and Factored Reactions									
Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.			
1 - SPF	5.500"	12%	475 / 1003	1478	L	1.25D+1.5L			
2 - SPF	2.375"	22%	365 / 784	1150	L	1.25D+1.5L			

### **Analysis Results**

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	607 ft-lb	1'4 1/8"	22724 ft-lb	0.027 (3%)	1.25D+1.5L	L
Unbraced	607 ft-lb	1'4 1/8"	22724 ft-lb	0.027 (3%)	1.25D+1.5L	L
Shear	729 lb	1'2 1/4"	9277 lb	0.079 (8%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/32357)	1'5 1/8"	0.072 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/18072)	1'4 11/16"	0.072 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.002 (L/11598)	1'4 13/16"	0.108 (L/240)	0.020 (2%)	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.

523



### **Design Notes**

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

15 PSF

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

6 Lateral	slenderness ratio based or	n full section width.
ID	Load Type	Location
4	Tio In	0.0.0 to 0.4.4

_	o zatoral cicilao	111000 14410 B4004 011 10	iii oodaan maan							
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 0-4-4	(Span)0-10-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Part. Uniform	0-0-0 to 0-0-2		Тор	46 PLF	123 PLF	0 PLF	0 PLF	J5
	3	Part. Uniform	0-0-0 to 0-0-2		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	4	Part. Uniform	0-0-2 to 2-5-2		Тор	92 PLF	246 PLF	0 PLF	0 PLF	J5
	5	Part. Uniform	0-0-2 to 2-6-12		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 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

  2 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 7 OF 32** NE0618-021

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

Address:

Project:

Date: 5/31/2018 Designer: RCO

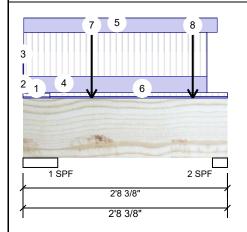
Job Name: LIANA 2 (ELEV.1)

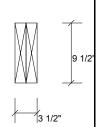
Project #:

Forex 2.0E-3000Fb LVL F3-A

1.750" X 9.500"

2-Ply - PASSED Level: Ground Floor





Page 2 of 2

Continued	from	page	1
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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Tie-In	0-4-4 to 2-8-6	(Span)1-0-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Point	0-10-14		Far Face	120 lb	319 lb	0 lb	0 lb	J5
8	Point	2-2-14		Far Face	83 lb	220 lb	0 lb	0 lb	J5
	Self Weight				8 PLF				

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

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

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

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

### Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







NE0618-021 **PAGE 8 OF 32** 

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

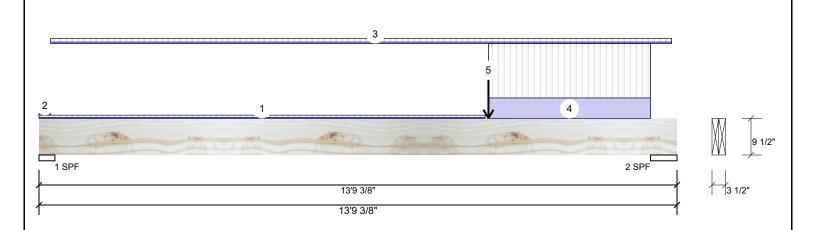
Date: 5/31/2018 Project: Designer: RCO Address:

Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" Forex 2.0E-3000Fb LVL 2-Ply - PASSED F4-C

Level: Ground Floor



Member Infor	mation			Unfactore	ed Reacti	ons UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	374	193	0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1087	464	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 Facto	ored Reactions		
Dead:	15 PSF			Bearing I	_ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 4	4.125"	9% 241 / 560	801 L	1.25D+1.5L
				2-SPF 6	6.875"	15% 580 / 1631	2211 L	1.25D+1.5L

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4654 ft-lb	9'8 1/2"	22724 ft-lb	0.205 (20%)	1.25D+1.5L	L
Unbraced	4654 ft-lb	9'8 1/2"	19392 ft-lb	0.240 (24%)	1.25D+1.5L	L
Shear	1816 lb	12'5 3/4"	9277 lb	0.196 (20%)	1.25D+1.5L	L
Perm Defl in.	0.058 (L/2669)	7'3 7/8"	0.433 (L/360)	0.130 (13%)	D	Uniform
LL Defl inch	0.127 (L/1225)	7'5 1/4"	0.433 (L/360)	0.290 (29%)	L	L
TL Defl inch	0.186 (L/840)	7'4 13/16"	0.649 (L/240)	0.290 (29%)	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.



Page 1 of 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 9-7-10	(Span)0-6-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-3-0	(Span)0-7-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-3-0 to 13-7-15	(Span)0-9-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Part. Uniform	9-8-8 to 13-2-8		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
5	Point	9-8-8		Far Face	116 lb	299 lb	0 lb	0 lb	F1
	Self Weight				8 PLF				

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

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







NE0618-021 **PAGE 9 OF 32** 

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

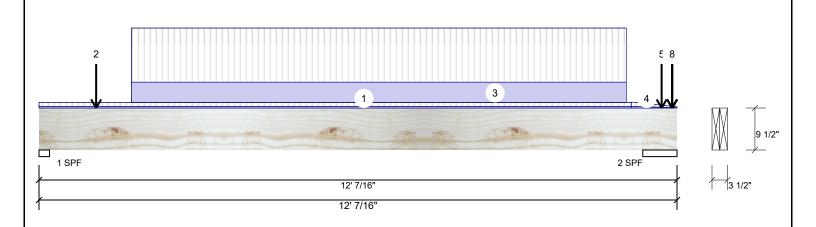
Date: 5/31/2018 Project: Designer: RCO Address:

Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" Forex 2.0E-3000Fb LVL 2-Ply - PASSED F4-D

Level: Ground Floor



Member Infor	mation			Unfactor	ed React	ions UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	1545	622	0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1762	732	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	2.375"	61% 777 / 2317	3094 L	1.25D+1.5L
Analysis Dasyl				2-SPF	7.754"	21% 915 / 2643	3559 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9242 ft-lb	5'9 9/16"	22724 ft-lb	0.407 (41%)	1.25D+1.5L	L
Unbraced	9242 ft-lb	5'9 9/16"	20195 ft-lb	0.458 (46%)	1.25D+1.5L	L
Shear	3271 lb	11 1/8"	9277 lb	0.353 (35%)	1.25D+1.5L	L
Perm Defl in.	0.092 (L/1482)	5'9 9/16"	0.377 (L/360)	0.240 (24%)	D	Uniform
LL Defl inch	0.229 (L/594)	5'9 9/16"	0.377 (L/360)	0.610 (61%)	L	L
TL Defl inch	0.320 (L/424)	5'9 9/16"	0.566 (L/240)	0.570 (57%)	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



Page 1 of 2

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-2-3	(Span)1-0-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-0-15		Far Face	124 lb	332 lb	0 lb	0 lb	J5
3	Part. Uniform	1-8-15 to 11-0-15		Far Face	101 PLF	270 PLF	0 PLF	0 PLF	
4	Tie-In	11-2-3 to 12-0-7	(Span)1-1-0 to 0-2-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	11-8-15		Far Face	48 lb	128 lb	0 lb	0 lb	J5
Continued on pag	je 2								

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

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







NE0618-021 PAGE 10 OF 32

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

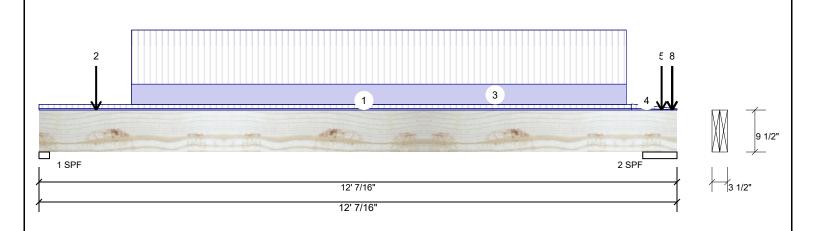
Date: 5/31/2018 Project: Designer: RCO Address:

Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" 2-Ply - PASSED Forex 2.0E-3000Fb LVL F4-D

Level: Ground Floor



Continued	from page 1							
ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	11-11-5	Тор	16 lb	34 lb	0 lb	0 lb	J4
7	Point	11-11-5	Тор	20 lb	54 lb	0 lb	0 lb	J5
8	Point	11-11-5	Тор	22 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight			8 PLF				

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

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

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

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

## Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318



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





Page 2 of 2

NE0618-021 **PAGE 11 OF 32** 



Simpson Strong-Tie® Component Solutions™ Client: **GREEN YORK HOMES** 

Project: Address:

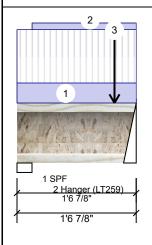
5/31/2018 Designer: RCO

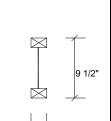
Job Name: LIANA 2 (ELEV.1)

Level: Ground Floor

Project #:

### **NJH** 9.500" - PASSED F5-A





Wind

0

0

1.25D+1.5L

0

286 L

Page 1 of 1

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

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

31

67

65

135

2.000"

2

2 -

Hanger

Bearings	and Fa	actored I	Reactions				
Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	_
1 - SPF	2.375"	9%	39 / 98	136	L	1.25D+1.5L	

84 / 202

### Analysis Results

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	52 ft-lb	1' 1/8"	3830 ft-lb	0.014 (1%)	1.25D+1.5L	L
Unbraced	52 ft-lb	1' 1/8"	3779 ft-lb	0.014 (1%)	1.25D+1.5L	L
Shear	272 lb	1'5 5/8"	1580 lb	0.172 (17%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/56622)	11 7/8"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/28154)	11 7/8"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/18804)	11 7/8"	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.

18%

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	1-3-7		Near Face	49 lb	99 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
   IJoist not to be treated with fire retardant or corrosive
- Handling & Installation
- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

- 5. Provide lateral support at bearing points to avoid

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

Manufacturer Info

Nascor by Kott







NE0618-021 PAGE 12 OF 32



# **EWP Studio**

Simpson Strong-Tie® Component Solutions™ Client: **GREEN YORK HOMES** 

Project: Address:

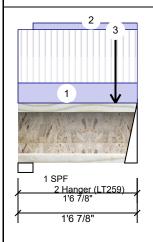
5/31/2018 Designer: RCO

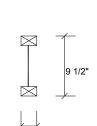
Job Name: LIANA 2 (ELEV.1)

Level: Ground Floor

Project #:

### 9.500" - PASSED F5-B NJH





Wind

Page 1 of 1

Member	Information
Type:	Girder

1,900.	Cirdoi
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: **Building Code:** NBCC 2010 / OBC 2012

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

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

1	63	30	0	0
1 2	120	59	0	0

## **Bearings and Factored Reactions**

Bearing	Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	8%	37 / 94	131	L	1.25D+1.5L
2 - Hanger	2.000"	16%	74 / 180	254	L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	48 ft-lb	11 11/16"	3830 ft-lb	0.013 (1%)	1.25D+1.5L	L
Unbraced	48 ft-lb	11 11/16"	3779 ft-lb	0.013 (1%)	1.25D+1.5L	L
Shear	240 lb	1'5 5/8"	1580 lb	0.152 (15%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/61792)	11 7/16"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/30562)	11 1/2"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/20448)	11 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	1-3-7		Far Face	40 lb	82 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
 IJoist not to be treated with fire retardant or corrosive

### Handling & Installation

- Handling & Installation

  1. Noist flanges must not be out or drilled

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

  3. Damaged IJoists must not be used

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

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

Manufacturer Info

Nascor by Kott







**PAGE 13 OF 32** NE0618-021



## **EWP Studio** Simpson Strong-Tie®

Client: **GREEN YORK HOMES** 

Project:

Address:

5/31/2018 Designer: RCO

Brg

1

2

2 -

Hanger

1 - SPF 2.375"

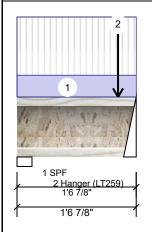
2.000"

Job Name: LIANA 2 (ELEV.1)

Level: Ground Floor

Project #:

### 9.500" - PASSED F5-C NJH



0

116 L

227 L

Wind

0

0

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

### Member Information

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

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

Live 59

115

Dead

22

44

Bearings	and Facto	red Reactions			
Bearing I	Length	Cap. React D/L lb	Total	Ld. Case	Ld. Comb.

28 / 88

55 / 173

### **Analysis Results**

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	39 ft-lb	11"	3830 ft-lb	0.010 (1%)	1.25D+1.5L	L
Unbraced	39 ft-lb	11"	3779 ft-lb	0.010 (1%)	1.25D+1.5L	L
Shear	214 lb	1'5 5/8"	1580 lb	0.135 (14%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/35261)	10 7/8"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/25598)	10 7/8"	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	1-4-0		Near Face	28 lb	73 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
 IJoist not to be treated with fire retardant or corrosive

### Handling & Installation

- anoling & installation
  Lioist flanges must not be cut or drilled
  Refer to latest copy of the IJoist product information
  details for framing details, sulffener tables, web hole
  chart, bridging details, multi-hyl fastening details and
  handling/erection details
  Damaged IJoist must not be used
  Design assumes top flange to be laterally restrained
  by attached sheathing or as specified in engineering
  notes.
- 5. Provide lateral support at bearing points to avoid
- lateral displacement and rotation
  6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
  7. For flat roofs provide proper drainage to prevent

Manufacturer Info

Nascor by Kott







NE0618-021 PAGE 14 OF 32



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

Project: Designer: RCO Address:

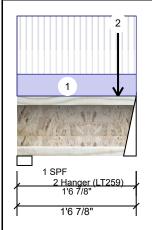
Job Name: LIANA 2 (ELEV.1)

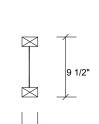
5/31/2018

Level: Ground Floor

Project #:

### 9.500" - PASSED F5-D NJH





Wind

0

0

0

0

Page 1 of 1

Member Inforn	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		

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

22

44

59

118

1

2

Hanger

Bearin	Bearings and Factored Reactions								
Bearin	g Length	Cap. Re	eact D/L lb	Total	Ld. Case	Ld. Comb.			
1 - SP	F 2.375"	7%	28 / 89	116	L	1.25D+1.5L			
2 -	2.000"	15%	55 / 177	231	L	1.25D+1.5L			

### Analysis Results

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	39 ft-lb	11 1/16"	3830 ft-lb	0.010 (1%)	1.25D+1.5L	L
Unbraced	39 ft-lb	11 1/16"	3779 ft-lb	0.010 (1%)	1.25D+1.5L	L
Shear	218 lb	1'5 5/8"	1580 lb	0.138 (14%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/34841)	10 15/16"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/25376)	10 15/16"	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	Point	1-4-0		Far Face	28 lb	76 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
 IJoist not to be treated with fire retardant or corrosive

### Handling & Installation

- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

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

Manufacturer Info

Nascor by Kott







NE0618-021 PAGE 15 OF 32



# **EWP Studio**

Simpson Strong-Tie® Component Solutions™ Client: **GREEN YORK HOMES** 

Project: Address:

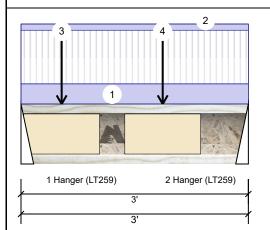
Date: 5/31/2018 Designer: RCO

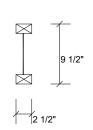
Job Name: LIANA 2 (ELEV.1)

Level: Ground Floor

Project #:

### 9.500" - PASSED F6-A NJH





Page 1 of 1

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:

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

Not Checked Deck: Not Checked

Vibration:

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	420 ft-lb	1'10 7/16"	3830 ft-lb	0.110 (11%)	1.25D+1.5L	L
Unbraced	420 ft-lb	1'10 7/16"	3411 ft-lb	0.123 (12%)	1.25D+1.5L	L
Shear	573 lb	1 1/4"	1580 lb	0.363 (36%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/12262)	1'10 7/16"	0.093 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.006 (L/6011)	1'10 7/16"	0.093 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.008 (L/4033)	1'10 7/16"	0.140 (L/240)	0.060 (6%)	D+L	L

### **Design Notes**

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

Brg	Live	Dead	Snow	Wind
1	274	135	0	0
2	215	105	0	0

### **Bearings and Factored Reactions**

Bearing	Length	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	37%	169 / 411	581	L	1.25D+1.5L
2 - Hanger	2.000"	29%	132 / 323	455	L	1.25D+1.5L

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

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

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



L										
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Part. Uniform	0-0-0 to 3-0-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
	3	Point	0-6-7		Far Face	84 lb	169 lb	0 lb	0 lb	J3
	4	Point	1-10-7		Far Face	106 lb	217 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
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

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

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

Manufacturer Info

Nascor by Kott







NE0618-021 PAGE 16 OF 32

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

Project: Address:

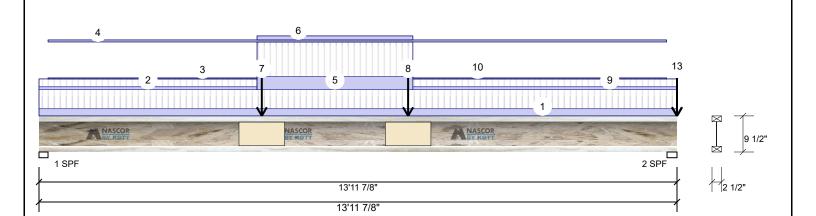
Date: 5/31/2018 Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Level: Ground Floor

Project #:

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



Member Info	mber Information					ons UNPATTERN	ED lb (Uplift)	) lb (Uplift)			
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	1	Design Method:	LSD	1	370	181	0	0			
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	533	273	0	0			
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bearings a	and Facto	ored Reactions					
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1-SPF 2	2.375"	49% 226 / 555	781 L	1.25D+1.5L			
				2-SPF 2	2.625"	72% 342 / 800	1141 L	1.25D+1.5L			

### Analysis Results

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3313 ft-lb	7'1"	3830 ft-lb	0.865 (87%)	1.25D+1.5L	L
Unbraced	3313 ft-lb	7'1"	3323 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	774 lb	1 5/8"	1580 lb	0.490 (49%)	1.25D+1.5L	L
Perm Defl in.	0.155 (L/1064)	6'11 3/8"	0.457 (L/360)	0.340 (34%)	D	Uniform
LL Defl inch	0.315 (L/522)	6'11 3/8"	0.457 (L/360)	0.690 (69%)	L	L
TL Defl inch	0.470 (L/350)	6'11 3/8"	0.685 (L/240)	0.690 (69%)	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



Page 1 of 2

### **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 3' o.c.

3 Bottom flange braced at bearings

3 Dolloin hange	braced at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-11-14	(Span)0-11-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 4-9-6	(Span)0-4-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 4-9-6		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 13-9-2		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
5	Tie-In	4-9-6 to 8-2-6	(Span)1-8-11 to 1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	4-9-6 to 8-2-6		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
7	Point	4-10-10		Near Face	59 lb	120 lb	0 lb	0 lb	F5

# 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
 IJoist not to be treated with fire retardant or corrosive

## Handling & Installation

- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

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

Manufacturer Info

Nascor by Kott







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**EWP Studio** 

Continued from page 1

Simpson Strong-Tie® Component Solutions™ Client: **GREEN YORK HOMES** 

Address:

Project:

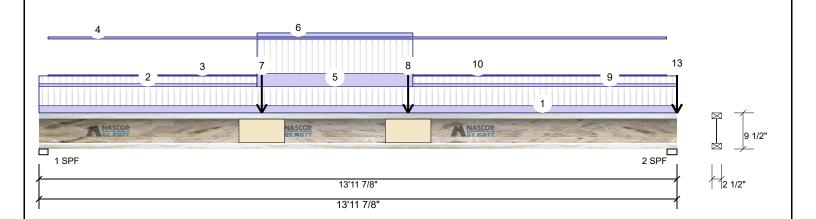
Date: 5/31/2018 Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

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

Level: Ground Floor



Continued from page 1										
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
8	Point	8-1-2		Near Face	67 lb	135 lb	0 lb	0 lb	F5	
9	Tie-In	8-2-6 to 13-11-14	(Span)0-4-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
10	Part. Uniform	8-2-6 to 13-9-2		Тор	1 PLF	0 PLF	0 PLF	0 PLF		
11	Point	13-11-14		Тор	35 lb	91 lb	0 lb	0 lb	J5	
12	Point	13-11-14		Тор	41 lb	93 lb	0 lb	0 lb	J5	
13	Point	13-11-14		Тор	27 lb	0 lb	0 lb	0 lb	Wall Self Weight	

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
   IJoist not to be treated with fire retardant or corrosive

## Handling & Installation

- Handling & Installation

  1. Noist flanges must not be out or drilled

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

  3. Damaged IJoists must not be used

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

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

Manufacturer Info

Nascor by Kott



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





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

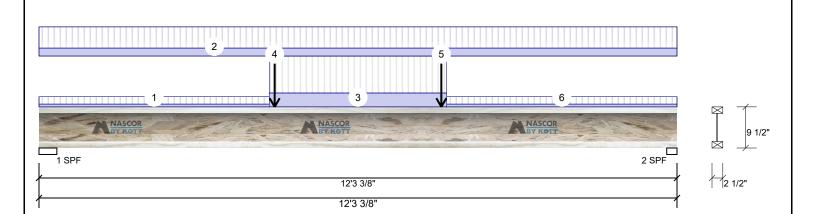
Project: Address: Date: 5/31/2018 Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Level: Ground Floor

Project #:

### 9.500" - PASSED F7-B NJH



Member Info	rmation			Unfactore	d Reacti	ons UNPATTERNI	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	331	125	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	324	122	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	and Fact	ored Reactions		
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 4	.125"	41% 156 / 496	652 L	1.25D+1.5L
				2-SPF 2	.375"	40% 152 / 486	638 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2390 ft-lb	6'2 3/4"	3830 ft-lb	0.624 (62%)	1.25D+1.5L	L
Unbraced	2390 ft-lb	6'2 3/4"	2404 ft-lb	0.994 (99%)	1.25D+1.5L	L
Shear	637 lb	3 3/8"	1580 lb	0.403 (40%)	1.25D+1.5L	L
Perm Defl in.	0.072 (L/1978)	6'2 1/2"	0.395 (L/360)	0.180 (18%)	D	Uniform
LL Defl inch	0.191 (L/744)	6'2 9/16"	0.395 (L/360)	0.480 (48%)	L	L
TL Defl inch	0.263 (L/541)	6'2 9/16"	0.593 (L/240)	0.440 (44%)	D+L	L

- 2 Top flange must be laterally braced at a maximum of 4'9" o.c.
- 3 Bottom flange braced at bearings

1 Girders are designed to be supported on the bottom edge only.								
Design Notes								
TL Defl inch	0.263 (L/541)	6'2 9/16"	0.593 (L/240)	0.440 (44%) D+L	. L			
LL Defl inch	0.191 (L/744)	6'2 9/16"	0.395 (L/360)	0.480 (48%) L	L			
Perm Defl in.	. 0.072 (L/1978)	6'2 1/2"	0.395 (L/360)	0.180 (18%) D	Uniforn			
				, ,				

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.

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



Page 1 of 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-5-3	(Span)0-4-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-3-6	(Span) 0-11-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	4-5-3 to 7-10-3	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	4-6-7		Far Face	44 lb	115 lb	0 lb	0 lb	F5
5	Point	7-8-15		Far Face	44 lb	118 lb	0 lb	0 lb	F5
6	Tie-In	7-10-3 to 12-3-6	(Span)0-4-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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

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

## Handling & Installation

- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

- 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







NE0618-021 **PAGE 19 OF 32** 

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

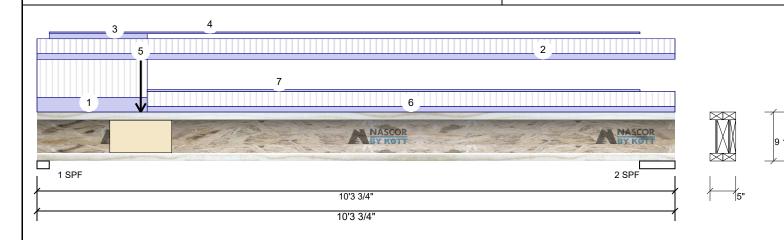
Project: Address: Date: 5/31/2018 Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

2-Ply - PASSED 9.500" F8-A NJH

Level: Ground Floor



### Member Information **Unfactored Reactions UNPATTERNED Ib (Uplift)** Wind Type: Application: Floor (Residential) Brg Live Dead Plies: 2 Design Method: 250 0 514 0 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 2 325 155 0 0 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Not Checked Deck: Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** 40 PSF Floor Live: Dead: 15 PSF Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 313 / 771 1 - SPF 2.375" 34% 1084 I 1.25D+1.5L 2 - SPF 6.875" 22% 194 / 488 682 L 1.25D+1.5L

### **Analysis Results**

,						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1756 ft-lb	4'2 9/16"	7660 ft-lb	0.229 (23%)	1.25D+1.5L	L
Unbraced	1756 ft-lb	4'2 9/16"	1759 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	1059 lb	1 5/8"	3160 lb	0.335 (34%)	1.25D+1.5L	L
Perm Defl in.	0.024 (L/4916)	4'8 11/16"	0.322 (L/360)	0.070 (7%)	D	Uniform
LL Defl inch	0.048 (L/2404)	4'8 11/16"	0.322 (L/360)	0.150 (15%)	L	L
TL Defl inch	0.072 (L/1614)	4'8 11/16"	0.483 (L/240)	0.150 (15%)	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



Page 1 of 1

### **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 8'5" o.c.
- 5 Bottom flange braced at bearings.

o Bottom namgo	Diacou at Doainigo.								
ID	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 10-3-12	(Span)1-3-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 1-9-6		Тор	9 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 9-8-15		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Far Face	105 lb	215 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 10-3-12	(Span)1-4-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 9-8-15		Тор	3 PLF	0 PLF	0 PLF	0 PLF	

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

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

## Handling & Installation

- andling & Installation
  Libel flagges must not be cut or drilled
  Refer to latest copy of the IJoist product information
  details for framing details, suffener tables, web hole
  chart, bridging details, multi-ply fastening details and
  handling/erection details
  Damaged IJoists must not be used
  Design assumes top flange to be laterally restrained
  by attached sheathing or as specified in engineering
  notes.
- 5. Provide lateral support at bearing points to avoid
- lateral displacement and rotation
  6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
  7. For flat roofs provide proper drainage to prevent

**Manufacturer Info** 

Nascor by Kott







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

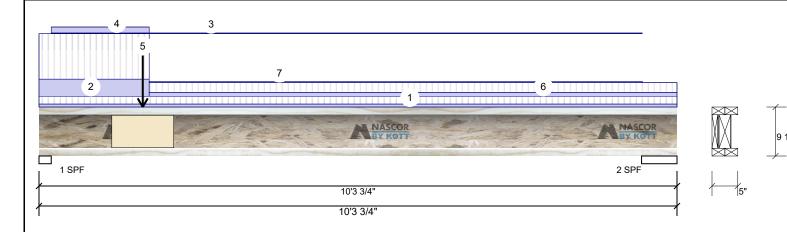
Date: 5/31/2018 Project: Designer: RCO Address:

Job Name: LIANA 2 (ELEV.1)

Project #:

2-Ply - PASSED F8-B NJH 9.500"

Level: Ground Floor



### Member Information **Unfactored Reactions UNPATTERNED Ib (Uplift)** Wind Type: Application: Floor (Residential) Brg Live Dead Plies: 2 Design Method: 220 0 451 0 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 2 194 93 0 0 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Not Checked Deck: Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** 40 PSF Floor Live: 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 30% 276 / 676 1 - SPF 2.375" 1.25D+1.5L 2 - SPF 6.875" 13% 116 / 291 407 I 1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1286 ft-lb	3' 1/2"	7660 ft-lb	0.168 (17%)	1.25D+1.5L	L
Unbraced	1286 ft-lb	3' 1/2"	1290 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	930 lb	1 5/8"	3160 lb	0.294 (29%)	1.25D+1.5L	L
Perm Defl in.	0.017 (L/6925)	4'6"	0.322 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.034 (L/3400)	4'6"	0.322 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.051 (L/2280)	4'6"	0.483 (L/240)	0.110 (11%)	D+L	L

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

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

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



Page 1 of 1

### **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 9'7" o.c.

5 Bottom flange braced at bearings.

o Bottom namgo	aracea ar acarmige.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-3-12	(Span)0-7-1	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	Part. Uniform	0-2-6 to 9-9-0		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 1-9-6		Тор	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	135 lb	274 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 10-3-12	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 9-9-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	

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

- Dry service conditions, unless noted otherwise
   IJoist not to be treated with fire retardant or corrosive
- Handling & Installation
- andling & Installation
  Libel flagges must not be cut or drilled
  Refer to latest copy of the IJoist product information
  details for framing details, suffener tables, web hole
  chart, bridging details, multi-ply fastening details and
  handling/erection details
  Damaged IJoists must not be used
  Design assumes top flange to be laterally restrained
  by attached sheathing or as specified in engineering
  notes.
- 5. Provide lateral support at bearing points to avoid
- lateral displacement and rotation
  6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
  7. For flat roofs provide proper drainage to prevent

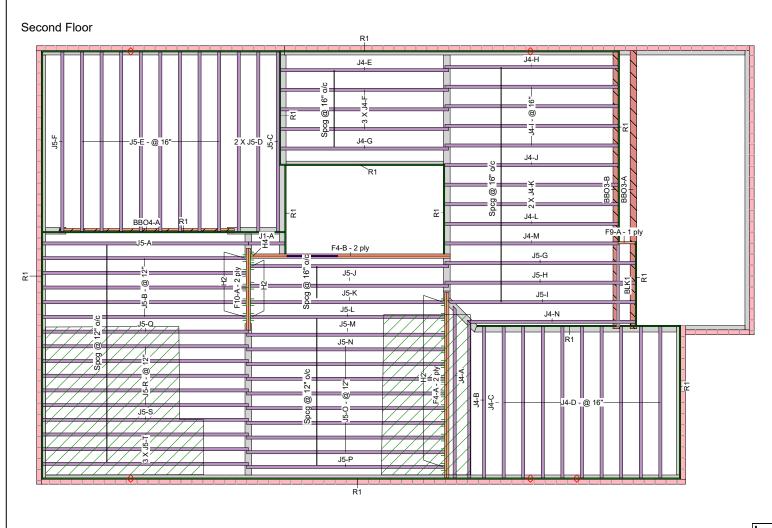
**Manufacturer Info** Nascor by Kott







NE0618-021



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

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



### Legend

- 2. Nascor CCMC 13535-R

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

Pcs Length Label Description Width Depth Qty Plies F4 1.75 9.5 4 2 2.0E-3000Fb LVL Layout Name F10 6-0-0 Forex 1.75 2.0E-3000Fb LVL LIANA 2 (ELEV.1) F9 Forex 1.75 9.5 2-0-0 Design Method 2.0E-3000Fb LVL LVL/LSL (Dropped) Description Label Description Width Depth Qty Plies Pcs Length GRANELLI HOMES CORP. BBO4 Forex 1.75 9.5 2 2 12-0-0 BRAMPTON, ONT. 2.0E-3000Fb LVL Created Joist (Flush) May 29, 2018 Label Description Width | Depth | Qty | Plies Pcs Length 2.5 45 14-0-0 J5 NJH 9.5 Builder J4 NJH 2.5 9.5 28 12-0-0 GREEN YORK HOMES J1 NJH 2.5 9.5 1 4-0-0 Sales Rep Rim Board Plies Label Description Width | Depth | Qty | Pcs Length Designer Norbord Rimboard 1.125 9.5 17 R1 Plus 1.125 X 9.5 Blocking Shipping Plies Pcs Length Label Description Width Depth Qty Project BLK1 NJH 2.5 9.5 Varies 5-0-0 LinFt

Beam/Girder

fasteners

4 10dx1 1/2

46 16d

Supported

Member

fasteners

2 10dx1 1/2

### H2 H4 NOTES:

Hanger

Label

Second Floor LVL/LSL (Flush)

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

Skew Slope

- . Install single-ply flush window header along inside face of rimboard/rimioist.
- . Refer to Nascor specifier guide for installation works.

Pcs Description

1 HGUS410

21 LT259

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

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

### ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: Rev.1; May 22,2018

Project No: 17-55 Model: Liana 2

### Stouffville, Ontario Canada I 4A 7X4

905-642-4400

**Builder's Project** 

14 Anderson Blvd

### Job Path

D:\LIsers\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \LIANA 2\LIANA 2 ELEV 1\FLOOR

**Kott Lumber Company** 

### Second Floor

Design Method Building Code NBCC 2010 / OBC 2012

### Floor Loads Live

Vibration

Ceiling:

15 Dead Deflection Joist 480 LL Span L/ 360 TL Span L/ LL Cant 2L/ 480 TL Cant 2L/ 360 Deflection Girder LL Span L/ 360 TL Span L/ 240 480 LL Cant 2L/ TL Cant 2L/ 360 Decking OSB Deck Thickness 5/8" Fastener Nailed & Glued

Gypsum 1/2"

NE0618-021 PAGE 22 OF 32

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

Address:

Project:

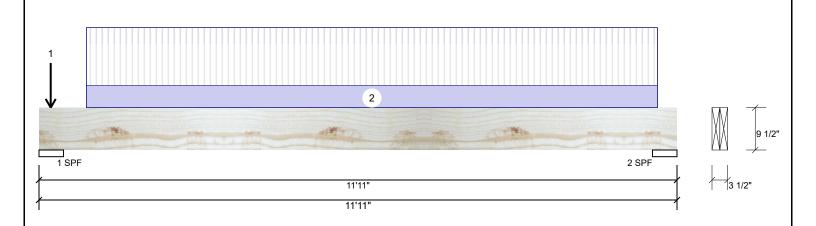
5/31/2018 Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL BBO4-A

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



<b>Member Infor</b>	mation			Unfactored Reactions UNPATTERNED lb (Uplift)					
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	1378	565	0	0	
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1362	559	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 I	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.	
				1 - SPF 5	5.500"	23% 706 / 2068	2774 L	1.25D+1.5L	
A l D l				2-SPF 5	5.500"	23% 699 / 2043	2742 L	1.25D+1.5L	

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7560 ft-lb	5'11 5/8"	22724 ft-lb	0.333 (33%)	1.25D+1.5L	L
Unbraced	7560 ft-lb	5'11 5/8"	20280 ft-lb	0.373 (37%)	1.25D+1.5L	L
Shear	2345 lb	1'2 1/4"	9277 lb	0.253 (25%)	1.25D+1.5L	L
Perm Defl in.	0.074 (L/1812)	5'11 9/16"	0.371 (L/360)	0.200 (20%)	D	Uniform
LL Defl inch	0.180 (L/740)	5'11 9/16"	0.371 (L/360)	0.490 (49%)	L	L
TL Defl inch	0.254 (L/525)	5'11 9/16"	0.556 (L/240)	0.460 (46%)	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



Page 1 of 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-2-10		Тор	52 lb	138 lb	0 lb	0 lb	J5
2	Part. Uniform	0-10-10 to 11-6-10		Тор	92 PLF	244 PLF	0 PLF	0 PLF	
	Self Weight				8 PLF				

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

- 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







NE0618-021 PAGE 23 OF 32

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

Project:

5/31/2018 Designer: RCO

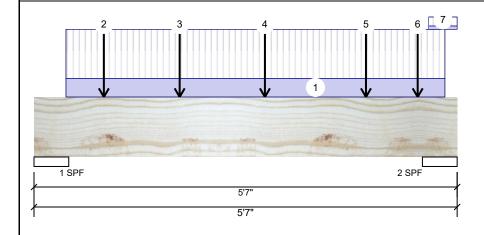
Job Name: LIANA 2 (ELEV.1)

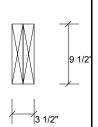
Project #:

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

Address:

Level: Second Floor 2-Ply - PASSED





Page 1 of 2

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

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Brg	Live	Dead	Snow	Wind
1	1315	519	0	0
2	1964	809	0	0

### **Bearings and Factored Reactions**

Bearing Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.	
1 - SPF 5.500"	22% 649 / 1973	2622 L	1.25D+1.5L	
0 005 5500	000/ 4040 / 0047	2050 1	4.050 .4.51	

### Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3183 ft-lb	3' 9/16"	22724 ft-lb	0.140 (14%)	1.25D+1.5L	L
Unbraced	3183 ft-lb	3' 9/16"	22724 ft-lb	0.140 (14%)	1.25D+1.5L	L
Shear	3768 lb	4'4 3/4"	9277 lb	0.406 (41%)	1.25D+1.5L	L
Perm Defl in.	0.007 (L/7855)	2'10 1/8"	0.160 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.019 (L/3082)	2'10 1/8"	0.160 (L/360)	0.120 (12%)	L	L
TL Defl inch	0.026 (L/2214)	2'10 1/8"	0.240 (L/240)	0.110 (11%)	D+L	L

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

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

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



### **Design Notes**

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

15 PSF

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-5-1 to 5-5-1		Far Face	104 PLF	276 PLF	0 PLF	0 PLF	
2	Point	0-11-1		Near Face	112 lb	292 lb	0 lb	0 lb	J5
3	Point	1-11-1		Near Face	105 lb	281 lb	0 lb	0 lb	J5
4	Point	3-0-9		Near Face	123 lb	327 lb	0 lb	0 lb	J5
5	Point	4-4-9		Near Face	100 lb	268 lb	0 lb	0 lb	J5
6	Point	5-0-12		Near Face	319 lb	713 lb	0 lb	0 lb	F4

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318







NE0618-021 PAGE 24 OF 32

**EWP Studio** 

Simpson Strong-Tie® Component Solutions™ Client:

Project: Address:

**GREEN YORK HOMES** Date: Designer:

5/31/2018 RCO

Job Name: LIANA 2 (ELEV.1)

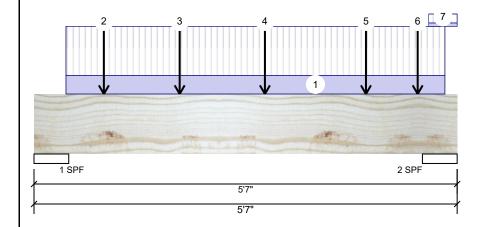
Project #:

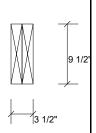
Forex 2.0E-3000Fb LVL F10-A

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





Page 2 of 2

.Continued from page 1

ID Load Type Location Trib Width Side Live Wind Comments Dead Snow 7 5-2-8 to 5-7-0 (Span)2-6-3 Тор 15 PSF 40 PSF 0 PSF 0 PSF Tie-In

> Self Weight 8 PLF

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

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

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

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

## Handling & Installation

- IARIGUING & INSTALLATION

  LVL beams must not be cut or drilled

  Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beams trength 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







NE0618-021 PAGE 25 OF 32

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

Date: Project: Designer: Address:

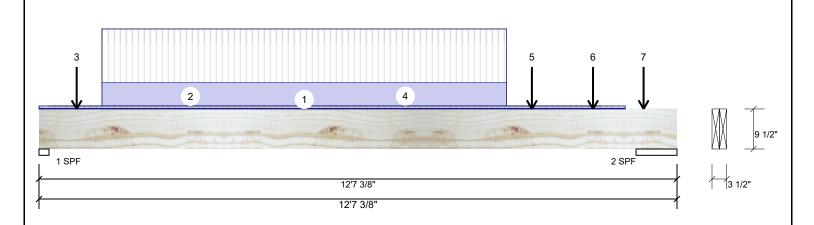
RCO Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" Forex 2.0E-3000Fb LVL 2-Ply - PASSED F4-A

Level: Second Floor

5/31/2018



Member Info	rmation			Unfactore	d Reacti	ions UNPATTERNI	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	1567	722	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1790	804	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	and Fact	ored Reactions		
Dead:	15 PSF			Bearing L	.ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 2	375"	64% 902 / 2351	3253 L	1.25D+1.5L
A L D	•			2-SPF 9	.714"	18% 1005 / 2685	3690 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9822 ft-lb	6'	22724 ft-lb	0.432 (43%)	1.25D+1.5L	L
Unbraced	9822 ft-lb	6'	20006 ft-lb	0.491 (49%)	1.25D+1.5L	L
Shear	3223 lb	11 1/8"	9277 lb	0.347 (35%)	1.25D+1.5L	L
Perm Defl in.	0.115 (L/1224)	6' 1/16"	0.391 (L/360)	0.290 (29%)	D	Uniform
LL Defl inch	0.251 (L/561)	6'	0.391 (L/360)	0.640 (64%)	L	L
TL Defl inch	0.366 (L/385)	6' 1/16"	0.587 (L/240)	0.620 (62%)	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.



Page 1 of 2

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-7-2	(Span)0-6-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-7 to 11-1-5		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
3	Point	0-8-15		Far Face	104 lb	238 lb	0 lb	0 lb	J5
4	Part. Uniform	1-2-15 to 9-2-15		Far Face	114 PLF	266 PLF	0 PLF	0 PLF	
5	Point	9-8-15		Far Face	128 lb	294 lb	0 lb	0 lb	J5
6	Point	10-11-7		Far Face	123 lb	292 lb	0 lb	0 lb	J5

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
 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





NE0618-021 PAGE 26 OF 32

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

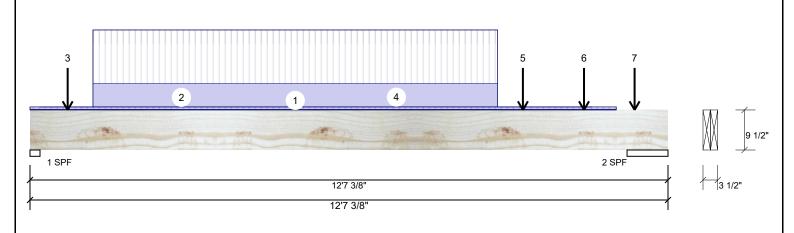
Date: 5/31/2018 Project: Designer: RCO Address:

Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" 2-Ply - PASSED Forex 2.0E-3000Fb LVL F4-A

Level: Second Floor



.Continued from page 1

ID Load Type Location Trib Width Side Live Wind Comments Dead Snow 7 Point 11-11-7 Far Face 105 lb 281 lb 0 lb 0 lb Self Weight 8 PLF

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

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

Notes

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

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

## Handling & Installation

- Informing & Installation

  I. VIL 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

  Design assumes top edge is laterally restrained is 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



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





Page 2 of 2

PAGE 27 OF 32 NE0618-021

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

Designer: Project: Address:

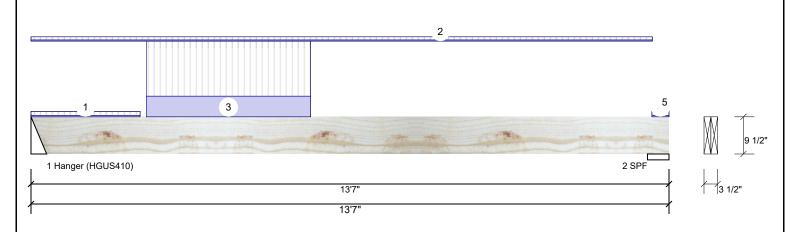
RCO Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" 2-Ply - PASSED F4-B Forex 2.0E-3000Fb LVL

Level: Second Floor

5/31/2018



Member Info	rmation			Unfactored Reactions UNPATTERNED lb (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	2	Design Method:	LSD	1	713	319	0	0			
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	357	186	0	0			
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bearings a	and Facto	ored Reactions					
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1 - 4 Hanger	1.000"	14% 398 / 1070	1468 L	1.25D+1.5L			
Analysis Resu	lts			1 ~	5.500"	6% 233 / 535	768 L	1.25D+1.5L			
Analysis A	ctual Loc	cation Allowed Canaci	ity Comb Case								

Analysis Capacity 4658 ft-lb Moment 5' 1/8" 22724 ft-lb 0.205 (20%) 1.25D+1.5L L Unbraced 4658 ft-lb 5' 1/8" 19429 ft-lb 0.240 (24%) 1.25D+1.5L L 1393 lb 1' 3/4" 9277 lb 0.150 (15%) 1.25D+1.5L L Shear Perm Defl in. 0.058 (L/2674) 6'2 5/8" 0.431 (L/360) 0.130 (13%) D Uniform LL Defl inch 0.128 (L/1212) 6'1 5/16" 0.431 (L/360) 0.300 (30%) L L TL Defl inch 0.186 (L/834) 6'1 3/4" 0.646 (L/240) 0.290 (29%) 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



Page 1 of 1

### **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 2-3-14	(Span)0-10-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-2-12	(Span)0-8-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	2-5-7 to 5-11-7		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
4	Tie-In	13-2-10 to 13-7-0	(Span)0-10-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	13-2-12 to 13-7-0	(Span)0-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	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
- 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







NE0618-021 **PAGE 28 OF 32** 



Client: **GREEN YORK HOMES** 

Project:

5/31/2018 Designer: RCO

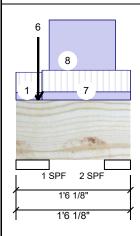
Job Name: LIANA 2 (ELEV.1)

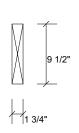
Project #:

### 1.750" X 9.500" - PASSED Forex 2.0E-3000Fb LVL F9-A

Address:

Level: Second Floor





Page 1 of 2

Member Info	rmation			Unfactore	d React	ions UN	PATTERNI	ED lb (l	Jplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	,	Wind
Plies:	1	Design Method:	LSD	1	283		457	566	;	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	20		43	0	)	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings a	and Fact	tored Re	actions			
Dead:	15 PSF			Bearing L	ength	Cap. R	leact D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF 5	.250"	37%	571 / 991	1561	L	1.25D+1.5S +0.5L
Analysis Posu	ltc			2-SPF 4	.125"	2%	53 / 29	83	L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10 ft-lb	9 5/8"	7385 ft-lb	0.001 (0%)	1.4D	Uniform
Unbraced	10 ft-lb	9 5/8"	7385 ft-lb	0.001 (0%)	1.4D	Uniform
Shear	40 lb	5 1/4"	3015 lb	0.013 (1%)	1.4D	Uniform
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

**Design Notes** 

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

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

USED IN THE DESIGN OF THIS COMPONENT.

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-2	(Span)1-3-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-3-8		Тор	10 lb	0 lb	23 lb	0 lb	
3	Point	0-3-8		Тор	18 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	0-3-8		Тор	386 lb	262 lb	537 lb	0 lb	F12 F12
5	Point	0-3-8		Тор	2 lb	0 lb	6 lb	0 lb	
6	Point	0-3-8		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
7	Tie-In	0-4-2 to 1-6-2	(Span)1-4-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
Continued on pa	ige 2								

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

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

## Handling & Installation

- LVL beams must not be cut or drilled
  Refer to manufacturer's product information
  regarding installation requirements, multi-ply
  fastening details, beam strength values, and code approvals
  3. 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







NE0618-021 PAGE 29 OF 32

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

5/31/2018 Project: Designer: RCO

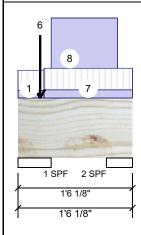
Job Name: LIANA 2 (ELEV.1)

Project #:

1.750" X 9.500" - PASSED F9-A Forex 2.0E-3000Fb LVL

Address:

Level: Second Floor



Page 2 of 2

.Continued from page 1

Self Weight

ID Load Type Location Trib Width Side Dead Live Wind Comments Snow 8 Part. Uniform 0-5-4 to 1-3-12 Тор 64 PLF 0 PLF 0 PLF 0 PLF Wall Self Weight

4 PLF

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

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

Notes

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

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

## Handling & Installation

- 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

  2 Damaged Beams must not be used
- Danaged 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

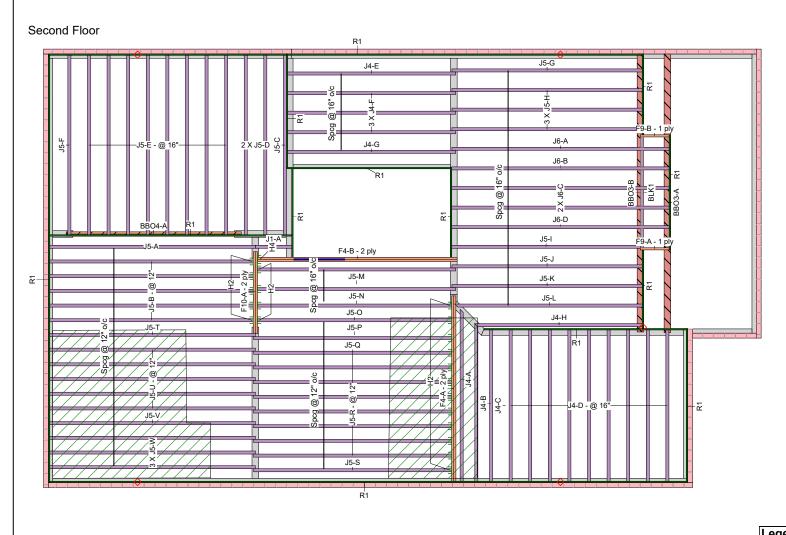
APA: PR-L318







NE0618-021



### 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 Norbord Rimboard Plus 1.125 X 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 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
- 5. CCMC -12787-R APA PR-L310(C)

LVL/LSL (Flush)

Second Floor

Labei	Description	vviatn	Depth	Qty	Piles	PCS	Length	
F4	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	14-0-0	_
F10	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0	La
F9	Forex 2.0E-3000Fb LVL	1.75	9.5			2	2-0-0	D
LVL/LS	L (Dropped)							F.
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	D
BBO4	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	12-0-0	-
I Joist (	Flush)							С
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	
J6	NJH	2.5	9.5			5	16-0-0	В
J5	NJH	2.5	9.5			50	14-0-0	١,
J4	NJH	2.5	9.5			18	12-0-0	s
J1	NJH	2.5	9.5			1	4-0-0	٦
Rim Bo	ard							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	D
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			17	12	S
Blockin	u .						•	Ĕ

Width Denth Oty Plies Pos I

BLK1 NJH

Label Description

ange	r				Beam/Girder	Supported Member
abel	Pcs	Description	Skew	Slope	fasteners	fasteners
H2	21	LT259			4 10dx1 1/2	2 10dx1 1/2
H4	1	HGUS410			46 16d	16 16d

9.5

Qty

LinFt

Plies

Width Depth

2.5

### NOTES:

- Framer to verify dimensions on the architectural drawings.
- 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- . Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls.
- 1. Install single-ply flush window header along inside face of rimboard/rimjoist.
- . Refer to Nascor specifier guide for installation works.
- . Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- . Load transfer blocks to be installed under all point loads.
- 3. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON

Date: Rev.1; May 22,2018 Project No: 17-55 Model: Liana 2

Pcs	Length	NASCOR
4	14-0-0	
2	6-0-0	Layout Name LIANA 2 (ELEV.2)
2	2-0-0	Design Method
Pcs	Length	Description
2	12-0-0	GRANELLI HOMES CORP. BRAMPTON, ONT.
		Created
Pcs	Length	May 29, 2018
5	16-0-0	Builder
50	14-0-0	GREEN YORK HOMES
18	12-0-0	Salas Ban
1	4-0-0	Sales Rep
		- · ····
Pcs	Length	Designer
17	12	RCO
		Shipping
		Project
Pcs	Length	Builder's Project
Varies	7-0-0	Dulluci a Froject

### **Kott Lumber Company** 14 Anderson Blvd Stouffville, Ontario Canada

### 905-642-4400 Job Path

L4A 7X4

D:\LIsers\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \LIANA 2\LIANA 2 ELEV 2\FLOOR

## Second Floor

Design Method	LSD
<b>Building Code</b>	NBCC 2010 / OBC
	2012

### Floor Loads Live Dead Deflection Joist LL Span L/ TL Span L/ LL Cant 2L/ TL Cant 2L/ Deflection Girder LL Span L/ TL Span L/ LL Cant 2L/

15

480

360

480

360

360

240

480

360

OSB

TL Cant 2L/

Decking

Ceiling: Gypsum 1/2" NE0618-021 PAGE 31 OF 32



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

Client: **GREEN YORK HOMES** 

Project:

Address:

Designer: RCO

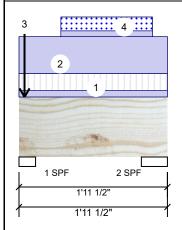
Job Name: LIANA 2 (ELEV.2)

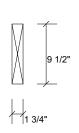
Project #:

### 1.750" X 9.500" - PASSED Forex 2.0E-3000Fb LVL F9-A

Level: Second Floor

5/31/2018





Wind

0

0

+0.5L

1.4D

365

19

126 Uniform

Page 1 of 1

Member Infor	mation			Unfactore
Туре:	Girder	Application:	Floor (Residential)	Brg
Plies:	1	Design Method:	LSD	1
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2
Deflection LL:	360	Load Sharing:	No	
Deflection TL:	240	Deck:	Not Checked	
Importance:	Normal	Vibration:	Not Checked	
General Load				
Floor Live:	40 PSF			Bearings a
Dead:	15 PSF			Bearing L

Unfactored	Reactions	UNPATTER	NED lb (Uplift)
Brg	Live	Dead	Snow

324

90

184

31

2 - SPF 4.125"

Bearings and Fac	tored Re	actions				
Bearing Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.	_
1 - SPF 2.625"	41%	406 / 639	1045	L	1.25D+1.5S	

126 / 0

### **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	35 ft-lb	11 1/16"	7385 ft-lb	0.005 (0%)	1.4D	Uniform
Unbraced	35 ft-lb	11 1/16"	7285 ft-lb	0.005 (0%)	1.4D	Uniform
Shear	8 lb	10 5/8"	4638 lb	0.002 (0%)	1.25D+1.5S +0.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

4%

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.

L		<u> </u>								
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 1-11-8	(Span)1-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Part. Uniform	0-0-0 to 1-11-8		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
l	3	Point	0-0-14		Тор	248 lb	157 lb	355 lb	0 lb	F11 F11
l	4	Part. Uniform	0-6-10 to 1-9-2		Тор	10 PLF	0 PLF	24 PLF	0 PLF	
١		Self Weight				4 PLF				

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

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

### Handling & Installation

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

  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







NE0618-021 PAGE 32 OF 32



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

Project:

Address:

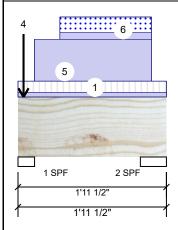
5/31/2018 Designer: RCO

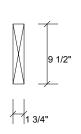
Job Name: LIANA 2 (ELEV.2)

Project #:

### 1.750" X 9.500" - PASSED F9-B Forex 2.0E-3000Fb LVL

Level: Second Floor





Page 1 of 1

Member Info	rmation	Unfactored Reactions UNPATTERNED Ib (Uplift)								
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
Plies:	1	Design Method:	LSD	1	173		318	37	0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	18		73	1	9	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearing	s and Fac	tored I	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	2.625"	41%	398 / 642	1040	L	1.25D+1.5S +0.5L
Analysis Results 2 - SPF 4.125" 4% 102 / 0 102								102	Uniform	1.4D

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	34 ft-lb	11 1/16"	7385 ft-lb	0.005 (0%)	1.4D	Uniform
Unbraced	34 ft-lb	11 1/16"	7285 ft-lb	0.005 (0%)	1.4D	Uniform
Shear	7 lb	10 5/8"	4638 lb	0.002 (0%)	1.25D+1.5S +0.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TI Deflinch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

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



### **Design Notes**

- 1 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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-11-8	(Span)0-10-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-0-14		Тор	250 lb	157 lb	360 lb	0 lb	F11 F11
3	Point	0-0-14		Тор	5 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	0-0-14		Тор	5 lb	0 lb	0 lb	0 lb	Wall Self Weight
5	Part. Uniform	0-2-10 to 1-9-2		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Part. Uniform	0-6-10 to 1-9-2		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

- 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





