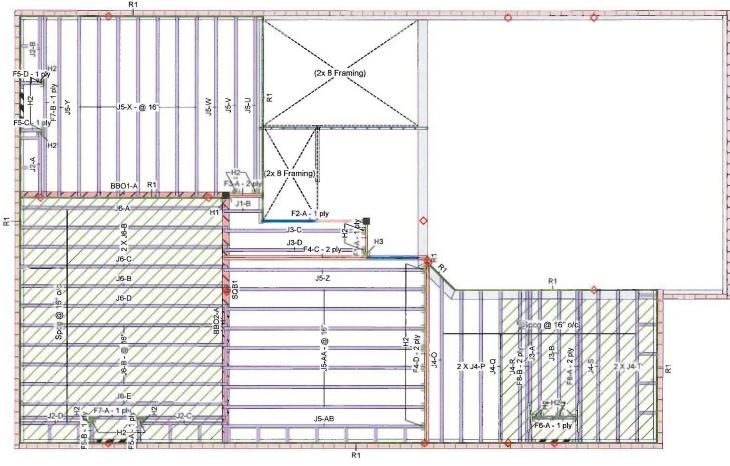
Ground Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

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

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

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

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



Engineered floor joists shall be installed in accordance with the supplier's layout and



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

- 3. LVL CCMC -14056-R



specifications forming part of the permit drawings.

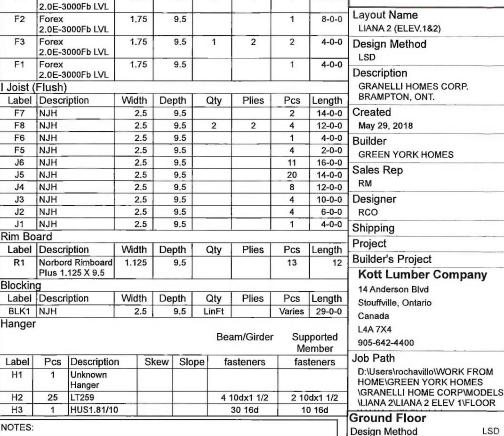
1, OBC 2012 O,Reg 332/12 as amended

2. Nascor CCMC - 13535-R

4. CAN/CSA-086-09

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

All work shall conform to the Onl Building Code O. Reg. 332/12 as ameni



NOTES:

LVL/LSL (Flush) Label Description

F4

Width Depth

9.5

1.75

Qty

Plies

2

Pcs Length

14-0-0

4

. 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.

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

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

. Refer to Nascor specifier guide for installation works.

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

7. Load transfer blocks to be installed under all point loads. 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load of 5 PSF

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

M-2057

Building Code NBCC 2010 / OBC

Floor

Loads

Live

Dead

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

Deflection Girder

2012

40

15

480

360

480

360

360

240

480

360

OSB

3/4"

Nailed & Glued



19-447160.RR.





Layout Name

Design Method

Description

May 29, 2018

Sales Rep

Designer

Shipping

Builder's Project

14 Anderson Blvd

Stouffville, Ontario

Project

Canada

L4A 7X4

905-642-4400

RCO

Created

Builder

LSD

LIANA 2 (ELEV,2)

GRANELLI HOMES CORP.

GREEN YORK HOMES

BRAMPTON, ONT.

Qty Plies Pcs Length

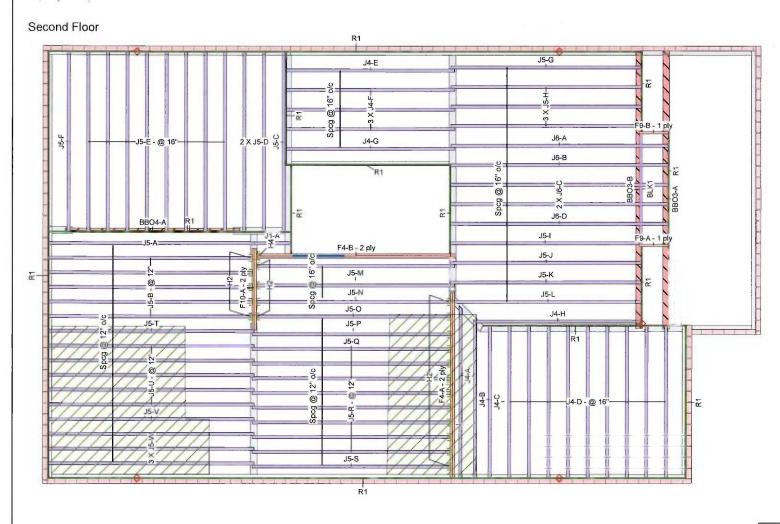
4

14-0-0

6-0-0

2-0-0

2



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.

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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.



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
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

N.A. EL-MASRI Jun 04 2018 NE0618-021

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

F10 Forex 1.75 9.5 2 2 2.0E-3000Fb LVL F9 Forex 1.75 2 2.0E-3000Fb LVL LVL/LSL (Dropped) Width Depth Qty Label Description Plies Pcs Length BBO4 Forex 1.75 9.5 12-0-0 2.0E-3000Fb LVL I Joist (Flush) Label Description Width Depth Qty Plies Pcs | Length J6 NJH 2.5 9.5 5 16-0-0 J5 NJH 2.5 9.5 50 14-0-0 J4 NJH 2.5 9.5 18 12-0-0 J1 NJH 2.5 9.5 1 4-0-0 Rim Board Label Description Width Depth Qty Plies Pcs Length Norbord Rimboard 1,125 9.5 R1 17 Plus 1.125 X 9.5 Blocking Pcs Length Label Description Width Depth Qty Plies 2.5 9.5 LinFt BLK1 NJH Varies 7-0-0 Hanger Beam/Girder Supported Member Pcs Description Skew Slope Label fasteners fasteners H2 21 LT259 4 10dx1 1/2 2 10dx1 1/2 1 HGUS410 H4 46 16d 16 16d NOTES: 1. 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. 3. Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of rimboard/rimioist. 5. Refer to Nascor specifier guide for installation works. 6. Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof. 7. Load transfer blocks to be installed under all point loads.

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

Rim parallel to joists: 1-1/8" rimboard with 2"x 4" block (1/16" longer than

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

rim depth @ 16" o/c). All other components and structural elements

foundation walls and footings including anchorage of components and

Hatch area represents ceramic tiled floor with an additional dead load

The framing shown on this layout may deviate from the architectural

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

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

bracing for lateral stability are the responsibility of Others.

fastened as per the hanger manufacturer's standards.

bolting requirements.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.

Date: Rev.1; May 22,2018

Project No: 17-55 Model: Liana 2

64 Jardin Dr., Suite 3A, Vaughan, ON

Width Depth

9.5

2

1.75

Second Floor LVL/LSL (Flush) Label Description

Forex

2.0E-3000Fb LVL

Job Path D:\Users\rochavillo\WORK FROM

HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \LIANA 2\LIANA 2 ELEV 2\FLOOR

Kott Lumber Company

Second Floor

Design Method LSD Building Code NBCC 2010 / OBC

2012

40

15

480

360

480

360

360

240

480

360

OSB

5/8"

Gypsum 1/2"

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/ TL Cant 2L/

Deckina Deck

Thickness Nailed & Glued

Fastener Vibration

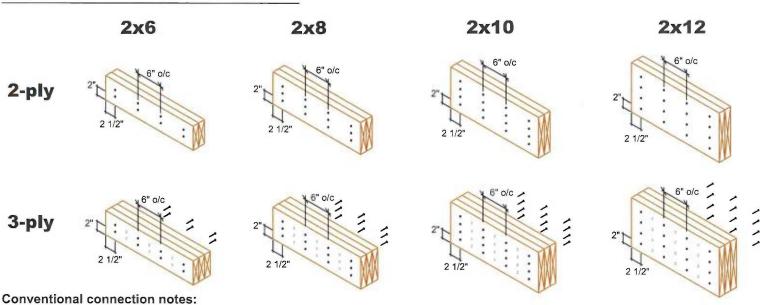
M-2057



TIPLE MEMBER CONNECTIONS

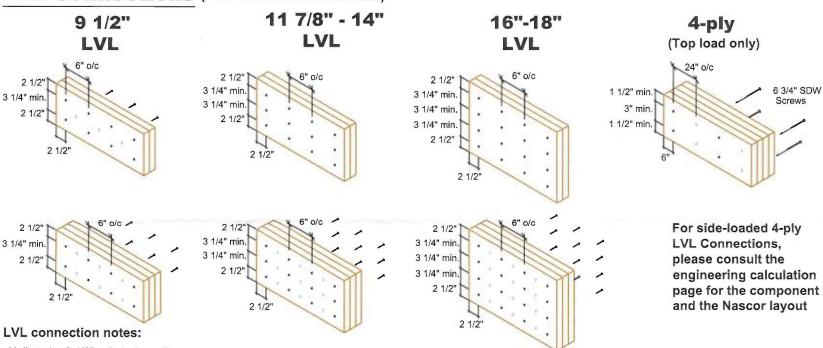
HOME CORP-LIANA 2 (ELEV.1&2

Conventional Connections (for uniform distributed loads)



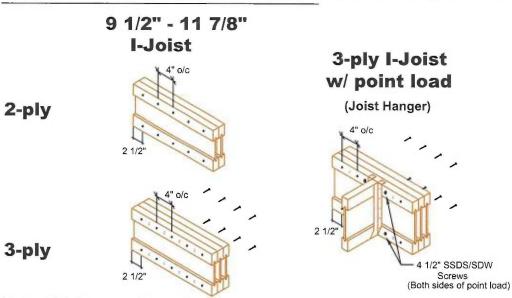
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

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

Engineering Note Page (ENP-2) M-2057

REVISION 2009-10-09

M-2057 LOT 22

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 http://www.nascor.ca.

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.





GREEN YORK HOMES

Project: Address: Date:

5/31/2018

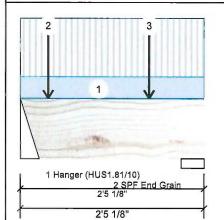
Designer: RCO

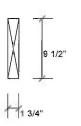
Job Name: LIANA 2 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Ground Floor





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		
Dead:	15 PSF		

Offactored Reactions ONPATTERINED ID (Opint)										
Brg	Live	Dead	Snow	Wind						
1	299	116	0	0						
2	258	101	0	0						

Unfactored Positions UNDATTERNED Ib (Unlift)

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 1'6 7/8" 11362 ft-lb Moment 214 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 1'4 3/8" 0.067 (L/360) 0.010 (1%) D Uniform (L/58713) LL Defl inch 0.001 1'4 9/16" 0.067 (L/360) 0.020 (2%) L

Bearings and Factored Reactions

Bearing	Length	Cap. F	React 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	

(L/23005) TL Defl inch 0.001 1'4 7/16" 0.100 (L/240) 0.010 (1%) D+L L (L/16529)

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,

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

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

Lumber

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

chemicals

Handling & Installation

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

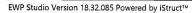
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318









Address:

GREEN YORK HOMES Project:

Date: 5/31/2018

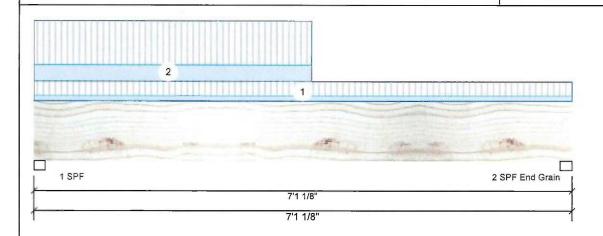
Designer: RCO Job Name: LIANA 2 (ELEV.1)

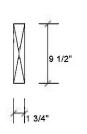
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Ground Floor





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

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

Member Information

Application: Floor (Residential) Design Method: **Building Code:** NBCC 2010 / OBC 2012 Load Sharing: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED ID (Uplift)											
Brg	Live	Dead	Snow	Wind							
1	156	72	0	0							
2	84	45	0	0							

Cap. React D/L lb

90 / 234

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 453 ft-lb 2'11 9/16" 11362 ft-lb Moment 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 3'4 1/8" 0.231 (L/360) 0.020 (2%) D Uniform (L/20045) LL Defl inch 0.009 (L/9718) 3'3 1/2" 0.231 (L/360) 0.040 (4%) L TL Defl inch 0.013 (L/6545) 3'3 11/16" 0.346 (L/240) 0.040 (4%) D+L L

2 - SPF 1.875" 7% 56 / 125 182 I End Grain

17%

Bearings and Factored Reactions

Bearing Length

1 - SPF 1.750"

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.



Total Ld. Case

324 L

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				

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.

Lumber

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

chemicals

Handling & Installation

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







Address:

GREEN YORK HOMES

Project:

Date:

5/31/2018

RCO Designer: Job Name: LIANA 2 (ELEV.1)

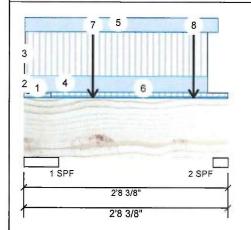
Project #:

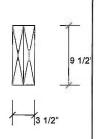
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Page 1 of 2

Member	Information
Type:	Girder

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

40 PSF 15 PSF Application:

Floor (Residential) Design Method: LSD

Building Code: NBCC 2010 / OBC 2012 Load Sharing:

Not Checked

Deck:

Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead Snow		Wind
1	669	380	0	0
2	523	292	0	0

Bearings and Factored Reactions

Bearing Len	gth Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	_
1 - SPF 5.50	0" 12%	475 / 1003	1478	L	1.25D+1.5L	
2 - SPF 2.37	5" 22%	365 / 784	1150	L	1.25D+1.5L	

Analysis Results

Floor Live:

Dead:

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
l	Moment	607 ft-lb	1'4 1/8"	22724 ft-lb	0.027 (3%)	1.25D+1.5L	L	
l	Unbraced	607 ft-lb	1'4 1/8"	22724 ft-lb	0.027 (3%)	1.25D+1.5L	L	
l	Shear	729 lb	1'2 1/4"	9277 lb	0.079 (8%)	1.25D+1.5L	L	
I	Perm Defl in.	0.001 (L/32357)	1'5 1/8"	0.072 (L/360)	0.010 (1%)	D	Uniform	
ı	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



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 of	on full section width.							
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...

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 sultability of the intended application, and to verify the dimensions and loads.

Lumber

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

Handling & Installation

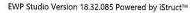
- I. IVI. beams must not be out or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- approvals
 Damaged Beams must not be used
 Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent

Manufacturer Info

APA: PR-L318







Client: Project:

Address:

GREEN YORK HOMES

Date: 5/31/2018

RCO Designer:

Job Name: LIANA 2 (ELEV.1)

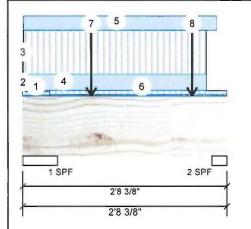
Project #:

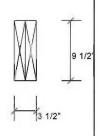
Forex 2.0E-3000Fb LVL F3-A

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,

Lumber

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

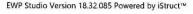
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







Project #:

Level: Ground Floor Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED 5

2 SPF 13'9 3/8' 13'9 3/8"

viember intorn	nation			Unfactor	ed React	tions UNPATTER	NED lb (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	374	193	0	0
Moisture Condition:	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 Fac	tored Reactions		
Dead:	15 PSF			Bearing	Length	Cap. React D/L lt	Total Ld. Case	Ld. Comb.
				1 - SPF	4.125"	9% 241 / 560	801 L	1.25D+1.5L
				2 - SPF	6.875"	15% 580 / 163	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			

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.



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.

Design Notes

- 5 Bottom braced at bearings.

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

Lumber

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

Handling & Installation

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

Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318





Client:

GREEN YORK HOMES

Project: Address: Date: 5/31/2018

Designer: **RCO**

Job Name: LIANA 2 (ELEV.1)

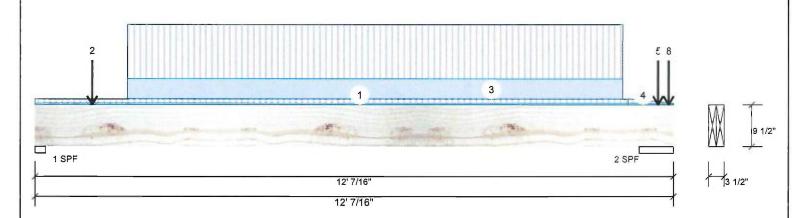
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Member Inforn	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	2	Design Method:	LSD	1	1545	622	0	0		
Moisture Condition:	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	1		Bearings	and Fact	ored Reactions				
Dead:	15 PSF	7		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		
				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

. Adioidi ololla	omicoo fallo pacca	on ran occaon main,								
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	e 2									

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

Lumber

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

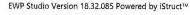
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







Client: Project: Address:

GREEN YORK HOMES

Date:

5/31/2018

Page 2 of 2

FAGE IU UF 32

RCO Designer:

Job Name: LIANA 2 (ELEV.1)

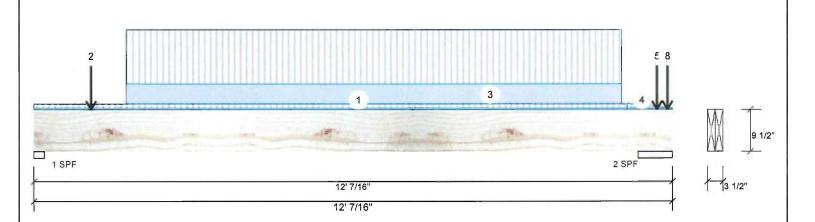
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



ŀ	Continued from p	age 1							
l	ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
١	6	Point	11-11-5	Тор	16 lb	34 lb	0 lb	0 lb	J4
١	7	Point	11-11-5	Тор	20 lb	54 lb	0 lb	0 lb	J5
l	8	Point	11-11-5	Тор	22 lb	0 lb	0 lb	0 lb	Wall Self Weight
l		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

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

Lumber

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318









Address:

GREEN YORK HOMES

Project:

Date: 5/31/2018

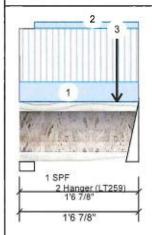
Designer: RCO

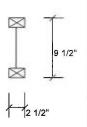
Job Name: LIANA 2 (ELEV.1)

Project #:

9.500" - PASSED F5-A NJH

Level: Ground Floor





Wind 0 0

Page 1 of 1

Member Information Unfactored Reactions UNPATTERNED Ib (Uplift)

Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	
Plies:	1	Design Method:	LSD	1	65	31	0	
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	135	67	0	
Deflection LL:	360	Load Sharing:	No	120				
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								_
Floor Live:	40 PSF	l l		Bearing	s and Factore	d Reactions		

Bearings and Factored Reactions

I	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
ŀ	1 - SPF	2.375"	9%	39 / 98	136	L	1.25D+1.5L	
	2 - Hanger	2.000"	18%	84 / 202	286	L	1.25D+1.5L	

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.

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	1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	2	Part. Uniform	0-2-6 to 1-6-14		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
ı	3	Point	1-3-7		Near Face	49 lb	99 lb	0 lb	0 lb	J2

Notes

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

Lumber

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

Handling & Installation

- Landling & Installation

 I blost flanges must not be cut or drilled

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

 Damaged IJoists must not be used

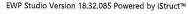
 Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.
- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Wab stiffeners for point load as shown Minimum point load bearing length>= 3,5 inches
 For flat roofs provide proper drainage to prevent pending

Manufacturer Info

Nascor by Kott







Client:

GREEN YORK HOMES

Project: Address: 5/31/2018

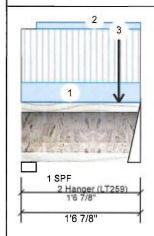
Designer: RCO

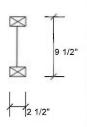
Job Name: LIANA 2 (ELEV.1)

Project #:

F5-B 9.500" - PASSED NJH

Level: Ground Floor





Wind

Total Ld. Case

131 L

254 L

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Page 1 of 1

Member Information Unfactored Reactions UNPATTERNED lb (Uplift) Girder Application: Floor (Residential) Live Brg Dead Snow Plies: Design Method: 63 30 n 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 2 120 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF

Analysis Results

Dead:

15 PSF

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.

8%

16%

Cap. React D/L lb

37 / 94

74 / 180

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

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

Bearing Length

1 - SPF 2.375"

2.000"

2 -

Hanger



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

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 bads.

Lumber

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

Handling & Installation

- andling & Installation.

 Llost flanges must not be cut or drilled.
 Refer to latest copy of the Moist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-lipy fastening details and handling/erection details.

 Damaged boists 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 roots provide proper drainage to prevent ponding

Manufacturer Info

Nascor by Kott





Client:

GREEN YORK HOMES

Project: Address:

5/31/2018

RCO Designer:

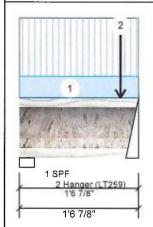
Job Name: LIANA 2 (ELEV.1)

Project #:

Date:

9.500" - PASSED F5-C NJH

Level: Ground Floor



9 1/2"

Wind

Page 1 of 1

IIa	nati

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

15 PSF

Application: Design Method:

Building Code:

Load Sharing:

Deck:

Vibration:

LSD

NBCC 2010 / OBC 2012

Floor (Residential)

No Not Checked

Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift) Live Dead Snow Brg 59 22 0

0 2 0 115

Dead:

Analysis Res	sults					
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	10 7/8"	0.067 (L/240)	0.010 (1%)	D+L	L

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	7%	28 / 88	116	L	1.25D+1.5L
2 - Hanger	2.000"	14%	55 / 173	227	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 flange unbraced.
- 4 Bottom flange braced at bearings

(L/25598)

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

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.

Handling & Installation

- anguing & installation

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

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

Manufacturer Info

Nascor by Kott









GREEN YORK HOMES

Project: Address:

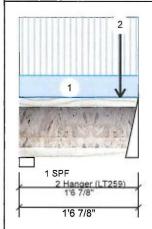
5/31/2018 Date:

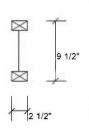
Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

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





Page 1 of 1

Member Information					Unfactored Reactions UNPATTERNED Ib (Uplift)					
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	1	Design Method:	LSD	1	59	22	0	0		
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	118	44	0	0		
Deflection LL:	360	Load Sharing:	No	1 =						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load		1-7321 - 1								
Floor Live:	40 PSF			Bearings a	and Facto	red Reactions				
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.		
				1 - SPF 2	.375"	7% 28 / 89	116 L	1.25D+1.5L		

Analysis Results

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.

15%

55 / 177

231 L

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

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

2.000"

Hanger



1.25D+1.5L

Design Notes

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

Notes

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

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

Handling & Installation

- Randling & Installation
 I. Joist flanges must not be cut or drilled
 Refer to latest copy of the IJoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastering details and handling/erection details
 Damaged Lioists 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
- For lifat roofs provide proper displayed to permit to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length≻= 3.5 inches
 For lifat roofs provide proper drainage to prevent ponding

Manufacturer Info

Nascor by Kott





Client: Project: Address: **GREEN YORK HOMES**

5/31/2018

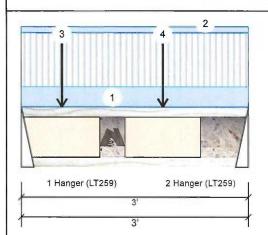
Designer: RCO

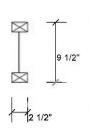
Job Name: LIANA 2 (ELEV.1)

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

15 PSF

Application: Design Method:

Building Code:

Floor (Residential) LSD

NBCC 2010 / OBC 2012 No

Load Sharing: Deck: Not Checked

Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Live	Dead	Snow	Wind
274	135	0	0
215	105	0	0
	274	274 135	274 135 0

Analysis Results

Dead:

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

TL Defl	inch	0.0
Design	Not	es

- 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.

I	Bearings and Factored Reactions											
ľ	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.					
ļ	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.



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

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.

Lumber

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

Handling & Installation

- andling & Installation.

 Joint flanges must not be out or drilled.

 Refer to latest copy of the IJoist product information details for fireming details, suffiener tables, web hole chart, bridging details, multi-hip 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
 Wab stiffeners for point load as shown Minimum point load bearing length>= 3,5 inches
 For flat roofs provide proper drainage to prevent pending

Manufacturer Info

Nascor by Kott







Page 1 of 2

EWP Studio Simpson Strong-Tie® Component Solutions™

Client:

GREEN YORK HOMES

Project: Address:

5/31/2018 Date:

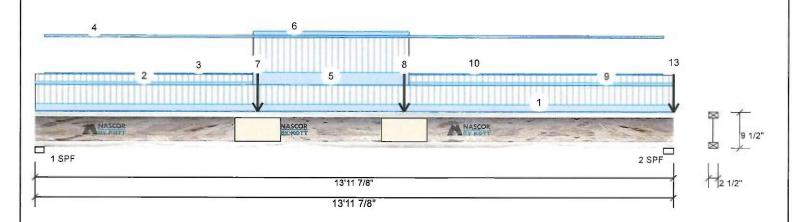
RCO Designer:

Job Name: LIANA 2 (ELEV.1)

Project #:

9.500" - PASSED F7-A NJH

Level: Ground Floor



Type: Girder Application: Floor (Residential) Brg Plies: Design Method: LSD Moisture Condition: Dry NBCC 2010 / OBC 2012 **Building Code:** Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Importance: Normal Vibration: Not Checked General Load Floor Live: 40 PSF Dead: 15 PSF

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

1	370	181	0	0
2	533	273	0	0

Snow

Dead

Bearings and Factored Reactions

Live

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	49%	226 / 555	781	L	1.25D+1.5L
2 - SPF	2.625"	72%	342 / 800	1141	L	1.25D+1.5L

Analysis Results

Member Information

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



Wind

Design Notes

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

3 Bottom flange braced at bearings.

- Botton	manigo bracoa at boaring	0.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tìe-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 or	page 2								

Notes

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

Lumber

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

Handling & Installation

- Libist flanges must not be cut or drilled
 Refer to latest copy of the IJoist product information details for framing details, stiffener tables, web hole chart, bradging 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 apportune.

Nascor by Kott

Manufacturer Info



Client:

GREEN YORK HOMES

Project: Address: Date: 5/31/2018

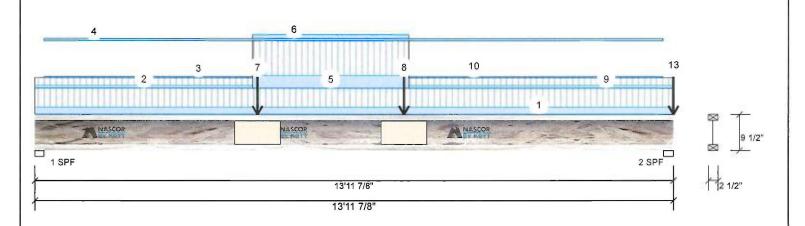
Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

9.500" - PASSED F7-A NJH

Level: Ground Floor



Continued from pa	age 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	di 0	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

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.

Lumber

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

Handling & Installation

- I. Joist flanges must not be cut or drilled
 Refer to latest copy of the Uoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
 Damaged Lioists 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 beaning 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





Page 2 of 2

Page 1 of 1



Client:

GREEN YORK HOMES

Project: Address: Date:

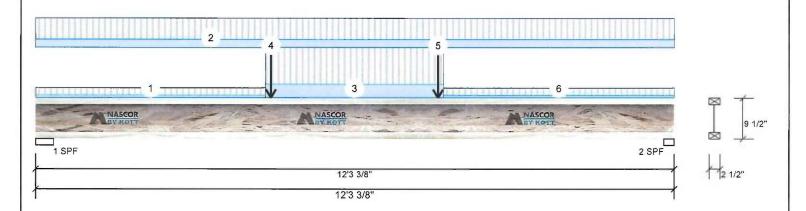
5/31/2018 RCO

Designer: Job Name: LIANA 2 (ELEV.1)

Project #:

F7-B 9.500" - PASSED NJH

Level: Ground Floor



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

15 PSF

Application: Design Method:

Vibration:

Floor (Residential)

Building Code: NBCC 2010 / OBC 2012

Not Checked

Load Sharing: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	VVind	
1	331	125	0	0	
2	324	122	0	0	

Bearings and Factored Reactions

Bearing	Length	Cap. R	eact 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

Dead:

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

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.

POFESSION

Design Notes

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

3 Bottom flange braced at bearings.

5 Dottom hange	braced at bearings.					I GHAL EGIAL	O O TEN BE	1111100.	
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.

Lumber

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

Handling & Installation

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

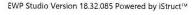
Provide lateral support at bearing points to avoid lateral displacement and rotation. Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches. For flat roots provide proper drainage to prevent propriet.

Manufacturer Info

Nascor by Kott







Client:

GREEN YORK HOMES

Project: Address: Date: 5/31/2018

Designer: RCO

Job Name: LIANA 2 (ELEV.1)

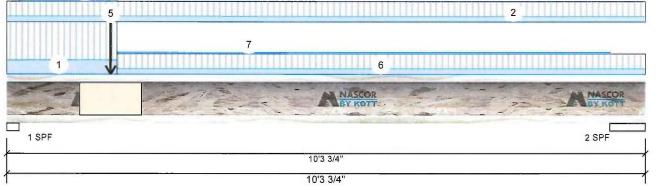
Level: Ground Floor

Project #:

F8-A 2-Ply - PASSED NJH 9.500"

FAGE 19 OF 34

Page 1 of 1



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

15 PSF

Application: Design Method:

Building Code:

Vibration:

Floor (Residential)

NBCC 2010 / OBC 2012

Load Sharing: Deck:

Not Checked

Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	514	250	0	0
2	325	155	0	0

Bearings and Factored Reactions

Ī	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
l	1 - SPF	2.375"	34%	313 / 771	1084	L	1.25D+1.5L
1	2 - SPF	6.875"	22%	194 / 488	682	L	1.25D+1.5L

Analysis Results

Dead:

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



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

5 DOLLOIN	nange bracea at bearing	J							
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.

Lumber

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

Handling & Installation

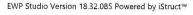
- Lolist flanges must not be cut or drilled Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-hip/ fastering details and handling/erection details Damaged bloists must not be used Design assumes top flange to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

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









Page 1 of 1

Client:

Project:

GREEN YORK HOMES

Address:

Date: 5/31/2018

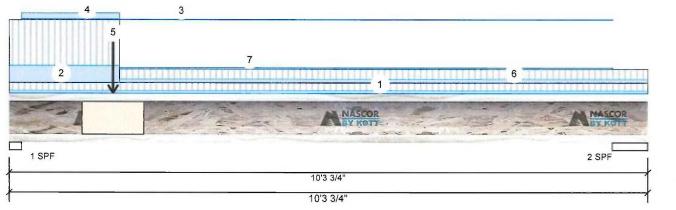
Designer: RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

9.500" 2-Ply - PASSED F8-B NJH

Level: Ground Floor



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

15 PSF

Application: Design Method:

Floor (Residential) LSD

NBCC 2010 / OBC 2012 **Building Code:** Load Sharing:

Deck: Vibration:

Not Checked Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	451	220	0	0
2	194	93	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - SPF	2.375"	30%	276 / 676	951	L	1.25D+1.5L	
2 - SPF	6.875"	13%	116 / 291	407	L	1.25D+1.5L	

Analysis Results

Dead:

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



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.

	0								
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	

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.

Lumber

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

Handling & Installation

- Library & Installation

 Library and the second of dilled
 Refer to latest copy of the IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-ply fastening details and
 handling/erection details
 Damaged IJoists must not be used
 Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

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

Manufacturer Info

Nascor by Kott





INDATTEDNED IL (IL IICA

Page 1 of 1

Client: Project:

Address:

GREEN YORK HOMES

5/31/2018

RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

Designer:

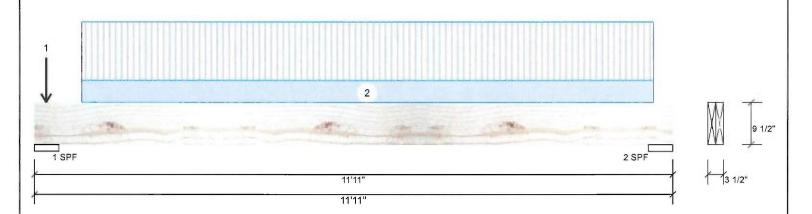
Date:

BBO4-A Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



vlember Inform	mation			Unfactor	red React	tions UNPATTERN	ED IB (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	1378	565	0	0
Moisture Condition	: 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		20000000						
Floor Live:	40 PSF			Bearings	and Fac	tored Reactions		
Dead:	15 PSF			Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	5.500"	23% 706 / 2068	2774 L	1.25D+1.5L
				2 - SPF	5.500"	23% 699 / 2043	2742	1 25D+1 5I

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.



/ Lateral s	ienderness rado based	on full section width.							
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.

Lumber

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

chemicals

Handling & Installation

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

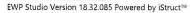
For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







GREEN YORK HOMES

Project: Address:

5/31/2018

RCO

Job Name: LIANA 2 (ELEV.1)

Project #:

Designer:

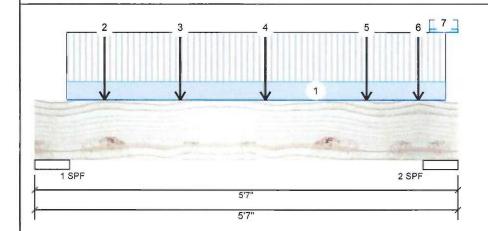
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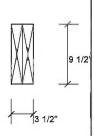
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





Page 1 of 2

Member Information

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

Floor (Residential) LSD

Design Method: Building Code: NBCC 2010 / OBC 2012

Load Sharing: Deck: Not Checked

Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

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

Bearings and Factored Reactions

- L								
	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
	1 - SPF	5.500"	22%	649 / 1973	2622	L	1.25D+1.5L	
4	2 - SPF	5,500"	33%	1012 / 2947	3959	L	1.25D+1.5L	

Analysis Results

Dead:

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

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

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

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



Design Notes

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

L	6 Lateral Siend	emess raud based on	full section width.							
ſ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
ı	1	Part. Uniform	0-5-1 to 5-5-1		Far Face	104 PLF	276 PLF	0 PLF	0 PLF	
l	2	Point	0-11-1		Near Face	112 lb	292 lb	0 lb	0 lb	J5
l	3	Point	1-11-1		Near Face	105 lb	281 lb	0 lb	0 lb	J5
ı	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

Near Face

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.

Point

Lumber

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

Handling & Installation

5-0-12

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

For flat roofs provide proper drainage to prevent ponding

319 lb

713 lb

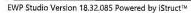
Manufacturer Info

APA: PR-L318

0 lb

0 lb F4





Client: Project: Address:

GREEN YORK HOMES

Date:

5/31/2018

Page 2 of 2

PAGE 24 OF 32

RCO Designer:

Job Name: LIANA 2 (ELEV.1)

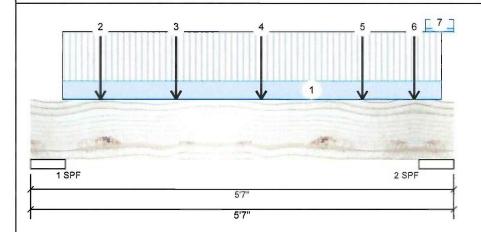
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



..Continued from page 1

ID Load Type 7 Tie-In

Location Trib Width 5-2-8 to 5-7-0 (Span)2-6-3

Side

Dead 15 PSF

Live 40 PSF

Snow 0 PSF

Wind Comments 0 PSF

Self Weight

8 PLF

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

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

Notes

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318





Client:

GREEN YORK HOMES

Project: Address:

5/31/2018

RCO Designer:

Page 1 of 2

Job Name: LIANA 2 (ELEV.1)

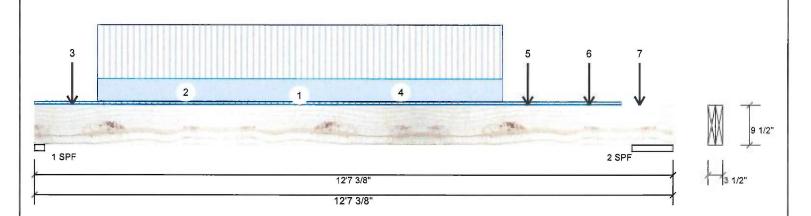
Project #:

Date:

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

2-Ply - PASSED

Level: Second Floor



Member Info	rmation			Unfactore	ed Reacti	ons UNPATTERNE	D lb (Uplift)	
Туре:	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	and Facto	ored Reactions		
Dead:	15 PSF			Bearing I	_ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 2	2.375"	64% 902 / 2351	3253 L	1.25D+1.5L
				2 - SPF 9	9.714"	18% 1005 / 2685	3690 L	1.25D+1.5L

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	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
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.



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

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318



12'7 3/8 12'7 3/8"

Live

281 lb

Snow

0 lb

Dead

105 lb

8 PLF

Side

Far Face

Location Trib Width

11-11-7

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

2 SPF

Comments

Wind

0 lb J5

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

Lumber

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

chemicals

2

1 SPF

.Continued from page 1

7

Load Type

Self Weight

Point

Handling & Installation

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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318



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



Page 2 of 2

Project: Address:

GREEN YORK HOMES

Designer:

RCO

Job Name: LIANA 2 (ELEV.1)

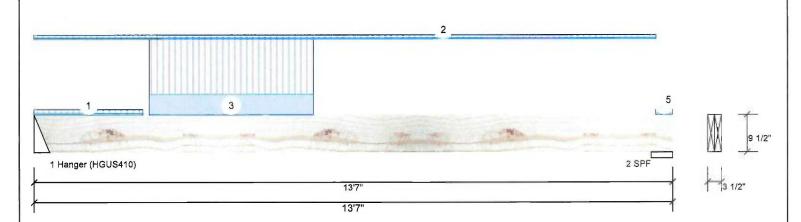
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Information Unfactored Reactions UNPATTERNED lb (Uplift) Wind Type: Girder Application: Floor (Residential) Live Dead Snow Brg Plies: Design Method: 713 319 2 0 0 1 Moisture Condition: Dry Building Code: NBCC 2010 / OBC 2012 0 2 357 186 0 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Vibration: Not Checked Normal General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Cap. React D/L lb Dead: Bearing Length Total Ld. Case Ld. Comb. 398 / 1070 1.25D+1.5L 4.000" 1468 L Hanger

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4658 ft-lb	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
Shear	1393 lb	1' 3/4"	9277 lb	0.150 (15%)	1.25D+1.5L	L
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.

6%

233 / 535

768 L

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

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

2 - SPF 5.500"



1,25D+1,5L

Page 1 of 1

Design Notes

Analysis Results

- 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
ם ו	Load Type	Location	THE WILLI	Side	Dead	Live	SHOW	vviila	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				

Notes

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

Lumber

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

Handling & Installation

- amuling & 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







Client:

GREEN YORK HOMES

Project: Address: Date:

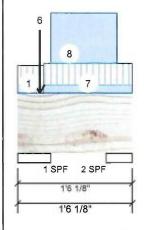
5/31/2018

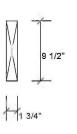
Designer: RCO Job Name: LIANA 2 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL F9-A

1.750" X 9.500" - PASSED Level: Second Floor





Page 1 of 2

Member Inforn	nation		Unfactored Reactions UNPATTERNED lb (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	w	Wind
Plies:	1	Design Method:	LSD	1	283		457	56	6	0
Moisture Condition:	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 and Factored Reactions						
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	5.250"	37%	571 / 991	1561	L	1.25D+1.5S +0.5L
Analysis Result	2 - SPF	4.125"	2%	53 / 29	83	L	1.25D+1.5L			

15							
Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	10 ft-lb	9 5/8"	7385 ft-lb	0.001 (0%)	1.4D	Uniform
l	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
١	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%)		

1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam

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.

Design Notes

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY

width X 4.5. 2 Girders are designed to be supported on the bottom edge only.

BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS

3 Top braced at bearings.

4 Bottom braced at bearings.

TL Defl inch 0.000 (L/999)

NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH

. Doctorii bie	iood at boatings.								
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 page 2...

Notes

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

Lumber

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

Handling & Installation

- andling & Installation.

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

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318



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



EDPROFESSIONAL



Client:

GREEN YORK HOMES

Project: Address:

5/31/2018

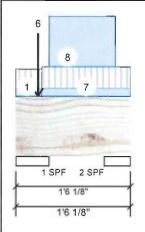
RCO

Designer: Job Name: LIANA 2 (ELEV.1)

Project #:

Date:

F9-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" - PASSED Level: Second Floor



Page 2 of 2

..Continued from page 1

ID Load Type 8 Part. Uniform

Self Weight

0-5-4 to 1-3-12

Location Trib Width Side Top

Dead 64 PLF

Live 0 PLF Snow 0 PLF Wind Comments 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.

Lumber

- Dry service conditions, unless noted otherwise
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Handling & Installation

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





Client:

GREEN YORK HOMES

Project: Address: Date:

5/31/2018

Job Name: LIANA 2 (ELEV.2)

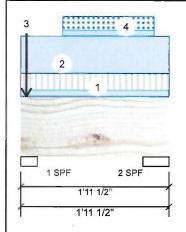
RCO

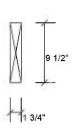
Project #:

Designer:

Forex 2.0E-3000Fb LVL F9-A

1.750" X 9.500" - PASSED Level: Second Floor





Page 1 of 1

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

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

Unfactored Reactions UNPATTERNED lb (Uplift) Wind Brg Live Dead Snow 324 365 184 0 1 2 31 90 19 0

Analysis Results Analysis Actual Location Allowed Comb. Case Capacity 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 10 5/8" 4638 lb 0.002 (0%) 1,25D+1.5S L +0.5L 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%)

0 999.000 (L/0) 0.000 (0%)

Bearings and Factored Reactions

Cap. React D/L lb Bearing Length Total Ld. Case Ld. Comb. 1 - SPF 2.625" 1.25D+1.5S 406 / 639 1045 L +0.5L 2 - SPF 4.125" 1.4D 4% 126 / 0 126 Uniform

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.

TL Defl inch 0.000 (L/999)

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

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

BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-11-8	(Span)1-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 1-11-8		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Point	0-0-14		Тор	248 lb	157 lb	355 lb	0 lb	F11 F11
4	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.

Lumber

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

chemicals

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







GREEN YORK HOMES

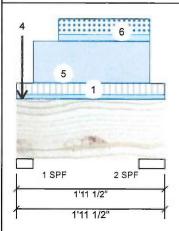
Project: Address:

Date: 5/31/2018

RCO Designer:

Job Name: LIANA 2 (ELEV.2)

1.750" X 9.500" - PASSED Level: Second Floor F9-B Forex 2.0E-3000Fb LVL



1.25D+1.5S +0.5L

1.4D

Page 1 of 1

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

Application: Floor (Residential) Design Method: LSD **Building Code:** NBCC 2010 / OBC 2012 Load Sharing: Deck: Not Checked Not Checked Vibration:

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Wind Dead Snow 173 318 370 0 1 2 18 73 0 19

Bearing Length 1 - SPF 2.625" 2 - SPF 4.125" Case Uniform

Bearings and Factored Reactions Cap. React D/L lb Total Ld. Case Ld. Comb. 41% 398 / 642 1040 L 4% 102/0 102 Uniform

Analysis Location Allowed Capacity Comb. Moment 34 ft-lb 11 1/16" 7385 ft-lb 0.005 (0%) 1.4D 34 ft-lb Unbraced 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 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.

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

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



Design Notes

Analysis Results

- 1 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	dI 0	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				

Notes

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Lumber

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 LVL not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent

Manufacturer Info

APA: PR-L318



Kott Lumber Company 14 Anderson Blvd, Ontario Canada



