Plus 1.125 X 9.5 **Kott Lumber Company** 14 Anderson Blvd Width Depth Qty Plies Pcs Length Description Stouffville Ontario BLK1 LPI 20 Plus 9.5 2.5 LinFt Varies 29-0-0 Canada L4A 7X4 Beam/Girder Supported 905-642-4400 Member Pcs Description Skew | Slope fasteners fasteners GRANELLI HOME CORP\MODELS Unknown \LOT 18 LIANA 2-2\FLOOR\LOT-18 Hanger (LIANA 2 EL-2).isl 25 LT259 4 10dx1 1/2 2 10dx1 1/2 Ground Floor 1 HUS1.81/10 30 16d 10 16d Design Method Building Code NBCC 2010 / OBC Framer to verify dimensions on the architectural drawings Floor 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger, Loads . Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls Live . Install single-ply flush window header along inside face of Dead rimboard/rimjoist **Deflection Joist** . Refer to Nascor specifier guide for installation works. 6. Squash blocks recommended to be installed at end bearing on LL Span L/ all first level joists which support loading from above exceeding TL Span L/ two levels floor or roof. LL Cant 2L/ . Load transfer blocks to be installed under all point loads. s. It shall be the framer's responsibility that floor joists and beams are TL Cant 2L/ fastened as per the hanger manufacturer's standards. Deflection Girder LL Span L/

Ground Floor

F2

F3

F7

F8

F6

F5

J6

J5

J4

J3

J2

Blocking

Label

Hanger

Label

H2

НЗ

of 5 PSF

Legend

/////

Rim Board

LVL/LSL (Flush)

Label Description

Forex

Forex

Forex

Label Description

LPI 20Plus

Norbord Rimboard

J1 LPI 20Plus

Label Description

Joist (Flush)

2.0E-3000Fb LVL

2.0E-3000Fb LVL

2.0E-3000Fb LVL

2.0E-3000Fb LVL

Width Depth

9.5

9.5

9.5

9.5

9.5

9.5

9,5

9.5

9.5

9.5

9.5

9.5

9.5

9.5

Depth Qty Plies

1.75

1.75

1.75

1.75

2.5

2.5

2.5

2.5

2.5

2.5

2.5

2.5

2.5

2.5

Width

1.125

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

The framing shown on this layout may deviate from the architectural

Point Load Support

Load from Above

Wall Opening

LPI 20Plus 9.5

0 X 0 (Dropped)

1,75 X 9,5 (Dropped)

5.25 X 8 (Dropped)

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

Norbord Rimboard Plus 1.125 X 9.5

Forex 2.0E-3000Fb LVL 1.75 X 9.5

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.

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

Width Depth

Qty Plies

Qty Plies

2

2

Pcs Length

14-0-0

8-0-0

4-0-0

4-0-0

12-0-0

2-0-0

16-0-0

6-0-0

14-0-0 Created

4-0-0 Builder

10-0-0 Designer

Pcs Length

20 14-0-0

8 12-0-0

1 4-0-0

Pcs Length

13

4

2

2

4

11

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: Rev.4: Dec 21,2018 Project No: 17-55 Model: lot-18 (Liana 2 el-2)

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -12904-R
- 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

THIS CERTIFICATION IS TO CONFIRM THAT:

APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY SHOWN ON THIS LAYOUT.

FOR THE LOADS AND SPACING SHOWN ON THIS LAYOUT.

ATTACHED TOGETHER AS PER THE INCLUDED MULTIPLE MEMBER CONNECTION DETAIL.

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

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

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

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

This layout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them

1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED

2. THE FLOOR JOISTS COMPLY WITH THE NASCOR SPAN TABLE

THE FLOOR SYSTEM MUST BE ASSEMBLED IN ACCORDANCE TO THE NASCOR SPECIFIER GUIDE. MULTI-PLY MEMBERS MUST BE

Layout Name

Design Method

Description

May 29, 2018

Sales Rep

RCO/SB

Shipping

12 Builder's Project

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

LOT-18 (LIANA 2 EL-2)

GRANELLI HOMES CORP.

BRAMPTON, ONT.

GREEN YORK HOMES

PAGE 3 UF 43

OSB 3/4" Nailed & Glued M-2057

LSD

2012

40

15

480

360

480

360

360

240 480

360

19-447248.000.00 KR. KOTT



Second Floor

F9-B - 1 ply 2 X J5-H (8) DROP BM4-A F9-A - 1 ply F4-B - 2 ply J4-J @ 16"-

1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY ARCHITECTURAL DRAWINGS: SHOWN ON THIS LAYOUT. JARDIN DESIGN GROUP INC.

THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

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

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

NAILING OR BOLTING REQUIREMENTS.

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

Second Floor LVL/LSL (Flush) Plies Label Description Width | Depth | Qty Pcs Length 1.75 2.0E-3000Fb LVI F10 Forex 1.75 9.5 2 6-0-0 2 2.0F-3000Fb1VI 1.75 9.5 2-0-0 2.0E-3000Fb LVL LVL/LSL (Dropped) Label Description Width | Depth | Qty Plies Pcs Length BM4 1.75 9.5 2.0E-3000Fb LVL Joist (Flush) Label Description Width Depth Qty Pcs Length J6 LPI 20Plus 2.5 9.5 16 16-0-0 J5 LPI 20Plus 9.5 41 14-0-0 2.5 J4 LPI 20Plus 2.5 9.5 20 12-0-0 J1 LPI 20Plus 2.5 9.5 4-0-0 Rim Board Pcs | Length Label Description Width Depth Qty Plies Norbord Rimboard 1.125 9.5 Plus 1.125 X 9.5 Blocking Pcs Length Label Description Width Depth Qty Plies BLK2 NJH 2.5 9.5 LinFt Varies 7-0-0

Hanger

					Deam/Gliuei	Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H2	21	LT259			4 10dx1 1/2	2 10dx1 1/2
H4	1	HGUS410			46 16d	16 16d

Framer to verify dimensions on the architectural drawings. 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.

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

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

. Refer to Nascor specifier guide for installation works. . Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding

two levels floor or roof. Load transfer blocks to be installed under all point loads. 3. It shall be the framer's responsibility that floor joists and beams are

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

fastened as per the hanger manufacturer's standards.

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

Hatch area represents ceramic tiled floor with an additional dead load

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

Legend

Point Load Support Load from Above

Norbord Rimboard Plus 1.125 X 9.5 LPI 20Plus 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped)

Forex 2.0E-3000Fb LVL 1.75 X 9.5 5.25 X 8 (Dropped)

Layout Name LOT-18 (LIANA 2 EL-2) Design Method

Description GRANELLI HOMES CORP. BRAMPTON, ONT.

May 29, 2018

GREEN YORK HOMES Sales Rep

Designer RCO/SB Shipping

Project Builder's Project

Kott Lumber Company

14 Anderson Blvd Stouffville, Ontario Canada L4A7X4 905-642-4400

Job Path

GRANELLI HOME CORP\MODELS \LOT 18 LIANA 2-2\FLOOR\LOT-18 (LIANA 2 EL-2).isl

Second Floor

LSD Design Method Building Code NBCC 2010 / OBC 2012

40

15

480

360

480

360

360

240

480

360

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 OSB Thickness 5/8" Fastener Nailed & Glued Vibration

Gypsum 1/2"

M-2057

OFESSION N.A. EL-MASRI ENG.JOB:NE0119-05

Version 18.80.219 Powered by iStruct™

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

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

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

Date: Rev.4; Dec 21,2018

Model: lot-18 (Liana 2 El-2)

Project No: 17-55

2. Nascor CCMC - 13535-R

3. LVL CCMC -12904-R

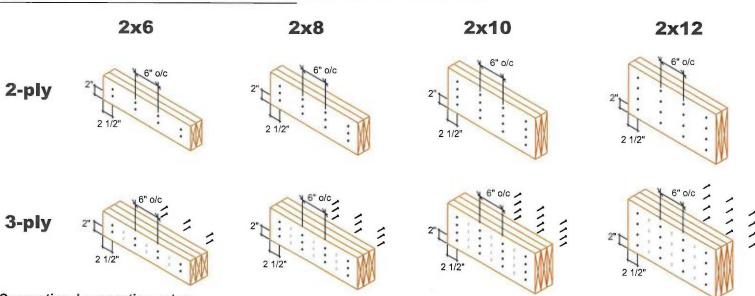
4. CAN/CSA-O86-09

This fayout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them

LTIPLE MEMBER CONNECTIONS

(LIANA -2 EL-2)-BRAMPTON-ON

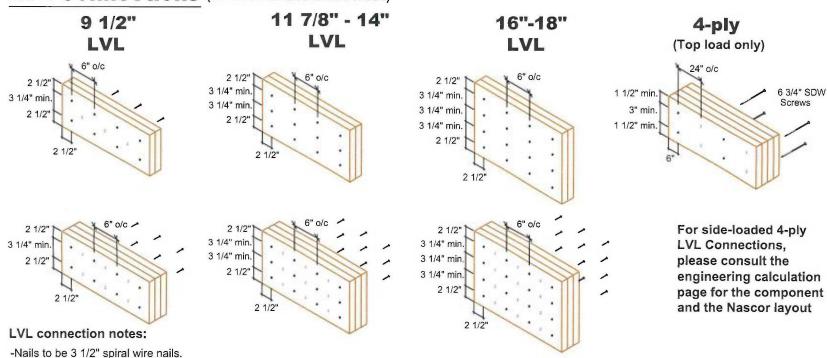
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

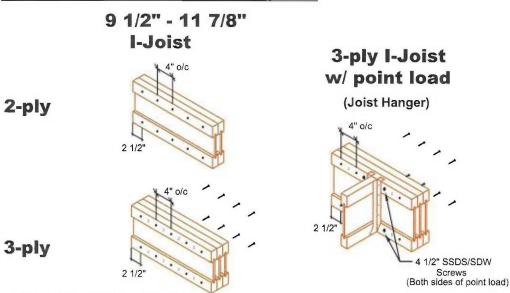
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



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

Vertical I-Joist Connections (for uniform distributed loads)



Vertical I-Joist connection notes:

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



MULTI-PLY CONNECTION **DETAILS**

Date: November 30, 2016

Scale: NTS

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

3228 Moodie Drive

Engineering Note Page (ENP-2)

GREEN YORK HOMES- LOT 18 (LIANA -2 EL-2)-BRAMPTON-ON REVISION 2009-10-09

Please read all notes prior to installation of the component

DESIGN INFORMATION

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

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

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

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

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

Installation of NASCOR joists is to be carried out in accordance with the current edition of the manufacturer's approved literature available at 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.





Client:

GREEN YORK HOMES

Project: Address:

1/16/2019 Date: RCO/SB Designer:

Job Name: LOT-18 (LIANA 2 EL-2)

Project #

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Ground Floor

Brg

1

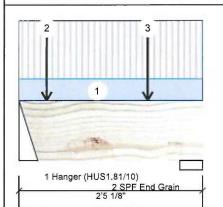
1 -

End Grain

Hanger

2 - SPF 3.625"

3.000"



2'5 1/8'

Wind

0

1.25D+1.5L

1.25D+1.5L

Member Information

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

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live 299 Dead

116

Snow

594 L

514 L

0

2	258	101		0	0
Bearings	and Fac	tored Reactions			
Bearing	Length	Cap. React D/L lb	7	Ld. Case	Ld. Comb.

145 / 449

127 / 387

Analysis Results

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

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

15%

11%

NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL**

POINT LOADS OVER BEARINGS

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



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

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

Handling & Installation

- andling & Installation.

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

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

6. For flat roofs provide proper drainage to prevent

This design is valid until 10/18/2021

Manufacturer Info

Forex APA: PR-L318







Client:

Project: Address: **GREEN YORK HOMES**

1/16/2019 Date:

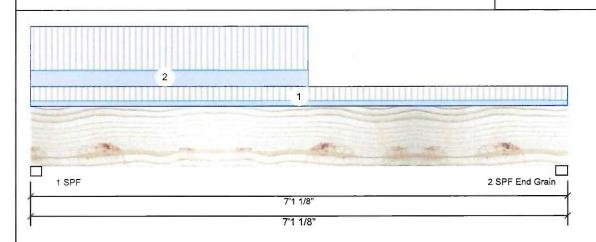
Designer: RCO/SB

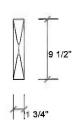
Job Name: LOT-18 (LIANA 2 EL-2)

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Ground Floor





Member Information

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

Unfactored	Reactions	UNPAT	TERNED	lb ((Uplift)

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

Analysis Results

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

Bearings and Factored Reactions

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

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

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



Design Notes

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

3 Bottom braced at bearings.

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

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

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

chemicals

Handling & Installation

- 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







Client: Project:

Address:

GREEN YORK HOMES

Date: 1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

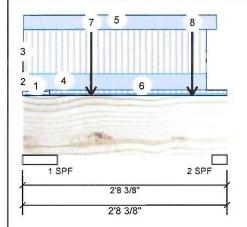
Project #:

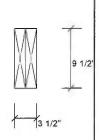
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Wind

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Total Ld. Case

1478 L

1149 I

Member Information

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

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

Load Sharing:

Deck: Vibration: Floor (Residential)

NBCC 2010 / OBC 2012 No

Not Checked Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

1	669	380	0	0	
2	522	292	0	0	

475 / 1003

365 / 783

Cap. React D/L lb

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	607 ft-lb	1'4 1/8"	22724 ft-lb	0.027 (3%)	1.25D+1.5L	L
Unbraced	607 ft-lb	1'4 1/8"	22724 ft-lb	0.027 (3%)	1.25D+1.5L	L
Shear	728 lb	1'2 1/4"	9277 lb	0.079 (8%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/32360)	1'5 1/8"	0.072 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/18075)	1'4 11/16"	0.072 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.002 (L/11600)	1'4 13/16"	0.108 (L/240)	0.020 (2%)	D+L	L

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

12%

22%

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

Bearings and Factored Reactions

Bearing Length

1 - SPF 5.500"

2 - SPF 2.375"

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



Design Notes

- 1 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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-4	(Span)0-10-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part, Uniform	0-0-0 to 0-0-2		Тор	46 PLF	123 PLF	0 PLF	0 PLF	J5
3	Part. Uniform	0-0-0 to 0-0-2		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-0-2 to 2-5-2		Тор	92 PLF	246 PLF	0 PLF	0 PLF	J5
5	Part. Uniform	0-0-2 to 2-6-12		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

Continued on page 2...

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

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

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

8. For flat roofs provide proper drainage to prevent ponding



Manufacturer info

Forex APA: PR-L318





Page 2 of 2



Client: Project:

Address:

GREEN YORK HOMES

1/16/2019

RCO/SB Designer:

Job Name: LOT-18 (LIANA 2 EL-2)

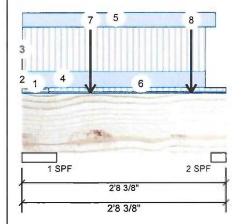
Project #:

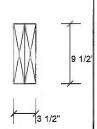
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Continued	from	page	1
-----------	------	------	---

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	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

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.

Notes

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

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

Handling & Installation

- Idencing & Installation

 I. VID 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

 Forvide lateral support at beaming points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

Forex APA: PR-L318







Project:

Address:

GREEN YORK HOMES

Date: 1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

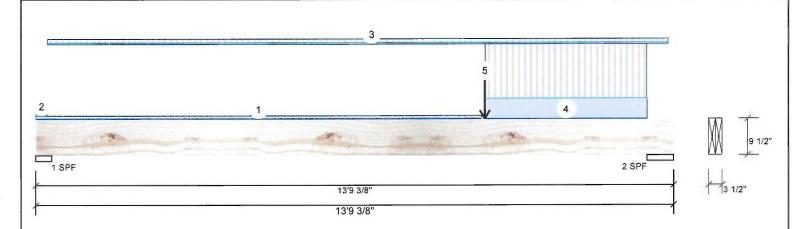
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Member Inforn	nation			Unfactore	ed Reacti	ions U	NPATTERNI	D lb (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	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		2.77.								
Floor Live:	40 PSF			Bearings a	and Fact	ored R	Reactions			
Dead:	15 PSF			Bearing L	ength	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF 4	.125"	9%	241 / 560	801	L	1.25D+1.5L
				2-SPF 6	3.875"	15%	580 / 1631	2211	L	1.25D+1.5L

Analysis Results

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

Design Notes

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

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

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.



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

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

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

Forex APA: PR-L318





isDesign™

Client:

Address:

GREEN YORK HOMES

Project:

Date:

1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

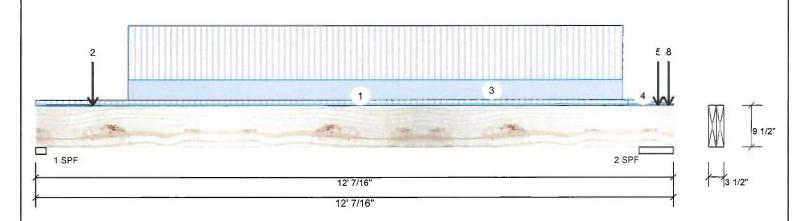
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Member Info	rmation			Unfacto	red Reac	tions L	INPATTERNI	ED lb (l	Jplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	,	Wind
Plies:	2	Design Method:	LSD	1	1545		622	0)	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1776		737	0)	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearing:	s and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	2.375"	61%	777 / 2317	3094	L	1.25D+1.5L
				2 - SPF	7.754"	21%	921 / 2664	3586	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.

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

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.



Lateral	siendemess ratio based	on full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 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
	The state of the s								

Continued on page 2...

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

Lumber

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

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
- lastering dealis, 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





Page 2 of 2

isDesign™

Client:

Project: Address: **GREEN YORK HOMES**

1/16/2019 Date:

Designer: RCO /SB

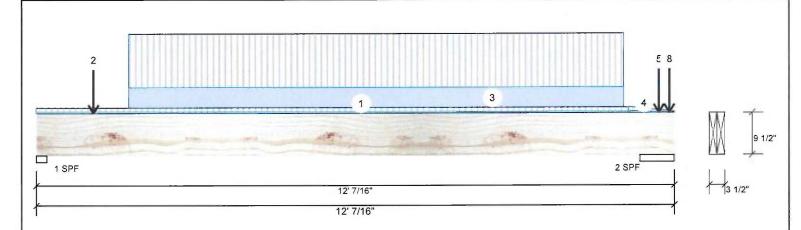
Job Name: LOT-18 (LIANA 2 EL-2)

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



m page 1								
Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
Point	11-11-5		Тор	16 lb	34 lb	0 lb	0 lb	J4
Point	11-11-5		Тор	25 lb	68 lb	0 lb	0 lb	J5
Point	11-11-5		Тор	22 lb	0 lb	0 lb	0 lb	Wall Self Weight
Self Weight				8 PLF				
	Point Point Point	Load Type Location Point 11-11-5 Point 11-11-5 Point 11-11-5	Load Type Location Trib Width Point 11-11-5 Point 11-11-5 Point 11-11-5	Load TypeLocationTrib WidthSidePoint11-11-5TopPoint11-11-5TopPoint11-11-5Top	Load Type Location Trib Width Side Dead Point 11-11-5 Top 16 lb Point 11-11-5 Top 25 lb Point 11-11-5 Top 22 lb	Load Type Location Trib Width Side Dead Live Point 11-11-5 Top 16 lb 34 lb Point 11-11-5 Top 25 lb 68 lb Point 11-11-5 Top 22 lb 0 lb	Load Type Location Trib Width Side Dead Live Snow Point 11-11-5 Top 16 lb 34 lb 0 lb Point 11-11-5 Top 25 lb 68 lb 0 lb Point 11-11-5 Top 22 lb 0 lb 0 lb	Load Type Location Trib Width Side Dead Live Snow Wind Point 11-11-5 Top 16 lb 34 lb 0 lb 0 lb Point 11-11-5 Top 25 lb 68 lb 0 lb 0 lb Point 11-11-5 Top 22 lb 0 lb 0 lb 0 lb

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

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.

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

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

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

Forex APA: PR-L318





isDesign™

Client:

Project: Address: **GREEN YORK HOMES**

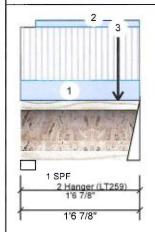
Date:

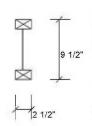
1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

LPI 20Plus 9.500" - PASSED 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:

Building Code:

Load Sharing:

Deck:

Vibration:

Floor (Residential)

NBCC 2010 / OBC 2012

No Not Checked

Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Live	Dead	Snow	Wind
65	31	0	0
135	67	0	0
	65	65 31	65 31 0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - SPF	2.375"	8%	39 / 98	136	L	1.25D+1.5L	
2 -	2.000"	18%	84 / 202	286	L	1.25D+1.5L	
Hanger							

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	52 ft-lb	1' 1/8"	4670 ft-lb	0.011 (1%)	1,25D+1.5L	L
Shear	272 lb	1'5 5/8"	1990 lb	0.137 (14%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/54318)	11 7/8"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/27008)	11 7/8"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/18039)	11 7/8"	0.067 (L/240)	0.010 (1%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.000", Long Term = 0.000"
- 3 Fill all hanger nailing holes.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange braced at bearings.

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.

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.



L	6 Bottom flange	braced at bearings.									
Г	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
	1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
	2	Part. Uniform	0-2-6 to 1-6-14		Тор	8 PLF	0 PLF	0 PLF	0 PLF		
	3	Point	1-3-7		Near Face	49 lb	99 lb	0 lb	0 lb	J2	

Notes

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C







Client:

Project: Address: **GREEN YORK HOMES**

1/16/2019

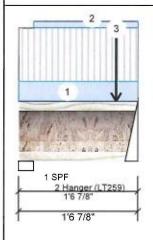
RCO/SB Designer:

Job Name: LOT-18 (LIANA 2 EL-2)

Date:

9.500" - PASSED LPI 20Plus

Level: Ground Floor



9 1/2"

IN/Iam	nor	Informa	TIAM
INTERR	vei	muunina	uui

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

Unfactored Reactions UNPATTERNED Ib (Uplift)

Cap. React D/L lb

Brg	Live	Dead	Snow	Wind	
1	63	30	0	0	
2	120	59	0	0	

37 / 94

74 / 180

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	48 ft-lb	11 11/16"	4670 ft-lb	0.010 (1%)	1.25D+1.5L	L
Shear	240 lb	1'5 5/8"	1990 lb	0.121 (12%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/59285)	11 1/2"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/29321)	11 1/2"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/19618)	11 1/2"	0.067 (L/240)	0.010 (1%)	D+L	L

REFER TO MULTIPLE MEMBER TO MEMBER

8%

16%

CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

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

Bearings and Factored Reactions

Bearing Length 1 - SPF 2.375"

2 000"

2 -

Hanger

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.



Total Ld. Case Ld. Comb.

1.25D+1.5L

1.25D+1.5L

131 L

254 L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.000", Long Term = 0.000"
- 3 Fill all hanger nailing holes.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange braced at bearings.

6 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	

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C







GREEN YORK HOMES

Project: Address:

1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

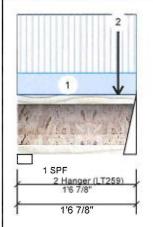
Project #

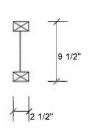
Date:

LPI 20Plus

9.500" - PASSED

Level: Ground Floor





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Member	Inform	atıor

Typo:	Girder	
Туре:	Girdei	'
Plies:	1	
Moisture Conditi	on: Dry	1.0
Deflection LL:	360	
Deflection TL:	240	
Importance:	Normal	,
General Load		
Floor Live:	40 PSF	
Dead:	15 PSF	

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

Deck: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	
1	59	22	0	0	
2	115	44	0	0	

28 / 88

55 / 173

Cap. React D/L lb

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	39 ft-lb	11"	4670 ft-lb	0.008 (1%)	1.25D+1.5L	L
Shear	214 lb	1'5 5/8"	1990 lb	0.108 (11%)	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/33835)	10 7/8"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/24562)	10 7/8"	0.067 (L/240)	0.010 (1%)	D+L	L

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

7%

14%

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

Bearings and Factored Reactions

Bearing Length

1 - SPF 2.375"

2.000"

2 -

Hanger

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.



Total Ld. Case

116 L

227 L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.000", Long Term = 0.000"
- 3 Fill all hanger nailing holes.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange braced at bearings.
- 6 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-4-0		Near Face	28 lb	73 lb	0 lb	0 lb	J2

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C





isDesign[™]

Client:

GREEN YORK HOMES

Project: Address:

Date: 1/16/2019

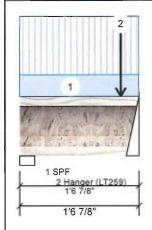
Designer: RCO/SB

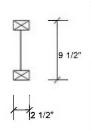
Job Name: LOT-18 (LIANA 2 EL-2)

Project #:

9.500" - PASSED LPI 20Plus

Level: Ground Floor





Wind

0

0

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

Not Checked

2 118

Brg

1

Live

59

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 116 L 1.25D+1.5L 1 - SPF 2.375" 7% 28 / 89 55 / 177 1.25D+1.5L 2 -2.000" 15% 231 L Hanger

Snow

0

0

Analysis Results

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	39 ft-lb	11 1/16"	4670 ft-lb	0.008 (1%)	1.25D+1.5L	L
	Shear	218 lb	1'5 5/8"	1990 lb	0.110 (11%)	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/33432)	10 15/16"	0.044 (L/360)	0.010 (1%)	L	L
	TL Defl inch	0.001	10 15/16"	0.067 (L/240)	0.010 (1%)	D+L	L

Vibration:

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

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

22

44

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

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



Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.000", Long Term = 0.000"
- 3 Fill all hanger nailing holes.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange braced at bearings.

o Dotte	om nange 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

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C







Client:

GREEN YORK HOMES

Project: Address:

Date:

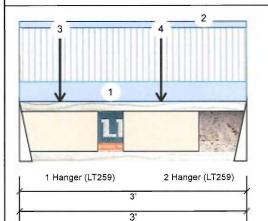
1/16/2019 Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

LPI 20Plus

9.500" - PASSED

Level: Ground Floor



9 1/2"

	-		-
MAG	a la a w	Infam	mation
uvien	iber	miori	nauon

١	viember 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: Design Method:

Building Code:

Floor (Residential) LSD

NBCC 2010 / OBC 2012 No

Load Sharing: Deck: Not Checked

Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	
1	264	131	0	0	
2	209	103	0	0	

Analysis Results

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	407 ft-lb	1'10 7/16"	4670 ft-lb	0.087 (9%)	1.25D+1.5L	L
l	Shear	552 lb	1 1/4"	1990 lb	0.277 (28%)	1.25D+1.5L	L
	Perm Defl in.	0.003 (L/12219)	1'10 7/16"	0.093 (L/360)	0.030 (3%)	D	Uniform
l	LL Defl inch	0.006 (L/6031)	1'10 7/16"	0.093 (L/360)	0.060 (6%)	L	L
ı	TI Deflinch	0.008 (L/4038)	1'10 7/16"	0.140 (L/240)	0.060 (6%)	D+L	L

Bearings and Factored Reactions

3							
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	_
1 - Hanger	2.000"	36%	164 / 396	559	L	1.25D+1.5L	
2 - Hanger	2.000"	28%	129 / 313	442	L	1.25D+1.5L	

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.003", Long Term = 0.004"
- 3 Fill all hanger nailing holes.
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange braced at bearings.

7 Bottom flange braced at bearings.

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

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.



i bottom nango	Diadou at boainigo.			_					
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	80 lb	160 lb	0 lb	0 lb	J3
4	Point	1-10-7		Far Face	103 lb	209 lb	0 lb	0 lb	J3

Notes

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C







Client:

GREEN YORK HOMES

Project: Address:

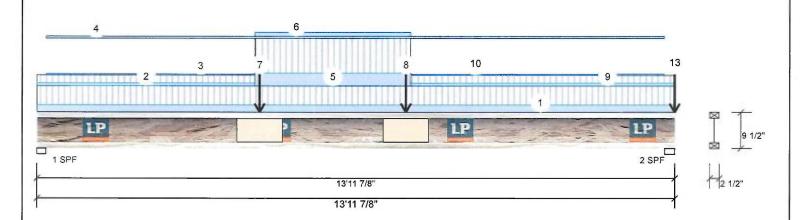
1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

9.500" - PASSED LPI 20Plus

Level: Ground Floor



Member Inforr	nation			Unfactor	ed Reaction	UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	370	181	0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	531	272	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 Factore	d Reactions		
Dead:	15 PSF			Bearing I	Length C	ap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 2	2.375" 4	9% 226 / 555	781 L	1.25D+1.5L
				2 - SPF 2	2.625" 7	0% 340 / 797	1137 L	1.25D+1.5L

l	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	3313 ft-lb	7'1"	4670 ft-lb	0.709 (71%)	1.25D+1.5L	L
l	Shear	774 lb	1 5/8"	1990 lb	0.389 (39%)	1.25D+1.5L	L
ı	Perm Defl in.	0,152 (L/1079)	6'11 7/16"	0.457 (L/360)	0.330 (33%)	D	Uniform
	LL Defl inch	0.311 (L/529)	6'11 3/8"	0.457 (L/360)	0.680 (68%)	L	L
l	TI Deflinch	0.463 (L/355)	6'11 3/8"	0.685 (L/240)	0.680 (68%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Applied loads over end bearings and loads exceeding 250 lbs over intermediate bearings must be transferred directly to the support by rim board, blocking, squash blocks, or other device.
- 3 Dead Load Deflection: Instant = 0.152", Long Term = 0.228"
- 4 See manufacture installation guide note E4 for installation details
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top flange must be laterally braced at a maximum of 4'11" o.c.

7 Bottom flange braced at bearings.

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

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.



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-11-14	(Span)0-11-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 4-9-6	(Span)0-4-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 4-9-6		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 13-9-2		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
5	Tie-In	4-9-6 to 8-2-6	(Span)1-8-11 to 1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C





Page 2 of 2



Client:

Project: Address:

GREEN YORK HOMES

1/16/2019

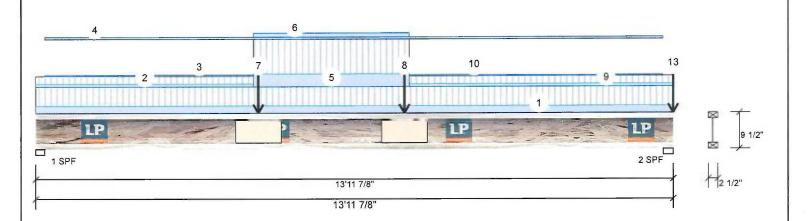
Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

Project #:

9.500" - PASSED LPI 20Plus

Level: Ground Floor



Load Type	1747-0140-4401							
	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
Part. Uniform	4-9-6 to 8-2-6		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
Point	4-10-10		Near Face	59 lb	120 lb	0 lb	dl 0	F5
Point	8-1-2		Near Face	67 lb	135 lb	0 lb	0 lb	F5
Tie-In	8-2-6 to 13-11-14	(Span)0-4-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
Part. Uniform	8-2-6 to 13-9-2		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
Point	13-11-14		Тор	34 lb	89 lb	0 lb	0 lb	J5
Bearing Length	0-1-8							
Point	13-11-14		Тор	41 lb	93 lb	0 lb	0 lb	J6
Bearing Length	0-1-8							
Point	13-11-14		Тор	27 lb	0 lb	0 lb	0 lb	Wall Self Weight
Bearing Length	0-1-8							
	Part. Uniform Point Point Tie-In Part. Uniform Point Bearing Length Point Bearing Length Point	Part. Uniform 4-9-6 to 8-2-6 Point 4-10-10 Point 8-1-2 Tie-In 8-2-6 to 13-11-14 Part. Uniform 8-2-6 to 13-9-2 Point 13-11-14 Bearing Length 0-1-8 Point 13-11-14 Bearing Length 0-1-8 Point 13-11-14	Part. Uniform 4-9-6 to 8-2-6 Point 4-10-10 Point 8-1-2 Tie-In 8-2-6 to 13-11-14 (Span)0-4-11 Part. Uniform 8-2-6 to 13-9-2 Point 13-11-14 Bearing Length 0-1-8 Point 13-11-14 Bearing Length 0-1-8 Point 13-11-14	Part. Uniform 4-9-6 to 8-2-6 Top Point 4-10-10 Near Face Point 8-1-2 Near Face Tie-In 8-2-6 to 13-11-14 (Span)0-4-11 Top Part. Uniform 8-2-6 to 13-9-2 Top Top Point 13-11-14 Top Top Bearing Length 0-1-8 Top Top Bearing Length 0-1-8 Top Top Point 13-11-14 Top Top	Part. Uniform 4-9-6 to 8-2-6 Top 4 PLF Point 4-10-10 Near Face 59 lb Point 8-1-2 Near Face 67 lb Tie-In 8-2-6 to 13-11-14 (Span)0-4-11 Top 15 PSF Part. Uniform 8-2-6 to 13-9-2 Top 1 PLF Point 13-11-14 Top 34 lb Bearing Length 0-1-8 Point 13-11-14 Top 41 lb Bearing Length 0-1-8 Point 13-11-14 Top 27 lb	Part. Uniform 4-9-6 to 8-2-6 Top 4 PLF 0 PLF Point 4-10-10 Near Face 59 lb 120 lb Point 8-1-2 Near Face 67 lb 135 lb Tie-In 8-2-6 to 13-11-14 (Span)0-4-11 Top 15 PSF 40 PSF Part. Uniform 8-2-6 to 13-9-2 Top 1 PLF 0 PLF Point 13-11-14 Top 34 lb 89 lb Bearing Length 0-1-8 Point 13-11-14 Top 41 lb 93 lb Bearing Length 0-1-8 Point 13-11-14 Top 27 lb 0 lb	Part. Uniform 4-9-6 to 8-2-6 Top 4 PLF 0 PLF 0 PLF Point 4-10-10 Near Face 59 lb 120 lb 0 lb Point 8-1-2 Near Face 67 lb 135 lb 0 lb Tie-In 8-2-6 to 13-11-14 (Span)0-4-11 Top 15 PSF 40 PSF 0 PSF Part. Uniform 8-2-6 to 13-9-2 Top 1 PLF 0 PLF 0 PLF Point 13-11-14 Top 34 lb 89 lb 0 lb Bearing Length 0-1-8 Point 13-11-14 Top 41 lb 93 lb 0 lb Bearing Length 0-1-8 Point 13-11-14 Top 27 lb 0 lb 0 lb	Part. Uniform 4-9-6 to 8-2-6 Top 4 PLF 0 PLF 0 PLF 0 PLF Point 4-10-10 Near Face 59 lb 120 lb 0 lb 0 lb Point 8-1-2 Near Face 67 lb 135 lb 0 lb 0 lb Tie-In 8-2-6 to 13-11-14 (Span)0-4-11 Top 15 PSF 40 PSF 0 PSF 0 PSF Part. Uniform 8-2-6 to 13-9-2 Top 1 PLF 0 PLF 0 PLF 0 PLF Point 13-11-14 Top 34 lb 89 lb 0 lb 0 lb Bearing Length 0-1-8 Point 13-11-14 Top 41 lb 93 lb 0 lb 0 lb Bearing Length 0-1-8 Top 27 lb 0 lb 0 lb 0 lb

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

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.

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C







Client:

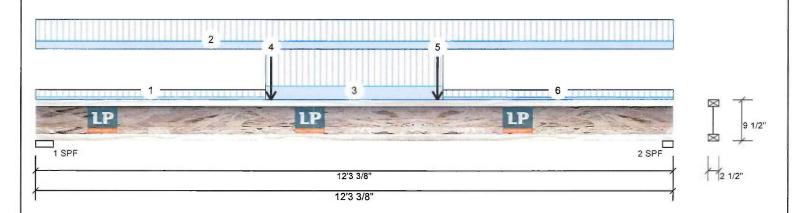
Project: Address: **GREEN YORK HOMES**

Date: 1/16/2019 Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

Project #:

LPI 20Plus 9.500" - PASSED Level: Ground Floor



Member Information Unfactored Reactions UNPATTERNED Ib (Uplift) Girder Application: Floor (Residential) Dead Snow Brg Live Plies: Design Method: 331 125 0 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 0 2 324 122 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Not Checked Deck: Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** 40 PSF Floor Live: 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case 1 - SPF 4.125" 37% 156 / 496 652 L 2 - SPF 2.375" 40% 152 / 486 638 L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2390 ft-lb	6'2 3/4"	4670 ft-lb	0.512 (51%)	1.25D+1.5L	L
Shear	637 lb	3 3/8"	1990 lb	0.320 (32%)	1.25D+1.5L	L
Perm Defl in.	0.071 (L/2003)	6'2 1/2"	0.395 (L/360)	0.180 (18%)	D	Uniform
LL Defl inch	0.189 (L/753)	6'2 9/16"	0.395 (L/360)	0.480 (48%)	L	L
TL Defl inch	0,260 (L/547)	6'2 9/16"	0.593 (L/240)	0.440 (44%)	D+L	L

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.071", Long Term = 0.107"
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top flange must be laterally braced at a maximum of 5'11" o.c.

L	5 Bottom llange	braced at bearings.					CONTAINS S	PECIFICATION	INS AND	CRITERI
	ID	Load Type	Location	Trib Width	Side	Dead	USED IN THE	DESIGN OF	THIS COM	IPONEN
	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	

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

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 NT.



Wind

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

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

Copyright 2016 All rights reserved by Louislana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C





Wind

0

0

Page 1 of 1



Client:

Address:

GREEN YORK HOMES

Project:

1/16/2019

Designer: RCO/SB

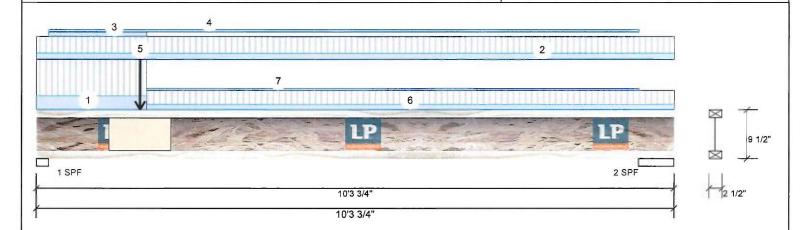
Job Name: LOT-18 (LIANA 2 EL-2)

Project #:

Date:

9.500" - PASSED LPI 20Plus

Level: Ground Floor



2

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

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead Snow 505 251 0 1

160

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" 314 / 758 1072 L 67% 1.25D+1.5L 199 / 486 1.25D+1.5L 2 - SPF 6.875" 39% 685 L

Analysis Results

l	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	1756 ft-lb	4'2 15/16"	4670 ft-lb	0.376 (38%)	1.25D+1.5L	L
l	Shear	1047 lb	1 5/8"	1990 lb	0.526 (53%)	1.25D+1.5L	L
l	Perm Defl in.	0.048 (L/2431)	4'8 3/4"	0.322 (L/360)	0.150 (15%)	Ď	Uniform
l	LL Defl inch	0.095 (L/1223)	4'8 11/16"	0.322 (L/360)	0.290 (29%)	L	L
I	TI Deflinch	0.143 (L/814)	4'8 3/4"	0.483 (1./240)	0 300 (30%)	D+L	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

324

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.

0

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.048", Long Term = 0.072"
- 3 See manufacture installation guide note E4 for installation details
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange must be laterally braced at a maximum of 6'10" o.c.

6 Bottom flange braced at bearings.

	Harrige Braces at Beating					TOOLD IN THE	- DEGIGIA OI	THIS SOI	III OITELT.
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 10-3-12	(Span)1-5-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part, Uniform	0-2-6 to 1-9-6		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 9-8-15		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Far Face	103 lb	209 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 10-3-12	(Span)1-2-13	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	



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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C





Wind

ROFESSION

0

0

Page 1 of 1



Client:

Project: Address: **GREEN YORK HOMES**

1/16/2019

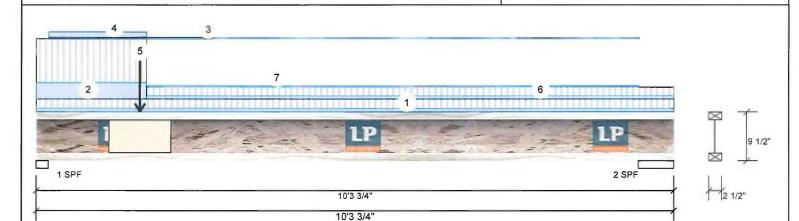
Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

Date:

9.500" - PASSED LPI 20Plus

Level: Ground Floor



Member Information **Unfactored Reactions UNPATTERNED lb (Uplift)** Girder Application: Floor (Residential) Type: Brg Live Dead Plies: Design Method: LSD 439 219 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 2 192 97 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal Vibration: Not Checked General Load Floor Live: 40 PSF 15 PSF Dead:

Bearing:	s and Fac	tored l	Reactions										
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.							
1 - SPF	2.375"	58%	274 / 658	932	L	1.25D+1.5L							
2 - SPF	6.875"	23%	121 / 288	409	L	1.25D+1.5L							

Analysis Results Analysis Actual Comb. Case Location Allowed Capacity 1272 ft-lb 3'1 13/16" 4670 ft-lb Moment 0.272 (27%) 1.25D+1.5L L Shear 911 lb 1 5/8" 1990 lb 0.458 (46%) 1.25D+1.5L L Perm Defl in. 0.034 (L/3418) 4'6 3/16" 0.322 (L/360) 0.110 (11%) D Uniform LL Defl inch 0.066 (L/1747) 4'6" 0.322 (L/360) 0.210 (21%) L

4'6 1/16" 0.483 (L/240) 0.210 (21%) D+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

READ ALL NOTES ON THIS PAGE AND ENGINEERING NOTE PAGE ENP-2. THI NOTE PAGE IS AN INTEGRAL PART OF CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRI

ON	10
IS	134
F THIS	S N.A
	CV6 Au
TERIA	1
NENT.	10h

Snow

0

0

Design Notes

- 1 Provide restraint at supports to ensure lateral stability.
- 2 Dead Load Deflection: Instant = 0.034", Long Term = 0.051"
- 3 See manufacture installation guide note E4 for installation details
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top flange must be laterally braced at a maximum of 7'11" o.c.

TL Defl inch 0.100 (L/1156)

L	6 Bottom flange	braced at bearings.					JUSED IN THE	DESIGN OF	- THIS COL	VIPONENT.
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 10-3-12	(Span)0-8-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Tie-In	0-0-0 to 1-9-6	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	3	Part. Uniform	0-2-6 to 9-9-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
	4	Part. Uniform	0-2-6 to 1-9-6		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
	5	Point	1-8-2		Near Face	131 lb	264 lb	0 lb	0 lb	F6
	6	Tie-In	1-9-6 to 10-3-12	(Span)0-7-11	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	

L

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

Copyright 2016 All rights reserved by Louisiana Pacific Corp. 414 Union St Suite 2000, Nashville, TN 37219



Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com CCMC: 12412-R APA: PR-L238C







Client;

Project: Address: **GREEN YORK HOMES**

Date:

1/16/2019

RCO/SB Designer:

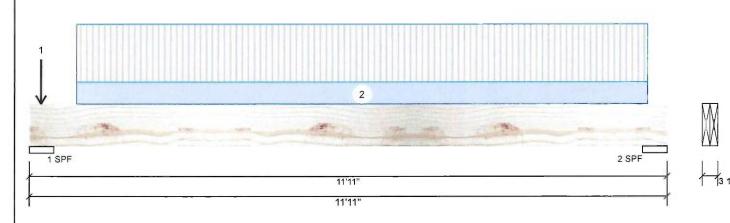
Job Name: LOT-18 (LIANA 2 EL-2)

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED Level: Second Floor



Member Inform	nation			Unfacto	red React	tions UI	NPATTERN	ED lb (U	plift)	
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										
Floor Live:	40 PSF			Bearings	and Fac	tored R	eactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total Le	d. Case	Ld. Comb.
				1 - SPF	5.500"	23%	706 / 2068	2774 L		1.25D+1.5L
				2 - SPF	5.500"	23%	699 / 2043	2742 L		1.25D+1.5L
a Later Design				2 011						

Analysis Results

ſ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	7560 ft-lb	5'11 5/8"	22724 ft-lb	0.333 (33%)	1.25D+1.5L	L
l	Unbraced	7560 ft-lb	5'11 5/8"	20280 ft-lb	0.373 (37%)	1.25D+1.5L	L
ĺ	Shear	2345 lb	1'2 1/4"	9277 lb	0.253 (25%)	1.25D+1.5L	L
l	Perm Defl in.	0.074 (L/1812)	5'11 9/16"	0.371 (L/360)	0.200 (20%)	D	Uniform
l	LL Defl inch	0.180 (L/740)	5'11 9/16"	0,371 (L/360)	0.490 (49%)	L	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.

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.

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.



/ Lateral	sienderness ratio based								
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	
W.	Self Weight				8 PLF				

Notes

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

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

Handling & Installation

- Idencing & 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 beaming points to avoid lateral displacement and rotation.

For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

Forex APA: PR-L318





isDesign"

Client:

GREEN YORK HOMES

Project: Address:

Floor (Residential)

Not Checked

Not Checked

NBCC 2010 / OBC 2012

LSD

No

Date: 1/16/2019 Designer:

RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

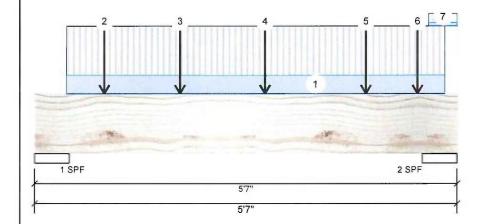
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Application:

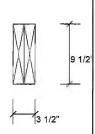
Design Method:

Building Code:

Load Sharing:

Deck:

Vibration:



Member Information

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

Floor Live: 40 PSF Dead: 15 PSF

Unfactored Reactions UNPATTERNED lb (Uplift)

5 519	0	0
809	0	0

Bearings and Factored Reactions

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

Analysis Results

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

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

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.



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

Notes

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

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

Handling & Installation

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





Page 2 of 2

isDesign[™]

Client:

Project: Address: **GREEN YORK HOMES**

1/16/2019

Date: Designer:

RCO/SB

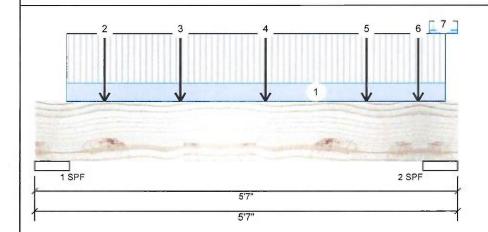
Job Name: LOT-18 (LIANA 2 EL-2) Project #:

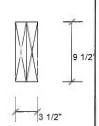
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor





.Continued from page 1

ID Load Type 7

Tie-In

Self Weight

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

Side Top

Dead 15 PSF

Live 40 PSF Snow 0 PSF

Wind Comments 0 PSF

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

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.

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

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

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

Forex APA: PR-L318







Client:

Address:

GREEN YORK HOMES

Project:

Date: 1/16/2019

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

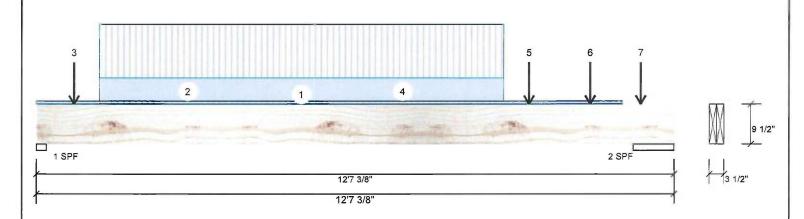
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Information **Unfactored Reactions UNPATTERNED Ib (Uplift)** Girder Application: Floor (Residential) Dead Wind Туре: Brg Live Snow Plies: 2 Design Method: LSD 1567 722 0 0 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 804 0 0 2 1790 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 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" 64% 902 / 2351 3253 L 1.25D+1.5L 2 - SPF 9.714" 18% 1005 / 2685 3690 L 1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9822 ft-lb	6'	22724 ft-lb	0.432 (43%)	1.25D+1.5L	L
Unbraced	9822 ft-lb	6'	20006 ft-lb	0.491 (49%)	1.25D+1.5L	L
Shear	3223 lb	11 1/8"	9277 lb	0.347 (35%)	1,25D+1,5L	L
Perm Defl in.	0.115 (L/1224)	6' 1/16"	0.391 (L/360)	0.290 (29%)	D	Uniform
LL Defl inch	0.251 (L/561)	6'	0.391 (L/360)	0.640 (64%)	L	L
TL Defl inch	0.366 (L/385)	6' 1/16"	0.587 (L/240)	0.620 (62%)	D+L	L

Design Notes

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

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

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

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.



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

Continued on page 2...

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

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

Handling & Installation

LVL beams must not be cut or drilled manufacturer's product information installation requirements, multi-pty 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





Page 2 of 2

isDesign™

Client:

Project: Address: **GREEN YORK HOMES**

1/16/2019

Date: RCO/SB Designer:

Job Name: LOT-18 (LIANA 2 EL-2)

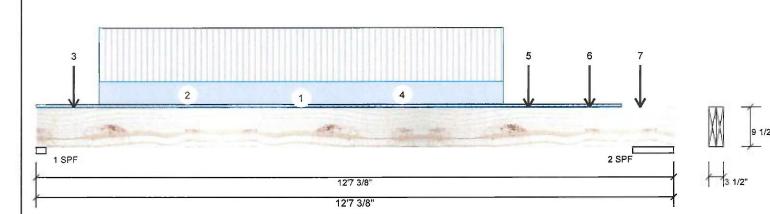
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



.Continued from page 1

7

ID Load Type

Point

Self Weight

Location Trib Width 11-11-7

Side Far Face Dead 105 lb

Live 281 lb Snow 0 lb Wind Comments 0 lb J5

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.

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.

Notes

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

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

Handling & Installation

- Idencing & 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.
 Provice 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





isDesign

Client:

GREEN YORK HOMES

1/16/2019

Designer: RCO/SB Job Name: LOT-18 (LIANA 2 EL-2) Page 1 of 1

Project:

Address:

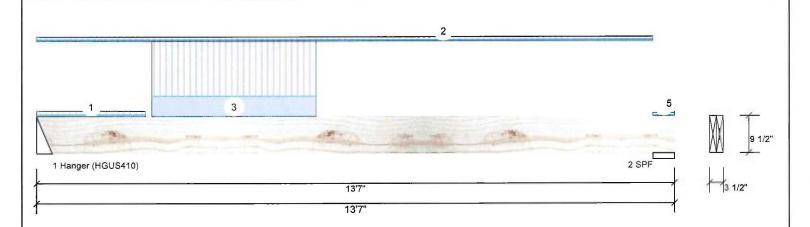
Project #

Date:

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

2-Ply - PASSED

Level: Second Floor



Unfactored Reactions UNPATTERNED lb (Uplift) Member Information Floor (Residential) Dead Snow Type: Application: Brg Plies: 2 Design Method: 713 319 1 Moisture Condition: Dry Building Code: NBCC 2010 / OBC 2012 356 186 2 Deflection LL: 360 Load Sharing: No Deflection TL: Not Checked 240 Deck: Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Cap. React D/L lb Total Ld. Case Dead: Bearing Length 1 -4.000" 14% 398 / 1070 1468 L Hanger

Anal	ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Mom	ent	4658 ft-lb	5' 1/8"	22724 ft-lb	0.205 (20%)	1.25D+1.5L	L
Unbr	aced	4658 ft-lb	5' 1/8"	19429 ft-lb	0.240 (24%)	1.25D+1.5L	L
Shea	ar	1393 lb	1' 3/4"	9277 lb	0.150 (15%)	1.25D+1.5L	L
Perm	n Defl in.	0.058 (L/2674)	6'2 5/8"	0.431 (L/360)	0.130 (13%)	D	Uniform
LLD	efl inch	0.128 (L/1212)	6'1 5/16"	0.431 (L/360)	0.300 (30%)	L	L
TLD	efl inch	0.186 (L/834)	6'1 3/4"	0.646 (L/240)	0.290 (29%)	D+L	L

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

6%

232 / 535

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

2 - SPF 5.500"

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.



Wind

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

0

0

767 L

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.

1	/ Lateral siendel	rness ratio based or	Tuli section width.							
1	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
ı	1	Tie-In	0-0-0 to 2-3-14	(Span)0-10-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	2	Tie-In	0-0-0 to 13-1-8	(Span)0-8-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	3	Part. Uniform	2-5-7 to 5-11-7		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
ı	4	Tie-In	13-1-8 to 13-7-0	(Span)0-5-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	5	Tie-In	13-2-10 to 13-7-0	(Span)0-10-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
		Self Weight				8 PLF				

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

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

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

Forex APA: PR-L318





isDesign"

Client:

GREEN YORK HOMES

Project:

Address:

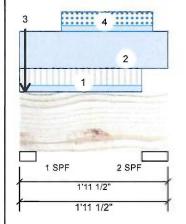
1/16/2019 Date:

Designer: RCO/SB

Job Name: LOT-18 (LIANA 2 EL-2)

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Second Floor



Wind

		rmation
IR/IAmh	or Into	rmastice
HAICHID	CI IIIIU	IIIIauvi

ľ	viember 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: Design Method:

Building Code:

Load Sharing:

Floor (Residential)

NBCC 2010 / OBC 2012

No Not Checked

Deck: Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

1	184	324	365	0
2	21	86	19	0

Snow

Dead

Bearings and Factored Reactions

Live

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.625"	41%	406 / 639	1045	L	1.25D+1.5S +0.5L
2 - SPF	4 125"	4%	121 / 0	121	Uniform	1.4D

Analysis Results

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

TL Defl inch 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) 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

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

ROFESSION -MASRI

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.
- Top braced at bearing

4 Bottom braced at bearings.						USED IN THE DESIGN OF THIS COMPONENT.			
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-7-6	(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	

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

Self Weight

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

4 PLF



Manufacturer Info

Forex APA: PR-L318







Client:

GREEN YORK HOMES

Project:

Address:

1/16/2019

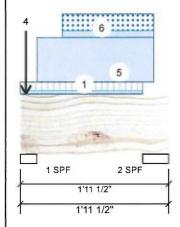
RCO/SB Designer:

Job Name: LOT-18 (LIANA 2 EL-2)

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Second Floor



Member I	nformation			Unfactored Read		
Туре:	Girder	Application:	Floor (Residential)	Brg	Liv	
Plies:	1	Design Method:	LSD	1	16	

Vibration:

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

Moisture Condition: Dry Deflection I.I. 360 Deflection TL: 240 Importance:

Normal

Floor Live: 40 PSF Dead: 15 PSF

General Load

Analysis Results

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

Not Checked

actions UNPATTERNED Ib (Uplift) Wind Dead Snow ve 0 168 317 370 0 2 69 19

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1.25D+1.5S 1 - SPF 2.625" 41% 396 / 639 1035 L +0.5L 1.4D 2 - SPF 4.125" 3% 97/0 97 Uniform

Analysis Location Allowed Capacity Comb. Case 0.004 (0%) Moment 33 ft-lb 11 1/16" 7385 ft-lb 1.4D Uniform 33 ft-lb 11 1/16" 7285 ft-lb Uniform Unbraced 0.004 (0%) 1.4D Shear 7 lb 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%)

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

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

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. -MASRI

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

3 Top braced at bearings.

TL Defl inch 0.000 (L/999)

Design Notes

4 Bottom braced at bearings

1 Dollon	i bracca at bearings.									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 1-7-6	(Span)0-7-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Point	0-0-14		Тор	250 lb	157 lb	360 lb	0 lb	F11 F11	
3	Point	0-0-14		Тор	5 lb	0 lb	0 lb	0 lb	Wall Self Weight	
4	Point	0-0-14		Тор	5 lb	0 lb	0 lb	0 lb	Wall Self Weight	
5	Part. Uniform	0-2-10 to 1-9-2		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
6	Part. Uniform	0-6-10 to 1-9-2		Тор	10 PLF	0 PLF	24 PLF	0 PLF		
	Self Weight				4 PLF					

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

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

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding



Manufacturer Info

APA: PR-L318



