NE0618-036 PAGE 1 OF 40

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

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

**REVISION 2009-10-09** 

# Please read all notes prior to installation of the component

# **DESIGN INFORMATION**

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

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

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

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

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

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

# <u>CODE</u>

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.

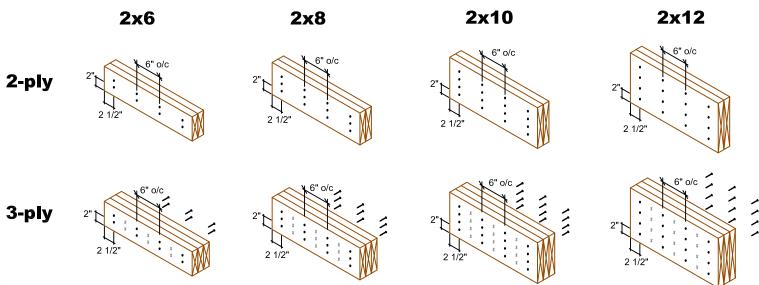


NE0618-036 PAGE 2 OF 40

# LTIPLE MEMBER CONNECTIONS

GRANELLI HOME CORP-CELESTIAL 2 (ELEV.1&2)

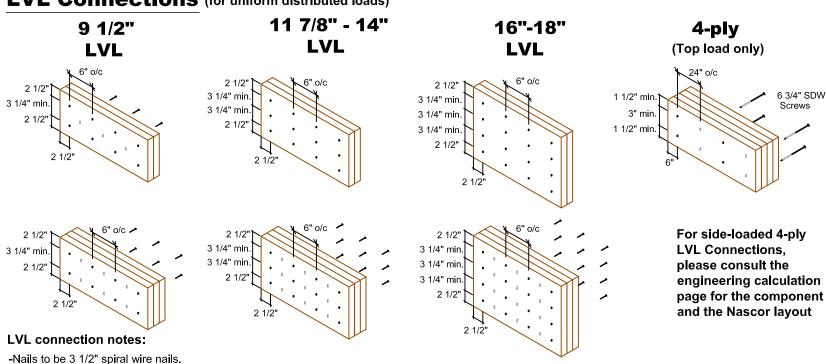
# Conventional Connections (for uniform distributed loads)



## **Conventional connection notes:**

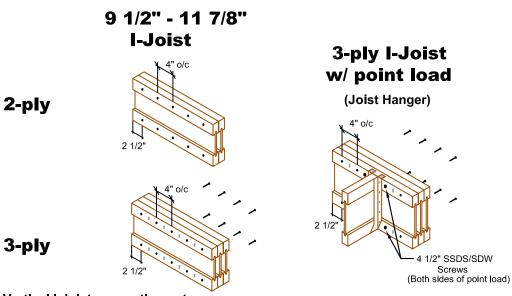
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

# LVL Connections (for uniform distributed loads)



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

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



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

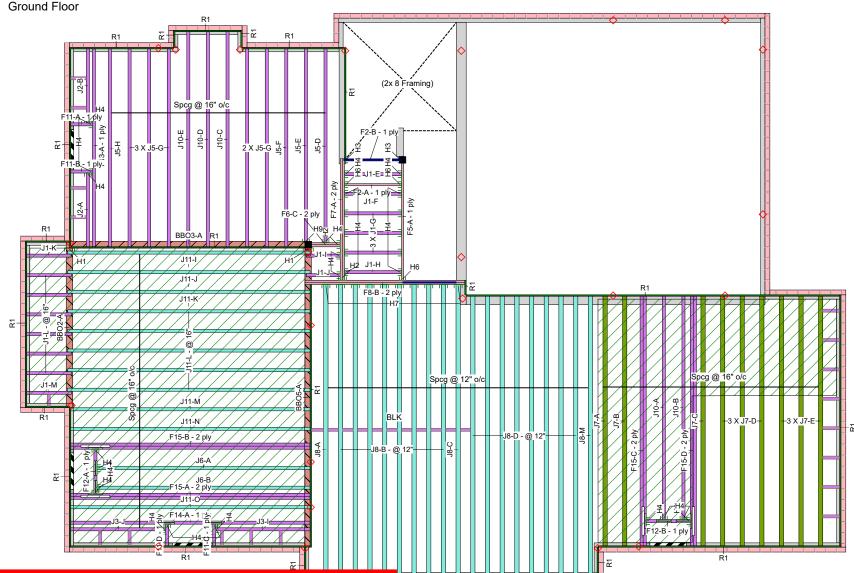
- -Nails to be 3" spiral wire nails.
- -Nails to be located at centre of top and bottom flanges. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.



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

> Date: November 30, 2016 Scale: NTS

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



# THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

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

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

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

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



# ARCHITECTURAL DRAWINGS:

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

# Legend



Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 NJ40U 11.875 NJ60H 11.875 NJ60U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

Model: Celestial 2

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

	1 1001												
	L (Flus								1				NASCOF
Label	Descri	ption	Wid	lth	De	oth	(	Qty	Plies		Pcs	Length	NASCUR
F8	Forex 2.0E-3	000Fb LVL	1.1	75	11.8	375		1	2		2	12-0-0	
F7	Forex 2.0E-3	000Fb LVL	1.	75	11.8	375		1	2		2	10-0-0	Layout Name CELESTIAL 2 (ELEV.1)
F5	Forex 2.0E-3	000Fb LVL	1.1	75	11.8	375					1	10-0-0	Design Method
F2	Forex 2.0E-3	000Fb LVL	1.	75	11.8	375					2	4-0-0	Description
F6	Forex 2.0E-3	000Fb LVL	1.1	75	11.8	375		1	2		2	4-0-0	GRANELLI HOME CORP. BRAMPTON, ONT.
Joist (	Flush)											•	Created
Label	Descri	ption	Wid	lth	De	oth	(	Qty	Plies		Pcs	Length	May 30, 2018
J7	NJ40U		3	3.5	11.8	375					9	18-0-0	
J11	NJ60H		2	2.5	11.8	375					11	18-0-0	Builder
J6	NJ60H		2	2.5	11.8	375					2	16-0-0	GREEN YORK HOMES
J8	NJ60U		3	3.5	11.8	375					19	20-0-0	Sales Rep
F15	NJH		2	2.5	11.8	375		4	2		8	18-0-0	RM
F14	NJH		2	2.5	11.8	_					1	18-0-0	Designer
F13	NJH			2.5	11.8	-					1	14-0-0	RCO
F12	NJH			2.5	11.8						2	4-0-0	
F11	NJH			2.5	11.8						4	2-0-0	Shipping
J10	NJH			2.5	11.8	_					5	16-0-0	Project
J5	NJH			2.5	11.8						9	14-0-0	Builder's Project
J3	NJH			2.5	11.8						2	8-0-0	Kott Lumber Company
J2	NJH			2.5	11.8	_						6-0-0	
J1	NJH			2.5	11.8	_					16	4-0-0	14 Anderson Blvd
im Bo			_										Stouffville, Ontario
Label	Descri	ntion	Wid	lth	Dei	oth T	_	Qty	Plies		Pcs	Length	Canada
R1		d Rimboard	1.12	-	11.8			2.7	1 1100		17	12	L4A 7X4
	Plus 1. 11.875					,,,							905-642-4400
lockin													Job Path
	<del> </del>	4:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	141-	D	- 41-	_	<b>34.</b>	Dii		D	141-	D:\Users\rochavillo\WORK FROM
	Descri	ption	Wid	_	De	_		Qty	Plies	_	Pcs	Length	HOME\GREEN YORK HOMES
BLK1	NJH			2.5	11.8	3/5	L	inFt		_ '	Varies	29-0-0	\GRANELLI HOME CORP\MODEL \CELESTIAL 2\CELESTIAL 2 ELE\
langer	ſ												\FLOOR\CELESTIAL 2 (ELEV.1).is
								Bea	am/Girde	r		ported	Ground Floor
							_			_		mber	
Label	Pcs	Description	n	Sk	ew	Slop	ре	fa	steners		fas	teners	Design Method LSE
H1	2	Unknown Hanger											Building Code NBCC 2010 / OBC 2012
H2	2	HGUS410							46 16d		16	6 16d	Floor
Н3	2	HUCQ1.81/	/9-										Loads
		SDS								_			Live 40
H4	31	LT251188							0dx1 1/2			dx1 1/2	Dead 15
H6	3	HUS1.81/10	0						30 16d	$\perp$		) 16d	Deflection Joist
H7	10	LT351188						4 1	0dx1 1/2	$\perp$	2 10	dx1 1/2	LL Span L/ 480
H9	1	LT251188											TL Span L/ 360
OTES:												]	LL Cant 2L/ 480
													LL Cant ZL/

Ground Floor

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

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

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

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

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



TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

Deflection Girder

360

360

240

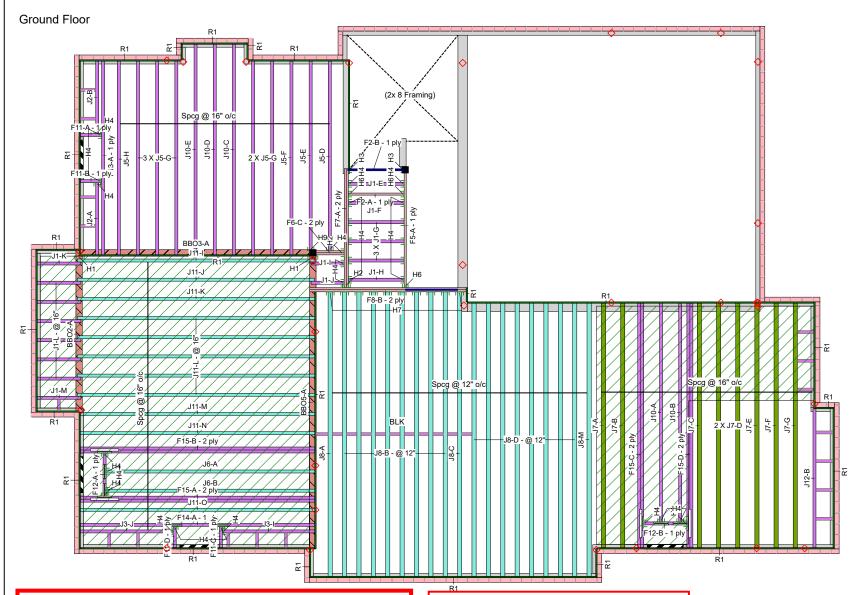
480

360

OSB

3/4"

Nailed & Glued



## THIS CERTIFICATION IS TO CONFIRM THAT:

- 1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY SHOWN ON THIS LAYOUT.
- 2. THE FLOOR JOISTS COMPLY WITH THE NASCOR SPAN TABLE FOR THE LOADS AND SPACING SHOWN ON THIS LAYOUT.

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

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

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

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

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



ARCHITECTURAL DRAWINGS:

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

# Legend



Load from Above Wall Wall Opening Norbord Rimboard Plus 1.125 X 11.875 NJ40U 11.875 NJ60H 11.875 NJ60U 11.875 NJH 11.875

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

Forex 2.0E-3000Fb LVL 1.75 X 11.875

Ground	Floor								
LVL/LS	LVL/LSL (Flush)							ALACCOD	
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	NASCOR	
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0		
F7	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	10-0-0	Layout Name CELESTIAL 2 (ELEV.2)	
F5	Forex 2.0E-3000Fb LVL	1.75	11.875			1	10-0-0	Design Method LSD	
F2	Forex 2.0E-3000Fb LVL	1.75	11.875			2	4-0-0	Description	
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	4-0-0	GRANELLI HOME CORP. BRAMPTON, ONT.	
I Joist (	(Flush)							Created	
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	May 30, 2018	
J7	NJ40U	3.5	11.875			8	18-0-0	Builder	
J11	NJ60H	2.5	11.875			11	18-0-0	GREEN YORK HOMES	
J6	NJ60H	2.5	11.875			2	16-0-0		
J8	NJ60U	3.5	11.875			19	20-0-0	Sales Rep	
F15	NJH	2.5	11.875	4	2	8	18-0-0	RM	
F14	NJH	2.5	11.875			1	18-0-0	Designer	
F13	NJH	2.5	11.875			1	14-0-0	RCO	
F12	NJH	2.5	11.875			2	4-0-0	Shipping	
F11	NJH	2.5	11.875			4	2-0-0	Project	
J10	NJH	2.5	11.875			5	16-0-0	-	
J5	NJH	2.5	11.875			9	14-0-0	Builder's Project	
J12	NJH	2.5	11.875			1	10-0-0	Kott Lumber Company	
J3	NJH	2.5	11.875			2	8-0-0	14 Anderson Blvd	
J2	NJH	2.5	11.875			2	6-0-0	Stouffville, Ontario	
J1	NJH	2.5	11.875			16	4-0-0	Canada	
Rim Bo		14 <i>C</i> 101	D 11	01	Di:	_		L4A 7X4	
	Description	Width	Depth	Qty	Plies	Pcs	Length	905-642-4400	
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			17	12	Job Path	
Blockin								D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES	
	Description	Width	Depth	Qty	Plies	Pcs	Length	\GRANELLI HOME CORP\MODELS	
BLK1	NJH	2.5	11.875	LinFt	1 1100	Varies	28-0-0	\CELESTIAL 2\CELESTIAL 2 ELEV.2	
Hanger					1			\FLOOR\CELESTIAL 2 (ELEV.2).isl	
				Bea	am/Girde	r Sur	ported	Ground Floor	
1								Docian Mothod ISD	

						Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H1	2	Unknown Hanger				
H2	2	HGUS410			46 16d	16 16d
Н3	2	HUCQ1.81/9- SDS				
H4	31	LT251188			4 10dx1 1/2	2 10dx1 1/2
H6	3	HUS1.81/10			30 16d	10 16d
H7	10	LT351188			4 10dx1 1/2	2 10dx1 1/2
H9	1	LT251188				

# NOTES:

- Framer to verify dimensions on the architectural drawings. 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- . Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls.
- . 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.
- 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

approve the deviation prior

LSD

2012

15

480

360

480

360

360

240

480

360

OSB

3/4"

Nailed & Glued

Design Method

**Deflection Joist** 

LL Span L/ TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Deck

Deflection Girder

Floor Loads I ive Dead

Building Code NBCC 2010 / OBC

PAGE 5 OF 40 NE0618-036



# **EWP Studio** Simpson Strong-Tie®

Client: Project:

Address:

**GREEN YORK HOMES** 

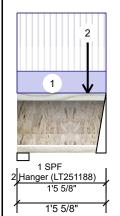
5/31/2018 Designer: RCO

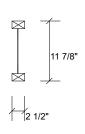
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## F11-A NJH 11.875" - PASSED

Level: Ground Floor





Wind

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

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

1	61	23	0	0
1 2	114	42	0	0

# **Bearings and Factored Reactions**

Bearing Length	Cap. Re	eact D/L lb T	otal	Ld. Case	Ld. Comb.	
1 - SPF 2.375"	7%	29 / 92	120	L	1.25D+1.5L	
2 - 2.000" Hanger	14%	53 / 171	224	L	1.25D+1.5L	
паниен						

## **Analysis Results**

Dead:

15 PSF

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	42 ft-lb	11 7/16"	5390 ft-lb	0.008 (1%)	1.25D+1.5L	L
Unbraced	42 ft-lb	11 7/16"	5334 ft-lb	0.008 (1%)	1.25D+1.5L	L
Shear	211 lb	1'4 3/8"	1810 lb	0.117 (12%)	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/38536)	11 1/4"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/28072)	11 1/4"	0.061 (L/240)	0.010 (1%)	D+L	L

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

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

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



## **Design Notes**

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

	<u> </u>							
ID	Load Type	Location Tri	b Width Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-10 (Sp	oan)3-2-8 Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-2-0	Far Face	30 lb	81 lb	0 lb	0 lb	J2

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

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

  1. Noist flanges must not be out or drilled

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

  3. Damaged IJoists must not be used

  4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.
- 5. Provide lateral support at bearing points to avoid
- lateral displacement and rotation
  6. Web stiffeners for point load as shown Minimum
  point load bearing length ≥ 3.5 inches
  7. For flat roofs provide proper drainage to prevent
  ponding

Manufacturer Info

Nascor by Kott





NE0618-036 PAGE 6 OF 40



Simpson Strong-Tie®

Client: **GREEN YORK HOMES** 

Project: Address:

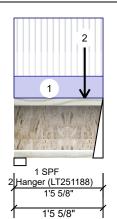
5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Level: Ground Floor

Project #:

## F11-B NJH 11.875" - PASSED



11 7/8"

Member Information					
Type:	Girder				
Plies:	1				

Moisture Condition: Dry Deflection LL: Deflection TL: 240 Importance: Normal General Load Floor Live:

40 PSF 15 PSF

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

Load Sharing: No Not Checked Deck:

Vibration: Not Checked

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

Brg	Live	Dead	Snow	Wind
1	61	23	0	0
2	112	42	0	0

# **Bearings and Factored Reactions**

Bearing	ıgth	Cap. Re	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	75"	7%	28 / 91	119	L	1.25D+1.5L
_	00"	14%	52 / 167	219	L	1.25D+1.5L
2 - Hanger	)0"	14%	52 / 167	219	L	

## **Analysis Results**

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	41 ft-lb	11 5/16"	5390 ft-lb	0.008 (1%)	1.25D+1.5L	L
Unbraced	41 ft-lb	11 5/16"	5334 ft-lb	0.008 (1%)	1.25D+1.5L	L
Shear	206 lb	1'4 3/8"	1810 lb	0.114 (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/39240)	11 3/16"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/28570)	11 3/16"	0.061 (L/240)	0.010 (1%)	D+L	L

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

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

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

# SPROFESSIONAL CHARLES

# **Design Notes**

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

	3								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-10	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-2-0		Near Face	29 lb	78 lb	0 lb	0 lb	J2

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

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

## Handling & Installation

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

**Manufacturer Info** 

Nascor by Kott





NE0618-036 **PAGE 7 OF 40** 



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

Project:

Address:

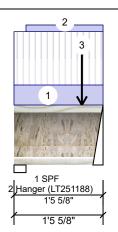
5/31/2018 RCO Designer:

Job Name: CELESTIAL 2 (ELEV.1)

Level: Ground Floor

Project #:

## F11-C 11.875" - PASSED NJH



11 7/8"

Page 1 of 1

Member	Information
Type:	Girder
Diag	4

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

40 PSF 15 PSF Dead:

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

Load Sharing: No Not Checked Deck:

Vibration: Not Checked

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

Brg	Live	Dead	Snow	Wind
1	68	32	0	0
2	127	63	0	0

# **Bearings and Factored Reactions**

READ ALL NOTES ON THIS PAGE AND ON

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" 41 / 102 9% 143 L 1.25D+1.5L 2 -2.000" 17% 79 / 191 269 I 1.25D+1.5L Hanger

## Analysis Results

Analysis Actual Comb. Case Location Allowed Capacity 1' 3/4" 5390 ft-lb Moment 59 ft-lb 0.011 (1%) 1.25D+1.5L L Unbraced 59 ft-lb 1' 3/4" 5334 ft-lb 0.011 (1%) 1.25D+1.5L L 0.141 (14%) 1.25D+1.5L L Shear 255 lb 1'4 3/8" 1810 lb Perm Defl in. 0.000 1' 5/16" 0.041 (L/360) 0.010 (1%) D Uniform (L/60774) 0.000 1' 3/8" 0.041 (L/360) 0.010 (1%) L LL Defl inch (L/30175) TL Defl inch 0.001 1' 3/8" 0.061 (L/240) 0.010 (1%) D+L L (L/20164)

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

101 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** 



## **Design Notes**

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

Point

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-10	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-6 to 1-5-10		Тор	8 PLF	0 PLF	0 PLF	0 PLF	

Near Face

3

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

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

1-1-7

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

50 lb

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

## **Manufacturer Info**

Nascor by Kott

0 lb

905-642-4400

0 lb J3



Kott Lumber Company 14 Anderson Blvd, Ontario

Canada



NE0618-036 PAGE 8 OF 40



Client: **GREEN YORK HOMES** 

Project: Address:

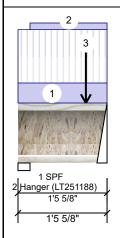
Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

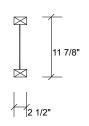
5/31/2018

Project #:

## 11.875" - PASSED F11-D NJH



Level: Ground Floor



Page 1 of 1

Member	Information
Type:	Girder
Plies:	1

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

15 PSF

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

Load Sharing: No Not Checked Deck:

Vibration: Not Checked

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

Brg	Live	Dead	Snow	Wind
1	69	33	0	0
2	129	65	0	0

# **Bearings and Factored Reactions**

Bearing Length	сар. Ке	eact D/L lb	iotai	La. Case	Ld. Comb.	
1 - SPF 2.375"	9%	41 / 103	144	L	1.25D+1.5L	
2 - 2.000" Hanger	17%	81 / 194	275	L	1.25D+1.5L	

## Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	60 ft-lb	1' 7/8"	5390 ft-lb	0.011 (1%)	1.25D+1.5L	L
Unbraced	60 ft-lb	1' 7/8"	5334 ft-lb	0.011 (1%)	1.25D+1.5L	L
Shear	261 lb	1'4 3/8"	1810 lb	0.144 (14%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/59235)	1' 1/2"	0.041 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.000 (L/29602)	1' 1/2"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/19738)	1' 1/2"	0.061 (L/240)	0.010 (1%)	D+L	L

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

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

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



## **Design Notes**

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

. Dottom name	o bracea ar bearinge.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-10	(Span)3-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-6 to 1-5-10		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
3	Point	1-1-7		Far Face	52 lb	104 lb	0 lb	0 lb	J3

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

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

  1. Noist flanges must not be out or drilled

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

  3. Damaged IJoists must not be used

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

  Web stiffeners for point load as shown Minimum point load bearing length=3.5 inches

  Ten flat roofs provide proper drainage to prevent

**Manufacturer Info** 

Nascor by Kott





NE0618-036 **PAGE 9 OF 40** 



Client: **GREEN YORK HOMES** 

Project: Address:

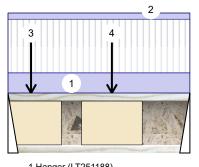
5/31/2018 Designer: RCO

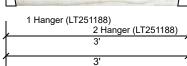
Job Name: CELESTIAL 2 (ELEV.1)

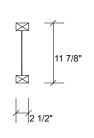
Level: Ground Floor

Project #:

## 11.875" - PASSED F12-A NJH







wember	intormation
Type:	Girder

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

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

Not Checked Deck: Vibration: Not Checked

**Analysis Results** 

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	723 ft-lb	1'8 9/16"	5390 ft-lb	0.134 (13%)	1.25D+1.5L	L
Unbraced	723 ft-lb	1'8 9/16"	4800 ft-lb	0.151 (15%)	1.25D+1.5L	L
Shear	986 lb	1 1/4"	1810 lb	0.545 (54%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/9494)	1'8 9/16"	0.093 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.007 (L/4709)	1'8 9/16"	0.093 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.011 (L/3148)	1'8 9/16"	0.140 (L/240)	0.080 (8%)	D+L	L

# **Design Notes**

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

Unfactored	Reactions	UNPATTERNED	lb	(Uplift)

Brg	Live	Dead	Snow	Wind
1	471	230	0	0
2	312	155	0	0

## **Bearings and Factored Reactions**

Bearing Length	Cap. F	teact D/L lb	Total	Ld. Case	Ld. Comb.	
1 - 2.000"	61%	287 / 707	994	L	1.25D+1.5L	
Hanger						
2 - 2.000"	41%	194 / 469	662	L	1.25D+1.5L	
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.

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

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



	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
	1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
:	2	Part. Uniform	0-0-0 to 3-0-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF		
;	3	Point	0-4-9		Near Face	132 lb	275 lb	0 lb	0 lb	J6	
	4	Point	1-8-9		Near Face	202 lb	405 lb	0 lb	0 lb	J6	

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

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

# Handling & Installation

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

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

## Manufacturer Info

Nascor by Kott





PAGE 10 OF 40 NE0618-036



Client: Project:

Address:

**GREEN YORK HOMES** 

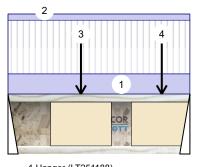
Date: 5/31/2018 Designer: RCO

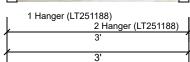
Job Name: CELESTIAL 2 (ELEV.1)

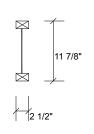
Level: Ground Floor

Project #:

## 11.875" - PASSED F12-B NJH







Ld. Comb.

1.25D+1.5L

1.25D+1.5L

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

## **Unfactored Reactions UNPATTERNED Ib (Uplift)** Wind Brg Live Dead 336 168 0 O 1 2 470 235 0 0

Cap. React D/L lb

210 / 504

293 / 705

# Dead: 15 PSF Analysis Results

Actual	Location	Allowed	Capacity	Comb.	Case
733 ft-lb	1'2 7/16"	5390 ft-lb	0.136 (14%)	1.25D+1.5L	L
733 ft-lb	1'2 7/16"	4800 ft-lb	0.153 (15%)	1.25D+1.5L	L
991 lb	2'10 3/4"	1810 lb	0.548 (55%)	1.25D+1.5L	L
0.004 (L/9288)	1'2 7/16"	0.093 (L/360)	0.040 (4%)	D	Uniform
0.007 (L/4651)	1'2 7/16"	0.093 (L/360)	0.080 (8%)	L	L
0.011 (L/3099)	1'2 7/16"	0.140 (L/240)	0.080 (8%)	D+L	L
	733 ft-lb	733 ft-lb 1'2 7/16" 733 ft-lb 1'2 7/16" 991 lb 2'10 3/4" 0.004 (L/9288) 1'2 7/16" 0.007 (L/4651) 1'2 7/16"	733 ft-lb 1'2 7/16" 5390 ft-lb 733 ft-lb 1'2 7/16" 4800 ft-lb 991 lb 2'10 3/4" 1810 lb 0.004 (L/9288) 1'2 7/16" 0.093 (L/360) 0.007 (L/4651) 1'2 7/16" 0.093 (L/360)	733 ft-lb 1'2 7/16" 5390 ft-lb 0.136 (14%) 733 ft-lb 1'2 7/16" 4800 ft-lb 0.153 (15%) 991 lb 2'10 3/4" 1810 lb 0.548 (55%) 0.004 (L/9288) 1'2 7/16" 0.093 (L/360) 0.040 (4%) 0.007 (L/4651) 1'2 7/16" 0.093 (L/360) 0.080 (8%)	733 ft-lb 1'2 7/16" 5390 ft-lb 0.136 (14%) 1.25D+1.5L 733 ft-lb 1'2 7/16" 4800 ft-lb 0.153 (15%) 1.25D+1.5L 991 lb 2'10 3/4" 1810 lb 0.548 (55%) 1.25D+1.5L 0.004 (L/9288) 1'2 7/16" 0.093 (L/360) 0.040 (4%) D 0.007 (L/4651) 1'2 7/16" 0.093 (L/360) 0.080 (8%) L

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.

44%

62%

**Bearings and Factored Reactions** 

Bearing Length

2.000"

2.000"

1 -

2 -

Hanger

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

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



Total Ld. Case

714 L

999 L

# **Design Notes**

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

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	1-2-7		Far Face	204 lb	406 lb	0 lb	0 lb	J10
4	Point	2-6-7		Far Face	148 lb	297 lb	0 lb	0 lb	J10

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

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

# Handling & Installation

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

**Manufacturer Info** 

Nascor by Kott







PAGE 11 OF 40 NE0618-036

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

Project:

Address:

Date:

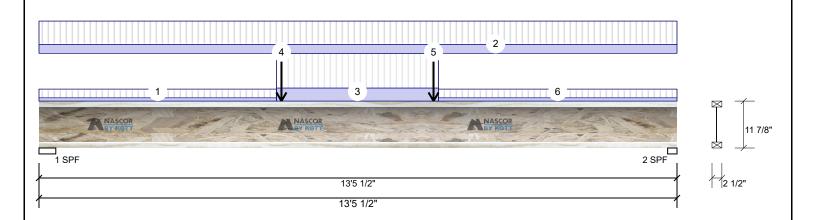
5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 11.875" - PASSED F13-A NJH

Level: Ground Floor



<b>Member Info</b>	rmation			Unfactore	d Reactio	ons UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	361	135	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	352	132	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	nd Facto	red Reactions		
Dead:	15 PSF			Bearing Le	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 4.	250"	39% 169 / 541	709 L	1.25D+1.5L
				2 - SPF 2.	375"	42% 164 / 528	693 L	1.25D+1.5L
Analysis Bosy	ılta			2 - SPF 2.	375"	42% 164 / 528	693 L	1.25D+1.5

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2806 ft-lb	6'9 13/16"	5390 ft-lb	0.521 (52%)	1.25D+1.5L	L
Unbraced	2806 ft-lb	6'9 13/16"	2825 ft-lb	0.993 (99%)	1.25D+1.5L	L
Shear	692 lb	3 1/2"	1810 lb	0.382 (38%)	1.25D+1.5L	L
Perm Defl in.	0.060 (L/2586)	6'9 5/8"	0.434 (L/360)	0.140 (14%)	D	Uniform
LL Defl inch	0.162 (L/966)	6'9 11/16"	0.434 (L/360)	0.370 (37%)	L	L
TL Defl inch	0.222 (L/704)	6'9 5/8"	0.652 (L/240)	0.340 (34%)	D+L	L

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

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 5-0-2	(Span)0-4-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-5-8	(Span)1-1-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	5-0-2 to 8-5-2	(Span)1-7-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	5-1-6		Far Face	42 lb	112 lb	0 lb	0 lb	F11
5	Point	8-3-14		Far Face	42 lb	114 lb	0 lb	0 lb	F11
6	Tie-In	8-5-2 to 13-5-8	(Span)0-4-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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

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

## Handling & Installation

- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

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

## Manufacturer Info

Nascor by Kott





NE0618-036 PAGE 12 OF 40

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

Project: Address:

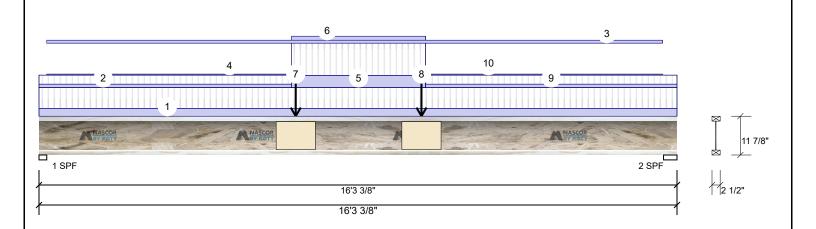
Date: 5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 11.875" - PASSED F14-A NJH

Level: Ground Floor



Member Info	rmation			Unfactore	d Reaction	ons UNPATTERNE	D lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	408	206	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	416	209	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	nd Facto	ored Reactions		
Dead:	15 PSF			Bearing Lo	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 2.	.375"	53% 257 / 612	869 L	1.25D+1.5L
				2 - SPF 4.	.125"	49% 261 / 624	885 L	1.25D+1.5L

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4338 ft-lb	8' 5/8"	5390 ft-lb	0.805 (80%)	1.25D+1.5L	L
Unbraced	4338 ft-lb	8' 5/8"	4339 ft-lb	1.000 (100%)	1.25D+1.5L	L
Shear	868 lb	16'	1810 lb	0.480 (48%)	1.25D+1.5L	L
Perm Defl in.	0.163 (L/1170)	8' 7/8"	0.529 (L/360)	0.310 (31%)	D	Uniform
LL Defl inch	0.322 (L/590)	8' 15/16"	0.529 (L/360)	0.610 (61%)	L	L
TL Defl inch	0.485 (L/392)	8' 15/16"	0.793 (L/240)	0.610 (61%)	D+L	L

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

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

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



# **Design Notes**

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top flange must be laterally braced at a maximum of 3'6" o.c.

3 Bottom flange braced at bearings

o bottom nange	bracea at bearings.	•								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 16-3-6	(Span)1-0-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-0-0 to 6-5-6	(Span)0-5-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Part. Uniform	0-2-6 to 15-10-15		Тор	3 PLF	0 PLF	0 PLF	0 PLF		
4	Part. Uniform	0-2-6 to 6-5-6		Тор	1 PLF	0 PLF	0 PLF	0 PLF		
5	Tie-In	6-5-6 to 9-10-6	(Span)1-7-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
6	Part. Uniform	6-5-6 to 9-10-6		Тор	4 PLF	0 PLF	0 PLF	0 PLF		
7	Point	6-6-10		Near Face	65 lb	129 lb	0 lb	0 lb	F11	
8	Point	9-9-2		Near Face	63 lb	127 lb	0 lb	0 lb	F11	

Continued on page 2...

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

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

# Handling & Installation

- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

  Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.
- Provide lateral support at bearing points to avoid lateral displacement and rotation
   Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
   For flat roofs provide proper drainage to prevent populing.

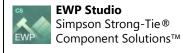
Manufacturer Info

Nascor by Kott





NE0618-036 PAGE 13 OF 40



Client: **GREEN YORK HOMES** 

Project:

Address:

Date:

Designer: RCO

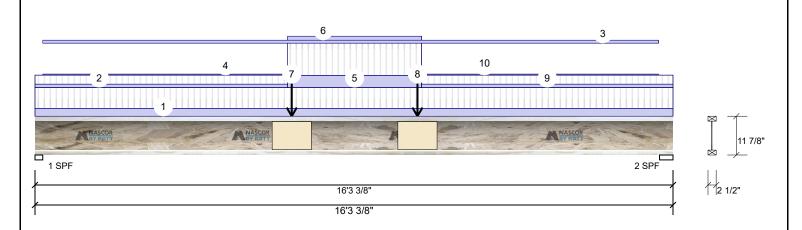
Job Name: CELESTIAL 2 (ELEV.1)

Level: Ground Floor

5/31/2018

Project #:

## 11.875" - PASSED F14-A NJH



.Continued from page 1

Location Trib Width Side Wind Comments ID Load Type Dead Live Snow 9-10-6 to 16-3-6 (Span)0-5-7 15 PSF 40 PSF 0 PSF 0 PSF 9 Tie-In Top 10 Part. Uniform 9-10-6 to 15-10-14 Тор 1 PLF 0 PLF 0 PLF 0 PLF

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

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

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



Page 2 of 2

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

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

# Handling & Installation

- IARIGHING & INSEGUATION

  Lodist flanges must not be cut or drilled

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

  Damaged IJoists must not be used

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

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

Manufacturer Info

Nascor by Kott







PAGE 14 OF 40 NE0618-036

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

Project:

Address:

Date: 5/31/2018

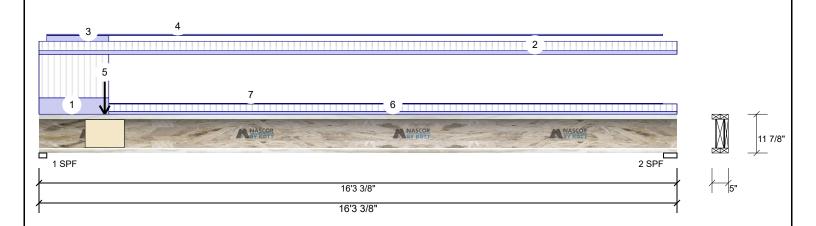
Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 2-Ply - PASSED F15-A NJH 11.875"

Level: Ground Floor



Member Info	rmation			Unfactore	d Reaction	ons UNPATTERNE	D lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	736	360	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	270	131	0	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked					
Importance:	Normal	Vibration:	Not Checked					
General Load								
Floor Live:	40 PSF			Bearings a	and Facto	ored Reactions		
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF 2	.375"	47% 450 / 1104	1554 L	1.25D+1.5L
	••			2 - SPF 4.	.125"	16% 163 / 404	568 L	1.25D+1.5L

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2720 ft-lb	6'2"	10780 ft-lb	0.252 (25%)	1.25D+1.5L	L
Unbraced	2720 ft-lb	6'2"	2722 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	1532 lb	1 5/8"	3620 lb	0.423 (42%)	1.25D+1.5L	L
Perm Defl in.	0.053 (L/3616)	7'6 13/16"	0.529 (L/360)	0.100 (10%)	D	Uniform
LL Defl inch	0.108 (L/1767)	7'6 13/16"	0.529 (L/360)	0.200 (20%)	L	L
TL Defl inch	0.160 (L/1187)	7'6 13/16"	0.793 (L/240)	0.200 (20%)	D+L	L

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

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-3-6	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 1-9-6		Тор	9 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 15-10-15		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Far Face	230 lb	471 lb	0 lb	0 lb	F12
6	Tie-In	1-9-6 to 16-3-6	(Span)0-7-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 15-10-15		Тор	1 PLF	0 PLF	0 PLF	0 PLF	

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

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

# Handling & Installation

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

Manufacturer Info

Nascor by Kott







PAGE 15 OF 40 NE0618-036

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

Project:

Address:

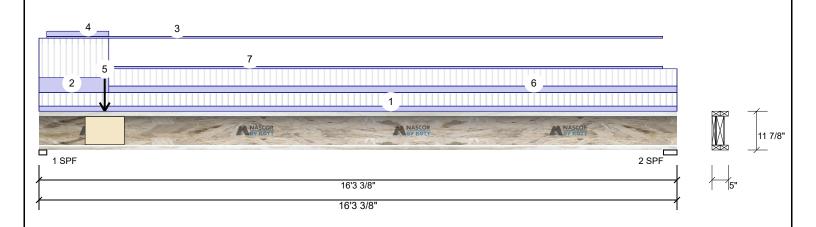
Date: 5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 2-Ply - PASSED F15-B NJH 11.875"

Level: Ground Floor



Member Info	rmation			Unfactored Reactions UNPATTERNED lb (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	2	Design Method:	LSD	1	777	388	0	0		
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	472	236	0	0		
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings a	and Facto	red Reactions				
Dead:	15 PSF			Bearing L	ength.	Cap. React D/L lb	Total Ld. Case	Ld. Comb.		
				1 - SPF 2	.375"	50% 485 / 1166	1651 L	1.25D+1.5L		
				2-SPF 4	.125"	28% 295 / 707	1002 L	1.25D+1.5L		

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4167 ft-lb	7'5 5/16"	10780 ft-lb	0.387 (39%)	1.25D+1.5L	L
Unbraced	4167 ft-lb	7'5 5/16"	4189 ft-lb	0.995 (99%)	1.25D+1.5L	L
Shear	1627 lb	1 5/8"	3620 lb	0.449 (45%)	1.25D+1.5L	L
Perm Defl in.	0.082 (L/2309)	7'10 5/16"	0.529 (L/360)	0.160 (16%)	D	Uniform
LL Defl inch	0.163 (L/1166)	7'10 5/16"	0.529 (L/360)	0.310 (31%)	L	L
TL Defl inch	0.246 (L/775)	7'10 5/16"	0.793 (L/240)	0.310 (31%)	D+L	L

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

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

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



# **Design Notes**

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

5 Bottom flange braced at bearings

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-3-6	(Span)1-2-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 15-11-0		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 1-9-6		Тор	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	155 lb	312 lb	0 lb	0 lb	F12
6	Tie-In	1-9-6 to 16-3-6	(Span)1-5-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 15-11-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF	

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

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

# Handling & Installation

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

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

## Manufacturer Info

Nascor by Kott







PAGE 16 OF 40 NE0618-036

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

Project: Address:

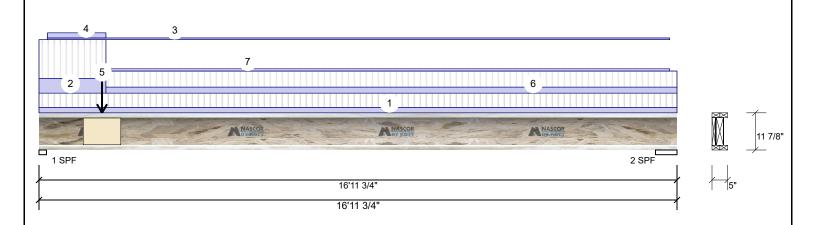
Date: 5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 2-Ply - PASSED F15-C NJH 11.875"

Level: Ground Floor



Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	2	Design Method:	LSD	1	815	408	0	0		
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	498	250	0	0		
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings a	nd Fact	ored Reactions				
Dead:	15 PSF			Bearing Le	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.		
				1 - SPF 2.	375"	52% 510 / 1223	1732 L	1.25D+1.5L		
A l						29% 313 / 747	1060 L	1.25D+1.5L		

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4426 ft-lb	7'7 3/4"	10780 ft-lb	0.411 (41%)	1.25D+1.5L	L
Unbraced	4426 ft-lb	7'7 3/4"	4453 ft-lb	0.994 (99%)	1.25D+1.5L	L
Shear	1707 lb	1 5/8"	3620 lb	0.472 (47%)	1.25D+1.5L	L
Perm Defl in.	0.092 (L/2122)	8'1 1/16"	0.544 (L/360)	0.170 (17%)	D	Uniform
LL Defl inch	0.183 (L/1072)	8'1 1/16"	0.544 (L/360)	0.340 (34%)	L	L
TL Defl inch	0.275 (L/712)	8'1 1/16"	0.817 (L/240)	0.340 (34%)	D+L	L

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

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

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



# **Design Notes**

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

5 Bottom flange braced at bearings

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-11-12	(Span)1-3-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-10 to 16-9-6		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-12 to 1-9-6		Тор	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	168 lb	336 lb	0 lb	0 lb	F12
6	Tie-In	1-9-6 to 16-11-12	(Span)1-4-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-6		Тор	4 PLF	0 PLF	0 PLF	0 PLF	

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

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

# Handling & Installation

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

Manufacturer Info Nascor by Kott







NE0618-036 PAGE 17 OF 40

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

Project:

Address:

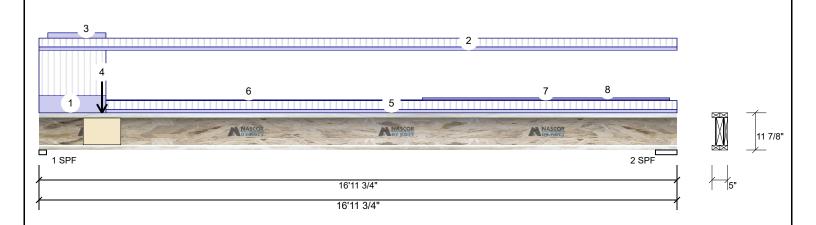
Date: 5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 2-Ply - PASSED F15-D NJH 11.875"

Level: Ground Floor



Type:         Girder         Application:         Floor (Residential)         Brg         Live         Dead         Snow         Wind           Plies:         2         Design Method:         LSD         1         740         353         0         0           Moisture Condition:         Dry         Building Code:         NBCC 2010 / OBC 2012         2         280         136         0         0           Deflection TL:         240         Deck:         Not Checked         Bearings and Factored Reactions         Bearings and Factored Reactions         Ld. Case         Ld. Comb.           Dead:         15 PSF         Bearings Length         Cap. React D/L lb         Total         Ld. Case         Ld. Comb.           1 - SPF         2.375"         47%         441 / 1110         1551         L         1.25D+1.5L	Member Info	rmation			Unfactore	ed Reactio	ns UNPATTERNI	D lb (Uplift)	
Building Code: NBCC 2010 / OBC 2012   2 280	Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Deflection LL: 360	Plies:	2	Design Method:	LSD	1	740	353	0	0
Deflection TL:	Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	280	136	0	0
Importance: Normal   Vibration: Not Checked	Deflection LL:	360	Load Sharing:	No					
Floor Live: 40 PSF   Bearing   Length   Cap.   React D/L lb   Total   Ld. Case   Ld. Comb.	Deflection TL:	240	Deck:	Not Checked					
Floor Live: 40 PSF   Bearing   Length   Cap.   React D/L lb   Total   Ld.   Case   Ld.   Comb.	Importance:	Normal	Vibration:	Not Checked					
Dead: 15 PSF Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb.  1 - SPF 2.375" 47% 441 / 1110 1551 L 1.25D+1.5L  2 - SPF 6.875" 16% 170 / 420 590 L 1.25D+1.5L	General Load								
1 - SPF 2.375" 47% 441 / 1110 1551 L 1.25D+1.5L 2 - SPF 6.875" 16% 170 / 420 590 L 1.25D+1.5L	Floor Live:	40 PSF			Bearings a	and Facto	red Reactions		
2 - SPF 6.875" 16% 170 / 420 590 L 1.25D+1.5L	Dead:	15 PSF			Bearing L	ength.	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
					1 - SPF 2	375"	47% 441 / 1110	1551 L	1.25D+1.5L
					2-SPF 6	3.875"	16% 170 / 420	590 L	1.25D+1.5L

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2770 ft-lb	6'5 7/16"	10780 ft-lb	0.257 (26%)	1.25D+1.5L	L
Unbraced	2770 ft-lb	6'5 7/16"	2794 ft-lb	0.991 (99%)	1.25D+1.5L	L
Shear	1530 lb	1 5/8"	3620 lb	0.423 (42%)	1.25D+1.5L	L
Perm Defl in.	0.055 (L/3575)	7'10"	0.544 (L/360)	0.100 (10%)	D	Uniform
LL Defl inch	0.118 (L/1665)	7'9 3/4"	0.544 (L/360)	0.220 (22%)	L	L
TL Defl inch	0.173 (L/1136)	7'9 7/8"	0.817 (L/240)	0.210 (21%)	D+L	L

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

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

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



# **Design Notes**

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

5 Bottom flange braced at bearings

ш	- J	<u> </u>								
ſ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Tie-In	0-0-0 to 16-11-12	(Span)0-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	3	Part. Uniform	0-2-13 to 1-9-6		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
l	4	Point	1-8-2		Far Face	235 lb	470 lb	0 lb	0 lb	F12
l	5	Tie-In	1-9-6 to 16-11-12	(Span)0-8-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	6	Part. Uniform	1-9-6 to 10-2-6		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
l	7	Part. Uniform	10-2-6 to 16-9-6		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
١	8	Part. Uniform	10-2-7 to 16-9-6		Тор	2 PLF	0 PLF	0 PLF	0 PLF	

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

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

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

Manufacturer Info

Nascor by Kott







NE0618-036 PAGE 18 OF 40



# **EWP Studio**

Simpson Strong-Tie® Component Solutions™

**GREEN YORK HOMES** Client:

Project: Address:

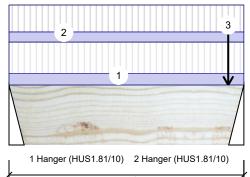
5/31/2018 Designer: RCO

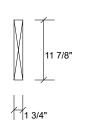
Job Name: CELESTIAL 2 (ELEV.1)

Project #

## 1.750" X 11.875" - PASSED Forex 2.0E-3000Fb LVL F2-A

Level: Ground Floor





L		
	1	3'10 1/2"
	1	3'10 1/2"

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

Floor Live: 40 PSF 15 PSF

Member Information

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

Brg	Live	Dead	Snow	Wind
1	68	36	0	0
2	869	374	0	0

# **Bearings and Factored Reactions**

Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	4%	45 / 103	147	L	1.25D+1.5L	
2 - Hanger	3.000"	98%	467 / 1303	1770	L	1.25D+1.5L	

Actual Capacity Case Analysis Location Allowed Comb. 2'6 1/4" 17130 ft-lb Moment 159 ft-lb 0.009 (1%) 1.25D+1.5L L Unbraced 159 ft-lb 2'6 1/4" 12574 ft-lb 0.013 (1%) 1.25D+1.5L L Shear 2'8 3/8" 5798 lb 0.023 (2%) 1.25D+1.5L L 131 lb Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) 2'2 15/16" 0.117 (L/360) 0.010 (1%) L LL Defl inch 0.001 L

(L/55914) TL Defl inch 0.001 2'2 11/16" 0.175 (L/240) 0.010 (1%) D+L READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

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



## Design Notes

Dead:

Analysis Results

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Fill all hanger nailing holes.

(L/37484)

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-10-8	(Span)0-8-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 3-10-8	(Span)0-7-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	3-7-6		Тор	352 lb	834 lb	0 lb	0 lb	C3
	Self Weight				5 PLF				

L

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

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

# Handling & Installation

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

Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

## **Manufacturer Info**

APA: PR-L318







PAGE 19 OF 40 NE0618-036

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

Project: Address:

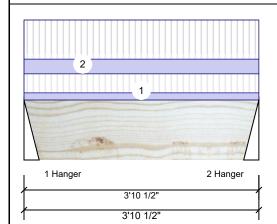
5/31/2018 Designer: RCO

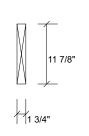
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 1.750" X 11.875" - PASSED F2-B Forex 2.0E-3000Fb LVL

Level: Ground Floor





0

0

Member Inforn	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)** Wind Brg Live Dead 115 52 O 1

52

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

3.000"

115

Total Ld. Case Ld. Comb. 238 I 1.25D+1.5L

0

2 -Hanger

Hanger

1 \_

2

3.000" 6% 66 / 173 238 L 1.25D+1.5L

66 / 173

Analysis Actual Location Allowed Comb. Case Capacity 188 ft-lb 1'11 1/4" 17130 ft-lb Moment 0.011 (1%) 1.25D+1.5L L Unbraced 188 ft-lb 1'11 1/4" 12574 ft-lb 0.015 (1%) 1.25D+1.5L L Shear 93 lb 1'2 1/8" 5798 lb 0.016 (2%) 1.25D+1.5L L Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) 1'11 1/4" 0.117 (L/360) 0.010 (1%) L LL Defl inch 0.001 L (L/45885) TL Defl inch 0.001

1'11 1/4" 0.175 (L/240) 0.010 (1%) D+L

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

READ ALL NOTES ON THIS PAGE AND ON

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

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



Design Notes

Analysis Results

1 Fill all hanger nailing holes.

(L/31535)

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-10-8	(Span)0-11-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-10-8		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
	Self Weight				5 PLF				

L

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

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

## Handling & Installation

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

Damaged Beams must not be used Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation 6. For flat roofs provide proper drainage to prevent ponding

## **Manufacturer Info**

APA: PR-L318







PAGE 20 OF 40 NE0618-036



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

Project: Address:

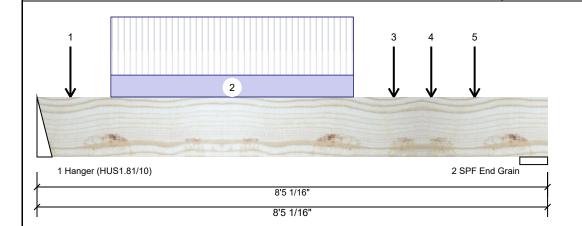
5/31/2018 Designer: RCO

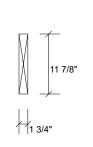
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 1.750" X 11.875" - PASSED Forex 2.0E-3000Fb LVL F5-A

Level: Ground Floor





## 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)**

Brg	Live	Dead	Snow	Wind
1	461	202	0	0
2	936	411	0	0

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2822 ft-lb	5'10 5/8"	17130 ft-lb	0.165 (16%)	1.25D+1.5L	L
Unbraced	2822 ft-lb	5'10 5/8"	5736 ft-lb	0.492 (49%)	1.25D+1.5L	L
Shear	1910 lb	7' 7/16"	5798 lb	0.329 (33%)	1.25D+1.5L	L
Perm Defl in.	0.016 (L/5933)	4'6 9/16"	0.261 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.036 (L/2586)	4'6 5/8"	0.261 (L/360)	0.140 (14%)	L	L
TL Defl inch	0.052 (L/1801)	4'6 5/8"	0.392 (L/240)	0.130 (13%)	D+L	L

# **Bearings and Factored Reactions**

Grain

Bearing	Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	24%	253 / 691	944	L	1.25D+1.5L	
2 - SPF Fnd	5.500"	27%	514 / 1405	1918	L	1.25D+1.5L	

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

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-6-10		Far Face	30 lb	79 lb	0 lb	0 lb	J1
2	Part. Uniform	1-2-10 to 5-2-10		Far Face	29 PLF	77 PLF	0 PLF	0 PLF	
3	Point	5-10-10		Far Face	28 lb	76 lb	0 lb	0 lb	J1
4	Point	6-6-0		Far Face	374 lb	869 lb	0 lb	0 lb	F2
5	Point	7-2-10		Far Face	25 lb	65 lb	0 lb	0 lb	J1
	Self Weight				5 PLF				

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

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

# Handling & Installation

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

approvals

Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

## Manufacturer Info

APA: PR-L318





NE0618-036 PAGE 21 OF 40



# **EWP Studio**

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

Project:

Address:

5/31/2018

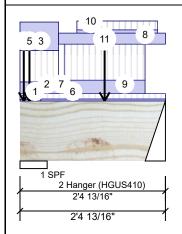
Designer: RCO

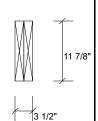
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

F6-C Forex 2.0E-3000Fb LVL 1.750" X 11.875"

Level: Ground Floor 2-Ply - PASSED





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

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

Brg	Live	Dead	Snow	Wind
1	2716	1180	0	0
2	314	165	0	0

# **Bearings and Factored Reactions**

Bearing Ler	ngth Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 5.3	75" 52%	1474 / 4075	5549	L	1.25D+1.5L
2 - 4.00 Hanger	00" 7%	206 / 471	677	L	1.25D+1.5L

## **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	396 ft-lb	1'4 3/4"	34261 ft-lb	0.012 (1%)	1.25D+1.5L	L
Unbraced	396 ft-lb	1'4 3/4"	34261 ft-lb	0.012 (1%)	1.25D+1.5L	L
Shear	337 lb	1'1 11/16"	11596 lb	0.029 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.001 (L/33790)	1'4 3/4"	0.058 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/23170)	1'4 3/4"	0.087 (L/240)	0.010 (1%)	D+L	L

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

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

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



## Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 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 0-4-2	(Span)0-6-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-7-10		Тор	33 PLF	88 PLF	0 PLF	0 PLF	J5
3	Part. Uniform	0-0-0 to 0-7-10		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

Continued on page 2...

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

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318





NE0618-036 PAGE 22 OF 40

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

Project:

Address:

5/31/2018 Designer:

RCO Job Name: CELESTIAL 2 (ELEV.1)

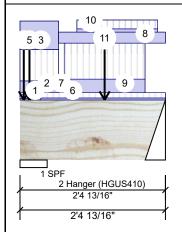
Project #:

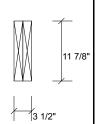
Forex 2.0E-3000Fb LVL F6-C

1.750" X 11.875"

2-Ply - PASSED

Level: Ground Floor





Page 2 of 2

Continued from p	page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Point	0-0-12		Far Face	92 lb	245 lb	0 lb	0 lb	J5
5	Point	0-1-14		Тор	901 lb	2190 lb	0 lb	0 lb	F9 F9
6	Tie-In	0-4-2 to 2-4-13	(Span)0-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	0-7-10 to 0-8-12		Тор	13 PLF	34 PLF	0 PLF	0 PLF	J5
8	Part. Uniform	0-7-10 to 2-4-13		Тор	31 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
9	Part. Uniform	0-8-12 to 2-0-12		Тор	38 PLF	101 PLF	0 PLF	0 PLF	J5
10	Part. Uniform	0-11-4 to 2-3-4		Тор	9 PLF	25 PLF	0 PLF	0 PLF	J1
11	Point	1-4-12		Far Face	125 lb	334 lb	0 lb	0 lb	J5
	Self Weight				10 PLF				

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

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

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

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

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







PAGE 23 OF 40 NE0618-036

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

Date: Designer: Project:

RCO Job Name: CELESTIAL 2 (ELEV.1)

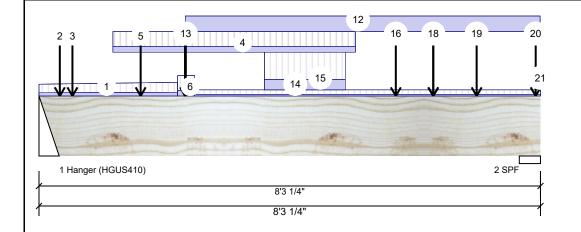
Project #

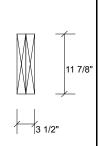
1.750" X 11.875" 2-Ply - PASSED F7-A Forex 2.0E-3000Fb LVL

Address:

Level: Ground Floor

5/31/2018





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

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

**Unfactored Reactions UNPATTERNED Ib (Uplift)** Wind Brg Live Dead 1175 754 0 0 1 2 1294 904 0 0

# 15 PSF Dead:

Bearings and Factored Reactions

Ш								
	Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.	
	1 -	4.000"	26%	942 / 1762	2704	L	1.25D+1.5L	
	Hanger							
	2 - SPF	4.192"	34%	1130 / 1941	3071	L	1.25D+1.5L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5427 ft-lb	4' 9/16"	34261 ft-lb	0.158 (16%)	1.25D+1.5L	L
Unbraced	5427 ft-lb	4' 9/16"	31493 ft-lb	0.172 (17%)	1.25D+1.5L	L
Shear	2722 lb	6'11 15/16"	11596 lb	0.235 (23%)	1.25D+1.5L	L
Perm Defl in.	0.022 (L/4116)	4'1 3/8"	0.257 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.032 (L/2870)	4'1 7/16"	0.257 (L/360)	0.130 (13%)	L	L
TL Defl inch	0.055 (L/1691)	4'1 3/8"	0.386 (L/240)	0.140 (14%)	D+L	L

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

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

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



# **Design Notes**

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

ID Load Type Location Trib Width Side Dead Live Snow Wind Comments 0-0-0 to 2-3-7 (Span)2-2-7 15 PSF 40 PSF 0 PSF 0 PSF 1 Tie-In Top to 2-6-11 Point 0-4-2 Far Face 15 lb 39 lb 0 lb 0 lb J1 2 3 Point 0-6-10 Near Face 30 lb 79 lb 0 lb 0 lb J1 Part. Uniform 1-2-10 to 5-2-10 Near Face 29 PLF 77 PLF 0 PLF 0 PLF 5 Point 1-8-2 Far Face 17 lb 44 lb 0 lb 0 lb J1

Continued on page 2...

## Notes

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318







PAGE 24 OF 40 NE0618-036

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

Continued from page 1

Client: **GREEN YORK HOMES** 

Project:

5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

Live

40 PSF

211 lb

52 lb

5 lb

0 lb

0 lb

0 PLF

314 lb

40 PSF

140 PLF

Snow

0 PSF

0 lb

0 lb

0 lb

0 lb

0 lb

0 lb

0 PLF

0 PSF

0 PLF

Wind

0 PSF

0 lb J5

0 lb

0 lb

0 lb

0 lb

0 lb

0 PLF

0 PSF

0 PLF

Comments

Wall Self Weight

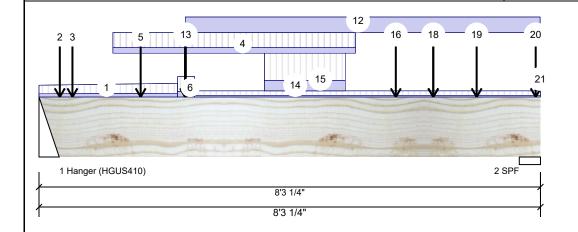
Wall Self Weight

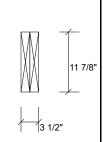
Wall Self Weight

1.750" X 11.875" 2-Ply - PASSED F7-A Forex 2.0E-3000Fb LVL

Address:

Level: Ground Floor





٠.	.Continued from page	age 1				
	ID	Load Type	Location	Trib Width	Side	Dead
	6	Tie-In	2-3-7 to 2-6-13	(Span)3-9-13	Тор	15 PSF
	7	Point	2-4-15		Тор	79 lb
	8	Point	2-4-15		Тор	20 lb
	9	Point	2-4-15		Тор	2 lb
	10	Point	2-4-15		Тор	86 lb
	11	Point	2-4-15		Тор	12 lb
	12	Part. Uniform	2-4-15 to 8-3-3		Тор	80 PLF
	13	Point	2-5-1		Far Face	165 lb
	14	Tie-In	2-6-13 to 8-3-4	(Span)1-1-13	Тор	15 PSF
	15	Part. Uniform	3-8-10 to 5-0-10		Тор	53 PLF
	16	Point	5-10-10		Near Face	28 lb
	17	Point	6-6-0		Тор	277 lb
	18	Point	6-6-0		Near Face	36 lb
	19	Point	7-2-10		Near Face	25 lb
	20	Point	8-2-5		Near Face	34 lb
	21	Part. Uniform	8-3-3 to 8-3-4		Тор	40 PLF
		Self Weight				10 PLF

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

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

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



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

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

# Handling & Installation

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

approvals

Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







NE0618-036 PAGE 25 OF 40

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

Project:

5/31/2018 Designer: RCO

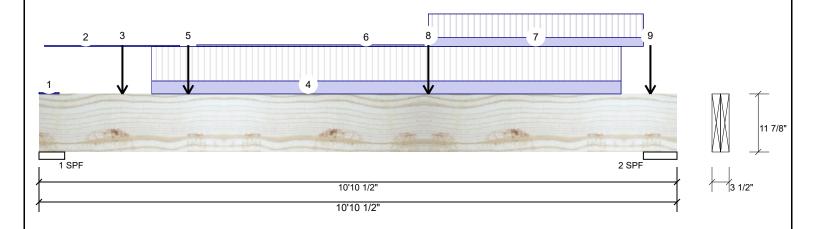
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

1.750" X 11.875" Forex 2.0E-3000Fb LVL 2-Ply - PASSED F8-B

Address:

Level: Ground Floor



Member Info	mber Information					Unfactored Reactions UNPATTERNED Ib (Uplift)					
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	2	Design Method:	LSD	1	3101	1470	0	0			
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	3210	1341	0	0			
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bearings a	nd Facto	ored Reactions					
Dead:	15 PSF			Bearing Le	ngth	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1 - SPF 5.2	250"	57% 1837 / 4651	6488 L	1.25D+1.5L			
				2-SPF 6.8	375"	44% 1677 / 4815	6491 L	1.25D+1.5L			
Amabreia Daerr	ite										

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	16532 ft-lb	5'6 3/16"	34261 ft-lb	0.483 (48%)	1.25D+1.5L	L
Unbraced	16532 ft-lb	5'6 3/16"	29618 ft-lb	0.558 (56%)	1.25D+1.5L	L
Shear	6864 lb	1'4 3/8"	11596 lb	0.592 (59%)	1.25D+1.5L	L
Perm Defl in.	0.077 (L/1556)	5'3 11/16"	0.333 (L/360)	0.230 (23%)	D	Uniform
LL Defl inch	0.175 (L/687)	5'4 5/8"	0.333 (L/360)	0.520 (52%)	L	L
TL Defl inch	0.252 (L/476)	5'4 3/8"	0.499 (L/240)	0.500 (50%)	D+L	L

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

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-2	(Span)0-7-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 2-4-13	(Span)0-5-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-5-1		Near Face	151 lb	402 lb	0 lb	0 lb	J8
4	Part. Uniform	1-11-1 to 9-11-1		Near Face	148 PLF	395 PLF	0 PLF	0 PLF	
5	Point	2-6-9		Far Face	754 lb	1175 lb	0 lb	0 lb	F7
6	Tie-In	2-8-5 to 6-6-12	(Span)0-8-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

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

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

## Handling & Installation

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

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

6. For flat roofs provide proper drainage to prevent ponding

## Manufacturer Info

APA: PR-L318





NE0618-036 PAGE 26 OF 40

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

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

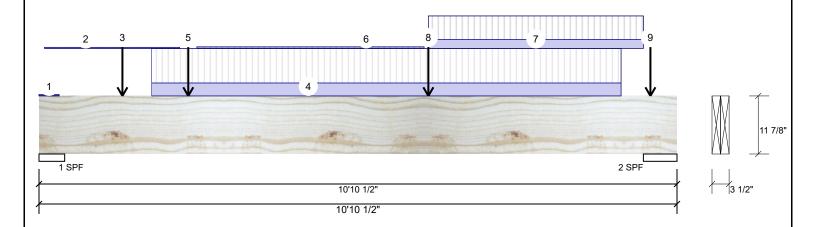
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

1.750" X 11.875" 2-Ply - PASSED Forex 2.0E-3000Fb LVL F8-B

Address:

Level: Ground Floor



Continued	.Continued from page 1										
ID	Load Type	Location Trib	Width Side	Dead	Live	Snow	Wind	Comments			
7	Part. Uniform	6-7-10 to 10-3-10	Тор	101 PLF	270 PLF	0 PLF	0 PLF				
8	Point	6-7-10	Far Face	202 lb	461 lb	0 lb	0 lb	F5			
9	Point	10-5-1	Near Face	16 lb	42 lb	0 lb	0 lb	J8			
	Self Weight			10 PLF							

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

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

Notes

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

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

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

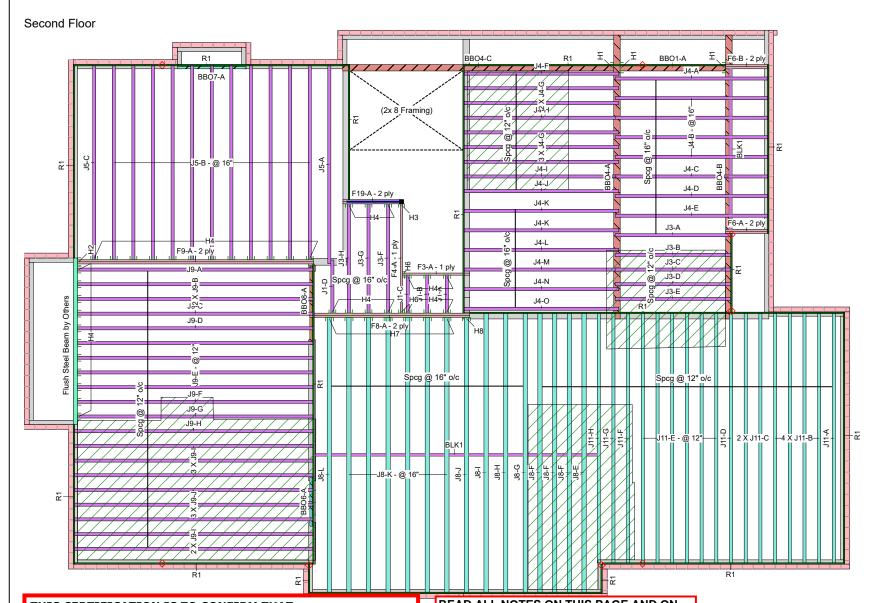


Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400





Page 2 of 2



# THIS CERTIFICATION IS TO CONFIRM THAT:

- 1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY SHOWN ON THIS LAYOUT.
- 2. THE FLOOR JOISTS COMPLY WITH THE NASCOR SPAN TABLE FOR THE LOADS AND SPACING SHOWN ON THIS LAYOUT.

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

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

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

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

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



# ARCHITECTURAL DRAWINGS:

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

# Legend



Wall Norbord Rimboard Plus 1.125 X 11.875 NJ60H 11.875 NJ60U 11.875

NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 9.5

Load from Above

(Dropped) Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

F9	Forex	000Fb LVL	1.	75 <i>'</i>	1.875		1	2		2	18-0-0	
F8	Forex	000Fb LVL	1.	75	1.875		1	2		2	12-0-0	Layout Name CELESTIAL 2 (ELEV.1)
F4	Forex	000Fb LVL	1.	75	1.875					1	8-0-0	Design Method
F19	Forex 2.0E-3	000Fb LVL	1.	75	1.875		1	2		2	6-0-0	Description
F3	Forex 2.0E-3	000Fb LVL	1.	75	1.875					1	6-0-0	GRANELLI HOME CORP. BRAMPTON, ONT.
F6		000Fb LVL	1.	75	1.875		2	2		4	4-0-0	Created May 30, 2018
LVL/LS	L (Dro	pped)										• .
Label	Descr	iption	Wid	th   I	Depth	(	Qty	Plies	Р	cs	Length	Builder
BBO8		000Fb LVL	1.	75	9.5		1	2		2	6-0-0	GREEN YORK HOMES Sales Rep
I Joist (	(Flush)					•						RM
Label	Descr	iption	Wid	th I	Depth		Qty	Plies	Р	cs	Length	Designer
J11	NJ60H		2	2.5	1.875					17	18-0-0	RCO
J8	NJ60U		(3)	3.5	1.875					15	20-0-0	* *
J9	NJH		2	2.5	1.875				2	20	18-0-0	Shipping
J5	NJH		2	2.5	1.875				,	13	14-0-0	Project
J4	NJH		2		1.875				2	23	12-0-0	Builder's Project
J3	NJH		2	2.5	1.875					8	8-0-0	Kott Lumber Company
J1	NJH		2	2.5	1.875					4	4-0-0	14 Anderson Blvd
Rim Bo												
Label	Descr	iption	Wid	th I	Depth	(	Qty	Plies	Р	cs	Length	Stouffville, Ontario
R1		d Rimboard	1.13	25 /	1.875				•	19	12	Canada
	Plus 1.											L4A 7X4
Blockin	11.875											905-642-4400
	<u> </u>	!4!	\ A /: -I	41.	S 4l-	т.	<b>~</b> +	Dii	_		141-	Job Path
	Descr	iption	Wid		Depth	_	Qty	Plies		cs	Length	D:\Users\rochavillo\WORK FROM
BLK1	NJH		2	2.5	1.875	L	inFt		Va	aries	25-0-0	HOME\GREEN YORK HOMES
Hange	ſ						Bea	am/Girde	r		ported	\GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.1 \FLOOR\CELESTIAL 2 (ELEV.1).isl
Label	Pcs	Descriptio	n	Ske	w S	lope	fo	steners	T		teners	Second Floor
H1	3	Unknown	"	Ske	w S	ope	Ic	isteriers	-	iasi	eners	Design Method LSD
'''	3	Hanger										Building Code NBCC 2010 / OBC
H2	1	HGUS410						46 16d		16	3 16d	2012
H3	1	HUCQ1.81	/9-									Floor
		SDS										Loads
H4	36	LT251188					4	10dx1 1/2		2 10	dx1 1/2	Live 40
H6	2	HUS1.81/1	0				30	10dx1 1/2	2	10 16d		Dead 15
H7	7	LT351188			$\perp$		4	10dx1 1/2		2 10dx1 1/2		Deflection Joist
H8	1	LT351188										LL Span L/ 480
NOTES												LL Opan L/

Width Depth Qty Plies Pcs Length

## NOTES:

Second Floor LVL/LSL (Flush) Label Description

- Framer to verify dimensions on the architectural drawings.
- . Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- . Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of
- rimboard/rimjoist
- 5. Refer to Nascor specifier guide for installation works.
- 6. Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- . Load transfer blocks to be installed under all point loads.
- 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

TL Span L/ LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Ceiling:

Deck

Deflection Girder

360

480

360

360

240

480

360

SPF Plywood

Nailed & Glued

Gypsum 1/2"

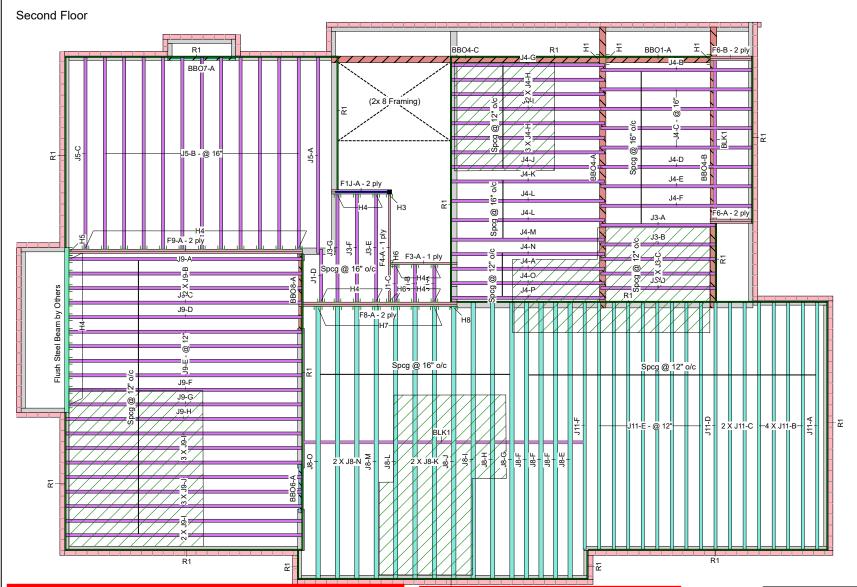


CELESTIAL 2 (ELEV.1) 5 BEDROOM

Pcs Length

12-0-0

2



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

**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.

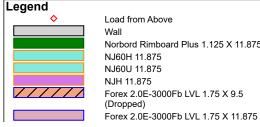
REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY **NAILING OR BOLTING REQUIREMENTS.** 

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



## ARCHITECTURAL DRAWINGS:

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



Forex 2.0E-3000Fb LVL 1.75 X 9.5 Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

		700. 2 L.L									, , , , , , , , , , , , , , , , , , , ,	
F4	Forex 2.0E-30	000Fb LVL	1.7	5 11.	875				1	8-0-0	Design Method LSD	
F1J	Forex 2.0E-30	000Fb LVL	1.7	5 11.	875	1	2		2	6-0-0	Description	_
F3	Forex	000Fb LVL	1.7	5 11.	875				1	6-0-0	GRANELLI HOME CORP. BRAMPTON, ONT.	
F6		000Fb LVL	1.7	5 11.	875	2	2		4	4-0-0	Created May 30, 2018	_
LVL/LS	L (Drop	oped)										_
Label	Descri	ption	Widt	h De	pth	Qty	Plies		Pcs	Length	Builder	
BBO8	Forex 2.0E-30	000Fb LVL	1.7	5	9.5	1	2		2	6-0-0	GREEN YORK HOMES Sales Rep	_
I Joist (	Flush)										RM .	
Label	Descri	ption	Widt	h De	pth	Qty	Plies		Pcs	Length	Designer	_
J11	NJ60H		2.	5 11.	875				17	18-0-0	RCO	
J8	NJ60U		3.	_	875				15	20-0-0		_
J9	NJH		2.	_	875				20	18-0-0	Shipping	_
J5	NJH		2.		875				13	14-0-0	Project	
J4	NJH		2.		875			_	24	12-0-0	Builder's Project	
J3	NJH		2.	_	875				8	8-0-0	Kott Lumber Company	Ī
J1	NJH		2.	5   11.	875				4	4-0-0	14 Anderson Blvd	
Rim Bo	Descri		Widt	h   D-		Oto	Plies	_	D	1	Stouffville, Ontario	
				_	pth	Qty	Piles	+	Pcs	Length	Canada	
R1	Plus 1.	d Rimboard	1.12	5   11.	875				19	12	L4A 7X4	
	11.875	120 %									905-642-4400	
Blockin	g			•			,			•	Job Path	-
Label	Descri	ption	Widt	h De	pth	Qty	Plies		Pcs	Length	D:\Users\rochavillo\WORK FROM	
BLK1	NJH		2.	5 11.	875	LinF	t		Varies	25-0-0	HOME\GREEN YORK HOMES	
Hanger	-										\GRANELLI HOME CORP\MODELS	
-						E	Beam/Gird	er		ported ember	\CELESTIAL 2\CELESTIAL 2 ELEV. \FLOOR\5 BEDRM\CELESTIAL 2	1
Label	Pcs	Descriptio	n	Skew	Slo	ре	fasteners		fas	teners	(ELEV.1).isl	_
H1	3	Unknown									Second Floor Design Method LSD	
H3	1	Hanger HUCQ1.81	10									
	•	SDS	19-								Building Code NBCC 2010 / OBC 2012	
H4	36	LT251188				_	4 10dx1 1/	2			Floor	
H5	1	HGUS410				<del></del>	46 16d	10	16 16d		Loads	
H6	2	HUS1.81/1	U			_	30 10dx1 1		10 16d 2 10dx1 1/2		Live 40	
H7	7	LT351188	-+			_	4 10dx1 1/		2 10	ax1 1/2	Dead 15	
H8	1	LT351188			L						Deflection Joist	

Width Depth

1.75 11.875

11.875

1.75

Qty

Plies

2

## NOTES

Second Floor LVL/LSL (Flush)

F9

Label Description

Forex 2.0E-3000Fb LVL

2.0E-3000Fb LVL

- Framer to verify dimensions on the architectural drawings. . Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- 3. Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of
- rimboard/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.
- 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an addtional dead load

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

## 360 LL Span L/ 360 TL Span L/ LL Cant 2L/ 480 TL Cant 2L/ 360 Deflection Girder LL Span L/ 360 240 TL Span L/ LL Cant 2L/ 480 TL Cant 2L/ 360 Decking SPF Plywood Deck Thickness Fastener Nailed & Glued Vibration

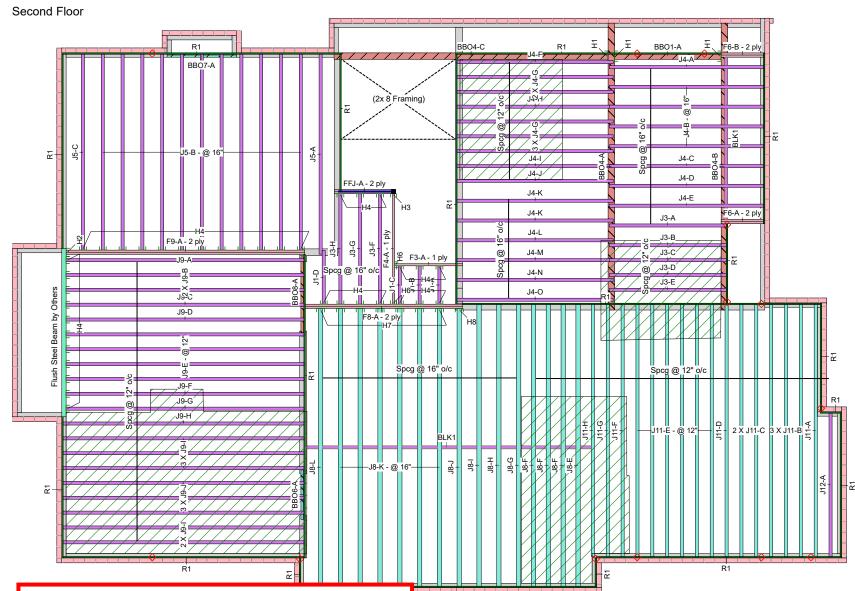
Ceilina:

Gypsum 1/2"





NE0618-036



# THIS CERTIFICATION IS TO CONFIRM THAT:

- 1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY SHOWN ON THIS LAYOUT.
- 2. THE FLOOR JOISTS COMPLY WITH THE NASCOR SPAN TABLE FOR THE LOADS AND SPACING SHOWN ON THIS LAYOUT.

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

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

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

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

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

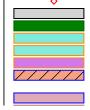


ARCHITECTURAL DRAWINGS:

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

# Legend

Model: Celestial 2



Wall Norbord Rimboard Plus 1.125 X 11.875 NJ60H 11.875

NJ60U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 9.5

Load from Above

(Dropped) Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

- Framer to verify dimensions on the architectural drawings.
- i. Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls.
- . Refer to Nascor specifier guide for installation works. 6. Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- 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.

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

## Second Floor LVL/LSL (Flush) Pcs Length Label Description Width Depth Qty Plies F9 1.75 11.875 2 2.0E-3000Fb LVL F8 11.875 12-0-0 Forex 1.75 2.0E-3000Fb LVL CELESTIAL 2 (ELEV.2) F4 Forex 1.75 11.875 8-0-0 Design Method 2.0E-3000Fb LVL LSD FFJ 1.75 11.875 2 6-0-0 Forex 2.0E-3000Fb LVL Description GRANELLI HOME CORP. F3 Forex 1.75 11.875 6-0-0 2.0E-3000Fb LVL BRAMPTON, ONT. F6 Forex 1.75 11.875 4-0-0 Created 2.0E-3000Fb LVL May 30, 2018 LVL/LSL (Dropped) Builder Label Description Width Depth Qty Plies Pcs Length GREEN YORK HOMES BBO8 Forex 1.75 9.5 2 6-0-0 2.0E-3000Fb LVL Sales Rep Joist (Flush) RM Pcs Length Label Description Width Depth Qty Plies Designer J11 NJ60H 2.5 11.875 16 18-0-0 RCO J8 NJ60U 3.5 11.875 15 20-0-0 Shipping J9 NJH 2.5 11.875 20 18-0-0 13 14-0-0 2.5 11.875 Project J5 NJH J4 NJH 2.5 11.875 23 12-0-0 Builder's Project J12 NJH 2.5 11.875 1 10-0-0 **Kott Lumber Company** J3 NJH 2.5 11.875 8 8-0-0 14 Anderson Blvd 2.5 11.875 4 4-0-0 J1 NJH Stouffville, Ontario Rim Board Canada Label Description Width Depth Qty Plies Pcs Length I 4A 7X4 Norbord Rimboard 1.125 11.875 19 Plus 1.125 X 905-642-4400 11.875 Job Path Blocking D:\LIsers\rochavillo\WORK FROM Width Depth Qty Plies Pcs Length Label Description HOME\GREEN YORK HOMES BLK1 NJH 2.5 11.875 LinFt Varies 25-0-0 \GRANELLI HOME CORP\MODELS \CFLESTIAL 2\CFLESTIAL 2 FLEV 2 Hanger \FLOOR\CELESTIAL 2 (ELEV.2).isl Beam/Girder Supported Second Floor Design Method Building Code NBCC 2010 / OBC Floor

						Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H1	3	Unknown Hanger				
H2	1	HGUS410			46 16d	16 16d
H3	1	HUCQ1.81/9- SDS				
H4	36	LT251188			4 10dx1 1/2	2 10dx1 1/2
H6	2	HUS1.81/10			30 10dx1 1/2	10 16d
H7	7	LT351188			4 10dx1 1/2	2 10dx1 1/2
H8	1	I T351188				

- . Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- 4. Install single-ply flush window header along inside face of rimboard/rimjoist.
- . 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.

Hatch area represents ceramic tiled floor with an addtional dead load

The framing shown on this layout may deviate from the architectural

LSD

2012

15

360

360

480

360

360

240

480

360

SPF Plywood

Nailed & Glued

Gypsum 1/2"

Loads I ive Dead

**Deflection Joist** 

LL Span L/

TL Span L/ LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

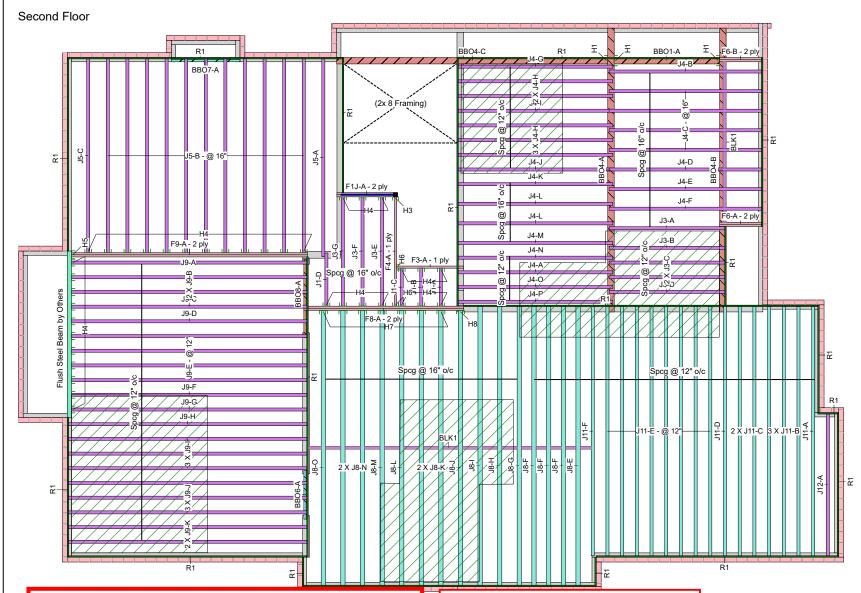
Vibration

Ceiling:

Deck

Deflection Girder

NE0618-036



THIS CERTIFICATION IS TO CONFIRM THAT:

- 1. THE LOADS USED IN THE CALCULATION OF THE ATTACHED APPROVED COMPONENTS CONFORM TO THE FLOOR ASSEMBLY **SHOWN ON THIS LAYOUT.**
- 2. THE FLOOR JOISTS COMPLY WITH THE NASCOR SPAN TABLE FOR THE LOADS AND SPACING SHOWN ON THIS LAYOUT.

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

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

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

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

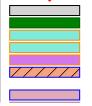
PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.



ARCHITECTURAL DRAWINGS:

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

## Legend



Load from Above Wall

Norbord Rimboard Plus 1.125 X 11.875 NJ60H 11.875 NJ60U 11.875 NJH 11.875

Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped) Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 1. OBC 2012 O.Reg 332/12 as amended 2. Nascor CCMC - 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-O86-09
- 5. CCMC -12787-R APA PR-L310(C)

Second													
LVL/LS			Wid	th.	Da	nth		)+v	Dlie	_	Doo	Longth	N
Label F9	Descri Forex	ption	1.		De <sub>l</sub>	_		Qty 1	Plie 2	S	Pcs 2	Length 18-0-0	
гэ	1	000Fb LVL	1	/5	11.0	5/5		1			2	10-0-0	
F8	Forex		1.	75	11.8	375		1	2		2	12-0-0	Layo
	2.0E-30	000Fb LVL											CEL
F4	Forex		1.7	75	11.8	375					1	8-0-0	Desig
F1J	-	000Fb LVL	4 .	7.5	44.0	75		1			2	0.00	LSD
FIJ	Forex	000Fb LVL	1.1	/5	11.8	3/5		1	2		2	6-0-0	Desc
F3	Forex	3001 5 2 7 2	1.	75	11.8	375					1	6-0-0	GRA
	2.0E-30	000Fb LVL									-		BRA
F6	Forex		1.1	75	11.8	375		2	2		4	4-0-0	Crea
	1	000Fb LVL											May
LVL/LS					_				·		_	l	Build
	Descri	ption	Wid	_	De		(	Qty	Plie	s	Pcs	Length	GRE
BBO8	Forex	000Fb LVL	1.7	/5		9.5		1	2		2	6-0-0	Sales
l Joist (		3001 5 2 7 2											RM
	Descri	ntion	Wid	th	De	oth	(	Qty	Plie	s	Pcs	Length	
J11	NJ60H	p		.5	11.8	_		^-,		_	16	18-0-0	Desi
J8	NJ60U			.5	11.8	_					15	20-0-0	RCC
J9	NJH		2	.5	11.8	375					20	18-0-0	Ship
J5	NJH		2	.5	11.8	375					13	14-0-0	Proje
J4	NJH		2	.5	11.8	375					24	12-0-0	Build
J12	NJH			.5	11.8	_					1	10-0-0	Kot
J3	NJH			.5	11.8	_					8	8-0-0	14 A
J1	NJH		2	.5	11.8	375					4	4-0-0	Stou
Rim Bo			10C 1		_				Di:				Cana
Label R1	Descri		Wid		De	_		Qty	Plie	s	Pcs	Length	L4A
RΊ	Plus 1.	d Rimboard	1.12	25	11.8	3/5					19	12	905-
	11.875	120 /											
Blockin	g												Job F
Label	Descri	ption	Wid	th	De	pth	(	Qty	Plie	s	Pcs	Length	D:\U HON
BLK1	NJH		2	.5	11.8	375	L	inFt			Varies	25-0-0	\GR/
Hanger	-												\CEL
								Bea	am/Gir	der		ported	\FLC (ELE
												ember	
Label	Pcs	Descriptio	n	SI	kew	Slo	ре	fa	stene	rs	fas	teners	Seco
H1	3	Unknown											Desig
H3	1	Hanger HUCQ1.81	/Q_										Buildi
113	,	SDS	· -										Floo
H4	36	LT251188						4 1	10dx1 <sup>-</sup>	1/2	2 10	dx1 1/2	Loads
H5	1	HGUS410							46 16d		16	6 16d	Live
H6	2	HUS1.81/1	0					30	10dx1	1/2	10	) 16d	Dead
H7	7 LT351188							4 1	10dx1 ′	1/2	2 10	dx1 1/2	Defle

# NOTES:

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

1 LT351188

- . Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls . Install single-ply flush window header along inside face of rimboard/rimjoist.
- 5. Refer to Nascor specifier guide for installation works.
- . Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- Load transfer blocks to be installed under all point loads
- 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

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

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

# LESTIAL 2 (ELEV.2) 5 BEDROOM ign Method cription ANELLI HOME CORP. AMPTON, ONT. ated y 30, 2018 REEN YORK HOMES es Rep igner ping ect der's Project ott Lumber Company Anderson Blvd uffville, Ontario nada 4 7X4 -642-4400 Path Users\rochavillo\WORK FROM ME\GREEN YORK HOMES RANELLI HOME CORP\MODELS ELESTIAL 2\CELESTIAL 2 ELEV.2 OOR\5 BEDRM\CELESTIAL 2 EV.2).isl ond Floor ign Method ding Code NBCC 2010 / OBC

2012 15

LSD

360

360

480

360

360

240

480

360

SPF Plywood

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/

Decking Deck Thickness

Fastener Nailed & Glued Vibration

Gypsum 1/2" Ceilina:

**EWP Studio** Simpson Strong-Tie® Component Solutions™ NE0618-036 PAGE 31 OF 40

Brg

2

Bearing Length

1-SPF 4.000"

2 - SPF 4.000"

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

Project: Address:

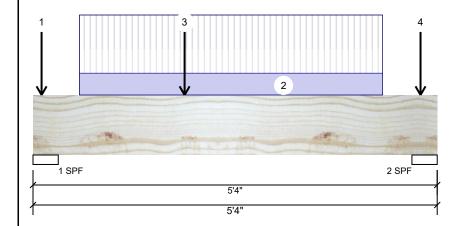
5/31/2018 Designer: RCO

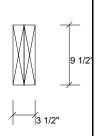
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL BBO8-A

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





Wind

O

Total Ld. Case

4597 L

3164 L

0

Λ

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

## Member Information

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

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

Dead

921

635

Cap. React D/L lb

Live

2297

1581

Вє	arings and Fac	tored Reactions		
	1001	000	· ·	Ü

1151 / 3446

793 / 2371

# **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6873 ft-lb	2'	22724 ft-lb	0.302 (30%)	1.25D+1.5L	L
Unbraced	6873 ft-lb	2'	22724 ft-lb	0.302 (30%)	1.25D+1.5L	L
Shear	4042 lb	1' 3/4"	9277 lb	0.436 (44%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/4096)	2'3 5/8"	0.160 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.035 (L/1640)	2'3 5/8"	0.160 (L/360)	0.220 (22%)	L	L
TL Defl inch	0.049 (L/1171)	2'3 5/8"	0.240 (L/240)	0.200 (20%)	D+L	L

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

37%

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-1-6		Тор	50 lb	133 lb	0 lb	0 lb	J9
2	Part. Uniform	0-7-6 to 4-7-6		Тор	120 PLF	320 PLF	0 PLF	0 PLF	
3	Point	2-0-0		Тор	947 lb	2363 lb	0 lb	0 lb	F8
4	Point	5-1-6		Тор	38 lb	102 lb	0 lb	0 lb	J9
	Self Weight				8 PLF				

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

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318





NE0618-036 PAGE 32 OF 40



# **EWP Studio**

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

Project: Address:

5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## Forex 2.0E-3000Fb LVL F19-A

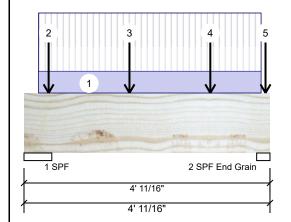
1.750" X 11.875"

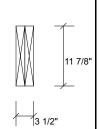
2-Ply - PASSED Level: Second Floor

Brg

1

2





Wind

O

0

0

0

Member I	nformation
----------	------------

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

ation: Floor (Residential) n Method:

NBCC 2010 / OBC 2012

Sharing: No

Not Checked Not Checked ion:

15 PSF Dead:

# **Bearings and Factored Reactions**

Live

685

834

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Dead

277

352

Bearing Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 5.500"	12%	346 / 1027	1373	L	1.25D+1.5L
2 - SPF 2.632" End Grain	25%	440 / 1250	1690	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1236 ft-lb	2' 3/16"	34261 ft-lb	0.036 (4%)	1.25D+1.5L	L
Unbraced	1236 ft-lb	2' 3/16"	34261 ft-lb	0.036 (4%)	1.25D+1.5L	L
Shear	815 lb	2'10 15/16"	11596 lb	0.070 (7%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/33942)	2'1 1/8"	0.117 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.003 (L/13508)	2'1 1/8"	0.117 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.004 (L/9663)	2'1 1/8"	0.175 (L/240)	0.020 (2%)	D+L	L

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

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

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



## Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Part. Uniform	0-2-14 to 3-10-15		Тор	101 PLF	270 PLF	0 PLF	0 PLF		
2	Point	0-4-14		Near Face	3 lb	8 lb	0 lb	0 lb	J3	
3	Point	1-8-14		Near Face	74 lb	198 lb	0 lb	0 lb	J3	
4	Point	3-0-14		Near Face	63 lb	167 lb	0 lb	0 lb	J3	
5	Point	3-11-13		Near Face	79 lb	154 lb	0 lb	0 lb	F4	
	Self Weight				10 PLF					

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

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

## Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318







PAGE 33 OF 40 NE0618-036



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

Project: Address:

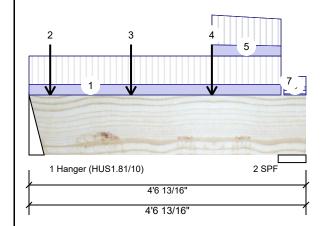
5/31/2018 Designer: RCO

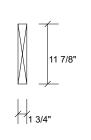
CELESTIAL 2 (ELEV.1) Job Name:

Project #

## 1.750" X 11.875" - PASSED F<sub>3</sub>-A Forex 2.0E-3000Fb LVL

Level: Second Floor





Wind

Ld. Comb.

1 250+1 51

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							
- ·	45 005							

Unfactored	Reactions	UNPATTERNED	b lb (Uplift)
Brg	Live	Dead	Snow

1	237	99	0	0
2	248	104	0	0

Total Ld. Case

470 I

## **Bearings and Factored Reactions** Dead: 15 PSF Bearing Length Cap. React D/L lb 3 000" 120/ 124 / 255

	-	3.000	12/0	124 / 333	413 L	1.20D 1 1.0L
_	Hanger					
	2 - SPF	5.500"	8%	131 / 372	503 L	1.25D+1.5L

Case Actual Comb. Analysis Location Allowed Capacity 2'2 1/4" 17130 ft-lb Moment 450 ft-lb 0.026 (3%) 1.25D+1.5L L Unbraced 450 ft-lb 2'2 1/4" 11283 ft-lb 0.040 (4%) 1.25D+1.5L L 342 lb 1'2 1/8" 5798 lb 0.059 (6%) 1.25D+1.5L L Shear Perm Defl in. 0.001 2'2 3/8" 0.133 (L/360) 0.010 (1%) D Uniform (L/44700) 0.003 2'2 3/8" 0.133 (L/360) 0.020 (2%) L LL Defl inch L (L/18662) TL Defl inch 0.004 2'2 3/8" 0.199 (L/240) 0.020 (2%) D+L L (L/13166)

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

READ ALL NOTES ON THIS PAGE AND ON

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

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



## **Design Notes**

Analysis Results

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

4 Dolloin braced	at bearings.								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-1-14	(Span)2-9-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-4-3		Near Face	17 lb	45 lb	0 lb	0 lb	J1
3	Point	1-8-3		Near Face	26 lb	69 lb	0 lb	0 lb	J1
4	Point	3-0-3		Near Face	24 lb	64 lb	0 lb	0 lb	J1
5	Tie-In	3-0-3 to 4-1-14	(Span)2-11-6 to 2-7-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	4-2-7 to 4-6-13	(Span)0-3-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318





NE0618-036 PAGE 34 OF 40

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

Project:

Date: 5/31/2018 Designer: RCO

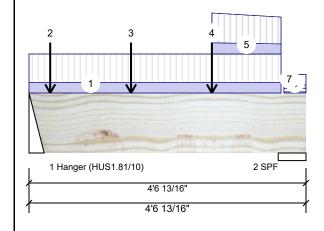
Job Name: CELESTIAL 2 (ELEV.1)

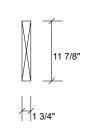
Project #:

1.750" X 11.875" - PASSED F3-A Forex 2.0E-3000Fb LVL

Address:

Level: Second Floor





Page 2 of 2

.Continued from page 1

ID Location Trib Width Side Live Wind Comments Load Type Dead Snow 7 4-2-7 to 4-6-13 (Span)1-0-5 Тор 15 PSF 40 PSF 0 PSF 0 PSF Tie-In

> Self Weight 5 PLF

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

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

Notes

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

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

# Handling & Installation

- IARIGUING & INSTALLATION

  LVL beams must not be cut or drilled

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

  Damaged Beams must not be used

  Design assumes top edge is laterally restrained.

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







NE0618-036 PAGE 35 OF 40



Client: **GREEN YORK HOMES** 

Project: Address:

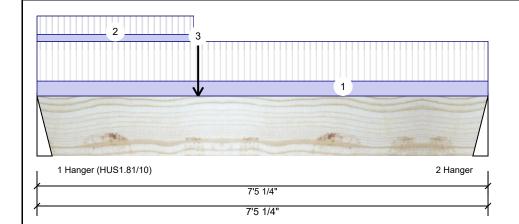
5/31/2018 Designer: RCO

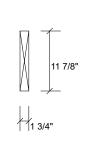
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

## 1.750" X 11.875" - PASSED Forex 2.0E-3000Fb LVL F4-A

Level: Second Floor





## 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)**

Brg	Live	Dead	Snow	Wind
1	240	114	0	0
2	154	79	0	0

# **Bearings and Factored Reactions**

Bearing	Length	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	13%	143 / 360	503	L	1.25D+1.5L
2 - Hanger	3.000"	8%	99 / 231	330	L	1.25D+1.5L

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1038 ft-lb	2'7 7/8"	17130 ft-lb	0.061 (6%)	1.25D+1.5L	L
Unbraced	1038 ft-lb	2'7 7/8"	6365 ft-lb	0.163 (16%)	1.25D+1.5L	L
Shear	435 lb	1'2 1/8"	5798 lb	0.075 (7%)	1.25D+1.5L	L
Perm Defl in.	0.005 (L/17453)	3'3 9/16"	0.235 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.010 (L/8259)	3'2 3/4"	0.235 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.015 (L/5606)	3'3 1/16"	0.353 (L/240)	0.040 (4%)	D+L	L

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

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 7-5-4	(Span) 0-10-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 2-7-0	(Span)0-5-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	2-7-14		Near Face	99 lb	237 lb	0 lb	0 lb	F3
	Self Weight				5 PLF				

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

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

## Handling & Installation

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

approvals

Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

## Manufacturer Info

APA: PR-L318





PAGE 36 OF 40 NE0618-036

Component Solutions™

# **EWP Studio** Simpson Strong-Tie®

Client: **GREEN YORK HOMES** Project:

Address:

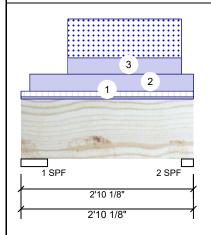
Designer: RCO Job Name: CELESTIAL 2 (ELEV.1)

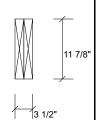
Project #:

Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED F6-A

Level: Second Floor

5/31/2018





Member Infor	mation				Unfactored Reactions UNPATTERNED lb (Uplift)						
Type:	Girder		Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind		
Plies:	2		Design Method:	LSD	1	33	165	117	0		
Moisture Conditio	n: Dry		Building Code:	NBCC 2010 / OBC 2012	2	28	172	156	0		
Deflection LL:	360		Load Sharing:	No							
Deflection TL:	240		Deck:	Not Checked							
Importance:	Normal		Vibration:	Not Checked							
General Load											
Floor Live:	40 PSF				<b>Bearings</b>	and Fact	ored Reactions				
Dead:	15 PSF				Bearing L	_ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.		
					1-SPF 5	5.250"	4% 207 / 192	399 L	1.25D+1.5S +0.5L		
Analysis Resul	ts				2 - SPF 2	2.375"	9% 214 / 235	449 L	1.25D+1.5S		
Analysis A	ctual	Location Al	lowed Capaci	ty Comb. Case							

Moment 259 ft-lb 1'6 13/16" 32548 ft-lb 0.008 (1%) 1.25D+1.5S L Unbraced 259 ft-lb 1'6 13/16" 32548 ft-lb 0.008 (1%) 1.25D+1.5S L 80 lb 1'4 3/8" 11016 lb 0.007 (1%) 1.25D+1.5S L Shear Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) 0 999.000 (L/0) 0.000 (0%) LL Defl inch 0.000 (L/999) TL Defl inch 0.001 1'6 3/4" 0.117 (L/240) 0.010 (1%) D+S+0.5L L (L/38042)

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

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

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



# **Design Notes**

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

6 Lateral sienderness ratio based on full section width.									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 2-10-2	(Span)1-0-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-1-12 to 2-10-2		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	0-9-4 to 2-7-12		Тор	61 PLF	0 PLF	146 PLF	0 PLF	
	Self Weight				10 PLF				

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

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

# Handling & Installation

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318







NE0618-036 PAGE 37 OF 40



# **EWP Studio**

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

Project: Address:

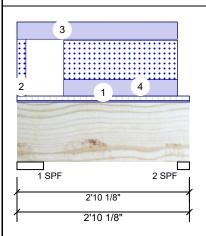
5/31/2018 Designer: RCO

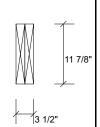
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

F6-B Forex 2.0E-3000Fb LVL 1.750" X 11.875"

Level: Second Floor 2-Ply - PASSED





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

General Load 40 PSF Floor Live: Dead:

Member Information

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Brg	Live	Dead	Snow	Wind
1	25	181	139	0
2	21	156	156	0

# 15 PSF

# **Bearings and Factored Reactions**

Bearing Length	Cap. Re	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 5.250"	4%	226 / 221	447	L	1.25D+1.5S +0.5L
2 - SPF 2.375"	9%	195 / 245	441	L	1.25D+1.5S +0.5I

**Analysis Results** 

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	262 ft-lb	1'6 13/16"	33918 ft-lb	0.008 (1%)	1.25D+1.5S +0.5L	L
Unbraced	262 ft-lb	1'6 13/16"	33918 ft-lb	0.008 (1%)	1.25D+1.5S +0.5L	L
Shear	79 lb	1'4 3/8"	11248 lb	0.007 (1%)	1.25D+1.5S	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.001 (L/38670)	1'6 3/4"	0.117 (L/240)	0.010 (1%)	D+S+0.5L	L

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

READ ALL NOTES ON THIS PAGE AND ON

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

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



## **Design Notes**

- 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.

0 2410141 0101140	111000 14110 B4004 011 10	an occurring matrix							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 2-10-2	(Span)0-9-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-1-12		Тор	62 PLF	0 PLF	149 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 2-7-12		Тор	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-9-4 to 2-7-12		Тор	61 PLF	0 PLF	146 PLF	0 PLF	
	Self Weight				10 PLF				

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

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318







NE0618-036 PAGE 38 OF 40

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

Project: Address:

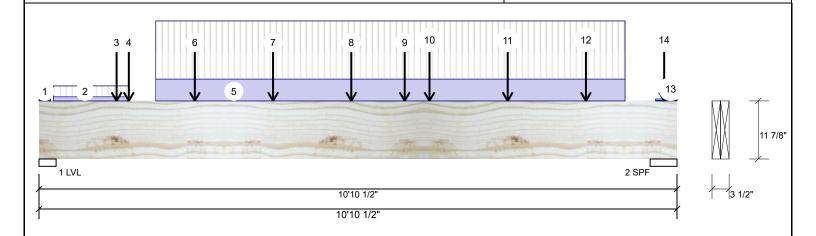
Date: 5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

1.750" X 11.875" Forex 2.0E-3000Fb LVL 2-Ply - PASSED F8-A

Level: Second Floor



## Member Information **Unfactored Reactions UNPATTERNED Ib (Uplift)** Wind Type: Application: Floor (Residential) Brg Live Dead Plies: 2 Design Method: 2363 947 0 0 1 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 2 2534 1018 0 0 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Not Checked Deck: Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** 40 PSF Floor Live: 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - LVL 3.500" 1184 / 3544 4728 I 1.25D+1.5L 2 - SPF 5.500" 43% 1272 / 3802 5074 I 1.25D+1.5L

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13339 ft-lb	5'3 7/8"	34261 ft-lb	0.389 (39%)	1.25D+1.5L	L
Unbraced	13339 ft-lb	5'3 7/8"	29373 ft-lb	0.454 (45%)	1.25D+1.5L	L
Shear	4939 lb	1'2 5/8"	11596 lb	0.426 (43%)	1.25D+1.5L	L
Perm Defl in.	0.059 (L/2101)	5'4 1/16"	0.342 (L/360)	0.170 (17%)	D	Uniform
LL Defl inch	0.146 (L/844)	5'3 7/8"	0.342 (L/360)	0.430 (43%)	L	L
TL Defl inch	0.204 (L/602)	5'3 15/16"	0.512 (L/240)	0.400 (40%)	D+L	L

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

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

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



# **Design Notes**

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-6	(Span) 0-10-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-2-15 to 1-6-6	(Span)3-5-15 to 3-6-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-3-14		Near Face	169 lb	451 lb	0 lb	0 lb	J8
4	Point	1-6-6		Far Face	31 lb	83 lb	0 lb	0 lb	J1
5	Part. Uniform	1-11-14 to 9-11-14		Near Face	140 PLF	373 PLF	0 PLF	0 PLF	

Continued on page 2...

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318







NE0618-036 PAGE 39 OF 40

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

Project: Address:

5/31/2018 Designer: RCO

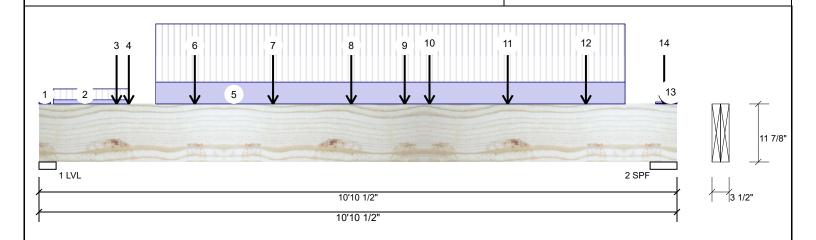
Job Name: CELESTIAL 2 (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL F8-A

1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Continued from page 1										
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
6	Point	2-7-14		Far Face	70 lb	187 lb	0 lb	0 lb	J3	
7	Point	3-11-14		Far Face	74 lb	198 lb	0 lb	0 lb	J3	
8	Point	5-3-14		Far Face	63 lb	167 lb	0 lb	0 lb	J3	
9	Point	6-2-13		Far Face	114 lb	240 lb	0 lb	0 lb	F4	
10	Point	6-7-14		Far Face	17 lb	45 lb	0 lb	0 lb	J1	
11	Point	7-11-14		Far Face	26 lb	69 lb	0 lb	0 lb	J1	
12	Point	9-3-14		Far Face	24 lb	64 lb	0 lb	0 lb	J1	
13	Tie-In	10-6-2 to 10-10-8	(Span)0-5-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
14	Point	10-7-14		Near Face	117 lb	312 lb	0 lb	0 lb	J8	
	Self Weight				10 PLF					

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

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

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

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

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318







PAGE 40 OF 40 NE0618-036

**EWP Studio** 

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

Project:

Address:

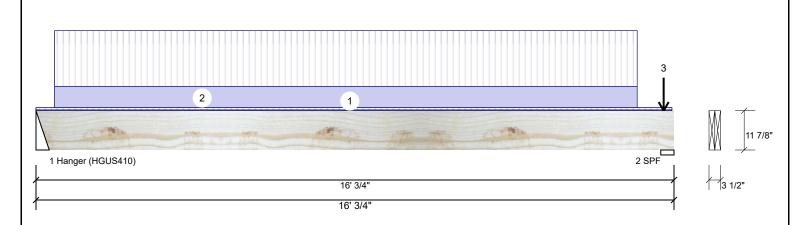
5/31/2018 Designer: RCO

Job Name: CELESTIAL 2 (ELEV.1)

Project #:

1.750" X 11.875" Forex 2.0E-3000Fb LVL 2-Ply - PASSED F9-A

Level: Second Floor



Member Infor	mation			Unfactor	red React	ions UNPATTERNI	D lb (Uplift)				
Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind			
Plies:	2	Design Method:	LSD	1	2070	856	0	0			
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	2190	901	0	0			
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF		Bearings and Factored Reactions								
Dead:	15 PSF			Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.			
				1	4.000"	40% 1070 / 3106	4175 L	1.25D+1.5L			
Analysis Resu	lts	I		Hanger 2 - SPF	4.000"	51% 1126 / 3285	4411 L	1.25D+1.5L			

Analysis Actual Location Allowed Capacity Comb. Case 8' 1/4" 34261 ft-lb 0.482 (48%) 1.25D+1.5L L Moment 16529 ft-lb Unbraced 16529 ft-lb 8' 1/4" 23053 ft-lb 0.717 (72%) 1.25D+1.5L L 4147 lb 14'9 5/8" 11596 lb 0.358 (36%) 1.25D+1.5L L Shear Perm Defl in. 0.159 (L/1171) 8' 5/16" 0.517 (L/360) 0.310 (31%) D Uniform LL Defl inch 0.387 (L/482) 8' 5/16" 0.517 (L/360) 0.750 (75%) L L TL Defl inch 0.546 (L/341) 8' 5/16" 0.776 (L/240) 0.700 (70%) D+L L

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

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

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



# **Design Notes**

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

. Lateral cicinatinos ratio bassa sir ian escalori matri											
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
	1	Tie-In	0-0-0 to 16-0-2	(Span)0-6-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
	2	Part. Uniform	0-5-10 to 15-1-10		Far Face	99 PLF	263 PLF	0 PLF	0 PLF		
	3	Point	15-9-10		Far Face	88 lb	234 lb	0 lb	0 lb	J5	
		Self Weight				10 PLF					

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

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

## Handling & Installation

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

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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info** 

APA: PR-L318





