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 only limited to the calculation of this building component for the loads and conditions shown on this drawing.

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

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

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

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

CODE

This building component is designed in accordance with the National Building Code of Canada, the Ontario Building Code, CCMC and Canadian Standards Association guidelines.

COMPONENT

1. The building component used in construction must be the same as indicated on the drawings.
2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer’s assembly and installation.
3. Members consisting of multiple plies must be connected as per the document “Multi-ply Connection Details”.
4. Pass-thru squash block framing is required at all point loads over bearings.

HANDLING AND INSTALLATION

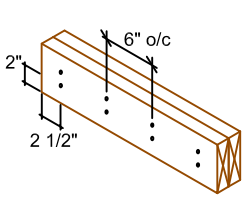
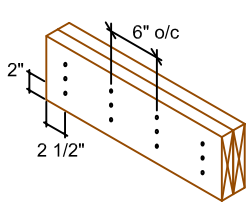
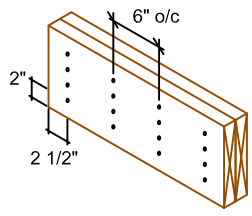
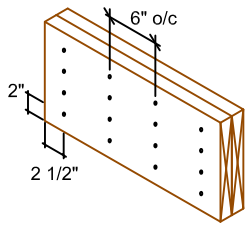
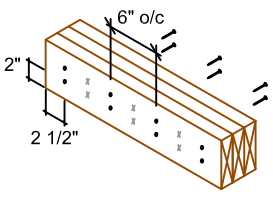
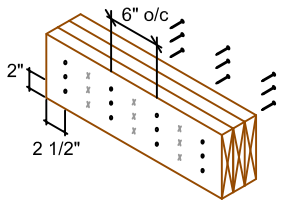
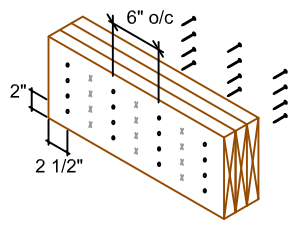
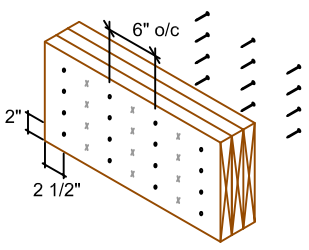
Do not drill any hole, cut or notch a certified building component without a written pre-authorization.

KOTT

MULTIPLE MEMBER CONNECTIONS

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

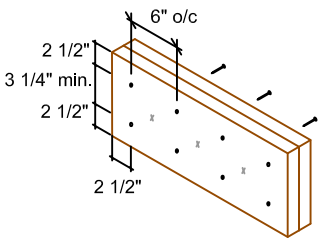
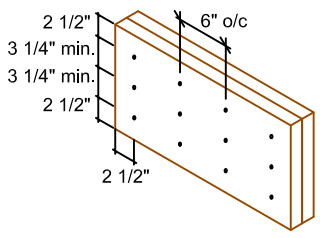
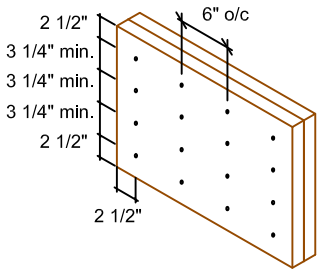
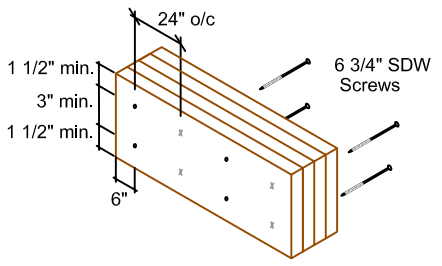
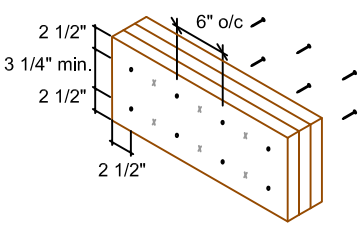
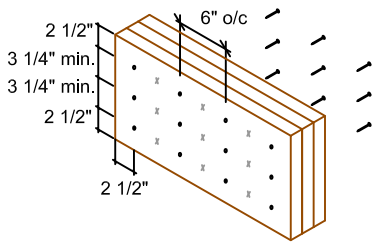
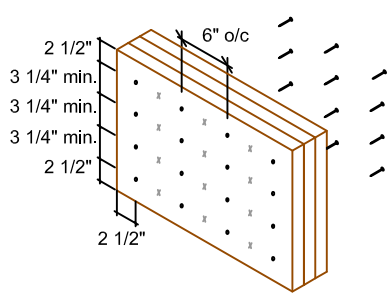
Conventional Connections (for uniform distributed loads)

	2x6	2x8	2x10	2x12
2-ply				
3-ply				

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)

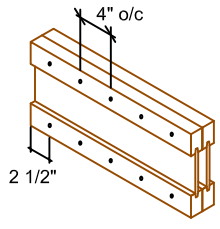
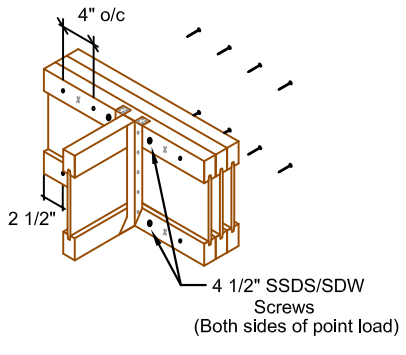
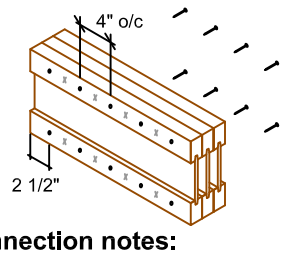
	9 1/2" LVL	11 7/8" - 14" LVL	16"-18" LVL	4-ply (Top load only)
				
				

For side-loaded 4-ply LVL Connections, please consult the engineering calculation page for the component and the Nascor layout

LVL connection notes:

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

Vertical I-Joist Connections (for uniform distributed loads)

	9 1/2" - 11 7/8" I-Joist	3-ply I-Joist w/ point load (Joist Hanger)
2-ply		
3-ply		

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.

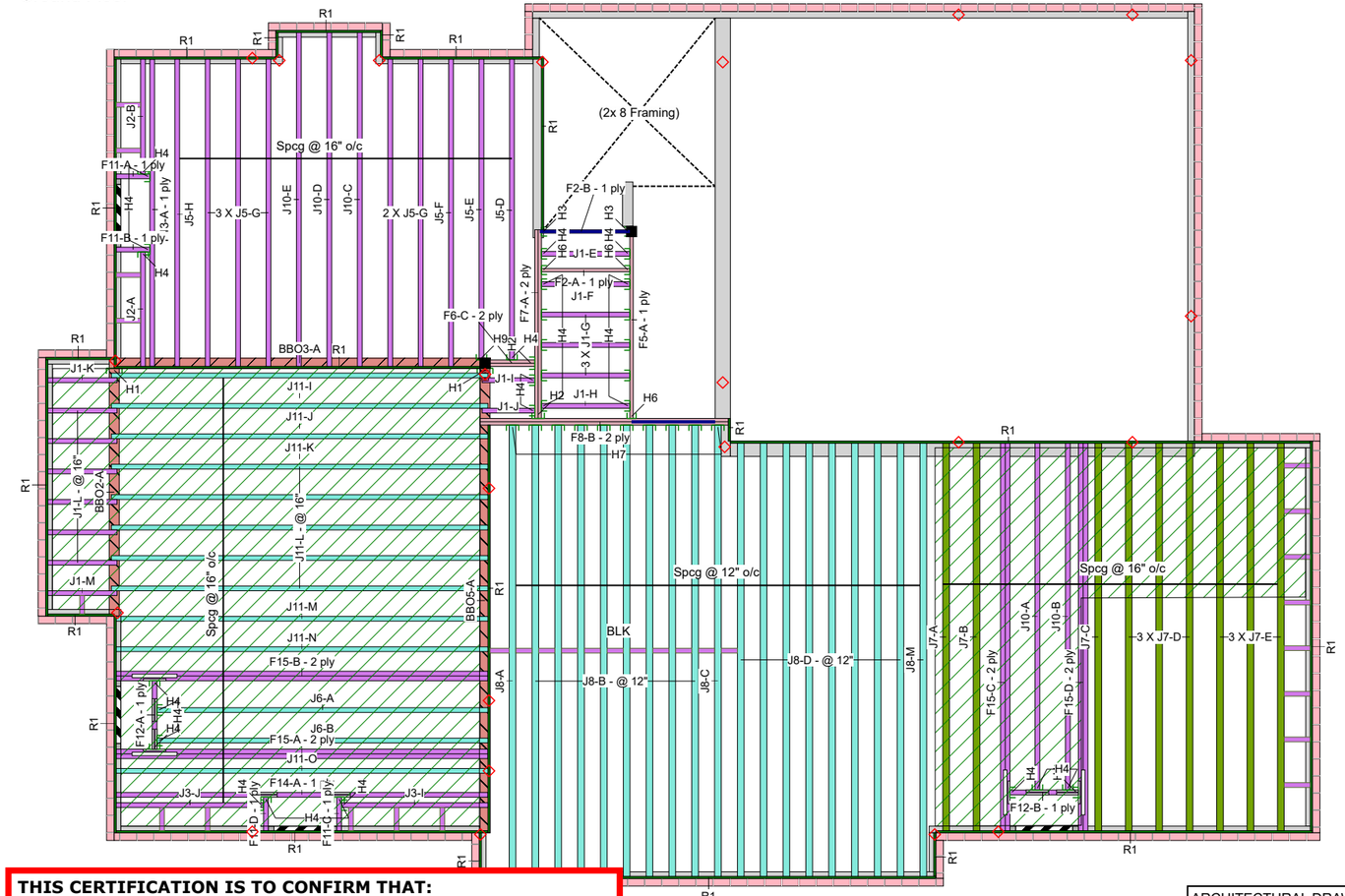
MULTI -PLY CONNECTION DETAILS

Date: November 30, 2016

Scale: NTS

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

Ground Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

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

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

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

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

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
	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)

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05 2018
NE0618-036

Ground Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
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
F5	Forex 2.0E-3000Fb LVL	1.75	11.875			1	10-0-0
F2	Forex 2.0E-3000Fb LVL	1.75	11.875			2	4-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	4-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J7	NJ40U	3.5	11.875			9	18-0-0
J11	NJ60H	2.5	11.875			11	18-0-0
J6	NJ60H	2.5	11.875			2	16-0-0
J8	NJ60U	3.5	11.875			19	20-0-0
F15	NJH	2.5	11.875	4	2	8	18-0-0
F14	NJH	2.5	11.875			1	18-0-0
F13	NJH	2.5	11.875			1	14-0-0
F12	NJH	2.5	11.875			2	4-0-0
F11	NJH	2.5	11.875			4	2-0-0
J10	NJH	2.5	11.875			5	16-0-0
J5	NJH	2.5	11.875			9	14-0-0
J3	NJH	2.5	11.875			2	8-0-0
J2	NJH	2.5	11.875			2	6-0-0
J1	NJH	2.5	11.875			16	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			17	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	29-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H1	2	Unknown Hanger				
H2	2	HGUS410			46 16d	16 16d
H3	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:

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

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

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

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

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

NASCOR

Layout Name
CELESTIAL 2 (ELEV.1)

Design Method
LSD

Description
GRANELLI HOME CORP.
BRAMPTON, ONT.

Created
May 30, 2018

Builder
GREEN YORK HOMES

Sales Rep
RM

Designer
RCO

Shipping

Project

Builder's Project

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

Job Path
D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.1 \FLOOR\CELESTIAL 2 (ELEV.1).isl

Ground Floor

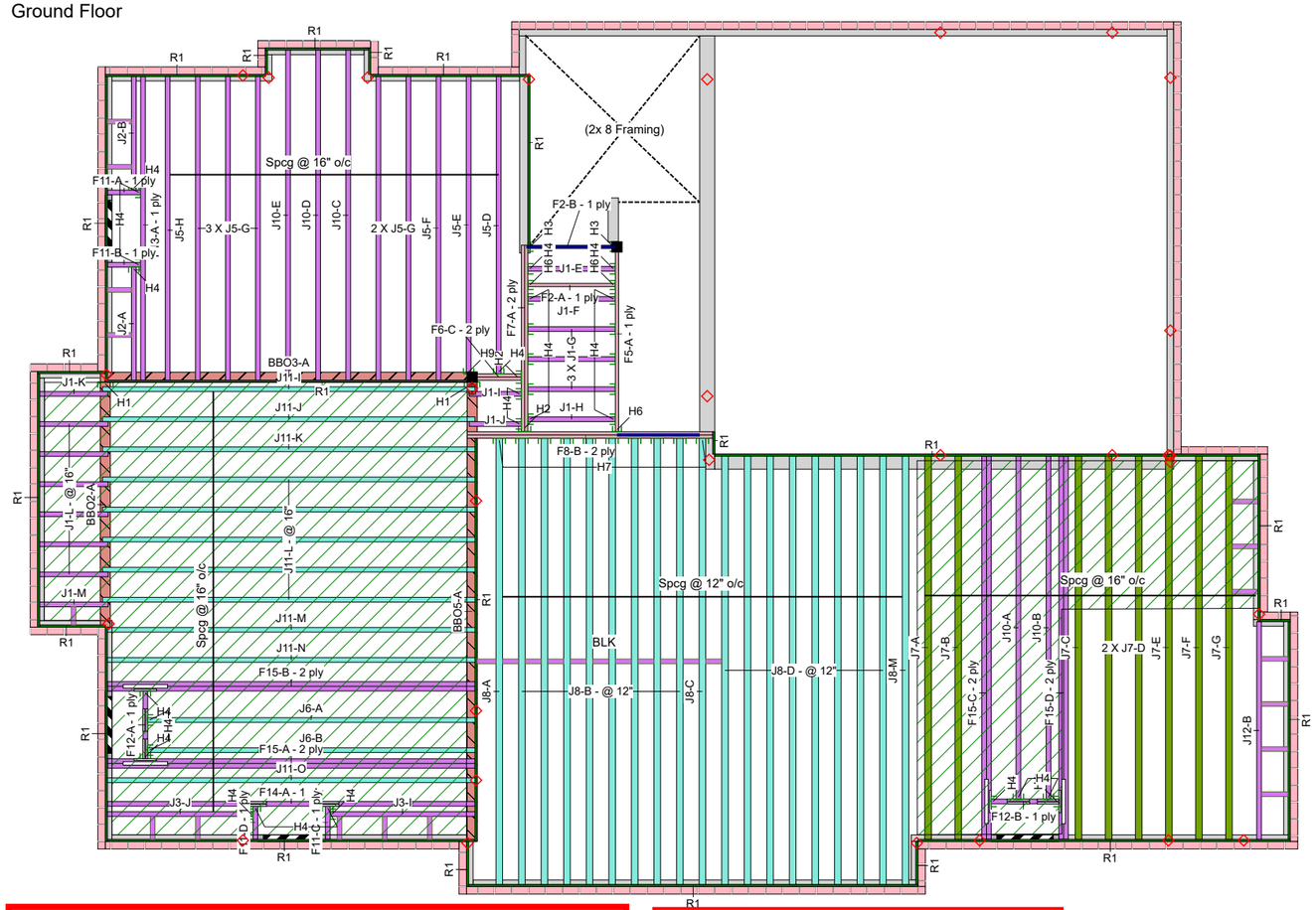
Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

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

KOTT

Ground Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018
NE0618-036

EWP Studio
Simpson Strong-Tie®
Component Solutions™

EWP Studio Version 18.32.085 Powered by iStruct™

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

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
	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)

Ground Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
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
F5	Forex 2.0E-3000Fb LVL	1.75	11.875			1	10-0-0
F2	Forex 2.0E-3000Fb LVL	1.75	11.875			2	4-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	4-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J7	NJ40U	3.5	11.875			8	18-0-0
J11	NJ60H	2.5	11.875			11	18-0-0
J6	NJ60H	2.5	11.875			2	16-0-0
J8	NJ60U	3.5	11.875			19	20-0-0
F15	NJH	2.5	11.875	4	2	8	18-0-0
F14	NJH	2.5	11.875			1	18-0-0
F13	NJH	2.5	11.875			1	14-0-0
F12	NJH	2.5	11.875			2	4-0-0
F11	NJH	2.5	11.875			4	2-0-0
J10	NJH	2.5	11.875			5	16-0-0
J5	NJH	2.5	11.875			9	14-0-0
J12	NJH	2.5	11.875			1	10-0-0
J3	NJH	2.5	11.875			2	8-0-0
J2	NJH	2.5	11.875			2	6-0-0
J1	NJH	2.5	11.875			16	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			17	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	28-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H1	2	Unknown Hanger				
H2	2	HGUS410			46 16d	16 16d
H3	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:

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

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

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

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

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

KOTT

NASCOR

Layout Name
CELESTIAL 2 (ELEV.2)

Design Method
LSD

Description
GRANELLI HOME CORP.
BRAMPTON, ONT.

Created
May 30, 2018

Builder
GREEN YORK HOMES

Sales Rep
RM

Designer
RCO

Shipping

Project

Builder's Project

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

Job Path
D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.2 \FLOOR\CELESTIAL 2 (ELEV.2).isl

Ground Floor

Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

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

SIMPSON Strong-Tie

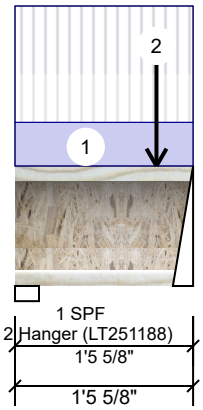
EWP Studio
Simpson Strong-Tie®
Component Solutions™

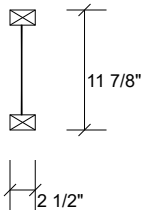
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F11-A NJH 11.875" - PASSED

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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	61	23	0	0
2	114	42	0	0

Bearings and Factored Reactions

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

Analysis Results

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.

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	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

Notes

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

Lumber

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

Handling & Installation

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

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

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Client: GREEN YORK HOMES
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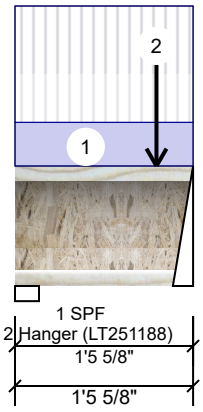
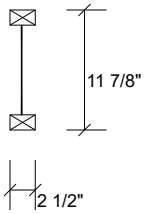
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F11-B NJH 11.875" - PASSED

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 lb (Uplift)

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

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	7%	28 / 91	119	L	1.25D+1.5L
2 - Hanger	2.000"	14%	52 / 167	219	L	1.25D+1.5L

Analysis Results

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

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

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

Design Notes

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

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

Notes

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Lumber

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

Handling & Installation

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

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L4A 7X4
905-642-4400

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Address:

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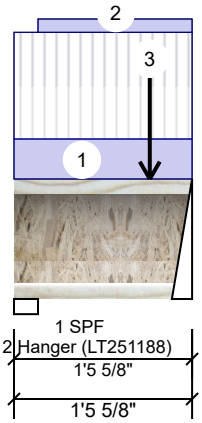
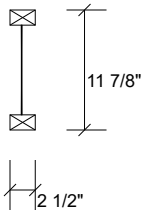
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F11-C NJH 11.875" - PASSED

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 lb (Uplift)

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

Bearings and Factored Reactions

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

Analysis Results

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

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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-10	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-6 to 1-5-10		Top	8 PLF	0 PLF	0 PLF	0 PLF	
3	Point	1-1-7		Near Face	50 lb	101 lb	0 lb	0 lb	J3

Notes

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Lumber

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

Handling & Installation

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

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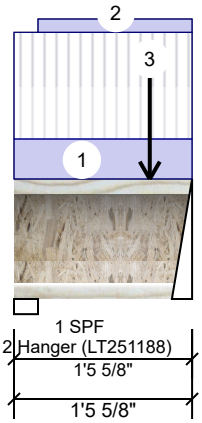
Component Solutions™

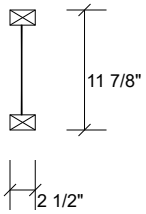
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F11-D NJH 11.875" - PASSED

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 lb (Uplift)

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

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	9%	41 / 103	144	L	1.25D+1.5L
2 - Hanger	2.000"	17%	81 / 194	275	L	1.25D+1.5L

Analysis Results

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

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

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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

Design Notes

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

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

Notes

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Lumber

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

Handling & Installation

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

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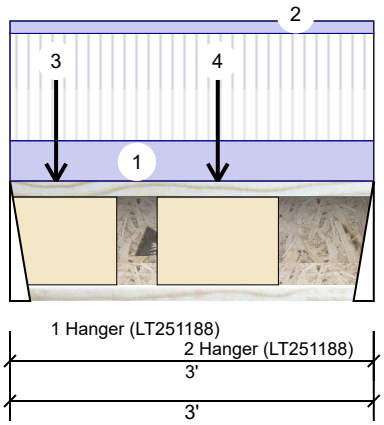
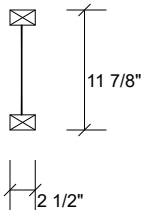
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F12-A NJH 11.875" - PASSED

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 lb (Uplift)

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

Bearings and Factored Reactions

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

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

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LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-0-0		Top	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

Notes

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Lumber

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2. IJoist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

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

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Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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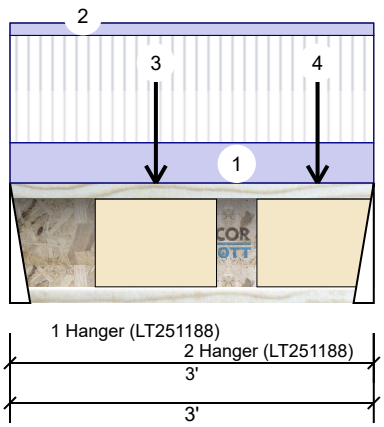
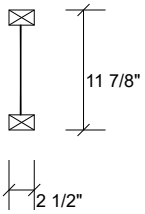
Level: Ground Floor





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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	336	168	0	0
2	470	235	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	44%	210 / 504	714	L	1.25D+1.5L
2 - Hanger	2.000"	62%	293 / 705	999	L	1.25D+1.5L

Analysis Results

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

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

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

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

Design Notes

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

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

Notes

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

Lumber

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

Handling & Installation

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

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

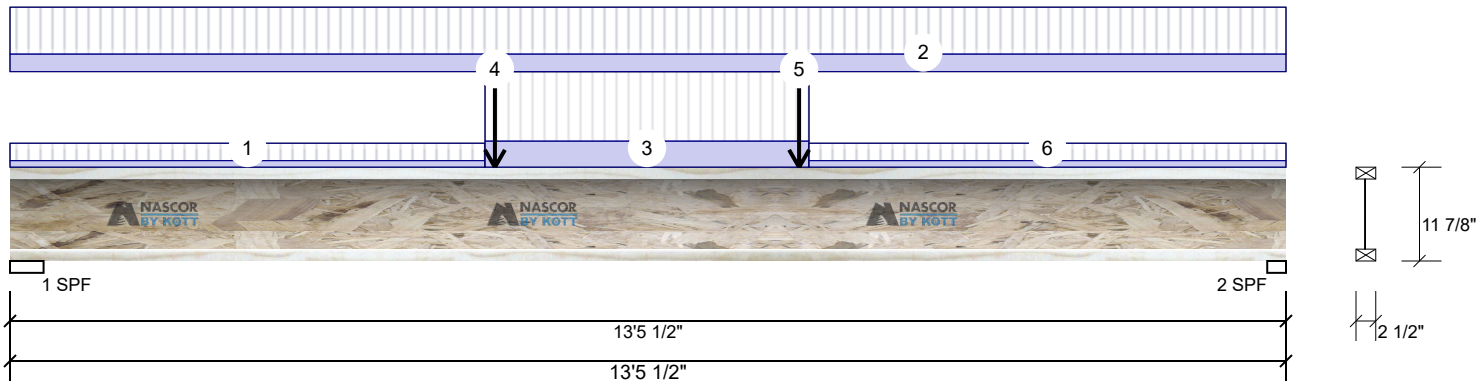
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F13-A NJH 11.875" - PASSED

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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	361	135	0	0
2	352	132	0	0

Bearings and Factored Reactions

Bearing	Length	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 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

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.

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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-5-8	(Span)1-1-2	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	5-0-2 to 8-5-2	(Span)1-7-7	Top	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

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

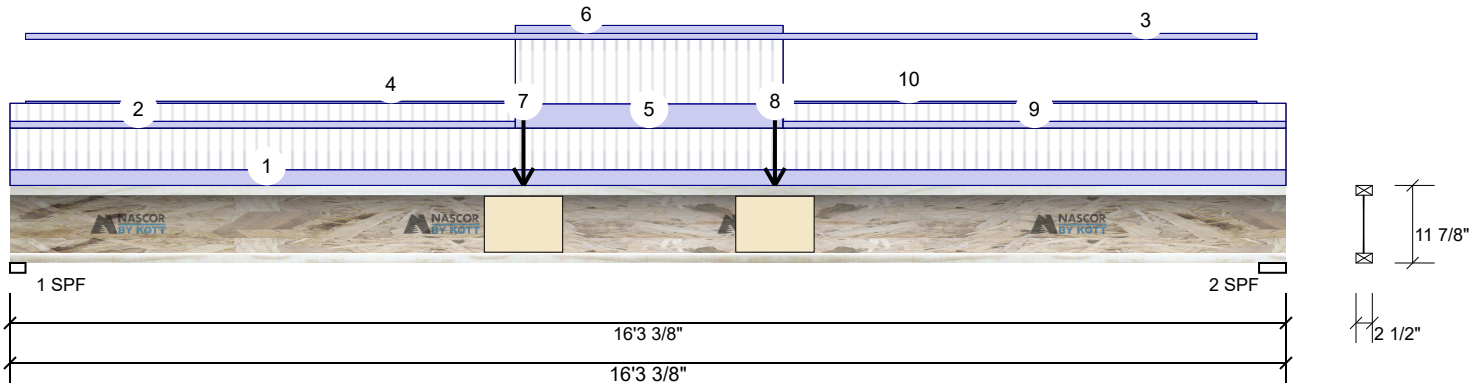
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F14-A NJH 11.875" - PASSED

Level: Ground Floor



Member Information

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

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	408	206	0	0
2	416	209	0	0

Bearings and Factored Reactions

Bearing	Length	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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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.

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 6-5-6	(Span)0-5-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 15-10-15		Top	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 6-5-6		Top	1 PLF	0 PLF	0 PLF	0 PLF	
5	Tie-In	6-5-6 to 9-10-6	(Span)1-7-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	6-5-6 to 9-10-6		Top	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...

Notes

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

Lumber

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

Handling & Installation

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

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

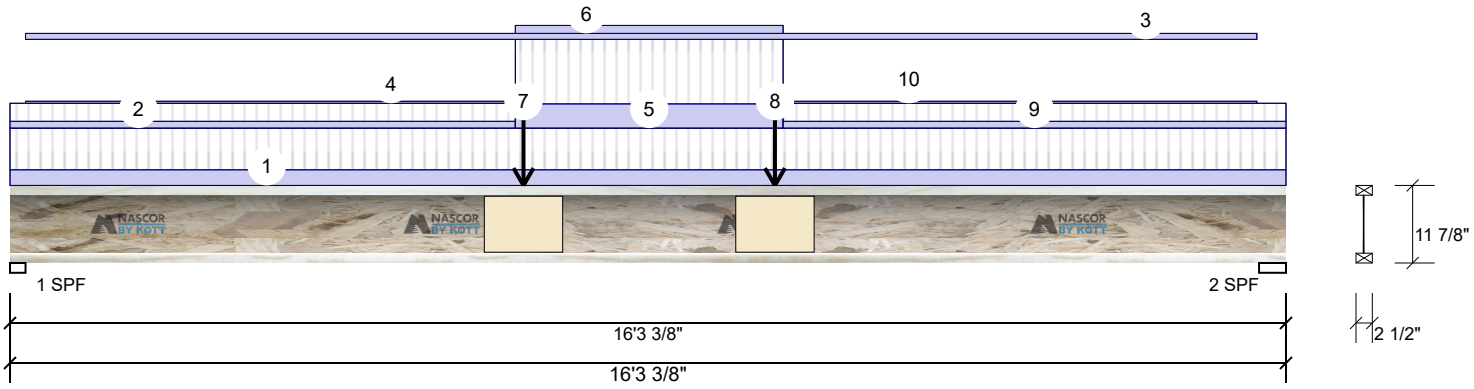
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F14-A NJH 11.875" - PASSED

Level: Ground Floor



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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

Notes

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

Lumber

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

Handling & Installation

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

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

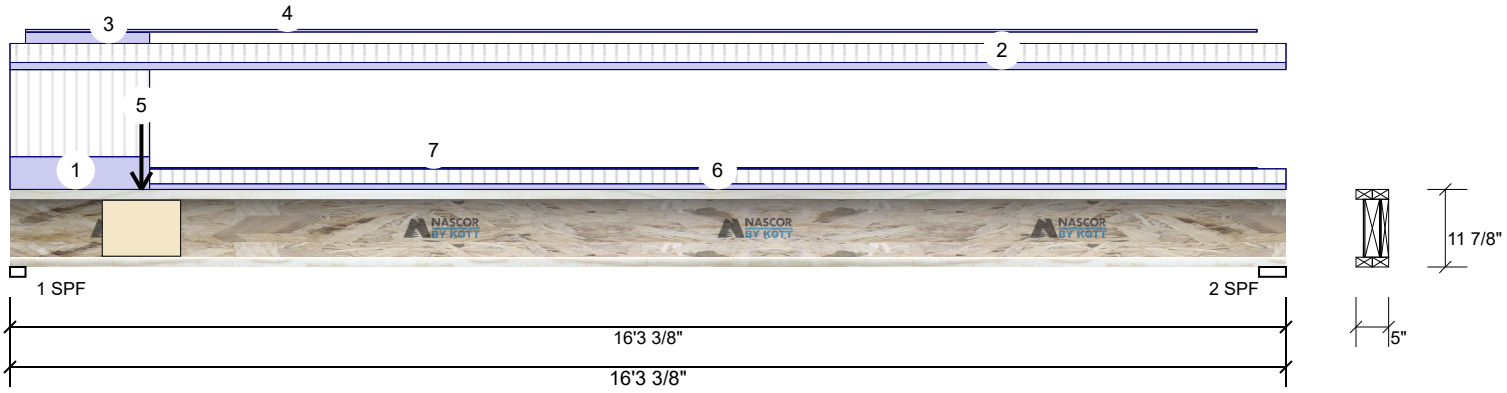
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F15-A NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	736	360	0	0
2	270	131	0	0

Bearings and Factored Reactions

Bearing	Length	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-3-6	(Span)0-8-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 1-9-6		Top	9 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 15-10-15		Top	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 15-10-15		Top	1 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

Lumber

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

Handling & Installation

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

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

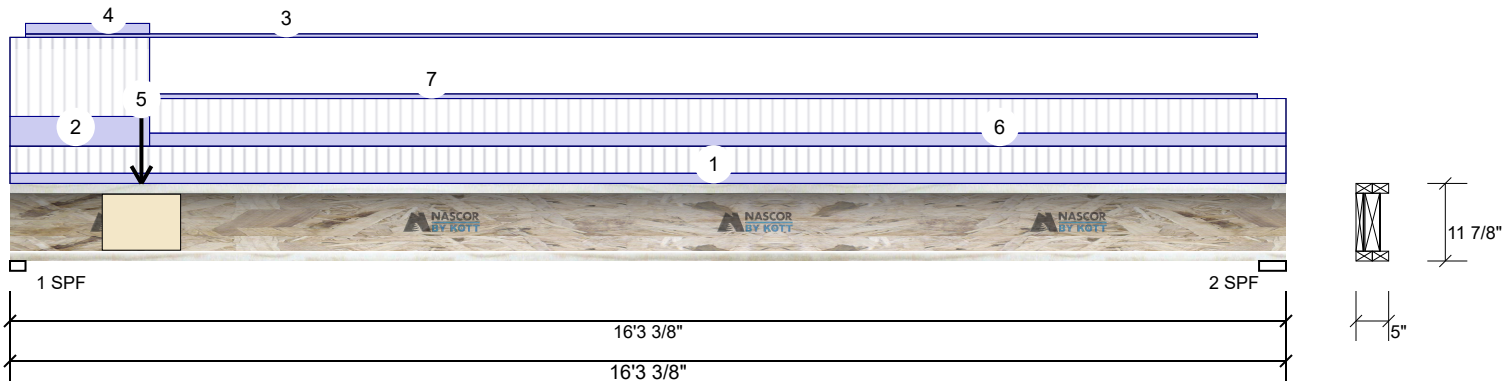
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F15-B NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	777	388	0	0
2	472	236	0	0

Bearings and Factored Reactions

Bearing	Length	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

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.

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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 15-11-0		Top	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 1-9-6		Top	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 15-11-0		Top	4 PLF	0 PLF	0 PLF	0 PLF	

Notes

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Lumber

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

Handling & Installation

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

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

EWP Studio
Simpson Strong-Tie®
Component Solutions™

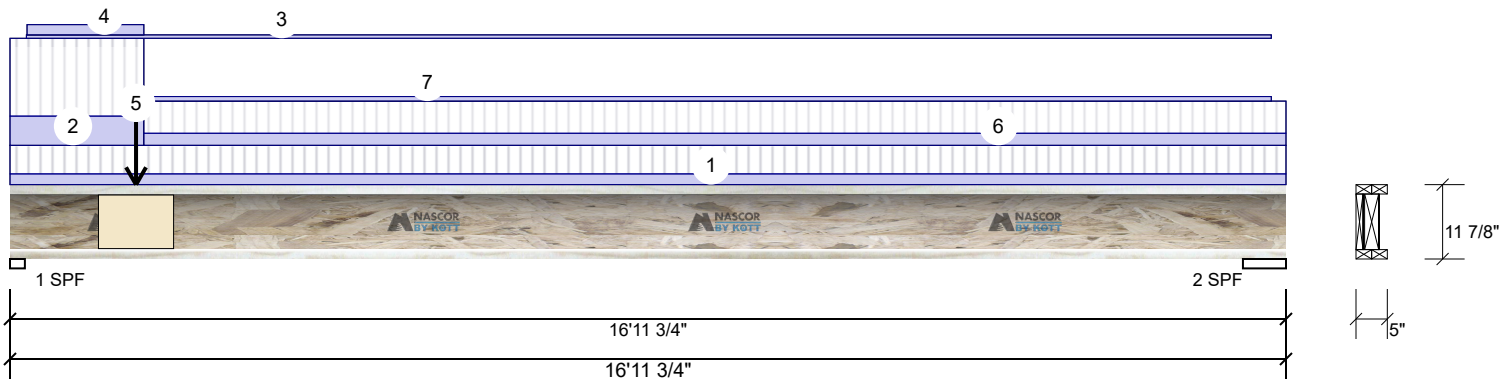
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

Page 1 of 1

F15-C NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	815	408	0	0
2	498	250	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	52%	510 / 1223	1732	L	1.25D+1.5L
2 - SPF	6.875"	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

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.

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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-10 to 16-9-6		Top	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-12 to 1-9-6		Top	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-6		Top	4 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

Lumber

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

Handling & Installation

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

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

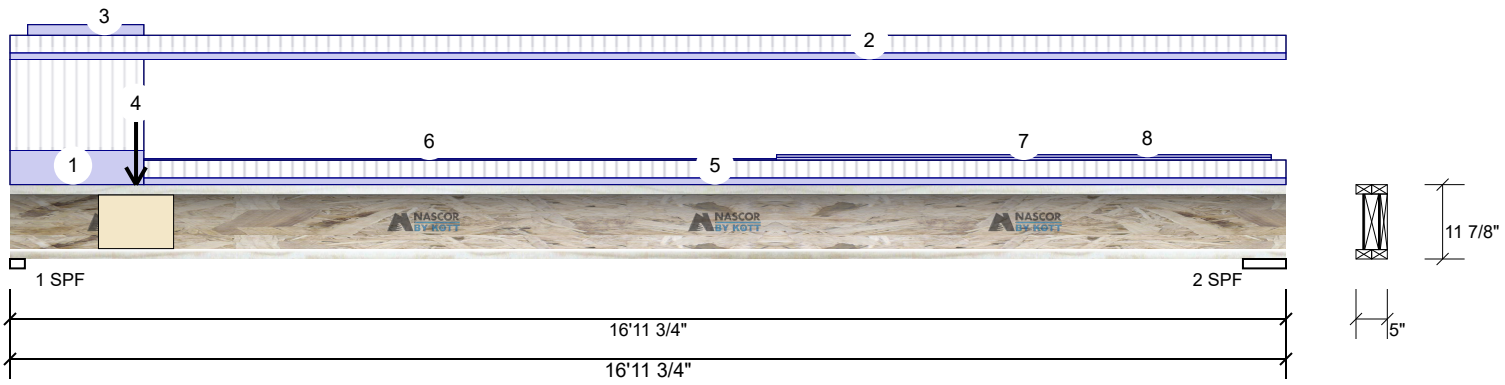
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F15-D NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	740	353	0	0
2	280	136	0	0

Bearings and Factored Reactions

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

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

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.

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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-11-12	(Span)0-7-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-13 to 1-9-6		Top	8 PLF	0 PLF	0 PLF	0 PLF	
4	Point	1-8-2		Far Face	235 lb	470 lb	0 lb	0 lb	F12
5	Tie-In	1-9-6 to 16-11-12	(Span)0-8-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	1-9-6 to 10-2-6		Top	1 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	10-2-6 to 16-9-6		Top	2 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	10-2-7 to 16-9-6		Top	2 PLF	0 PLF	0 PLF	0 PLF	

Notes

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Lumber

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

Handling & Installation

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

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

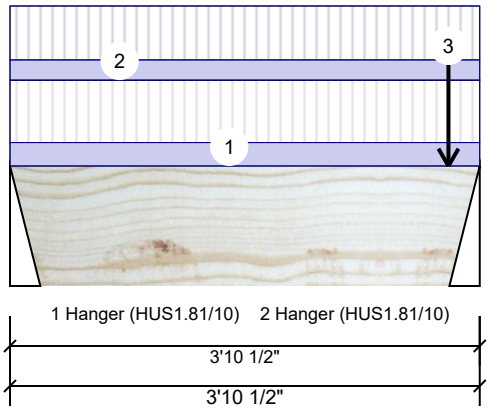
EWP Studio
Simpson Strong-Tie®
Component Solutions™

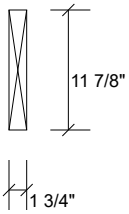
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

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 lb (Uplift)

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

Bearings and Factored Reactions

Bearing	Length	Cap.	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

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	159 ft-lb	2'6 1/4"	17130 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	131 lb	2'8 3/8"	5798 lb	0.023 (2%)	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/55914)	2'2 15/16"	0.117 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/37484)	2'2 11/16"	0.175 (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 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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 3-10-8	(Span)0-7-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	3-7-6		Top	352 lb	834 lb	0 lb	0 lb	C3
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

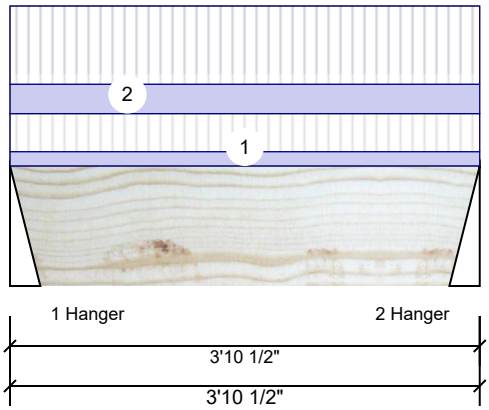
EWP Studio
Simpson Strong-Tie®
Component Solutions™

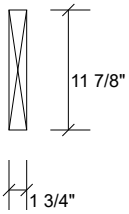
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	115	52	0	0
2	115	52	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	6%	66 / 173	238	L	1.25D+1.5L
2 - Hanger	3.000"	6%	66 / 173	238	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	188 ft-lb	1'11 1/4"	17130 ft-lb	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%)		
LL Defl inch	0.001 (L/45885)	1'11 1/4"	0.117 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/31535)	1'11 1/4"	0.175 (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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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 3-10-8	(Span)0-11-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-10-8		Top	15 PLF	40 PLF	0 PLF	0 PLF	
	Self Weight				5 PLF				

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
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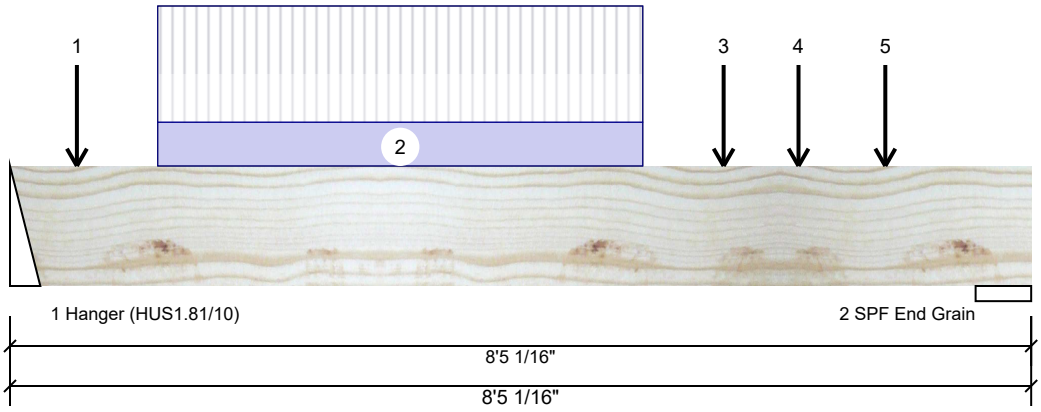
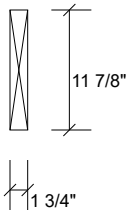
F5-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

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 lb (Uplift)

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

Bearings and Factored Reactions

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

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

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				

Notes

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Lumber

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

Handling & Installation

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

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Canada
L4A 7X4
905-642-4400

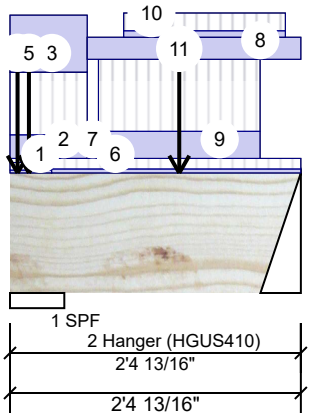
EWP Studio
Simpson Strong-Tie®
Component Solutions™

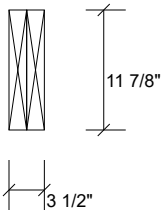
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

Level: Ground Floor





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 lb (Uplift)

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

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.375"	52%	1474 / 4075	5549	L	1.25D+1.5L
2 - Hanger	4.000"	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-7-10		Top	33 PLF	88 PLF	0 PLF	0 PLF	J5
3	Part. Uniform	0-0-0 to 0-7-10		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

Kott Lumber Company
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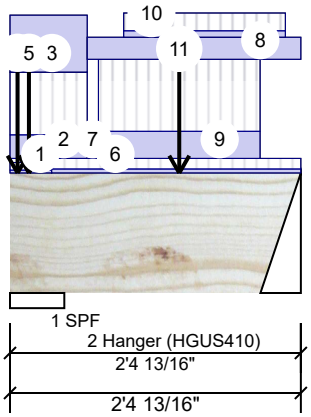

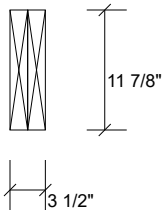

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Point	0-0-12		Far Face	92 lb	245 lb	0 lb	0 lb	J5
5	Point	0-1-14		Top	901 lb	2190 lb	0 lb	0 lb	F9 F9
6	Tie-In	0-4-2 to 2-4-13	(Span)0-8-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform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

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Notes

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Lumber

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2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

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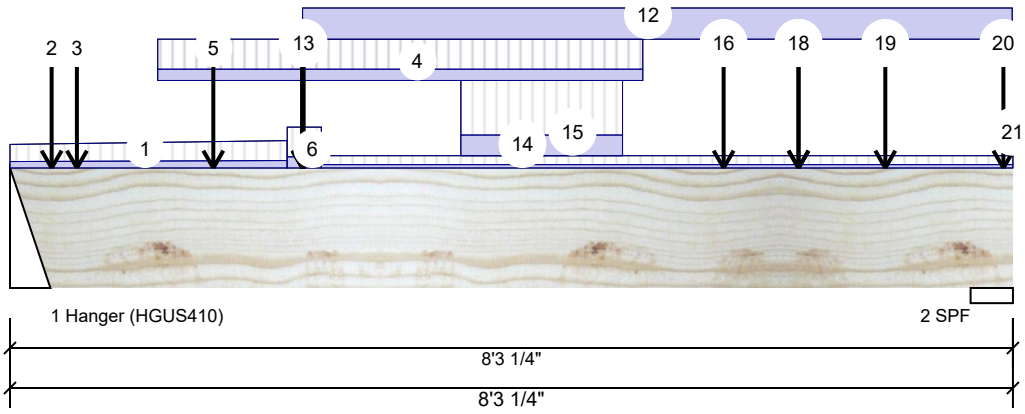
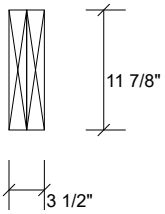
Level: Ground Floor





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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	1175	754	0	0
2	1294	904	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	26%	942 / 1762	2704	L	1.25D+1.5L
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

Design Notes

1 Fill all hanger nailing holes.
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5 Top braced at bearings.
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7 Lateral slenderness ratio based on full section width.

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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 2-3-7	(Span)2-2-7 to 2-6-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-4-2		Far Face	15 lb	39 lb	0 lb	0 lb	J1
3	Point	0-6-10		Near Face	30 lb	79 lb	0 lb	0 lb	J1
4	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

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
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Manufacturer Info

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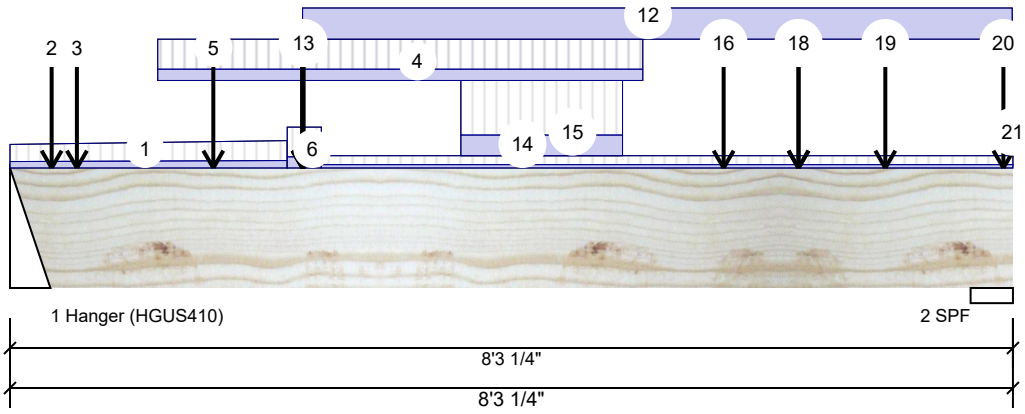

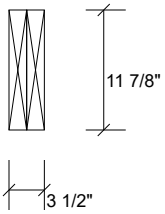

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Tie-In	2-3-7 to 2-6-13	(Span)3-9-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Point	2-4-15		Top	79 lb	211 lb	0 lb	0 lb	J5
8	Point	2-4-15		Top	20 lb	52 lb	0 lb	0 lb	J1
9	Point	2-4-15		Top	2 lb	5 lb	0 lb	0 lb	J5
10	Point	2-4-15		Top	86 lb	0 lb	0 lb	0 lb	Wall Self Weight
11	Point	2-4-15		Top	12 lb	0 lb	0 lb	0 lb	Wall Self Weight
12	Part. Uniform	2-4-15 to 8-3-3		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
13	Point	2-5-1		Far Face	165 lb	314 lb	0 lb	0 lb	F6
14	Tie-In	2-6-13 to 8-3-4	(Span)1-1-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
15	Part. Uniform	3-8-10 to 5-0-10		Top	53 PLF	140 PLF	0 PLF	0 PLF	J3
16	Point	5-10-10		Near Face	28 lb				
17	Point	6-6-0		Top	277 lb				19
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	75 lb	0 lb	0 lb	F2
21	Part. Uniform	8-3-3 to 8-3-4		Top	40 PLF				lf
	Self Weight				10 PLF				

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Handling & Installation

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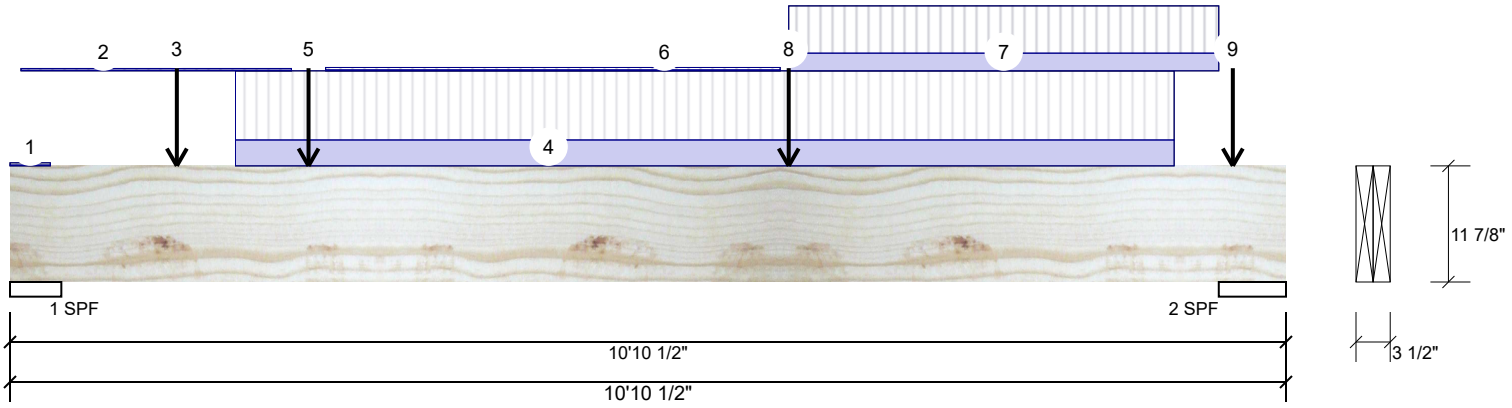

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Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	3101	1470	0	0
2	3210	1341	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	57%	1837 / 4651	6488	L	1.25D+1.5L
2 - SPF	6.875"	44%	1677 / 4815	6491	L	1.25D+1.5L

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

Design Notes

1 Girders are designed to be supported on the bottom edge only.
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LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 2-4-13	(Span)0-5-14	Top	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

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Lumber

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2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
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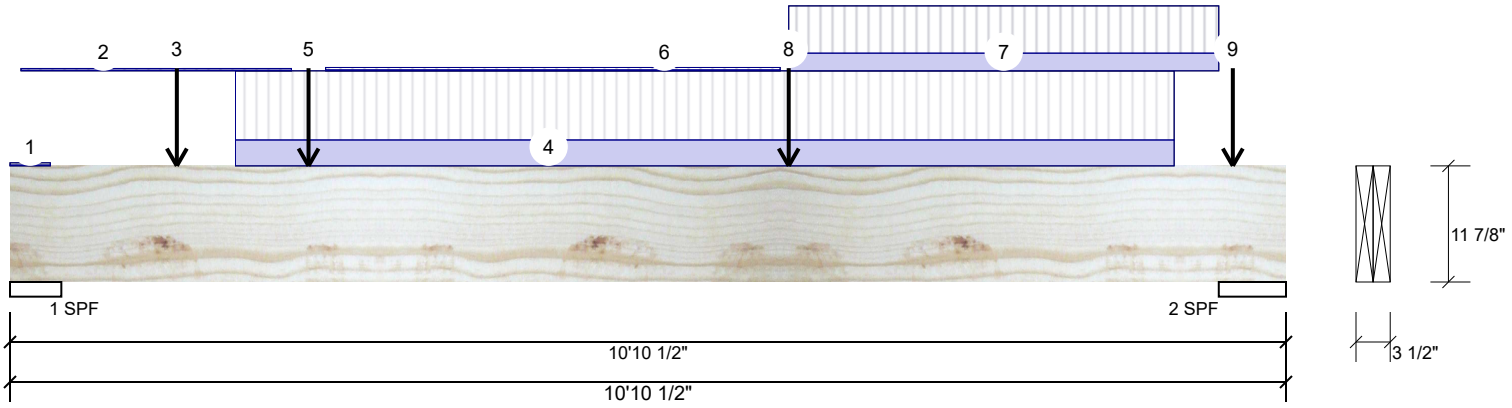

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	6-7-10 to 10-3-10		Top	101 PLF	270 PLF	0 PLF	0 PLF	
8	Point	6-7-10		Far Face	202 lb	461 lb	0 lb	0 lb	F5
9	Point	10-5-1		Near Face	16 lb	42 lb	0 lb	0 lb	J8
	Self Weight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

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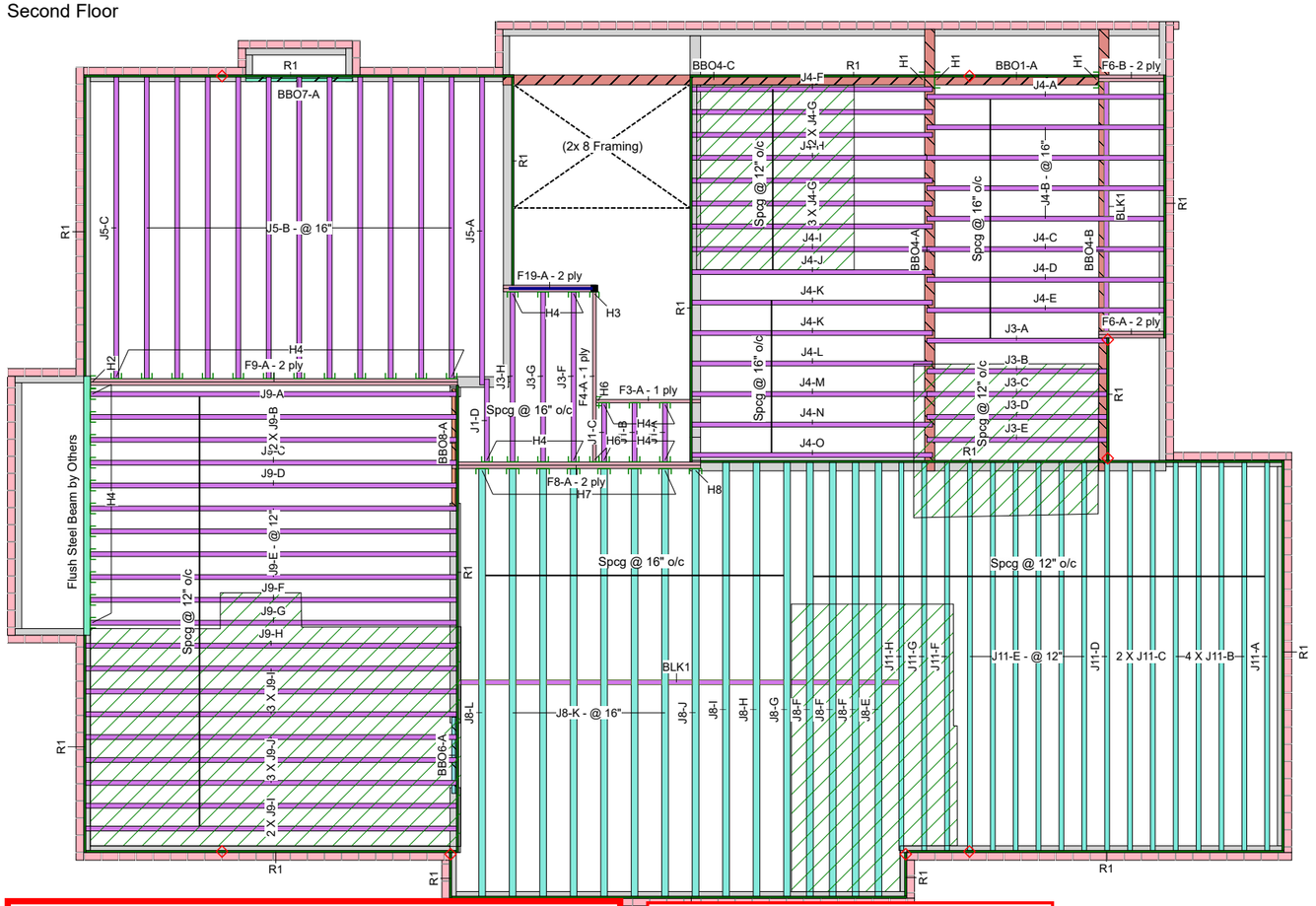
Second Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

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

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

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

ARCHITECTURAL DRAWINGS:

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 Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F9	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	18-0-0
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0
F4	Forex 2.0E-3000Fb LVL	1.75	11.875			1	8-0-0
F19	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	6-0-0
F3	Forex 2.0E-3000Fb LVL	1.75	11.875			1	6-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	4-0-0

LVL/LSL (Dropped)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BBO8	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J11	NJ60H	2.5	11.875			17	18-0-0
J8	NJ60U	3.5	11.875			15	20-0-0
J9	NJH	2.5	11.875			20	18-0-0
J5	NJH	2.5	11.875			13	14-0-0
J4	NJH	2.5	11.875			23	12-0-0
J3	NJH	2.5	11.875			8	8-0-0
J1	NJH	2.5	11.875			4	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			19	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	25-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member 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	LT351188				

NOTES:

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

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

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

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

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

NASCOR

Layout Name
CELESTIAL 2 (ELEV.1)

Design Method
LSD

Description
GRANELLI HOME CORP.
BRAMPTON, ONT.

Created
May 30, 2018

Builder
GREEN YORK HOMES

Sales Rep
RM

Designer
RCO

Shipping

Project

Builder's Project

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

Job Path
D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.1 \FLOOR\CELESTIAL 2 (ELEV.1).isl

Second Floor

Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	480
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girder	
LL Span L/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	SPF Plywood
Thickness	5/8"
Fastener	Nailed & Glued
Vibration	
Ceiling:	Gypsum 1/2"

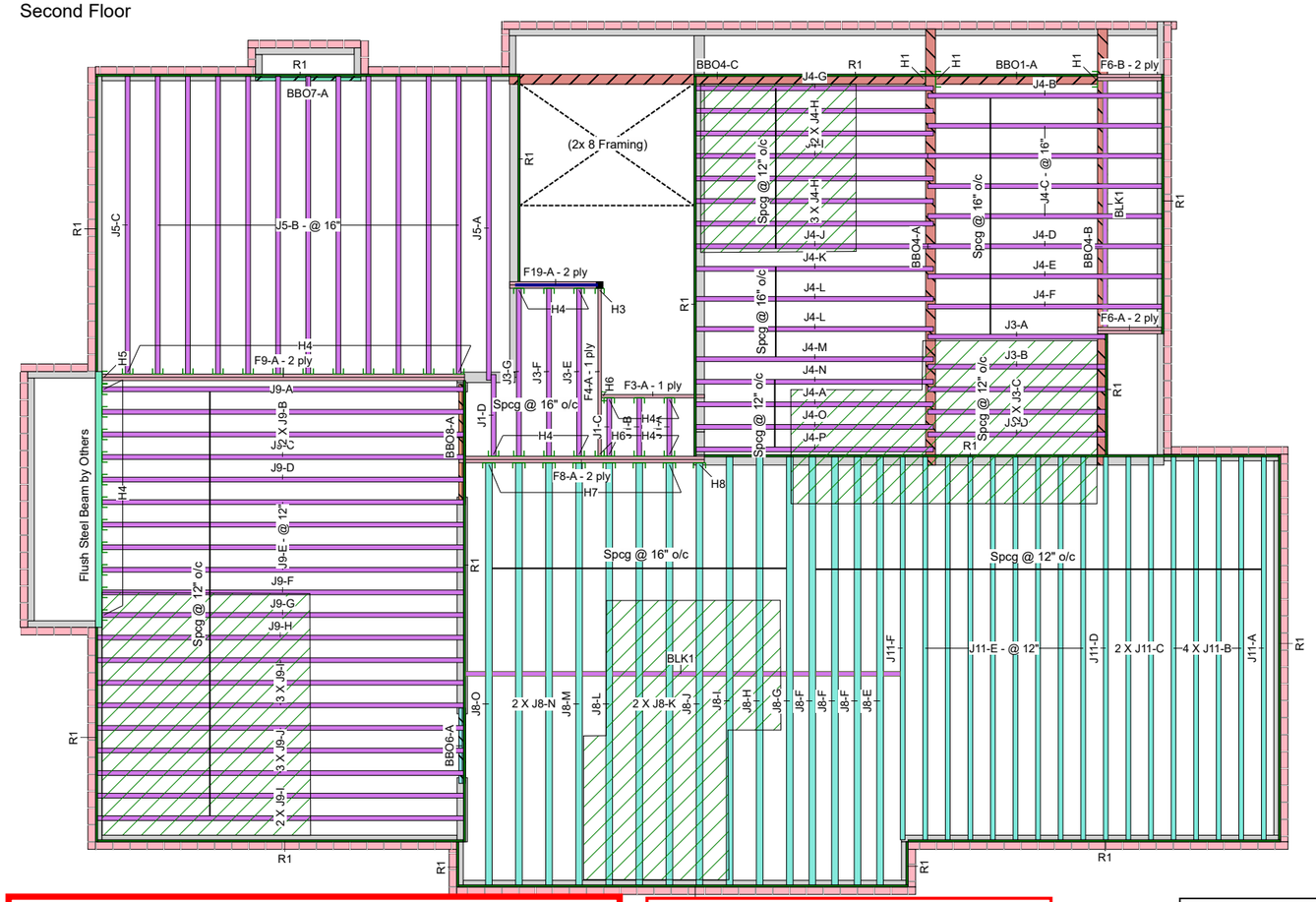
N.A. EL-MASRI
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO
Jun 05, 2018
NE0618-036

EWP Studio
Simpson Strong-Tie®
Component Solutions™

KOTT

SIMPSON StrongTie

Second Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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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)

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05 2018
NE0618-036

Second Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F9	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	18-0-0
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0
F4	Forex 2.0E-3000Fb LVL	1.75	11.875			1	8-0-0
F19	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	6-0-0
F3	Forex 2.0E-3000Fb LVL	1.75	11.875			1	6-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	4-0-0

LVL/LSL (Dropped)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BBO8	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J11	NJ60H	2.5	11.875			17	18-0-0
J8	NJ60U	3.5	11.875			15	20-0-0
J9	NJH	2.5	11.875			20	18-0-0
J5	NJH	2.5	11.875			13	14-0-0
J4	NJH	2.5	11.875			24	12-0-0
J3	NJH	2.5	11.875			8	8-0-0
J1	NJH	2.5	11.875			4	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			19	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	25-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H1	3	Unknown Hanger				
H3	1	HUCQ1.81/9-SDS				
H4	36	LT251188			4 10dx1 1/2	2 10dx1 1/2
H5	1	HGUS410			46 16d	16 16d
H6	2	HUS1.81/10			30 10dx1 1/2	10 16d
H7	7	LT351188			4 10dx1 1/2	2 10dx1 1/2
H8	1	LT351188				

NOTES:

1. Framer to verify dimensions on the architectural drawings.
2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
3. Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls.
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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.

NASCOR

Layout Name
CELESTIAL 2 (ELEV.1) 5 BEDROOM

Design Method
LSD

Description
GRANELLI HOME CORP.
BRAMPTON, ONT.

Created
May 30, 2018

Builder
GREEN YORK HOMES

Sales Rep
RM

Designer
RCO

Shipping

Project

Builder's Project

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

Job Path
D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.1 \FLOOR\5 BEDRM\CELESTIAL 2 (ELEV.1).isl

Second Floor

Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

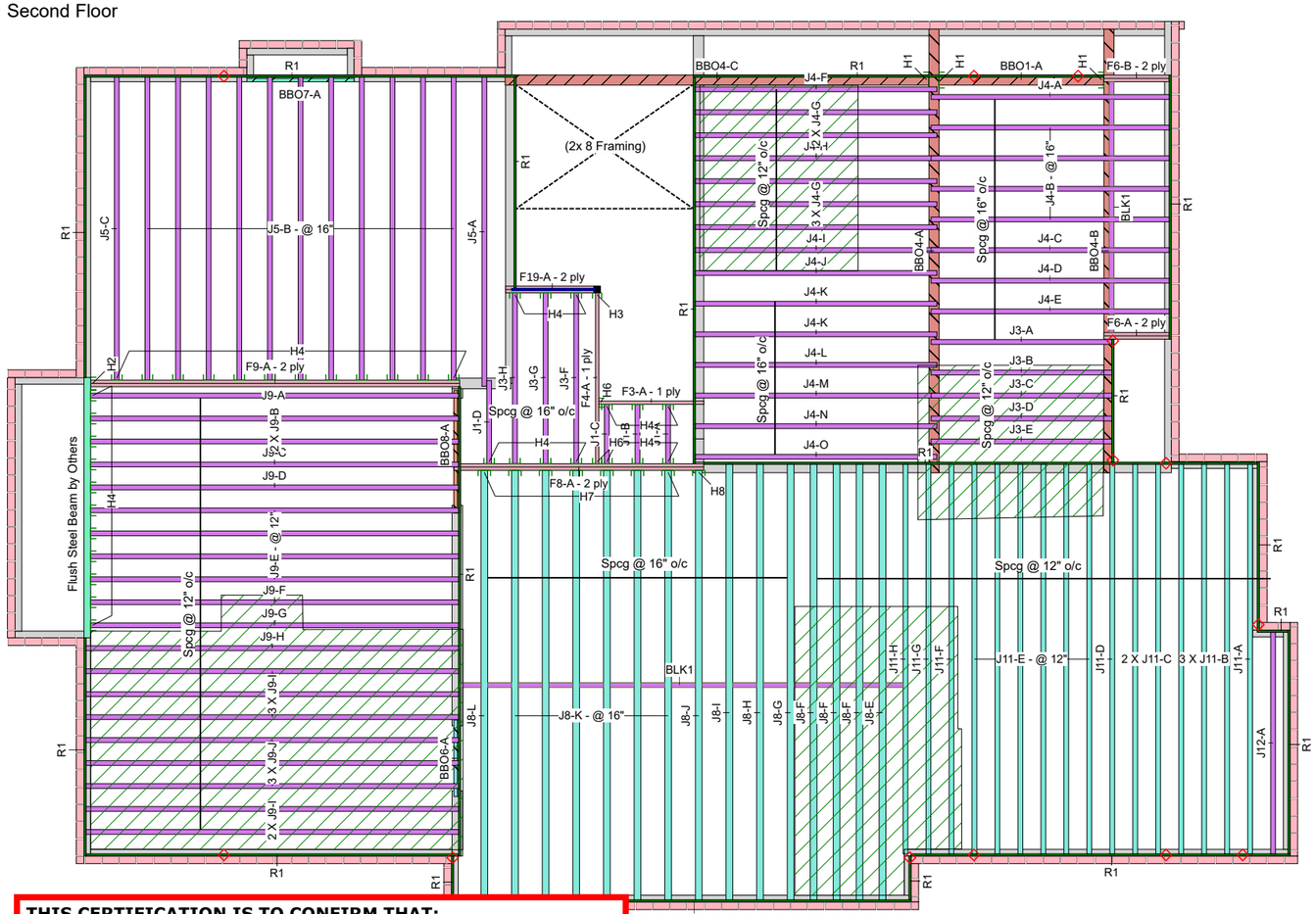
Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	360
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girder	
LL Span L/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	SPF Plywood
Thickness	5/8"
Fastener	Nailed & Glued
Vibration	
Ceiling:	Gypsum 1/2"

EWP Studio
Simpson Strong-Tie®
Component Solutions™

KOTT

SIMPSON Strong-Tie

Second Floor



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LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018
NE0618-036

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 Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F9	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	18-0-0
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0
F4	Forex 2.0E-3000Fb LVL	1.75	11.875			1	8-0-0
F19	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	6-0-0
F3	Forex 2.0E-3000Fb LVL	1.75	11.875			1	6-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	4-0-0

LVL/LSL (Dropped)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BBO8	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J11	NJ60H	2.5	11.875			16	18-0-0
J8	NJ60U	3.5	11.875			15	20-0-0
J9	NJH	2.5	11.875			20	18-0-0
J5	NJH	2.5	11.875			13	14-0-0
J4	NJH	2.5	11.875			23	12-0-0
J12	NJH	2.5	11.875			1	10-0-0
J3	NJH	2.5	11.875			8	8-0-0
J1	NJH	2.5	11.875			4	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			19	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	25-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member 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	LT351188				

NOTES:

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

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NASCOR

Layout Name
CELESTIAL 2 (ELEV.2)

Design Method
LSD

Description
GRANELLI HOME CORP.
BRAMPTON, ONT.

Created
May 30, 2018

Builder
GREEN YORK HOMES

Sales Rep
RM

Designer
RCO

Shipping

Project

Builder's Project

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

Job Path
D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.2 \FLOOR\CELESTIAL 2 (ELEV.2).isl

Second Floor

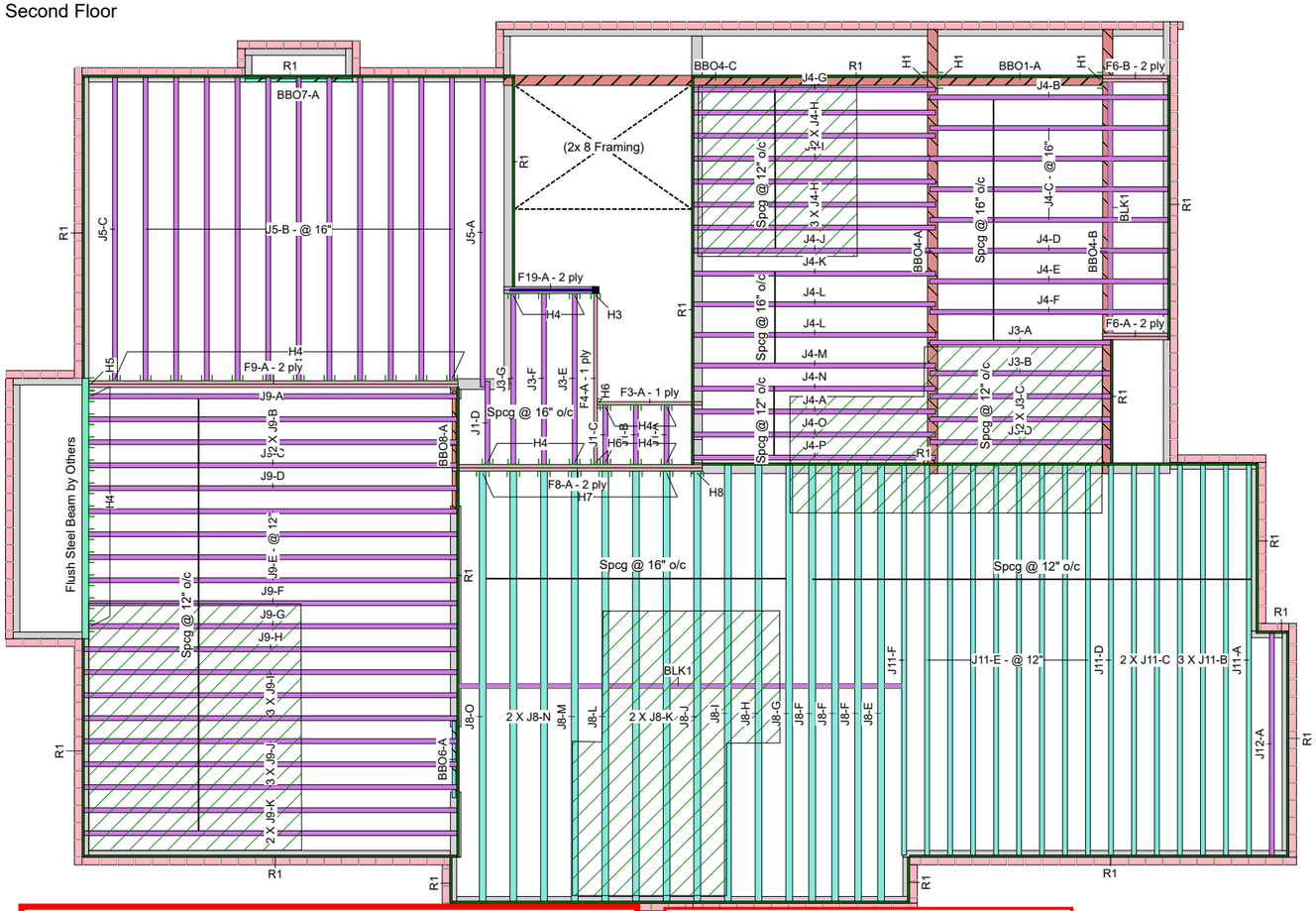
Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	360
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girder	
LL Span L/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	SPF Plywood
Thickness	5/8"
Fastener	Nailed & Glued
Vibration	
Ceiling:	Gypsum 1/2"

EWP Studio
Simpson Strong-Tie®
Component Solutions™

Second Floor



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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)

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018
NE0618-036

EWP Studio
Simpson Strong-Tie®
Component Solutions™

EWP Studio Version 18.32.085 Powered by iStruct™

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

Second Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F9	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	18-0-0
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0
F4	Forex 2.0E-3000Fb LVL	1.75	11.875			1	8-0-0
F19	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	6-0-0
F3	Forex 2.0E-3000Fb LVL	1.75	11.875			1	6-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	4-0-0

LVL/LSL (Dropped)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BBO8	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J11	NJ60H	2.5	11.875			16	18-0-0
J8	NJ60U	3.5	11.875			15	20-0-0
J9	NJH	2.5	11.875			20	18-0-0
J5	NJH	2.5	11.875			13	14-0-0
J4	NJH	2.5	11.875			24	12-0-0
J12	NJH	2.5	11.875			1	10-0-0
J3	NJH	2.5	11.875			8	8-0-0
J1	NJH	2.5	11.875			4	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			19	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	25-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H1	3	Unknown Hanger				
H3	1	HUCQ1.81/9-SDS				
H4	36	LT251188			4 10dx1 1/2	2 10dx1 1/2
H5	1	HGUS410			46 16d	16 16d
H6	2	HUS1.81/10			30 10dx1 1/2	10 16d
H7	7	LT351188			4 10dx1 1/2	2 10dx1 1/2
H8	1	LT351188				

NOTES:

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

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

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

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

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

KOTT

NASCOR

Layout Name
CELESTIAL 2 (ELEV.2) 5 BEDROOM

Design Method
LSD

Description
GRANELLI HOME CORP.
BRAMPTON, ONT.

Created
May 30, 2018

Builder
GREEN YORK HOMES

Sales Rep
RM

Designer
RCO

Shipping

Project

Builder's Project

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

Job Path
D:\Users\rochavillo\WORK FROM HOME\GREEN YORK HOMES \GRANELLI HOME CORP\MODELS \CELESTIAL 2\CELESTIAL 2 ELEV.2 \FLOOR\5 BEDRM\CELESTIAL 2 (ELEV.2).isl

Second Floor

Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	360
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girder	
LL Span L/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	SPF Plywood
Thickness	5/8"
Fastener	Nailed & Glued
Vibration	
Ceiling:	Gypsum 1/2"

SIMPSON StrongTie

EWP Studio
Simpson Strong-Tie®
Component Solutions™

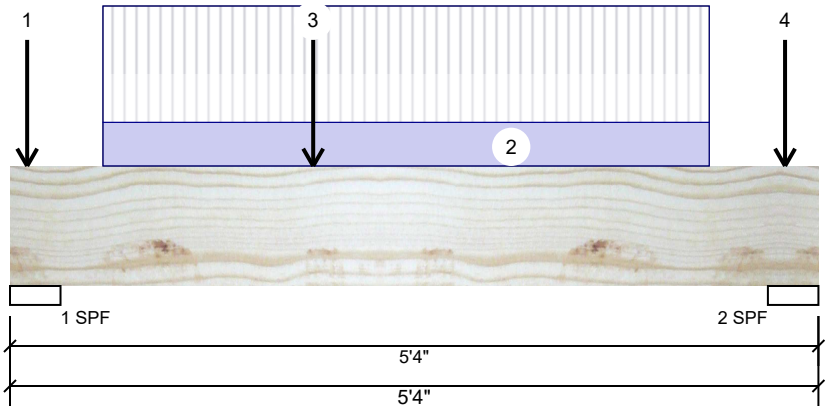
Client: GREEN YORK HOMES
Project:
Address:

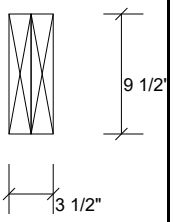
Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

Page 1 of 1

BBO8-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED

Level: Second Floor





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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	2297	921	0	0
2	1581	635	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.000"	53%	1151 / 3446	4597	L	1.25D+1.5L
2 - SPF	4.000"	37%	793 / 2371	3164	L	1.25D+1.5L

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

Design Notes

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

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

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

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

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

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

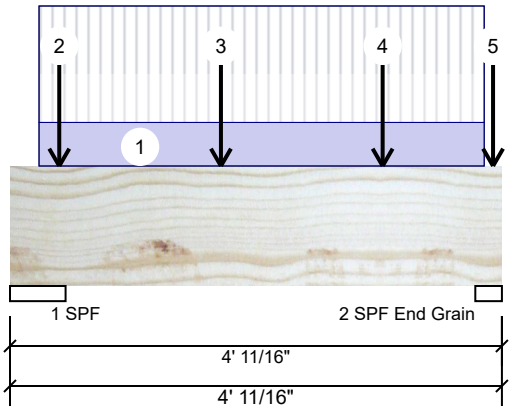
EWP Studio
Simpson Strong-Tie®
Component Solutions™

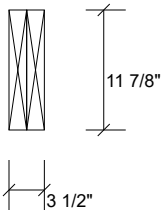
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

F19-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	685	277	0	0
2	834	352	0	0

Bearings and Factored Reactions

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

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

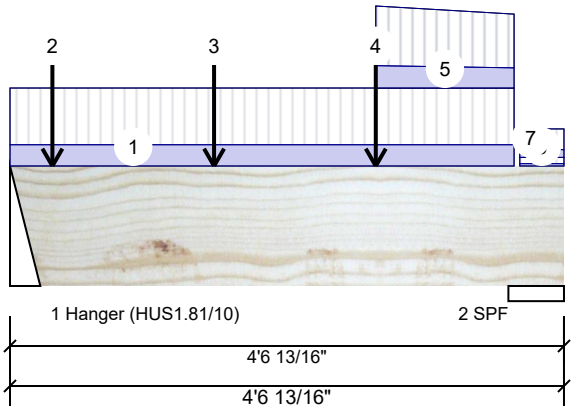
EWP Studio
Simpson Strong-Tie®
Component Solutions™

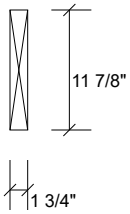
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	237	99	0	0
2	248	104	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	12%	124 / 355	479	L	1.25D+1.5L
2 - SPF	5.500"	8%	131 / 372	503	L	1.25D+1.5L

Analysis Results

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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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 4-1-14	(Span)2-9-10	Top	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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	4-2-7 to 4-6-13	(Span)0-3-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

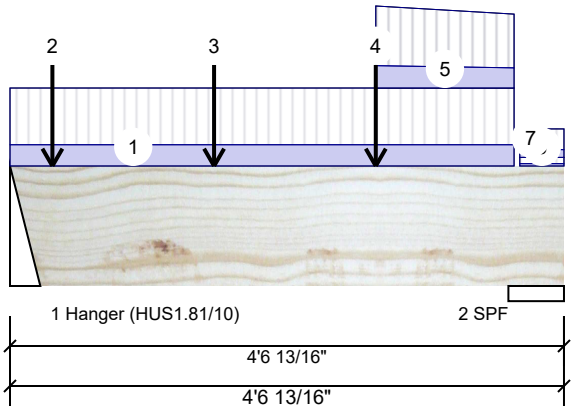
EWP Studio
Simpson Strong-Tie®
Component Solutions™

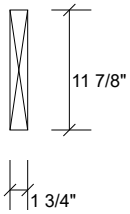
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

Level: Second Floor





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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

EWP Studio
Simpson Strong-Tie®
Component Solutions™

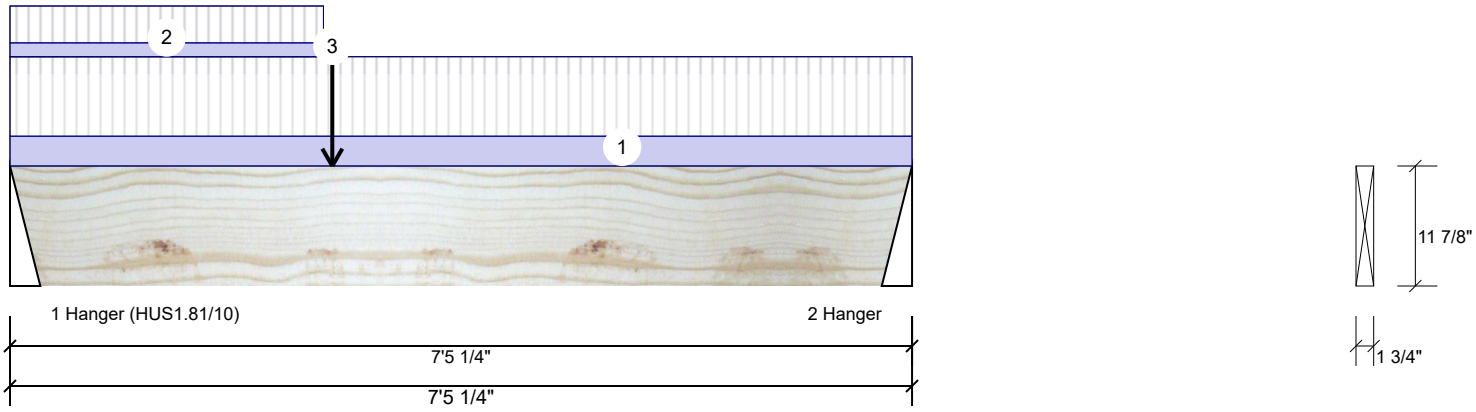
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

Page 1 of 1

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

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 lb (Uplift)

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

Bearings and Factored Reactions

Bearing	Length	Cap.	React 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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 2-7-0	(Span)0-5-1	Top	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				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

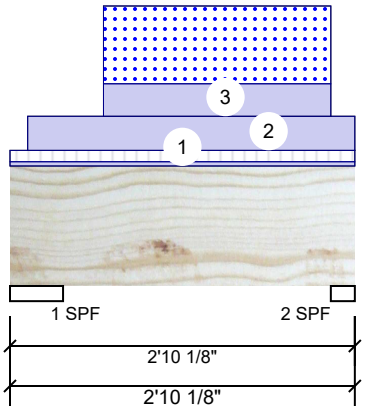
EWP Studio
Simpson Strong-Tie®
Component Solutions™

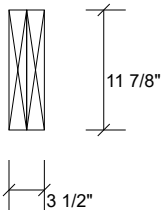
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

Level: Second Floor





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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	33	165	117	0
2	28	172	156	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	4%	207 / 192	399	L	1.25D+1.5S +0.5L
2 - SPF	2.375"	9%	214 / 235	449	L	1.25D+1.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	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
Shear	80 lb	1'4 3/8"	11016 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/38042)	1'6 3/4"	0.117 (L/240)	0.010 (1%)	D+S+0.5L	L

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

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.

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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 2-10-2	(Span)1-0-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-1-12 to 2-10-2		Top	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	0-9-4 to 2-7-12		Top	61 PLF	0 PLF	146 PLF	0 PLF	
	Self Weight				10 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

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APA: PR-L318

Kott Lumber Company
14 Anderson Blvd, Ontario
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905-642-4400

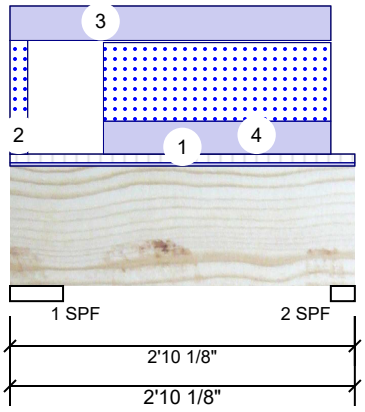
EWP Studio
Simpson Strong-Tie®
Component Solutions™

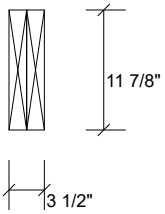
Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

Level: Second Floor





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 lb (Uplift)

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

Bearings and Factored Reactions

Bearing	Length	Cap.	React 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 +0.5L

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

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 2-10-2	(Span)0-9-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-1-12		Top	62 PLF	0 PLF	149 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 2-7-12		Top	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-9-4 to 2-7-12		Top	61 PLF	0 PLF	146 PLF	0 PLF	
	Self Weight				10 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

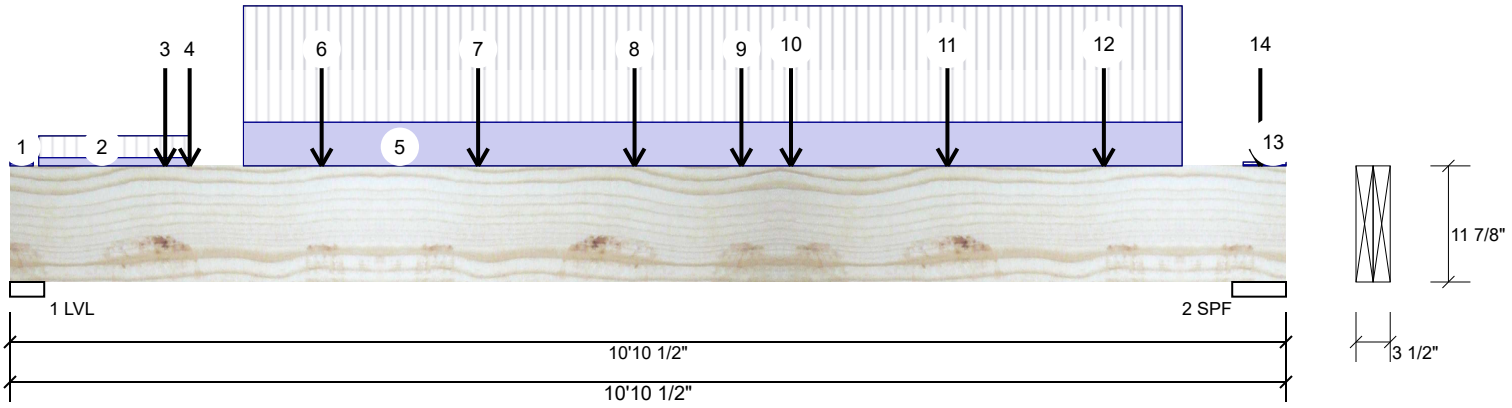
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

Level: Second Floor



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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	2363	947	0	0
2	2534	1018	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - LVL	3.500"	52%	1184 / 3544	4728	L	1.25D+1.5L
2 - SPF	5.500"	43%	1272 / 3802	5074	L	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

Design Notes

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

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

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

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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

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	Top	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	Top	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...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

Kott Lumber Company
14 Anderson Blvd, Ontario
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L4A 7X4
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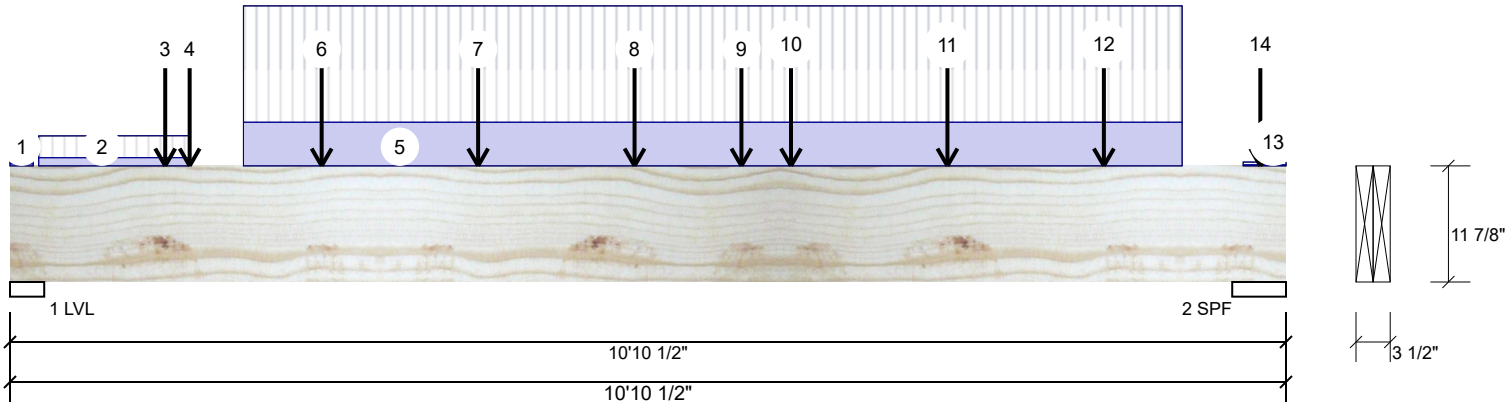
F8-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



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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	Top	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.

Lumber

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

Handling & Installation

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

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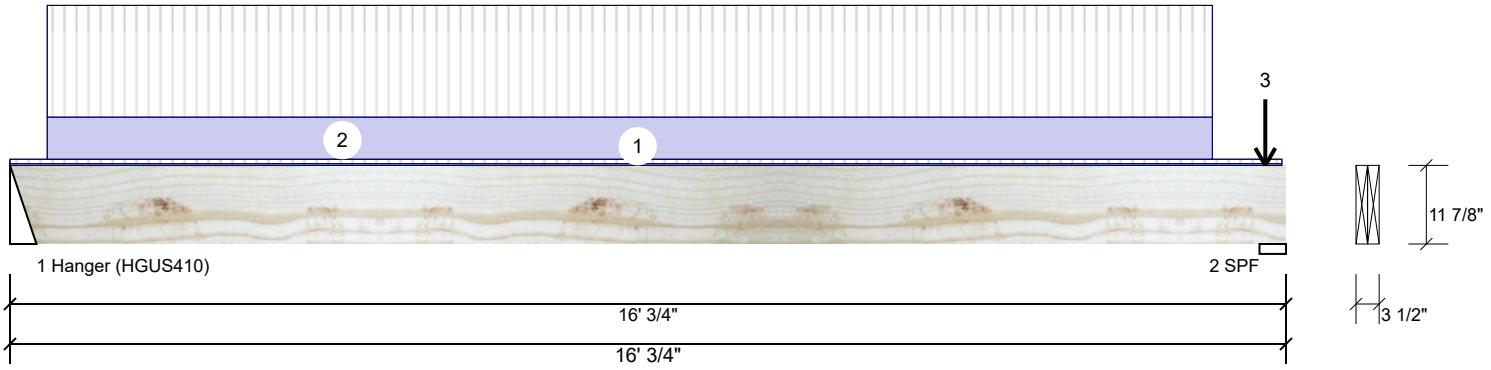
Date: 5/31/2018
Designer: RCO
Job Name: CELESTIAL 2 (ELEV.1)
Project #:

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

Level: Second Floor



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 lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	2070	856	0	0
2	2190	901	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	40%	1070 / 3106	4175	L	1.25D+1.5L
2 - SPF	4.000"	51%	1126 / 3285	4411	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	16529 ft-lb	8' 1/4"	34261 ft-lb	0.482 (48%)	1.25D+1.5L	L
Unbraced	16529 ft-lb	8' 1/4"	23053 ft-lb	0.717 (72%)	1.25D+1.5L	L
Shear	4147 lb	14'9 5/8"	11596 lb	0.358 (36%)	1.25D+1.5L	L
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

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LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 05, 2018

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-0-2	(Span)0-6-5	Top	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				

Notes

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Lumber

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

Handling & Installation

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

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