Engineering Note Page (ENP-2)

REVISION 2018-10-17

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 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 transfer blocks. Structural elements such as walls, posts, connectors, and transfer 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 floor joists is to be carried out in accordance with the current edition of the manufacturer's literature available at http://www.kottgroup.com.

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.

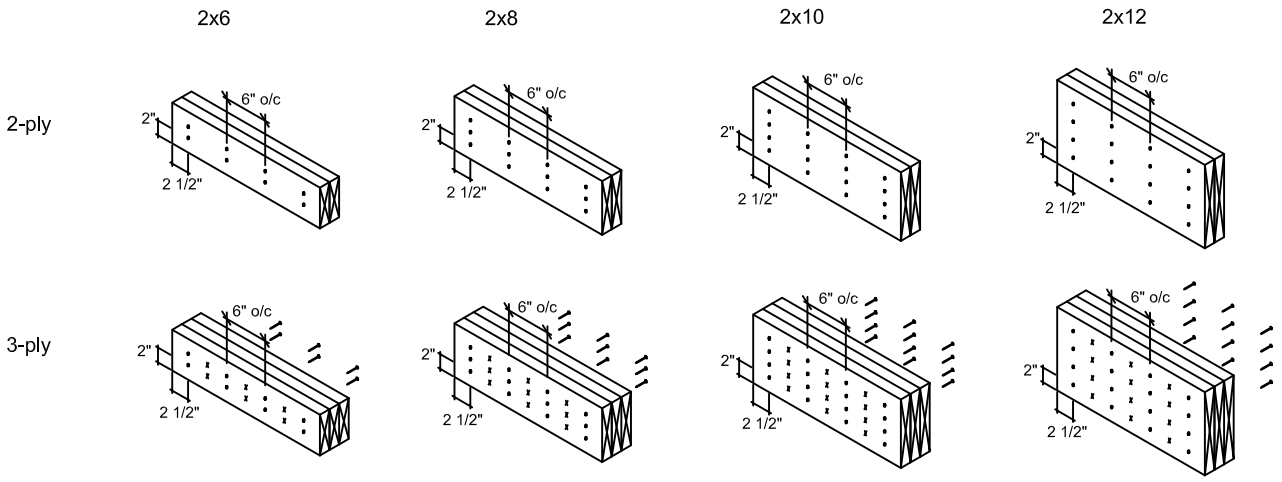
COMPONENT

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 transfer 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.

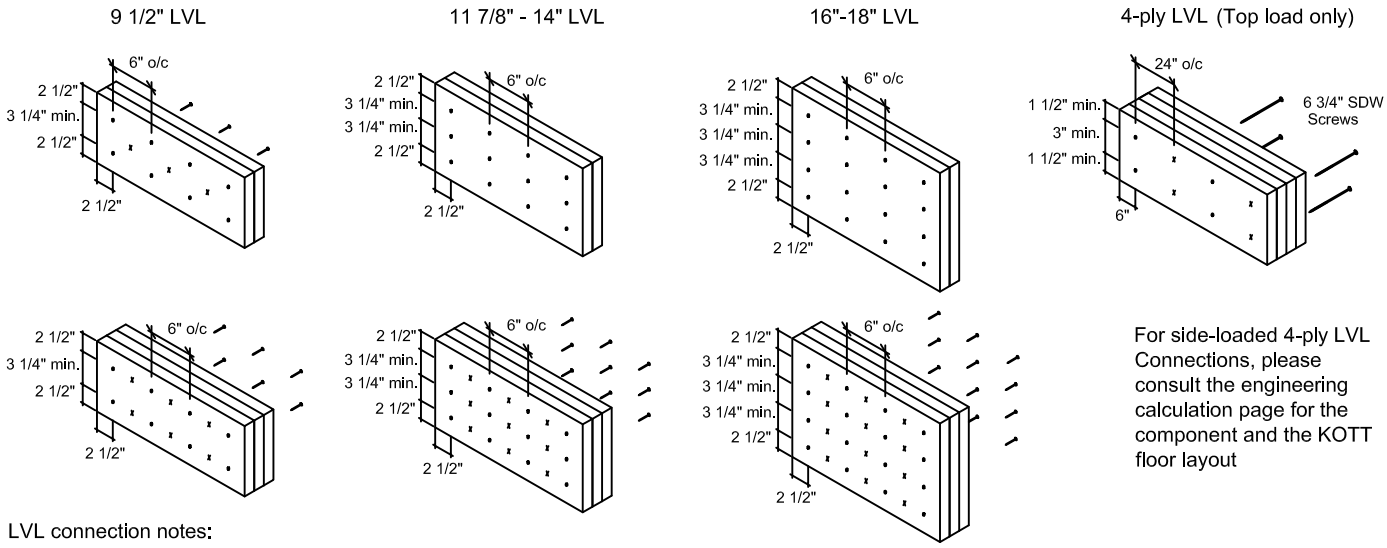
Conventional Connections



Conventional connection notes:

-Nails to be 3" long wire nails.
-Nails to be located 2" min. from the top and bottom of the member. Start all nails 2 1/2" min. 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 side-loaded 4-ply LVL Connections, please consult the engineering calculation page for the component and the KOTT floor layout

LVL connection notes:

-LVL ply width is 1-3/4"
-Nails to be 3 1/2" common wire nails.
-Nails to be located 2 1/2" min. from the top and bottom of the member. Start all nails 2 1/2" min. 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.

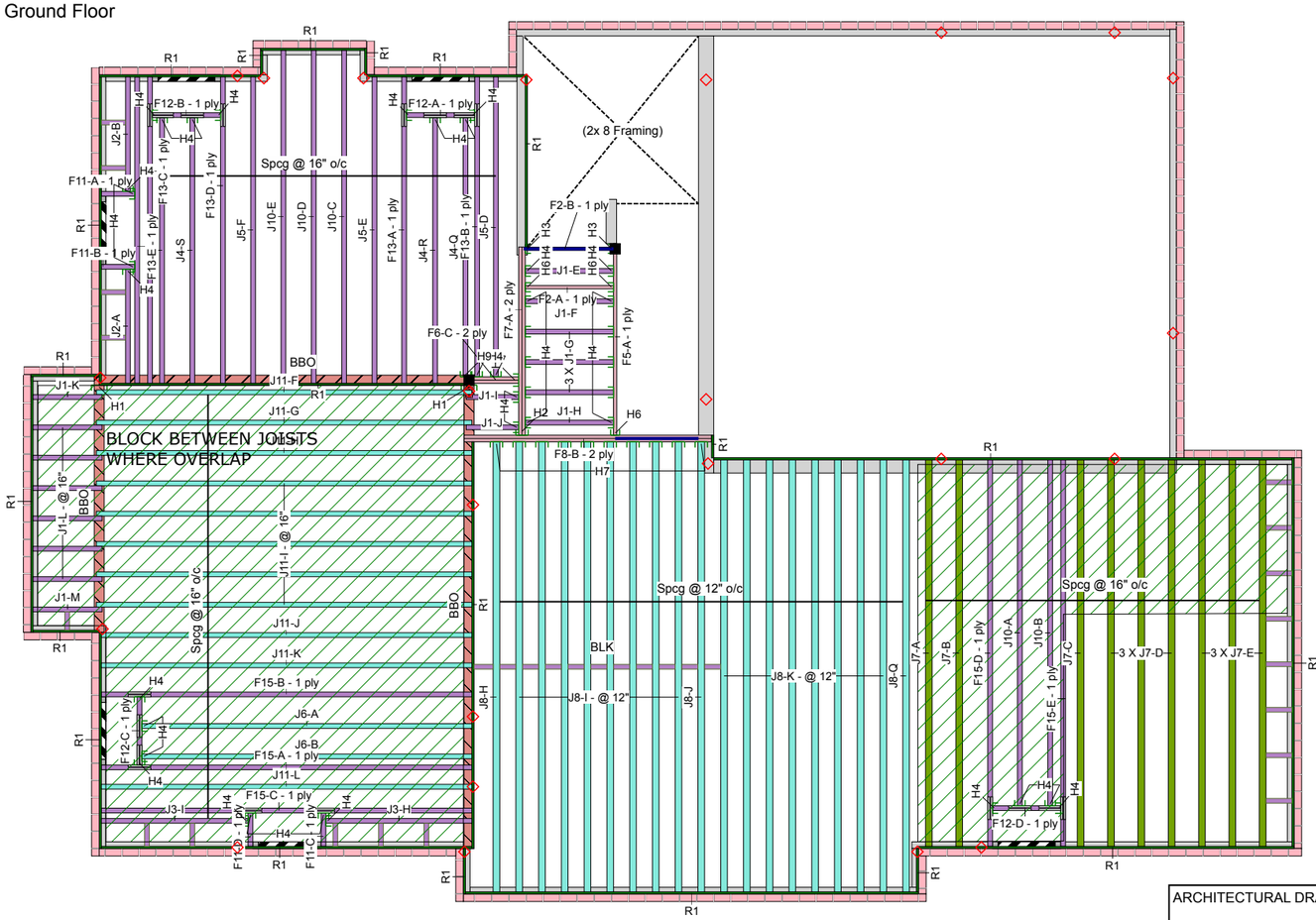
Multiple Member Connections

All connections are for uniformly distributed loads.

For multi-ply connections of I-joists, refer to Manufacturer's Installation Guide

KOTT Inc.
3228 Moodie Drive
Ottawa, ON
K2H 7V1
613-838-2775

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.

December 17, 2018

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.
64 Jardin Dr., Suite 3A, Vaughan, ON
Date: Rev.5; Aug.30,2018
Project No: 17-55
Model: Celestial 2

Legend

◇	Load from Above
	Wall
	Wall Opening
	Norbord Rimboard Plus 1.125 X 11.875
	LPI 20Plus 11.875
	NJ40U 11.875
	NJ60H 11.875
	NJ60U 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
F15	LPI 20Plus	2.5	11.875			5	18-0-0
F13	LPI 20Plus	2.5	11.875			5	14-0-0
F12	LPI 20Plus	2.5	11.875			4	4-0-0
F11	LPI 20Plus	2.5	11.875			4	2-0-0
J10	LPI 20Plus	2.5	11.875			5	16-0-0
J5	LPI 20Plus	2.5	11.875			3	14-0-0
J4	LPI 20Plus	2.5	11.875			4	12-0-0
J3	LPI 20Plus	2.5	11.875			2	8-0-0
J2	LPI 20Plus	2.5	11.875			2	6-0-0
J1	LPI 20Plus	2.5	11.875			16	4-0-0
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

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	LPI 20 Plus	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	40	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
LOT 1 (CELESTIAL 2 EL.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 \LOT 1 (CELESTIAL 2 ELEV.1)\FLOOR \LOT 1 (CELESTIAL 2 EL.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	SPF Plywood
Thickness	3/4"
Fastener	Nailed & Glued
Vibration	

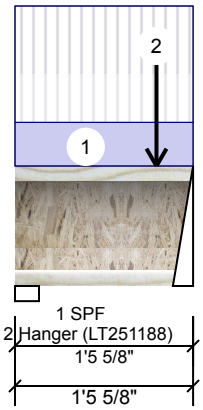
isDesign™

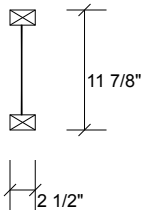
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F11-A LPI 20Plus 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

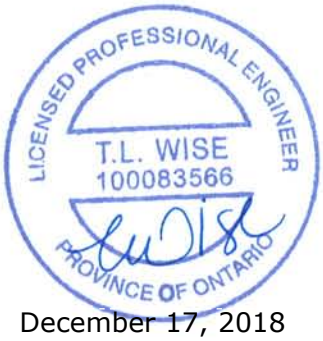
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	7%	29 / 92	120	L	1.25D+1.5L
2 - Hanger	2.000"	14%	53 / 171	224	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	42 ft-lb	11 7/16"	6250 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	211 lb	1'4 3/8"	2345 lb	0.090 (9%)	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/36074)	11 5/16"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/26279)	11 5/16"	0.061 (L/240)	0.010 (1%)	D+L	L

Design Notes

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



December 17, 2018

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

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

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

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

NASCOR

KOTT LSJ

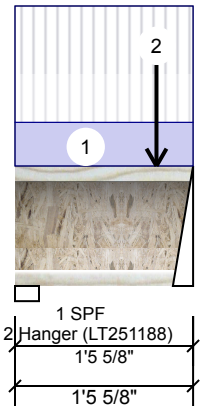
isDesign™

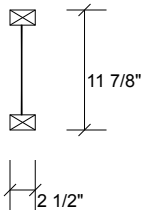
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F11-B LPI 20Plus 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

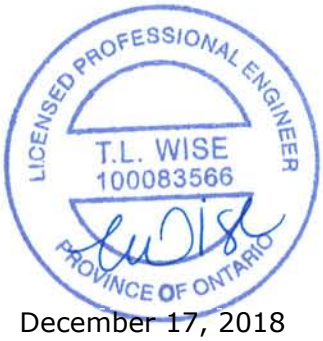
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	7%	28 / 91	119	L	1.25D+1.5L
2 - Hanger	2.000"	14%	52 / 167	219	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	41 ft-lb	11 5/16"	6250 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	206 lb	1'4 3/8"	2345 lb	0.088 (9%)	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/36734)	11 3/16"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/26745)	11 3/16"	0.061 (L/240)	0.010 (1%)	D+L	L

Design Notes

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



December 17, 2018

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

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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

This design is valid until 10/31/2020

Manufacturer Info

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

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

NASCOR

KOTT LSJ

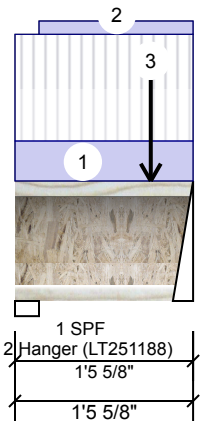
isDesign™

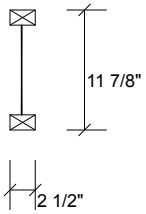
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F11-C LPI 20Plus 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

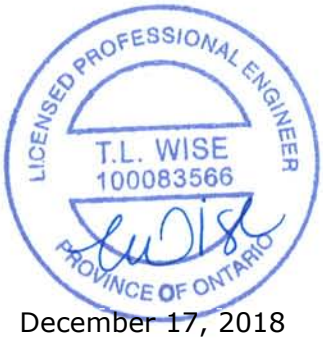
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	9%	41 / 102	143	L	1.25D+1.5L
2 - Hanger	2.000"	17%	79 / 191	269	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	59 ft-lb	1' 3/4"	6250 ft-lb	0.009 (1%)	1.25D+1.5L	L
Shear	255 lb	1'4 3/8"	2345 lb	0.109 (11%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/56853)	1' 3/8"	0.041 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/28228)	1' 7/16"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/18862)	1' 3/8"	0.061 (L/240)	0.010 (1%)	D+L	L

Design Notes

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



December 17, 2018

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	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

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CCMC: 12412-R APA: PR-L238C

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

NASCOR

KOTT LSJ

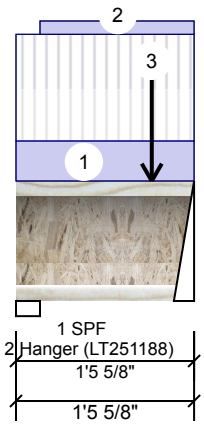
isDesign™

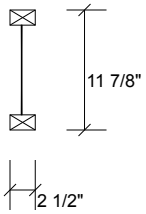
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F11-D LPI 20Plus 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

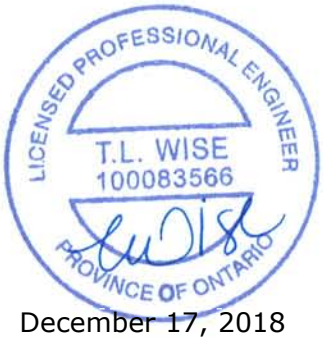
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	9%	41 / 103	144	L	1.25D+1.5L
2 - Hanger	2.000"	17%	81 / 194	275	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	60 ft-lb	1' 7/8"	6250 ft-lb	0.010 (1%)	1.25D+1.5L	L
Shear	261 lb	1'4 3/8"	2345 lb	0.111 (11%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/55408)	1' 1/2"	0.041 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/27690)	1' 1/2"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/18463)	1' 1/2"	0.061 (L/240)	0.010 (1%)	D+L	L

Design Notes

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



December 17, 2018

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	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

Louisiana-Pacific Corp
414 Union Street, Suite 2000
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(888) 820-0325
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CCMC: 12412-R APA: PR-L238C

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

NASCOR

KOTT LSJ

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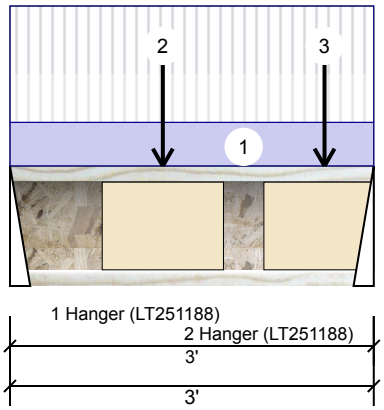
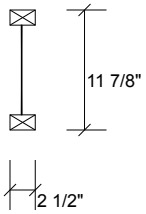
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F12-A LPI 20Plus 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	256	96	0	0
2	366	137	0	0

Bearings and Factored Reactions

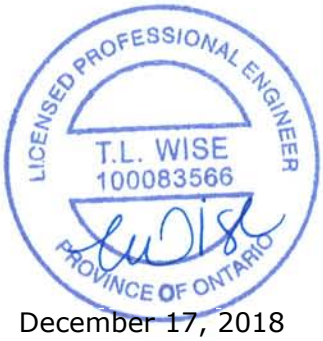
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	32%	120 / 384	504	L	1.25D+1.5L
2 - Hanger	2.000"	45%	171 / 550	721	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	529 ft-lb	1'3 1/8"	6250 ft-lb	0.085 (8%)	1.25D+1.5L	L
Shear	714 lb	2'10 3/4"	2345 lb	0.304 (30%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/15127)	1'3 1/8"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.006 (L/5660)	1'3 1/8"	0.093 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.008 (L/4119)	1'3 1/8"	0.140 (L/240)	0.060 (6%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.002", Long Term = 0.003"
3 Fill all hanger nailing holes.
4 See manufacture installation guide note E4 for installation details
5 Girders are designed to be supported on the bottom edge only.
6 Top flange braced at bearings.
7 Bottom flange braced at bearings.



December 17, 2018

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	Point	1-3-2		Near Face	116 lb	310 lb	0 lb	0 lb	J4
3	Point	2-7-2		Near Face	78 lb	209 lb	0 lb	0 lb	J4

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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CCMC: 12412-R APA: PR-L238C

Kott Lumber Company
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905-642-4400

NASCOR

KOTT LSJ

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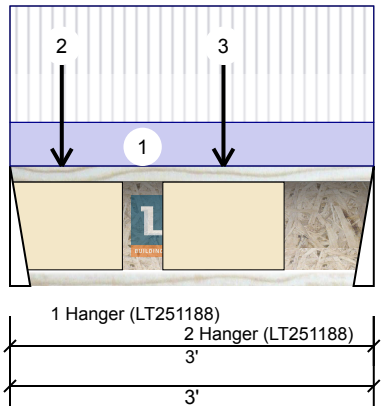
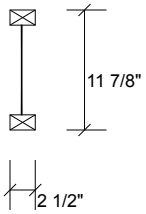
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F12-B LPI 20Plus 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	366	137	0	0
2	259	97	0	0

Bearings and Factored Reactions

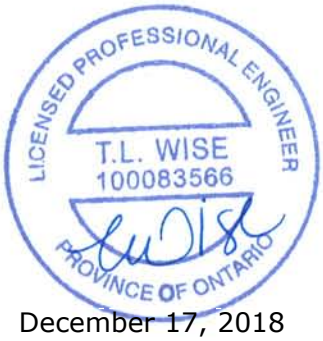
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	45%	171 / 549	720	L	1.25D+1.5L
2 - Hanger	2.000"	32%	121 / 389	510	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	527 ft-lb	1'9 1/8"	6250 ft-lb	0.084 (8%)	1.25D+1.5L	L
Shear	713 lb	1 1/4"	2345 lb	0.304 (30%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/15183)	1'9 1/8"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.006 (L/5673)	1'9 1/8"	0.093 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.008 (L/4130)	1'9 1/8"	0.140 (L/240)	0.060 (6%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.002", Long Term = 0.003"
3 Fill all hanger nailing holes.
4 See manufacture installation guide note E4 for installation details
5 Girders are designed to be supported on the bottom edge only.
6 Top flange braced at bearings.
7 Bottom flange braced at bearings.



December 17, 2018

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	Point	0-5-2		Near Face	80 lb	214 lb	0 lb	0 lb	J4
3	Point	1-9-2		Near Face	115 lb	308 lb	0 lb	0 lb	J4

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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905-642-4400

NASCOR

KOTT LSJ

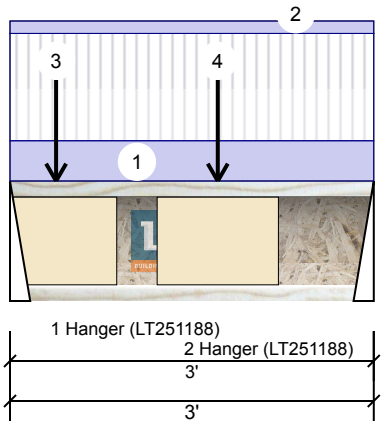
isDesign™

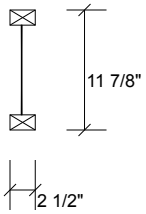
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F12-C LPI 20Plus 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	451	219	0	0
2	302	147	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	60%	274 / 677	950	L	1.25D+1.5L
2 - Hanger	2.000"	40%	184 / 453	637	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	693 ft-lb	1'8 9/16"	6250 ft-lb	0.111 (11%)	1.25D+1.5L	L
Shear	943 lb	1 1/4"	2345 lb	0.402 (40%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/9546)	1'8 9/16"	0.093 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.007 (L/4632)	1'8 9/16"	0.093 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.011 (L/3119)	1'8 9/16"	0.140 (L/240)	0.080 (8%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.004", Long Term = 0.005"
3 Fill all hanger nailing holes.
4 See manufacture installation guide note E4 for installation details
5 Girders are designed to be supported on the bottom edge only.
6 Top flange braced at bearings.
7 Bottom flange braced at bearings.

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 2018

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	126 lb	260 lb	0 lb	0 lb	J6
4	Point	1-8-9		Near Face	189 lb	390 lb	0 lb	0 lb	J6

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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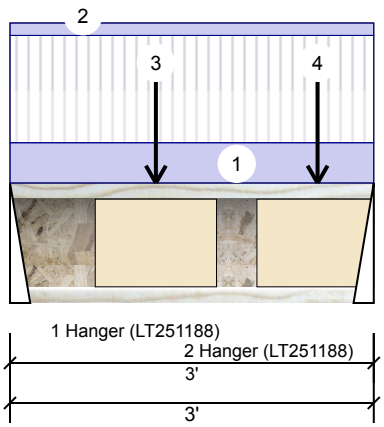
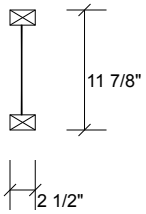
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F12-D LPI 20Plus 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	325	159	0	0
2	450	218	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	43%	198 / 487	686	L	1.25D+1.5L
2 - Hanger	2.000"	60%	273 / 676	948	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	701 ft-lb	1'2 7/16"	6250 ft-lb	0.112 (11%)	1.25D+1.5L	L
Shear	941 lb	2'10 3/4"	2345 lb	0.401 (40%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/9387)	1'2 7/16"	0.093 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.007 (L/4578)	1'2 7/16"	0.093 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.011 (L/3077)	1'2 7/16"	0.140 (L/240)	0.080 (8%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.004", Long Term = 0.005"
3 Fill all hanger nailing holes.
4 See manufacture installation guide note E4 for installation details
5 Girders are designed to be supported on the bottom edge only.
6 Top flange braced at bearings.
7 Bottom flange braced at bearings.

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 2018

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	191 lb	391 lb	0 lb	0 lb	J10
4	Point	2-6-7		Far Face	135 lb	281 lb	0 lb	0 lb	J10

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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NASCOR

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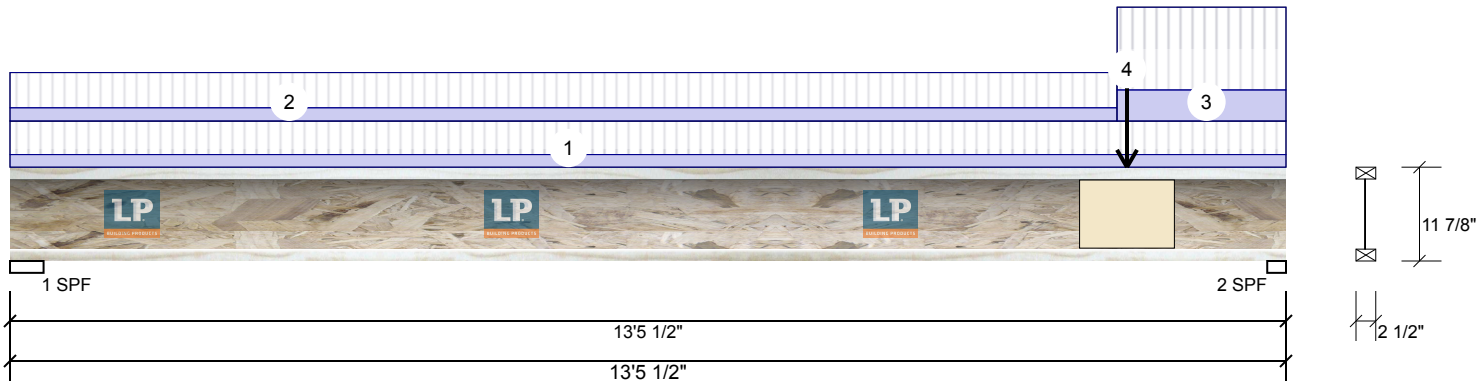
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F13-A LPI 20Plus 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	397	149	0	0
2	642	241	0	0

Bearings and Factored Reactions

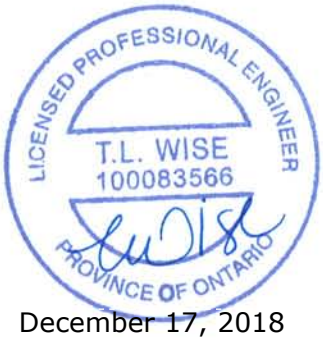
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.250"	43%	186 / 596	782	L	1.25D+1.5L
2 - SPF	2.375"	77%	301 / 963	1265	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2688 ft-lb	7'5 3/8"	6250 ft-lb	0.430 (43%)	1.25D+1.5L	L
Shear	1240 lb	13'3 7/8"	2345 lb	0.529 (53%)	1.25D+1.5L	L
Perm Defl in.	0.060 (L/2623)	7' 3/8"	0.434 (L/360)	0.140 (14%)	D	Uniform
LL Defl inch	0.159 (L/984)	7' 3/8"	0.434 (L/360)	0.370 (37%)	L	L
TL Defl inch	0.219 (L/715)	7' 3/8"	0.652 (L/240)	0.340 (34%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.060", Long Term = 0.089"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 6'4" o.c.
6 Bottom flange braced at bearings.



December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-5-8	(Span)1-3-10	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 11-8-2	(Span)1-4-6	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	11-8-2 to 13-5-8	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	11-9-6		Near Face	96 lb	256 lb	0 lb	0 lb	F12

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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This design is valid until 10/31/2020

Manufacturer Info

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

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

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KOTT LSJ

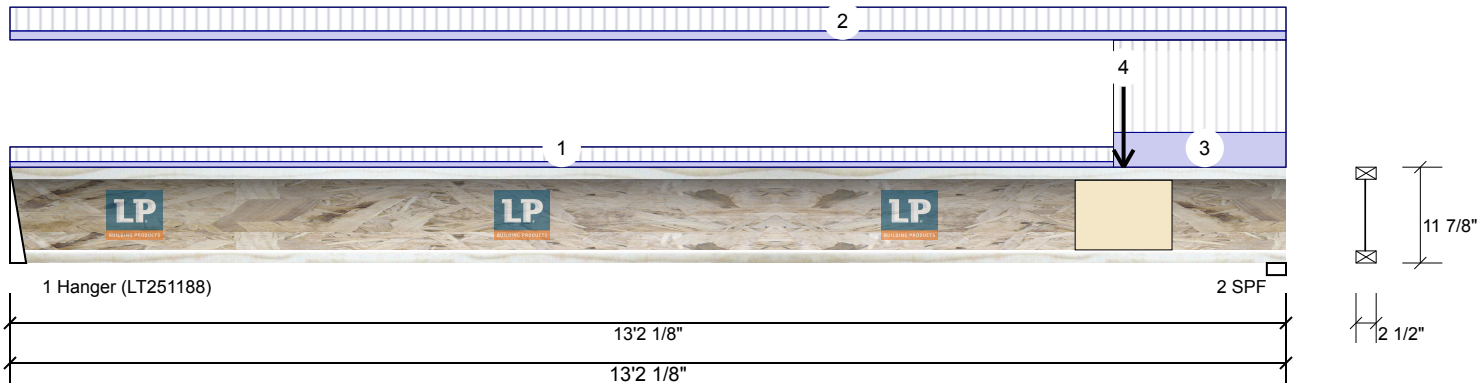
isDesign™

Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F13-B LPI 20Plus 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	225	84	0	0
2	589	221	0	0

Bearings and Factored Reactions

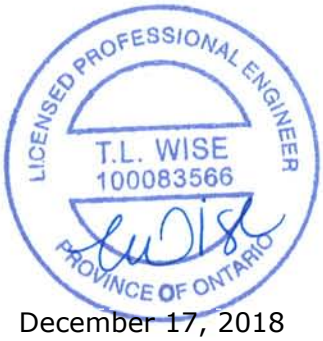
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	28%	105 / 337	442	L	1.25D+1.5L
2 - SPF	2.375"	71%	276 / 883	1159	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1815 ft-lb	8'5 1/16"	6250 ft-lb	0.290 (29%)	1.25D+1.5L	L
Shear	1138 lb	13' 1/2"	2345 lb	0.485 (49%)	1.25D+1.5L	L
Perm Defl in.	0.039 (L/3941)	7' 15/16"	0.431 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.105 (L/1477)	7' 15/16"	0.431 (L/360)	0.240 (24%)	L	L
TL Defl inch	0.145 (L/1074)	7' 15/16"	0.647 (L/240)	0.220 (22%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.039", Long Term = 0.059"
3 Fill all hanger nailing holes.
4 See manufacture installation guide note E4 for installation details
5 Girders are designed to be supported on the bottom edge only.
6 Top flange must be laterally braced at a maximum of 7'7" o.c.
7 Bottom flange braced at bearings.



December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-4-12	(Span)0-6-2	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-2-2	(Span)0-9-14	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	11-4-12 to 13-2-2	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	11-6-0		Far Face	137 lb	366 lb	0 lb	0 lb	F12

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

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www.lpcorp.com
CCMC: 12412-R APA: PR-L238C

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

NASCOR

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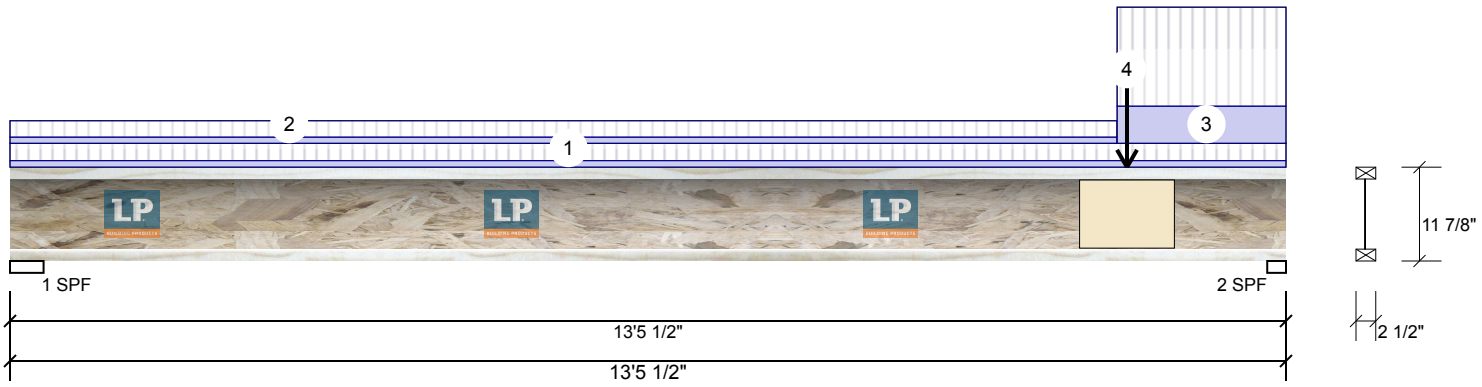
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F13-C LPI 20Plus 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	198	74	0	0
2	558	209	0	0

Bearings and Factored Reactions

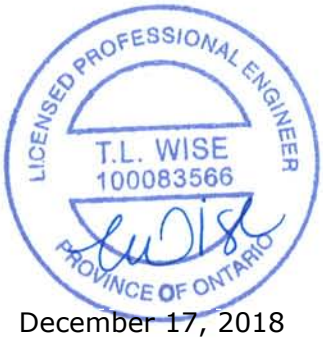
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.250"	21%	93 / 297	389	L	1.25D+1.5L
2 - SPF	2.375"	67%	261 / 837	1098	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1648 ft-lb	9' 1/2"	6250 ft-lb	0.264 (26%)	1.25D+1.5L	L
Shear	1078 lb	13'3 7/8"	2345 lb	0.460 (46%)	1.25D+1.5L	L
Perm Defl in.	0.036 (L/4358)	7'4 1/2"	0.434 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.096 (L/1633)	7'4 1/2"	0.434 (L/360)	0.220 (22%)	L	L
TL Defl inch	0.132 (L/1188)	7'4 1/2"	0.652 (L/240)	0.200 (20%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.036", Long Term = 0.054"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 7'11" o.c.
6 Bottom flange braced at bearings.



December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-5-8	(Span)0-6-12	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 11-8-2	(Span)0-6-6	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	11-8-2 to 13-5-8	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	11-9-6		Near Face	137 lb	366 lb	0 lb	0 lb	F12

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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Manufacturer Info

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CCMC: 12412-R APA: PR-L238C

Kott Lumber Company
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905-642-4400

NASCOR

KOTT LSJ

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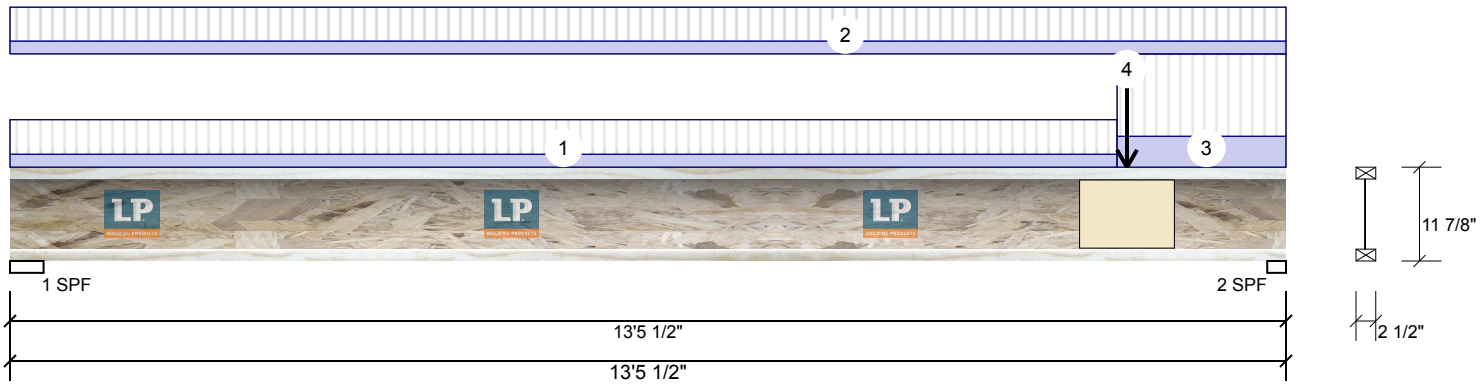
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F13-D LPI 20Plus 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	398	149	0	0
2	646	242	0	0

Bearings and Factored Reactions

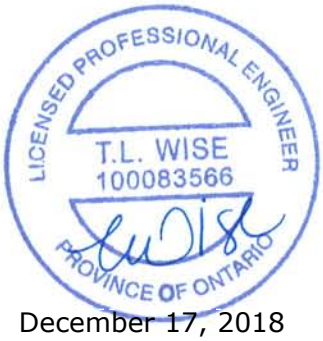
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.250"	43%	186 / 596	783	L	1.25D+1.5L
2 - SPF	2.375"	78%	303 / 968	1271	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2693 ft-lb	7'5 7/16"	6250 ft-lb	0.431 (43%)	1.25D+1.5L	L
Shear	1247 lb	13'3 7/8"	2345 lb	0.532 (53%)	1.25D+1.5L	L
Perm Defl in.	0.060 (L/2618)	7' 3/8"	0.434 (L/360)	0.140 (14%)	D	Uniform
LL Defl inch	0.159 (L/982)	7' 3/8"	0.434 (L/360)	0.370 (37%)	L	L
TL Defl inch	0.219 (L/714)	7' 3/8"	0.652 (L/240)	0.340 (34%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.060", Long Term = 0.090"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 6'4" o.c.
6 Bottom flange braced at bearings.



December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-8-2	(Span)1-4-2	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-5-8	(Span)1-3-14	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	11-8-2 to 13-5-8	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	11-9-6		Far Face	97 lb	259 lb	0 lb	0 lb	F12

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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Manufacturer Info

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CCMC: 12412-R APA: PR-L238C

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905-642-4400

NASCOR

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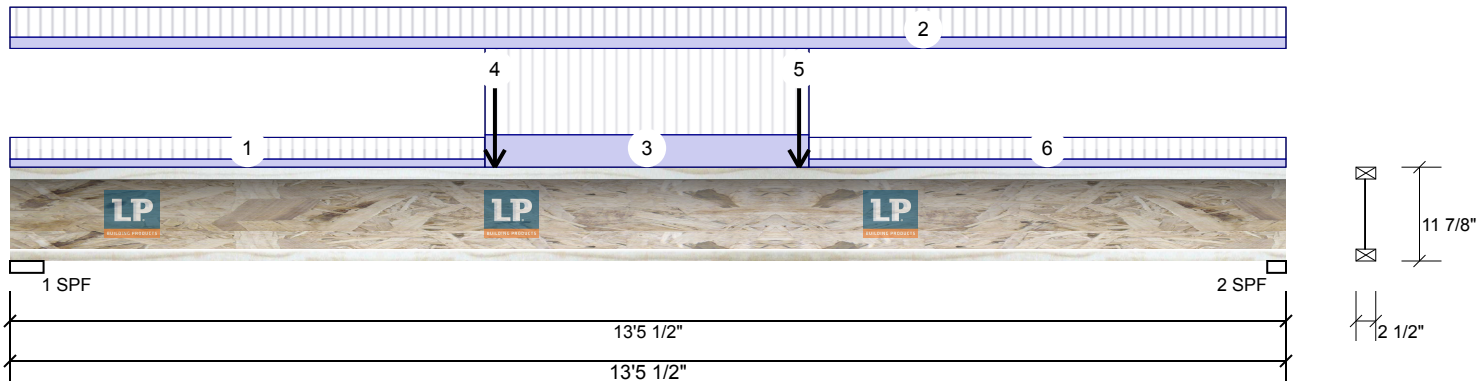
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F13-E LPI 20Plus 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	288	108	0	0
2	281	105	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.250"	31%	135 / 432	567	L	1.25D+1.5L
2 - SPF	2.375"	34%	131 / 422	554	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2362 ft-lb	6'9 13/16"	6250 ft-lb	0.378 (38%)	1.25D+1.5L	L
Shear	556 lb	3 1/2"	2345 lb	0.237 (24%)	1.25D+1.5L	L
Perm Defl in.	0.050 (L/3138)	6'9 5/8"	0.434 (L/360)	0.110 (11%)	D	Uniform
LL Defl inch	0.133 (L/1172)	6'9 5/8"	0.434 (L/360)	0.310 (31%)	L	L
TL Defl inch	0.183 (L/853)	6'9 5/8"	0.652 (L/240)	0.280 (28%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.050", Long Term = 0.075"
3 Girders are designed to be supported on the bottom edge only.
4 Top flange must be laterally braced at a maximum of 6'9" o.c.
5 Bottom flange braced at bearings.

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 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)0-6-12	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	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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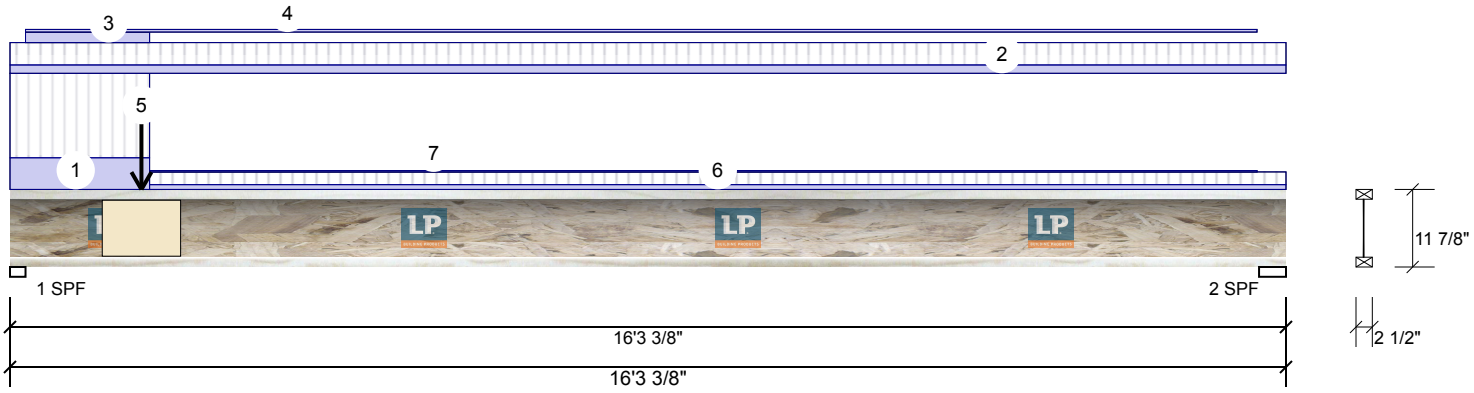
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F15-A LPI 20Plus 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	715	347	0	0
2	268	129	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	92%	434 / 1072	1506	L	1.25D+1.5L
2 - SPF	4.125"	31%	162 / 401	563	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2674 ft-lb	6'3"	6250 ft-lb	0.428 (43%)	1.25D+1.5L	L
Shear	1484 lb	1 5/8"	2345 lb	0.633 (63%)	1.25D+1.5L	L
Perm Defl in.	0.101 (L/1881)	7'6 7/8"	0.529 (L/360)	0.190 (19%)	D	Uniform
LL Defl inch	0.208 (L/917)	7'6 7/8"	0.529 (L/360)	0.390 (39%)	L	L
TL Defl inch	0.309 (L/616)	7'6 7/8"	0.793 (L/240)	0.390 (39%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.101", Long Term = 0.152"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 6'5" o.c.
6 Bottom flange braced at bearings.

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-3-6	(Span)0-10-3	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 1-9-6		Top	8 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	219 lb	451 lb	0 lb	0 lb	F12
6	Tie-In	1-9-6 to 16-3-6	(Span)0-5-13	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	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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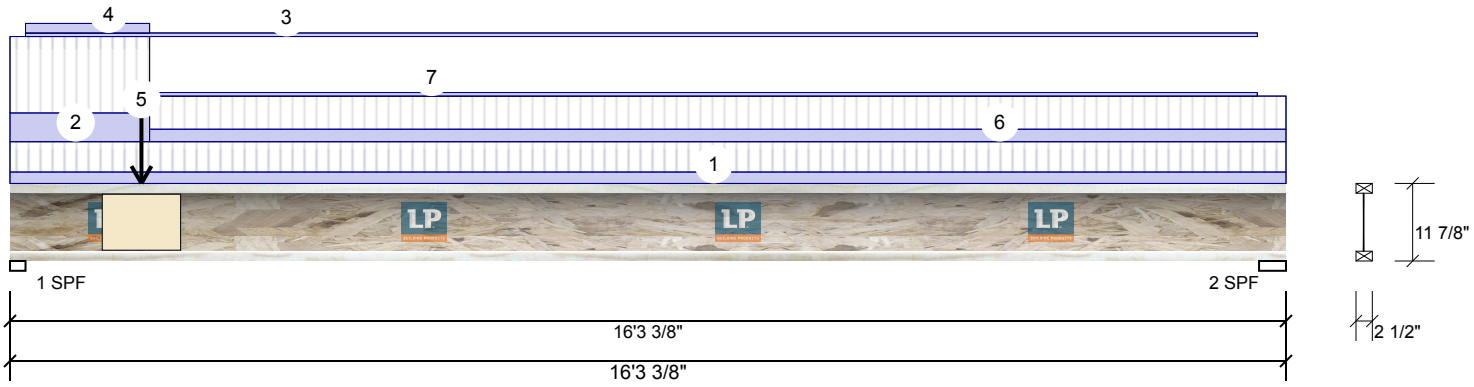
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F15-B LPI 20Plus 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	765	372	0	0
2	471	227	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	99%	465 / 1147	1612	L	1.25D+1.5L
2 - SPF	4.125"	54%	284 / 706	990	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4104 ft-lb	7'5 1/2"	6250 ft-lb	0.657 (66%)	1.25D+1.5L	L
Shear	1588 lb	1 5/8"	2345 lb	0.677 (68%)	1.25D+1.5L	L
Perm Defl in.	0.155 (L/1227)	7'10 5/16"	0.529 (L/360)	0.290 (29%)	D	Uniform
LL Defl inch	0.318 (L/598)	7'10 5/16"	0.529 (L/360)	0.600 (60%)	L	L
TL Defl inch	0.473 (L/402)	7'10 5/16"	0.793 (L/240)	0.600 (60%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.155", Long Term = 0.233"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 5'1" o.c.
6 Bottom flange braced at bearings.

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December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-3-6	(Span)1-3-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-2-8	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	8 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	147 lb	302 lb	0 lb	0 lb	F12
6	Tie-In	1-9-6 to 16-3-6	(Span)1-4-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 15-11-0		Top	3 PLF	0 PLF	0 PLF	0 PLF	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

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

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

NASCOR

KOTT

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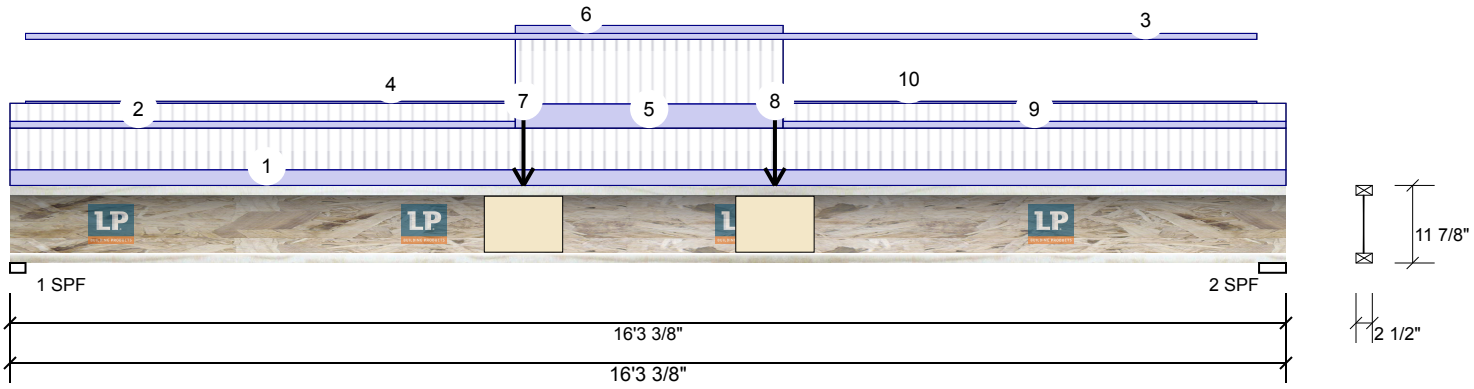
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F15-C LPI 20Plus 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	408	206	0	0
2	416	209	0	0

Bearings and Factored Reactions

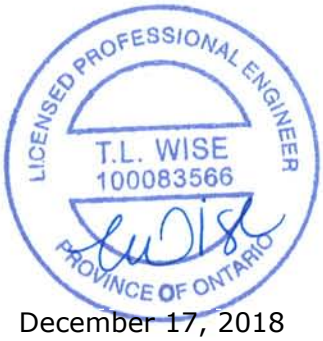
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	53%	257 / 612	869	L	1.25D+1.5L
2 - SPF	4.125"	48%	261 / 624	885	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4338 ft-lb	8' 5/8"	6250 ft-lb	0.694 (69%)	1.25D+1.5L	L
Shear	868 lb	16'	2345 lb	0.370 (37%)	1.25D+1.5L	L
Perm Defl in.	0.159 (L/1194)	8' 7/8"	0.529 (L/360)	0.300 (30%)	D	Uniform
LL Defl inch	0.316 (L/603)	8' 15/16"	0.529 (L/360)	0.600 (60%)	L	L
TL Defl inch	0.475 (L/400)	8' 15/16"	0.793 (L/240)	0.600 (60%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.159", Long Term = 0.239"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 4'11" o.c.
6 Bottom flange braced at bearings.



December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-3-6	(Span)1-0-9	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

Continued on page 2...

Notes

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This design is valid until 10/31/2020

Manufacturer Info

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

Kott Lumber Company
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905-642-4400

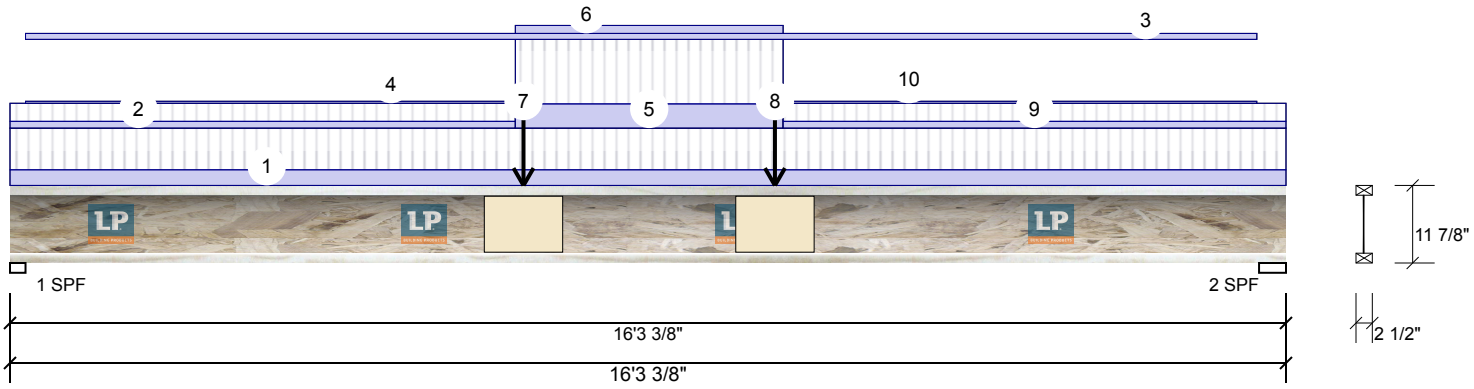
isDesign™

Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F15-C LPI 20Plus 11.875" - PASSED

Level: Ground Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
8	Point	9-9-2		Near Face	63 lb	127 lb	0 lb	0 lb	F11
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	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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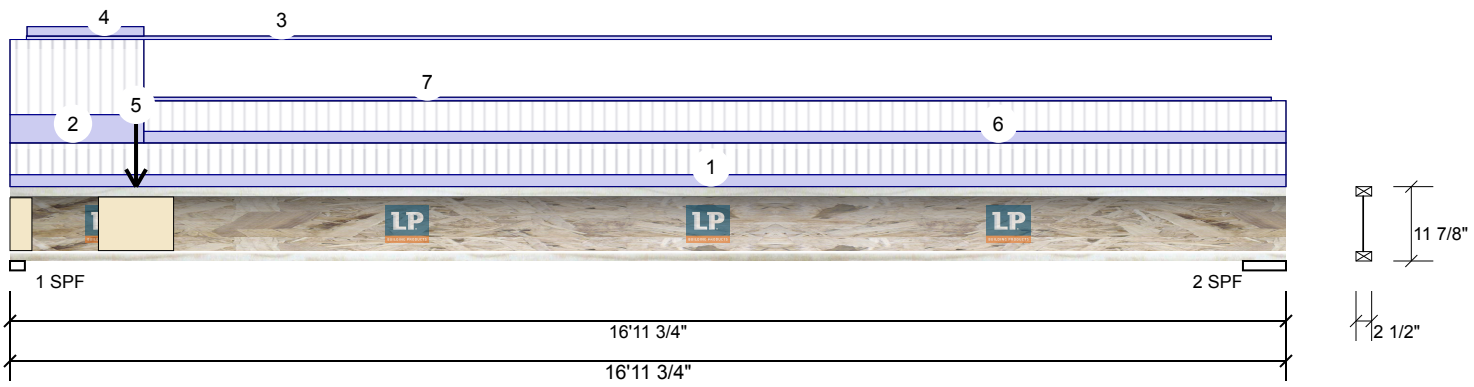
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F15-D LPI 20Plus 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	802	390	0	0
2	497	241	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	79%	488 / 1203	1690	L	1.25D+1.5L
2 - SPF	6.875"	57%	301 / 745	1046	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4358 ft-lb	7'8"	6250 ft-lb	0.697 (70%)	1.25D+1.5L	L
Shear	1666 lb	1 5/8"	2345 lb	0.710 (71%)	1.25D+1.5L	L
Perm Defl in.	0.174 (L/1129)	8'1 1/16"	0.544 (L/360)	0.320 (32%)	D	Uniform
LL Defl inch	0.356 (L/551)	8'1 1/16"	0.544 (L/360)	0.650 (65%)	L	L
TL Defl inch	0.530 (L/370)	8'1 1/16"	0.817 (L/240)	0.650 (65%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.174", Long Term = 0.260"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 4'10" o.c.
6 Bottom flange braced at bearings.
7 Web stiffeners required at Bearing 1.

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December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-11-12	(Span)1-4-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-2-8	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	8 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	159 lb	325 lb	0 lb	0 lb	
6	Tie-In	1-9-6 to 16-11-12	(Span)1-3-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-6		Top	3 PLF	0 PLF	0 PLF	0 PLF	

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

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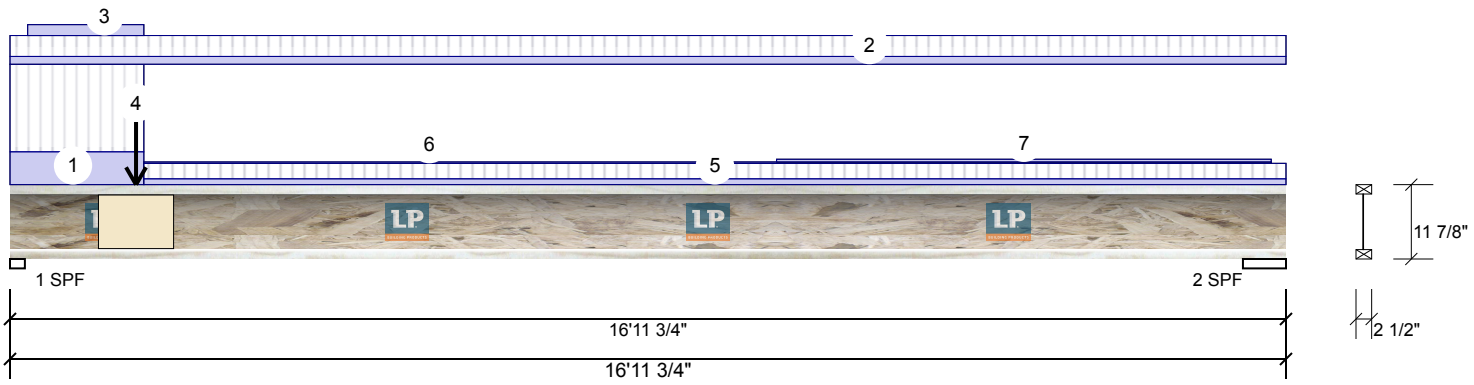
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F15-E LPI 20Plus 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	719	335	0	0
2	278	129	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	91%	418 / 1078	1496	L	1.25D+1.5L
2 - SPF	6.875"	32%	161 / 417	578	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2709 ft-lb	6'6 1/4"	6250 ft-lb	0.433 (43%)	1.25D+1.5L	L
Shear	1475 lb	1 5/8"	2345 lb	0.629 (63%)	1.25D+1.5L	L
Perm Defl in.	0.103 (L/1907)	7'9 7/8"	0.544 (L/360)	0.190 (19%)	D	Uniform
LL Defl inch	0.227 (L/864)	7'9 7/8"	0.544 (L/360)	0.420 (42%)	L	L
TL Defl inch	0.330 (L/594)	7'9 7/8"	0.817 (L/240)	0.400 (40%)	D+L	L

Design Notes

1 Provide restraint at supports to ensure lateral stability.
2 Dead Load Deflection: Instant = 0.103", Long Term = 0.154"
3 See manufacture installation guide note E4 for installation details
4 Girders are designed to be supported on the bottom edge only.
5 Top flange must be laterally braced at a maximum of 6'4" o.c.
6 Bottom flange braced at bearings.

LICENSED PROFESSIONAL ENGINEER
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PROVINCE OF ONTARIO

December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-11-12	(Span)0-9-3	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	218 lb	450 lb	0 lb	0 lb	F12
5	Tie-In	1-9-6 to 16-11-12	(Span)0-6-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	1-9-6 to 16-9-6		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	

Pass Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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

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This design is valid until 10/31/2020

Manufacturer Info

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(888) 820-0325
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CCMC: 12412-R APA: PR-L238C

Kott Lumber Company
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905-642-4400

NASCOR

KOTT LSJ

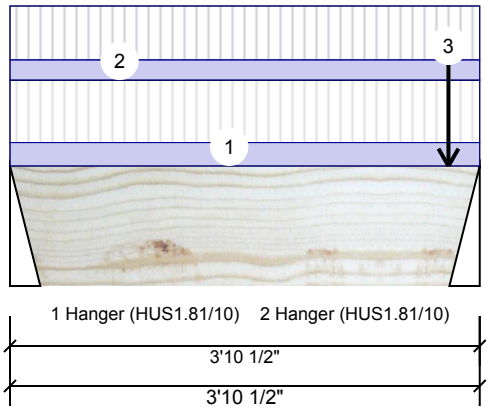
isDesign™

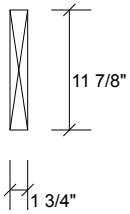
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.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	62	33	0	0
2	580	266	0	0

Bearings and Factored Reactions

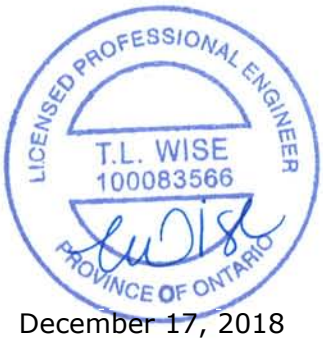
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	3%	42 / 94	136	L	1.25D+1.5L
2 - Hanger	3.000"	64%	332 / 870	1202	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	133 ft-lb	2'3 13/16"	17130 ft-lb	0.008 (1%)	1.25D+1.5L	L
Unbraced	133 ft-lb	2'3 13/16"	12574 ft-lb	0.011 (1%)	1.25D+1.5L	L
Shear	101 lb	2'8 3/8"	5798 lb	0.017 (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/66968)	2'1 7/8"	0.117 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/44165)	2'1 3/4"	0.175 (L/240)	0.010 (1%)	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 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.



December 17, 2018

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	242 lb	539 lb	0 lb	0 lb	
	Self Weight				5 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This design is va

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Manufacturer Info

Forex
APA: PR-L318

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

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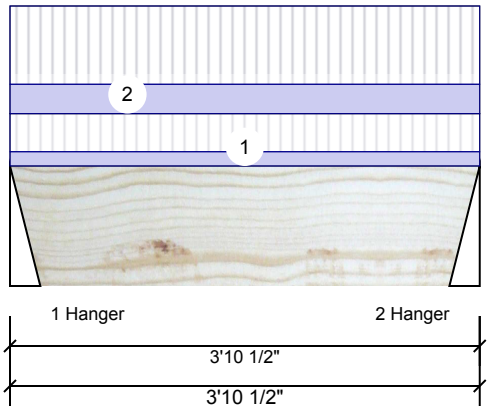
isDesign™

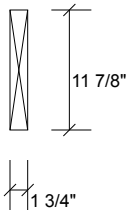
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.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

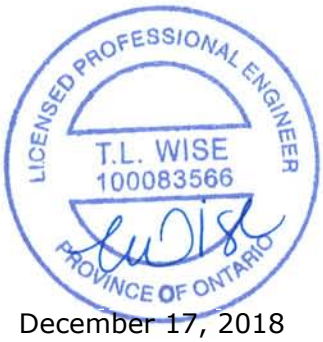
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	6%	66 / 173	238	L	1.25D+1.5L
2 - Hanger	3.000"	6%	66 / 173	238	L	1.25D+1.5L

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

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.



December 17, 2018

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				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This design

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

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT

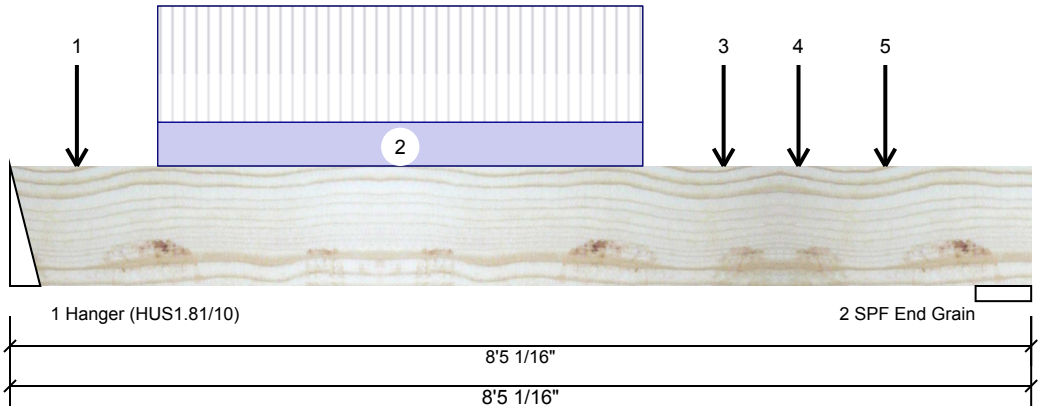
isDesign™

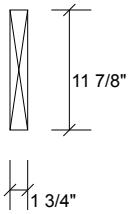
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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	404	181	0	0
2	704	324	0	0

Bearings and Factored Reactions

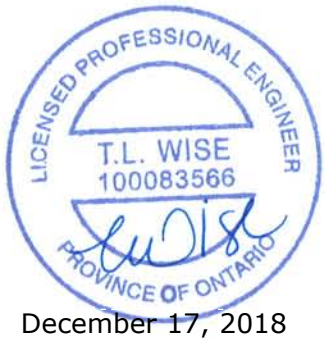
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	21%	227 / 607	833	L	1.25D+1.5L
2 - SPF End Grain	5.500"	20%	405 / 1055	1460	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2193 ft-lb	5'10 5/8"	17130 ft-lb	0.128 (13%)	1.25D+1.5L	L
Unbraced	2193 ft-lb	5'10 5/8"	5736 ft-lb	0.382 (38%)	1.25D+1.5L	L
Shear	1452 lb	7' 7/16"	5798 lb	0.250 (25%)	1.25D+1.5L	L
Perm Defl in.	0.013 (L/7131)	4'5 9/16"	0.261 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.029 (L/3217)	4'5 7/16"	0.261 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.042 (L/2217)	4'5 1/2"	0.392 (L/240)	0.110 (11%)	D+L	L

Design Notes

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



December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	
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	266 lb	580 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				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This design is val

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Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT LSJ

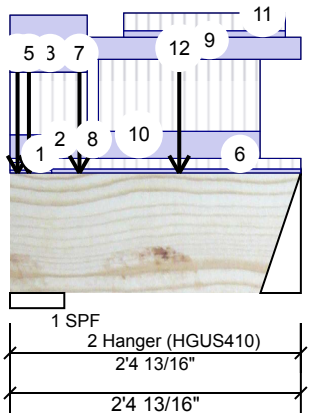
isDesign™

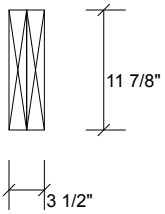
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.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	2791	1207	0	0
2	299	159	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.375"	52%	1509 / 4187	5695	L	1.25D+1.5L
2 - Hanger	4.000"	6%	199 / 449	648	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	375 ft-lb	1'4 3/4"	34261 ft-lb	0.011 (1%)	1.25D+1.5L	L
Unbraced	375 ft-lb	1'4 3/4"	34261 ft-lb	0.011 (1%)	1.25D+1.5L	L
Shear	582 lb	1'4 1/2"	11596 lb	0.050 (5%)	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/35461)	1'4 3/4"	0.058 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/24245)	1'4 3/4"	0.087 (L/240)	0.010 (1%)	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 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.

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 2018

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

This desig

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Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT

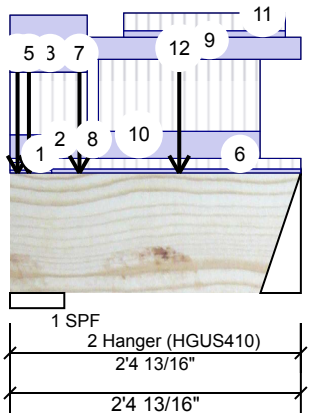
isDesign™

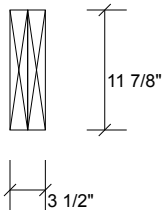
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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

Level: Ground Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Point	0-0-12		Far Face	55 lb	147 lb	0 lb	0 lb	J4
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	Point	0-6-14		Far Face	84 lb	225 lb	0 lb	0 lb	F13
8	Part. Uniform	0-7-10 to 0-8-12		Top	13 PLF	34 PLF	0 PLF	0 PLF	J5
9	Part. Uniform	0-7-10 to 2-4-13		Top	31 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
10	Part. Uniform	0-8-12 to 2-0-12		Top	38 PLF	101 PLF	0 PLF	0 PLF	J5
11	Part. Uniform	0-11-4 to 2-3-4		Top	9 PLF	25 PLF	0 PLF	0 PLF	J1
12	Point	1-4-12		Far Face	100 lb	267 lb	0 lb	0 lb	J5
	Self Weight				10 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This design is valid until 7/10/2021

Manufacturer Info

Forex
APA: PR-L318

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

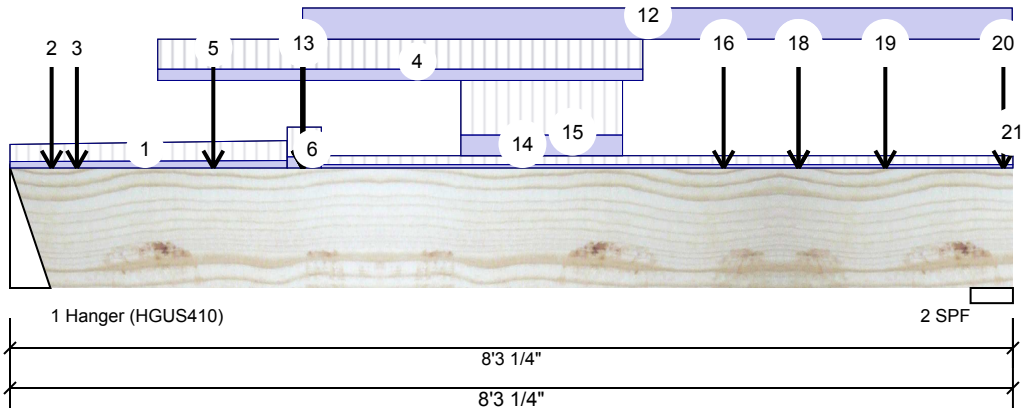
isDesign™

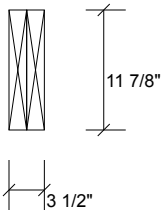
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F7-A 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	1093	723	0	0
2	992	790	0	0

Bearings and Factored Reactions

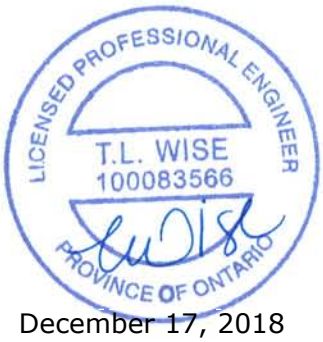
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	24%	903 / 1640	2543	L	1.25D+1.5L
2 - SPF	4.192"	27%	988 / 1487	2475	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4881 ft-lb	3'9 7/8"	34261 ft-lb	0.142 (14%)	1.25D+1.5L	L
Unbraced	4881 ft-lb	3'9 7/8"	31493 ft-lb	0.155 (15%)	1.25D+1.5L	L
Shear	2408 lb	1'3 1/8"	11596 lb	0.208 (21%)	1.25D+1.5L	L
Perm Defl in.	0.021 (L/4444)	4' 11/16"	0.257 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.028 (L/3322)	4' 1/8"	0.257 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.049 (L/1901)	4' 5/16"	0.386 (L/240)	0.130 (13%)	D+L	L

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.



December 17, 2018

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

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

This design is

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Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT LSJ

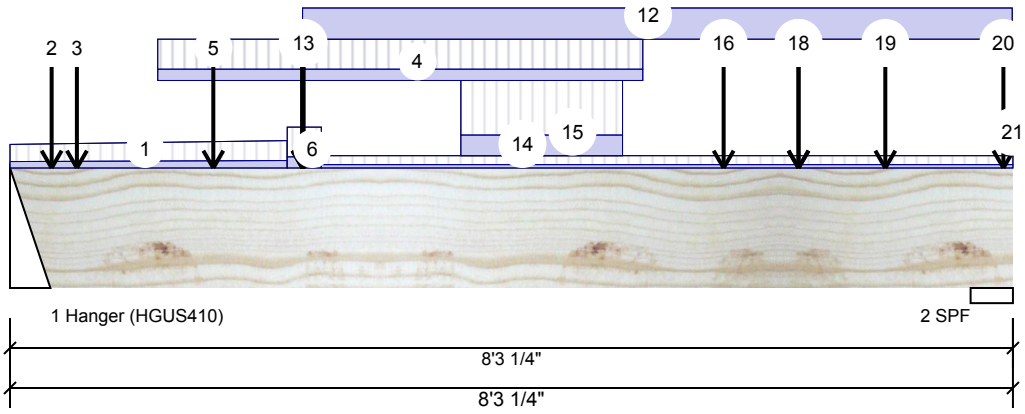
isDesign™

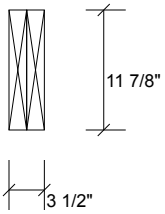
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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

Level: Ground Floor





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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	159 lb	299 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	76 lb	0 lb	0 lb	J1
17	Point	6-6-0		Near Face	33 lb	62 lb	0 lb	0 lb	F2
18	Point	6-6-0		Top	141 lb	322 lb	0 lb	0 lb	F10 F10
19	Point	7-2-10		Near Face	25 lb	65 lb	0 lb	0 lb	J1
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	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				10 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This design is valid until 7/10/2021

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT

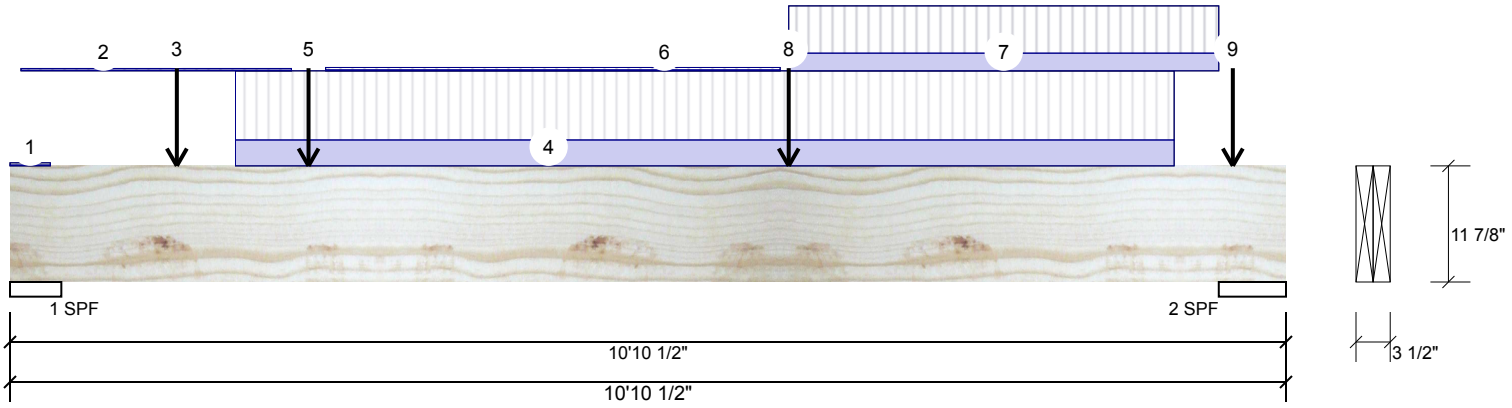
isDesign™

Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F8-B 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	3015	1438	0	0
2	3156	1322	0	0

Bearings and Factored Reactions

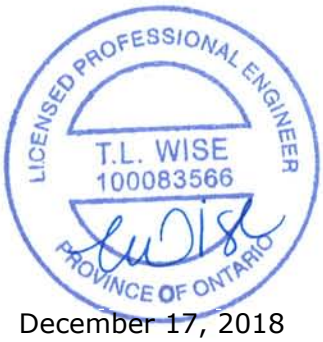
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	56%	1797 / 4523	6320	L	1.25D+1.5L
2 - SPF	6.875"	43%	1652 / 4734	6386	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	16147 ft-lb	5'6 1/8"	34261 ft-lb	0.471 (47%)	1.25D+1.5L	L
Unbraced	16147 ft-lb	5'6 1/8"	29618 ft-lb	0.545 (55%)	1.25D+1.5L	L
Shear	6696 lb	1'4 3/8"	11596 lb	0.577 (58%)	1.25D+1.5L	L
Perm Defl in.	0.075 (L/1589)	5'3 11/16"	0.333 (L/360)	0.230 (23%)	D	Uniform
LL Defl inch	0.170 (L/704)	5'4 11/16"	0.333 (L/360)	0.510 (51%)	L	L
TL Defl inch	0.246 (L/488)	5'4 3/8"	0.499 (L/240)	0.490 (49%)	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.



December 17, 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	723 lb	1093 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...

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

This design is

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

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT

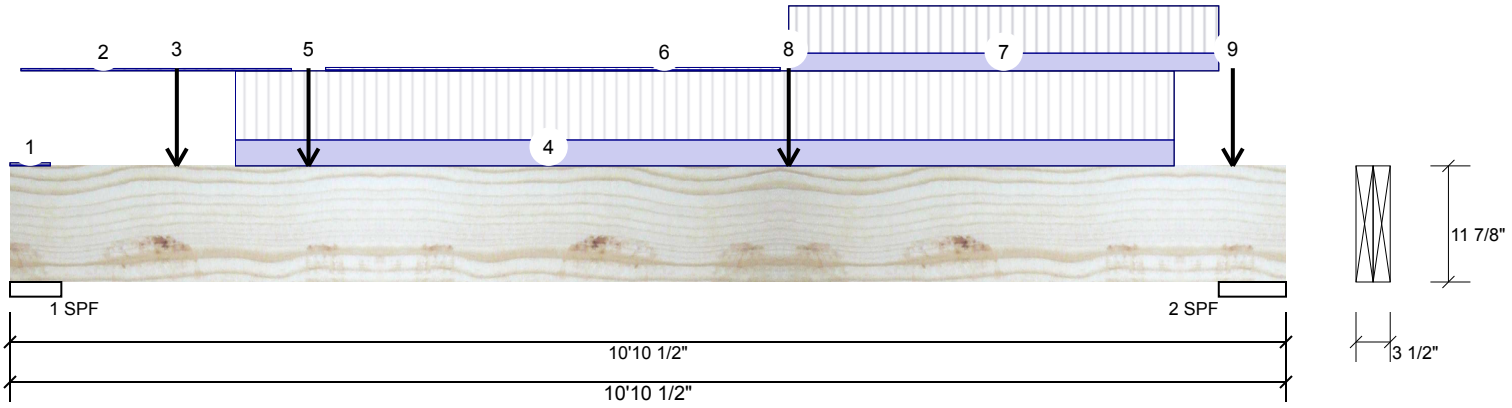
isDesign™

Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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

Level: Ground Floor



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	6-7-10 to 10-3-10		Top	101 PLF	270 PLF	0 PLF	0 PLF	
8	Point	6-7-10		Far Face	181 lb	404 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				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

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

Handling & Installation

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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

This design is valid until 7/10/2021

Manufacturer Info

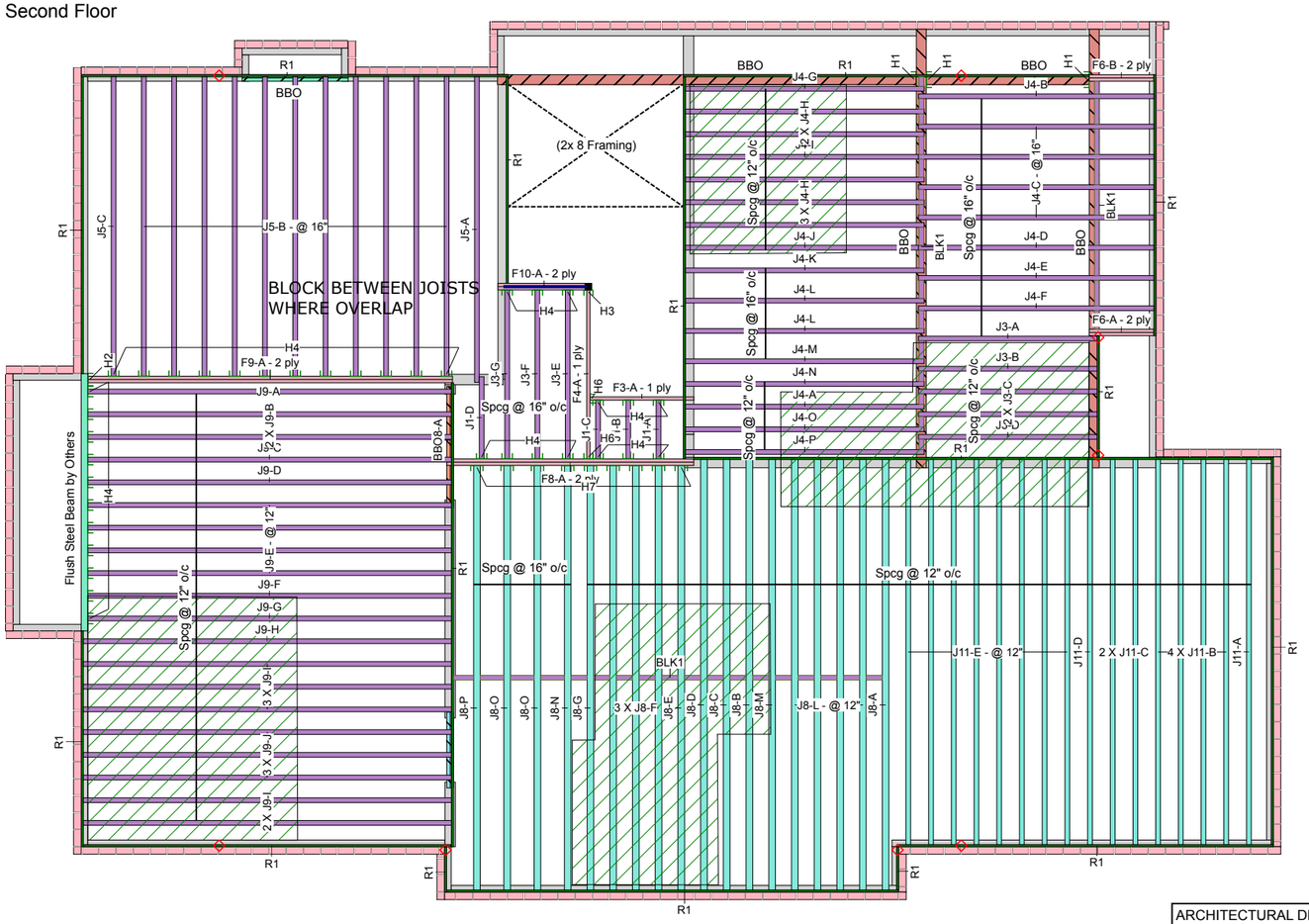
Forex
APA: PR-L318

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

NASCOR

KOTT LSJ

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.

December 17, 2018

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.
64 Jardin Dr., Suite 3A, Vaughan, ON
Date: Rev.5; Aug.30,2018
Project No: 17-55
Model: Celestial 2

Legend

◇	Load from Above
	Wall
	Norbord Rimboard Plus 1.125 X 11.875
	LPI 20Plus 11.875
	NJ60H 11.875
	NJ60U 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
F10	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
J9	LPI 20Plus	2.5	11.875			20	18-0-0
J5	LPI 20Plus	2.5	11.875			13	14-0-0
J4	LPI 20Plus	2.5	11.875			24	12-0-0
J3	LPI 20Plus	2.5	11.875			8	8-0-0
J1	LPI 20Plus	2.5	11.875			4	4-0-0
J11	NJ60H	2.5	11.875			16	18-0-0
J8	NJ60U	3.5	11.875			18	20-0-0

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	LPI 20 Plus	2.5	11.875	LinFt		Varies	33-0-0

Hanger

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

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
LOT 1 (CELESTIAL 2 EL.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 \LOT 1 (CELESTIAL 2 ELEV.1)\FLOOR \LOT 1 (CELESTIAL 2 EL.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"

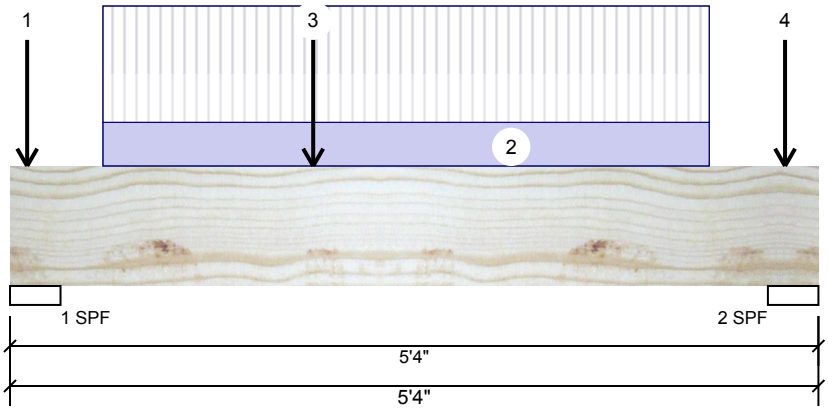
isDesign™

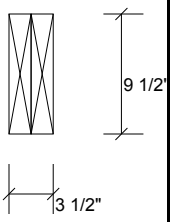
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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	2317	939	0	0
2	1592	645	0	0

Bearings and Factored Reactions

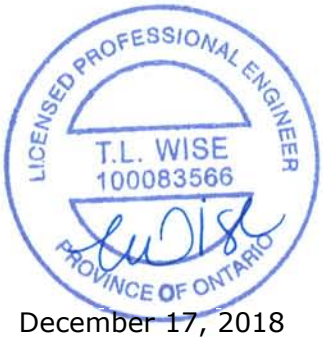
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.000"	54%	1173 / 3476	4649	L	1.25D+1.5L
2 - SPF	4.000"	37%	806 / 2388	3194	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6963 ft-lb	2'	22724 ft-lb	0.306 (31%)	1.25D+1.5L	L
Unbraced	6963 ft-lb	2'	22724 ft-lb	0.306 (31%)	1.25D+1.5L	L
Shear	4094 lb	1' 3/4"	9277 lb	0.441 (44%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/4012)	2'3 9/16"	0.160 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.035 (L/1625)	2'3 9/16"	0.160 (L/360)	0.220 (22%)	L	L
TL Defl inch	0.050 (L/1157)	2'3 9/16"	0.240 (L/240)	0.210 (21%)	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.



December 17, 2018

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	975 lb	2394 lb	0 lb	0 lb	P8
4	Point	5-1-6		Top	38 lb	102 lb	0 lb	0 lb	J9
	Self Weight				8 PLF				

Pass Thru Framing Squash Block is required at all point loads over bearings

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

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

This design is

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

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT

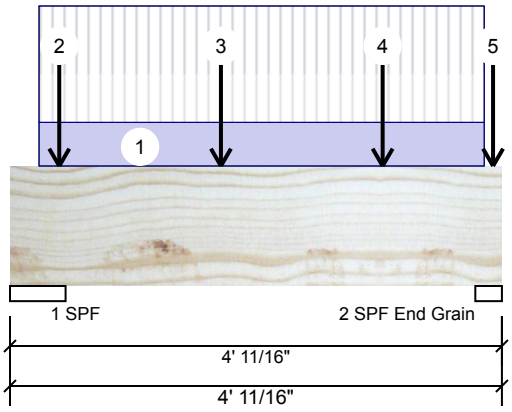
isDesign™

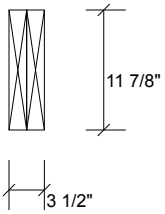
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

F10-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	322	141	0	0
2	539	242	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	6%	176 / 483	660	L	1.25D+1.5L
2 - SPF End Grain	2.632"	16%	302 / 808	1110	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	673 ft-lb	1'8 7/8"	34261 ft-lb	0.020 (2%)	1.25D+1.5L	L
Unbraced	673 ft-lb	1'8 7/8"	34261 ft-lb	0.020 (2%)	1.25D+1.5L	L
Shear	530 lb	2'10 15/16"	11596 lb	0.046 (5%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/60821)	2' 1/2"	0.117 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/25507)	2' 1/4"	0.117 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.002 (L/17971)	2' 3/8"	0.175 (L/240)	0.010 (1%)	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.

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-2-14 to 3-10-15		Top	30 PLF	80 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	94 lb	194 lb	0 lb	0 lb	F4
	Self Weight				10 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

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

This c

Manufacturer Info

Forex
APA: PR-L318

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NASCOR

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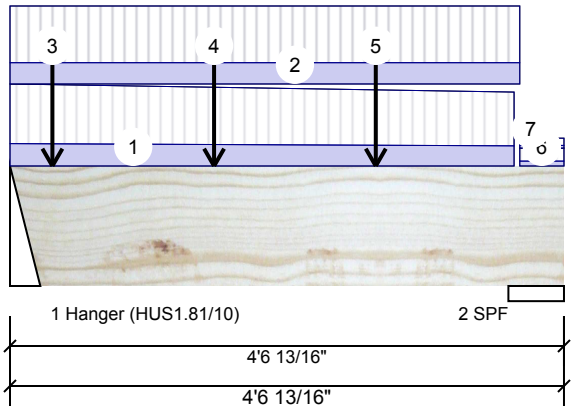
isDesign™

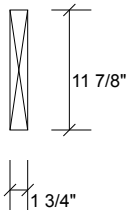
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.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	351	142	0	0
2	303	125	0	0

Bearings and Factored Reactions

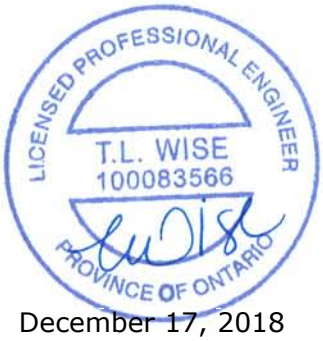
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	18%	178 / 527	705	L	1.25D+1.5L
2 - SPF	5.500"	10%	156 / 454	610	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	632 ft-lb	2'1 1/8"	17130 ft-lb	0.037 (4%)	1.25D+1.5L	L
Unbraced	632 ft-lb	2'1 1/8"	11283 ft-lb	0.056 (6%)	1.25D+1.5L	L
Shear	433 lb	1'2 1/8"	5798 lb	0.075 (7%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/32806)	2'1 13/16"	0.133 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.004 (L/13295)	2'1 3/4"	0.133 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.005 (L/9461)	2'1 3/4"	0.199 (L/240)	0.030 (3%)	D+L	L

Design Notes

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



December 17, 2018

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

This design

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

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT

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Date: 12/14/2018
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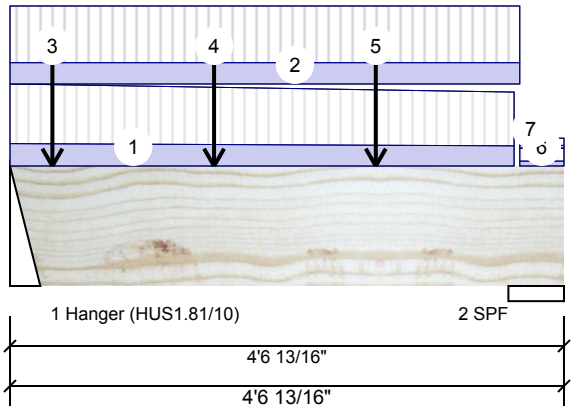
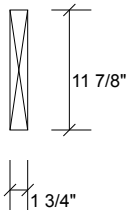
Level: Second Floor





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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)0-4-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This design is valid until 7/10/2021

Manufacturer Info

Forex
APA: PR-L318

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

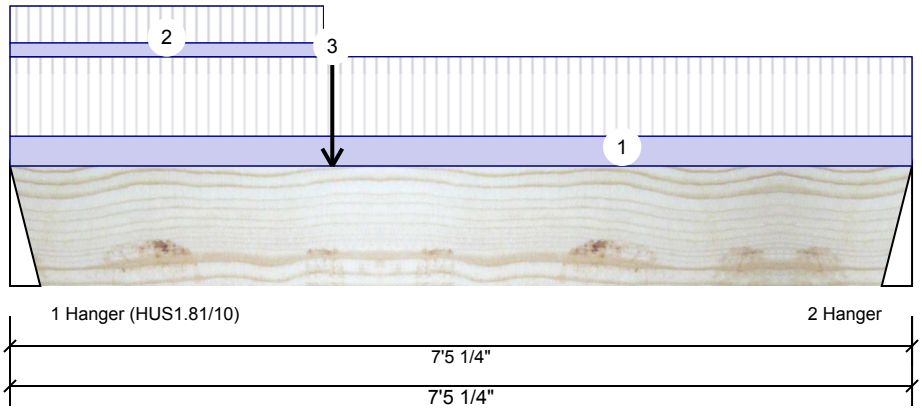
isDesign™

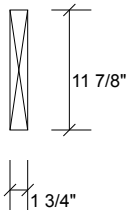
Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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	314	142	0	0
2	194	94	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	17%	178 / 472	650	L	1.25D+1.5L
2 - Hanger	3.000"	10%	118 / 291	408	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1399 ft-lb	2'7 7/8"	17130 ft-lb	0.082 (8%)	1.25D+1.5L	L
Unbraced	1399 ft-lb	2'7 7/8"	6365 ft-lb	0.220 (22%)	1.25D+1.5L	L
Shear	581 lb	1'2 1/8"	5798 lb	0.100 (10%)	1.25D+1.5L	L
Perm Defl in.	0.006 (L/13727)	3'2 7/8"	0.235 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.014 (L/6157)	3'2 3/16"	0.235 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.020 (L/4251)	3'2 7/16"	0.353 (L/240)	0.060 (6%)	D+L	L

Design Notes

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

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

December 17, 2018

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	142 lb	351 lb	0 lb	0 lb	F3
	Self Weight				5 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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

This desi

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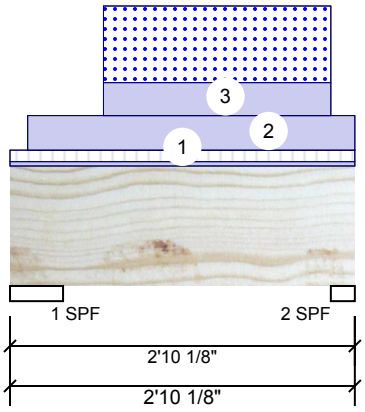
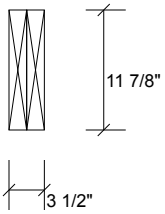
Project #:

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	114	0
2	28	172	152	0

Bearings and Factored Reactions

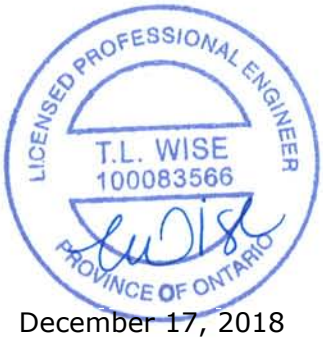
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	4%	207 / 188	394	L	1.25D+1.5S +0.5L
2 - SPF	2.375"	9%	214 / 242	457	L	1.25D+1.5S +0.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	262 ft-lb	1'6 13/16"	33233 ft-lb	0.008 (1%)	1.25D+1.5S +0.5L	L
Unbraced	262 ft-lb	1'6 13/16"	33233 ft-lb	0.008 (1%)	1.25D+1.5S +0.5L	L
Shear	81 lb	1'4 3/8"	11248 lb	0.007 (1%)	1.25D+1.5S +0.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.001 (L/38547)	1'6 3/4"	0.117 (L/240)	0.010 (1%)	D+S+0.5L	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.



December 17, 2018

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 Sheathing
3	Part. Uniform	0-9-4 to 2-7-12		Top	61 PLF	0 PLF	142 PLF	0 PLF	
	Self Weight				10 PLF				

Pass Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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Lumber

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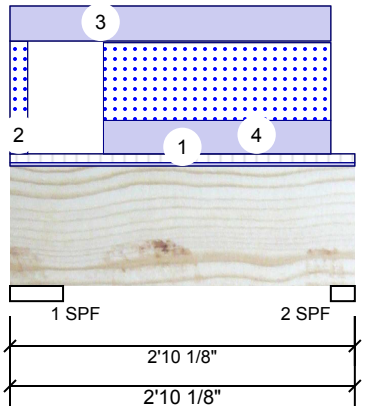
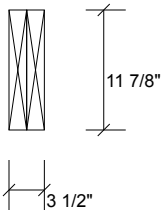
F6-B Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





Member Information

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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	135	0
2	21	156	152	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	4%	226 / 215	441	L	1.25D+1.5S +0.5L
2 - SPF	2.375"	9%	195 / 239	434	L	1.25D+1.5S +0.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	258 ft-lb	1'6 13/16"	33575 ft-lb	0.008 (1%)	1.25D+1.5S +0.5L	L
Unbraced	258 ft-lb	1'6 13/16"	33575 ft-lb	0.008 (1%)	1.25D+1.5S +0.5L	L
Shear	80 lb	1'4 3/8"	11364 lb	0.007 (1%)	1.25D+1.5S +0.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.001 (L/39192)	1'6 3/4"	0.117 (L/240)	0.010 (1%)	D+S+0.5L	L

Design Notes

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T.L. WISE
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PROVINCE OF ONTARIO

December 17, 2018

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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	144 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	142 PLF	0 PLF	
	Self Weight				10 PLF				

Pass Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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Lumber

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Handling & Installation

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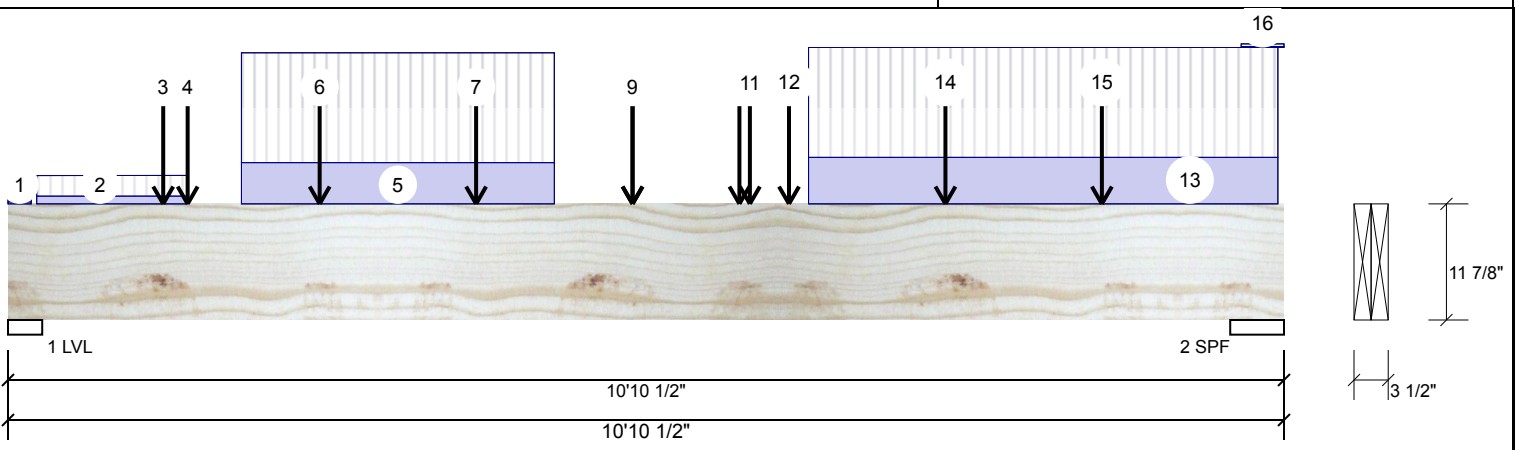

Member Information

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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	2394	975	0	0
2	2576	1100	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - LVL	3.500"	53%	1219 / 3591	4810	L	1.25D+1.5L
2 - SPF	5.500"	44%	1375 / 3864	5239	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13922 ft-lb	5'3 7/8"	34261 ft-lb	0.406 (41%)	1.25D+1.5L	L
Unbraced	13922 ft-lb	5'3 7/8"	29373 ft-lb	0.474 (47%)	1.25D+1.5L	L
Shear	5403 lb	1'2 5/8"	11596 lb	0.466 (47%)	1.25D+1.5L	L
Perm Defl in.	0.062 (L/1983)	5'4 1/8"	0.342 (L/360)	0.180 (18%)	D	Uniform
LL Defl inch	0.150 (L/820)	5'3 7/8"	0.342 (L/360)	0.440 (44%)	L	L
TL Defl inch	0.212 (L/580)	5'3 7/8"	0.512 (L/240)	0.410 (41%)	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.
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4 Top braced at bearings.
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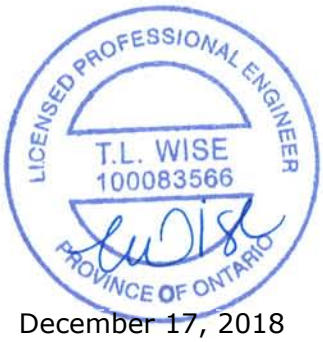
6 Lateral slenderness ratio based on full section width.



December 17, 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 4-7-14		Near Face	140 PLF	373 PLF	0 PLF	0 PLF	

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

This design

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

Manufacturer Info

Forex
APA: PR-L318

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

NASCOR

KOTT LSJ

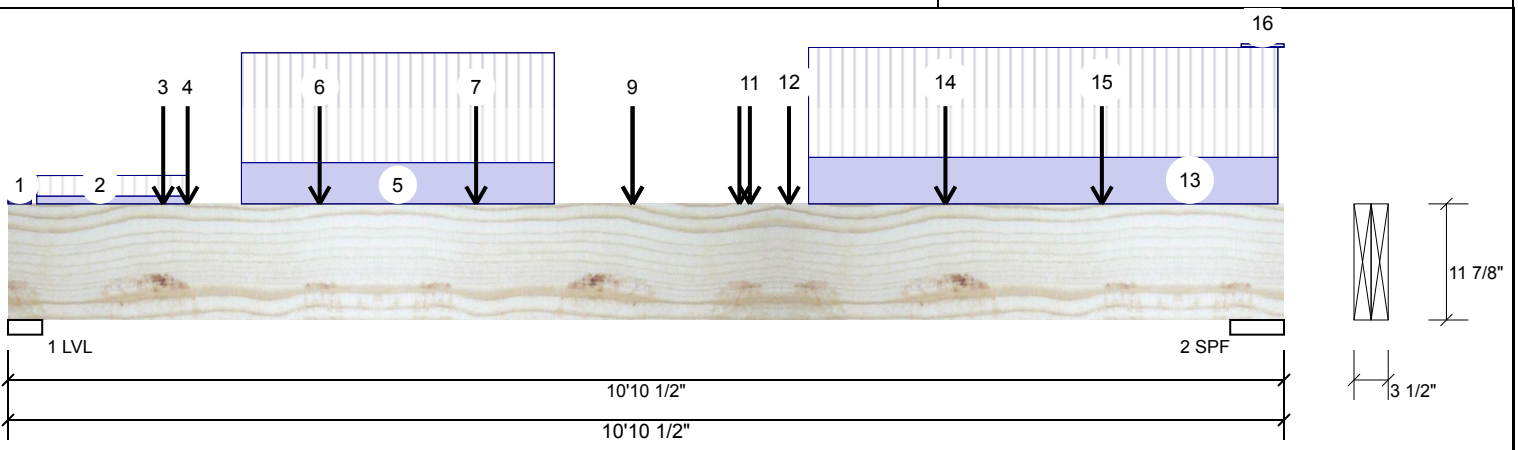
isDesign™

Client: GREEN YORK HOMES
Project:
Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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

Level: Second Floor



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	2-7-14		Far Face	70 lb	187 lb	0 lb	0 lb	J3
7	Point	3-11-14		Far Face	74 lb	198 lb	0 lb	0 lb	J3
8	Point	5-3-14		Far Face	63 lb	167 lb	0 lb	0 lb	J3
9	Point	5-3-14		Near Face	166 lb	435 lb	0 lb	0 lb	J8
10	Point	6-2-13		Far Face	142 lb	314 lb	0 lb	0 lb	F4
11	Point	6-3-14		Near Face	148 lb	373 lb	0 lb	0 lb	J8
12	Point	6-7-14		Far Face	17 lb	45 lb	0 lb	0 lb	J1
13	Part. Uniform	6-9-14 to 10-9-14		Near Face	158 PLF	373 PLF	0 PLF	0 PLF	
14	Point	7-11-14		Far Face	26 lb	69 lb	0 lb	0 lb	J1
15	Point	9-3-14		Far Face	24 lb	64 lb	0 lb	0 lb	J1
16	Tie-In	10-6-2 to 10-10-8	(Span)0-5-6	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				10 PLF				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

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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This design is valid until 7/10/2021

Manufacturer Info

Forex
APA: PR-L318

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Address:

Date: 12/14/2018
Designer: RCO
Job Name: LOT 1 (CELESTIAL 2 EL.1)
Project #:

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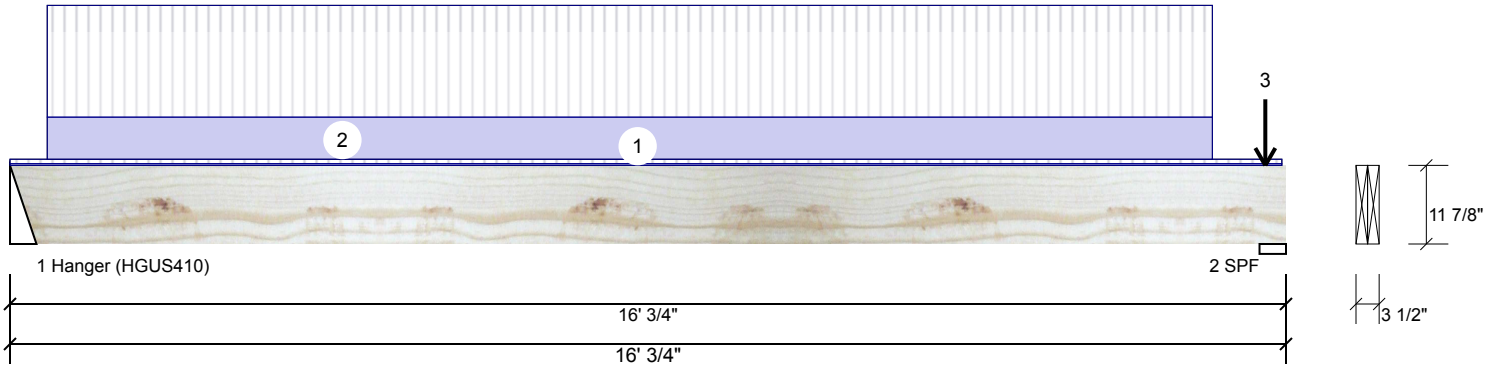
Level: Second Floor



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

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.
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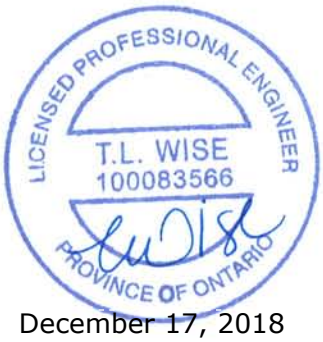

December 17, 2018

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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				

Pass-Thru Framing Squash Block is required at all point loads over bearings

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

Notes

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