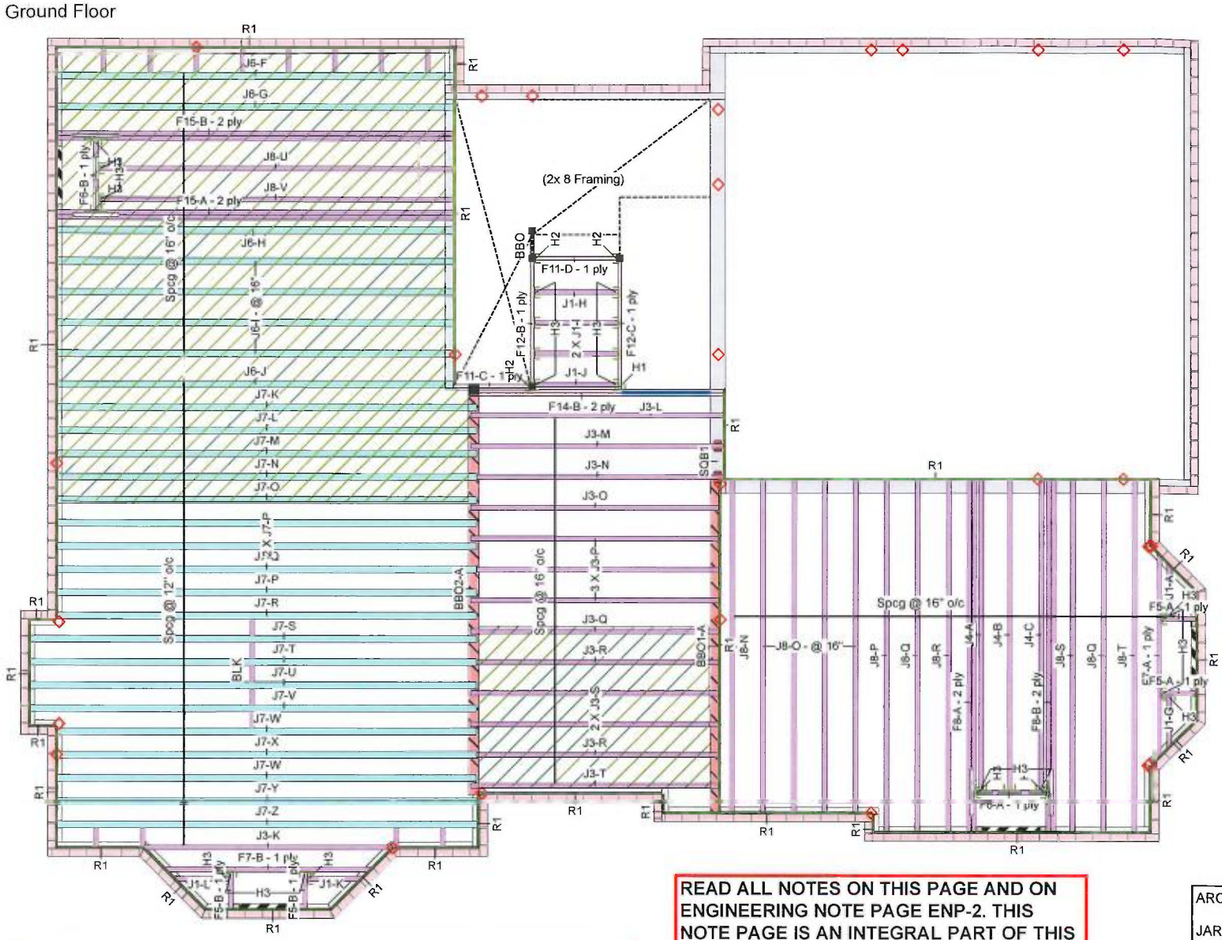
Ground Floor



THIS CERTIFICATION IS TO CONFIRM THAT:

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

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

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

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

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

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

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

Engineered floor joists shall be installed in accordance with the supplier's layout and specifications forming part of the permit drawings.

All work shall conform to the Ontario Building Code O. Reg. 332/12 as amended

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.
64 Jardin Dr., Suite 3A, Vaughan, ON
Date: Rev.2; May 22,2018
Project No: 17-55
Model: Indigo 1

Legend

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

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

Ground Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F14	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0
F12	Forex 2.0E-3000Fb LVL	1.75	11.875			2	6-0-0
F11	Forex 2.0E-3000Fb LVL	1.75	11.875			2	4-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J7	NJ60U	3.5	11.875			19	20-0-0
J6	NJ60U	3.5	11.875			8	18-0-0
F15	NJH	2.5	11.875	2	2	4	18-0-0
F8	NJH	2.5	11.875	2	2	4	16-0-0
F7	NJH	2.5	11.875			2	10-0-0
F6	NJH	2.5	11.875			2	4-0-0
F5	NJH	2.5	11.875			4	2-0-0
J8	NJH	2.5	11.875			13	16-0-0
J4	NJH	2.5	11.875			3	14-0-0
J3	NJH	2.5	11.875			14	12-0-0
J1	NJH	2.5	11.875			8	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			15	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	16-0-0

Hanger

					Beam/Girder	Supported Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H1	1	HUS1.81/10			30 16d	10 16d
H2	3	LS90				
H3	25	LT251188			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	INDIGO 1 (ELEV.1)
Design Method	LSD
Description	GRANELLI HOME CORP. BRAMPTON, ONT.
Created	May 30, 2018
Builder	GREEN YORK HOMES
Sales Rep	RM
Designer	RCO
Shipping	
Project	
Builder's Project	

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

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

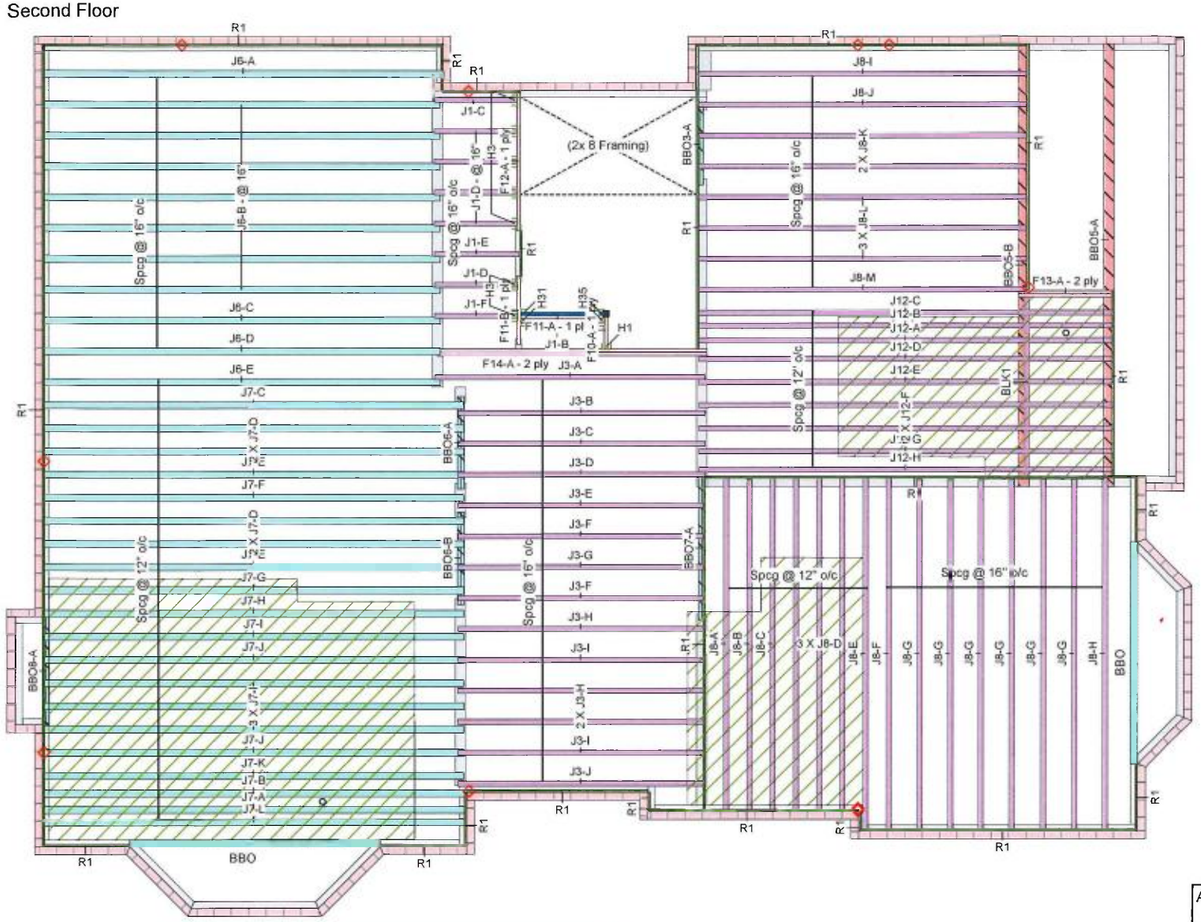
Ground Floor

Design Method	LSD
Building Code	NBCC 2010 / OBC 2012
Floor	
Loads	
Live	40
Dead	15
Deflection Joist	
LL Span L/	480
TL Span L/	360
LL Cant 2L/	480
TL Cant 2L/	360
Deflection Girder	
LL Span L/	360
TL Span L/	240
LL Cant 2L/	480
TL Cant 2L/	360
Decking	
Deck	OSB
Thickness	3/4"
Fastener	Nailed & Glued
Vibration	

M-2057
LOT 27
19-447257.000.00.RR.

EWP Studio
Simpson Strong-Tie®
Component Solutions™

Second Floor



Second Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F14	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	12-0-0
F13	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	6-0-0
F12	Forex 2.0E-3000Fb LVL	1.75	11.875			1	6-0-0
F11	Forex 2.0E-3000Fb LVL	1.75	11.875			2	4-0-0
F10	Forex 2.0E-3000Fb LVL	1.75	11.875			1	2-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J7	NJ60U	3.5	11.875			20	20-0-0
J6	NJ60U	3.5	11.875			11	18-0-0
J12	NJH	2.5	11.875			9	18-0-0
J8	NJH	2.5	11.875			23	16-0-0
J3	NJH	2.5	11.875			14	12-0-0
J1	NJH	2.5	11.875			9	4-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			16	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	7-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H1	2	HUS1.81/10			30 16d	10 16d
H3	9	LT251188			4 10dx1 1/2	2 10dx1 1/2
H5	1	HUCQ1.81/9-SDS				

NOTES:

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

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC.
64 Jardin Dr., Suite 3A, Vaughan, ON
Date: Rev.2; May 22,2018
Project No: 17-55
Model: Indigo 1

Legend

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

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

NASCOR

Layout Name	INDIGO 1 (ELEV.1)
Design Method	LSD
Description	GRANELLI HOME CORP. BRAMPTON, ONT.
Created	May 30, 2018
Builder	GREEN YORK HOMES
Sales Rep	RM
Designer	RCO
Shipping	
Project	
Builder's Project	

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

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

Second Floor

Design Method	LSD
Building Code	NBCC 2010 / OBC 2012

Floor

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

M-2057
LOT 27

EWP Studio
Simpson Strong-Tie®
Component Solutions™

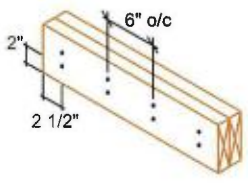
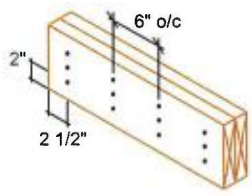
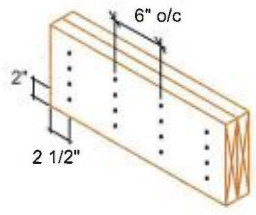
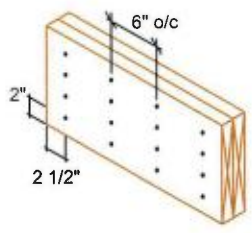
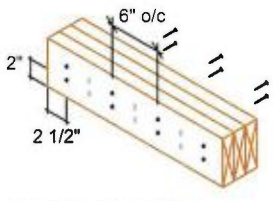
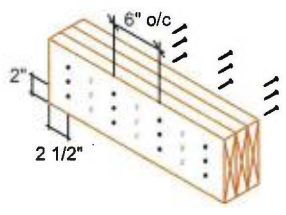
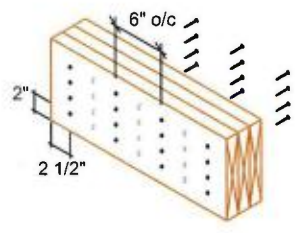
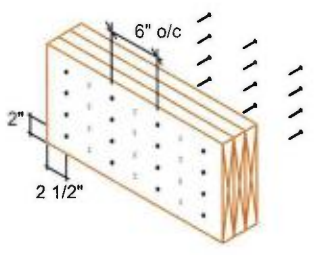
KOTT
SIMPSON StrongTie

M-30ST LOT 24

MULTIPLE MEMBER CONNECTIONS

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

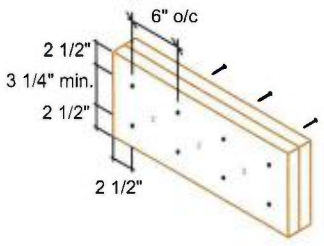
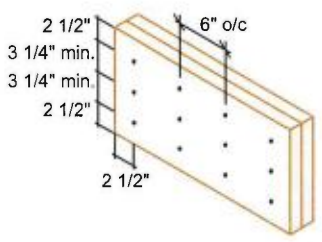
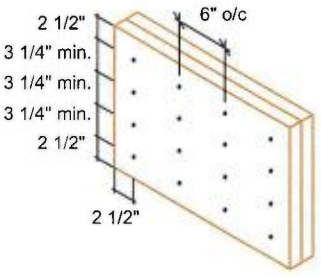
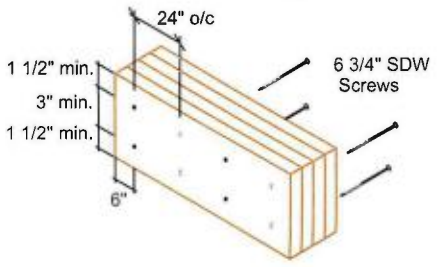
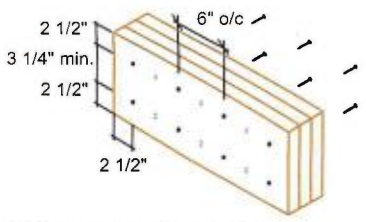
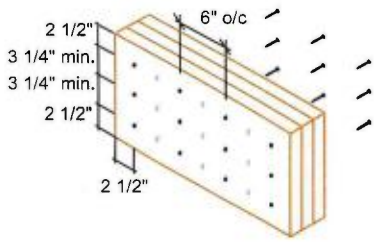
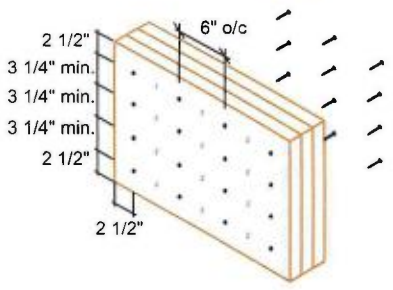
Conventional Connections (for uniform distributed loads)

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

Conventional connection notes:

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

LVL Connections (for uniform distributed loads)

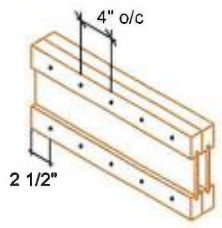
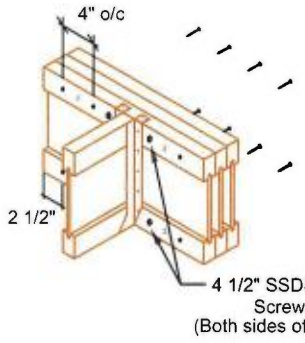
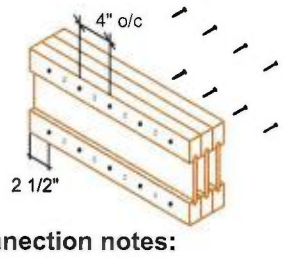
	9 1/2" LVL	11 7/8" - 14" LVL	16"-18" LVL	4-ply (Top load only)
				
				

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

LVL connection notes:

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

Vertical I-Joist Connections (for uniform distributed loads)

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

Vertical I-Joist connection notes:

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

MULTI -PLY CONNECTION DETAILS

Date: November 30, 2016

Scale: NTS

KOTT

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

Engineering Note Page (ENP-2)

REVISION 2009-10-09

Please read all notes prior to installation of the component

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

DESIGN INFORMATION

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

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

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

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

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

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

CODE

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

COMPONENT

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

HANDLING AND INSTALLATION

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

KOTT

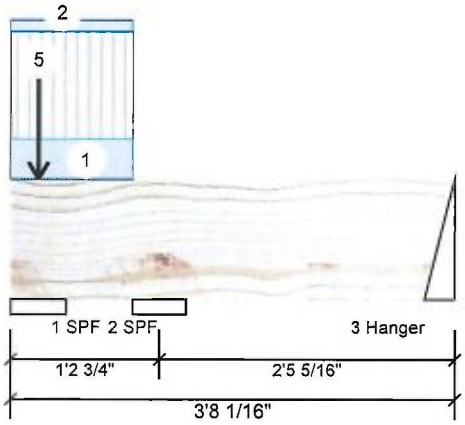
EWP Studio
Simpson Strong-Tie® Component Solutions™

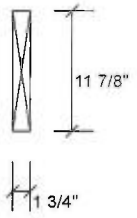
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F11-C 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	104	57	0	0
2	4	11	0	0
3	0 (0)	6	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	5%	69 / 156	225	L_	1.25D+1.5L
2 - SPF	5.250"	1%	19 / 0	19	Uniform	1.4D
3 - Hanger	3.000"	0%	7 / 0	7	Uniform	1.4D

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-3 ft-lb	1'2 3/4"	11135 ft-lb	0.000 (0%)	1.4D	Uniform
Unbraced	-3 ft-lb	1'2 3/4"	11135 ft-lb	0.000 (0%)	1.4D	Uniform
Pos Moment	3 ft-lb	2'7 1/16"	11135 ft-lb	0.000 (0%)	1.4D	Uniform
Unbraced	3 ft-lb	2'7 1/16"	10807 ft-lb	0.000 (0%)	1.4D	Uniform
Shear	11 lb	1'4 5/8"	3769 lb	0.003 (0%)	1.4D	Uniform
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

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

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

Design Notes

1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
2 Fill all hanger nailing holes.
3 Girders are designed to be supported on the bottom edge only.
4 Top braced at bearings.
5 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-0-2	(Span)0-11-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 1-0-1		Top	2 PLF	0 PLF	0 PLF	0 PLF	
3	Point	0-2-12		Top	21 lb	55 lb	0 lb	0 lb	J6
4	Point	0-2-12		Top	13 lb	35 lb	0 lb	0 lb	J3
5	Point	0-2-12		Top	13 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

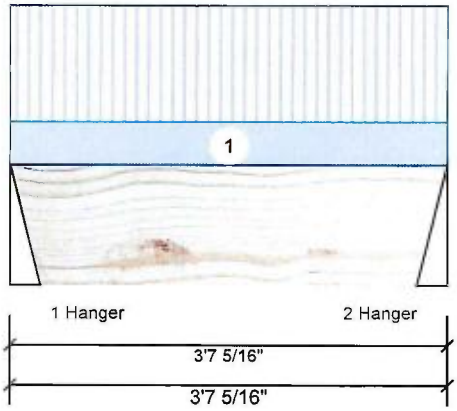
EWP Studio
Simpson Strong-Tie®
Component Solutions™

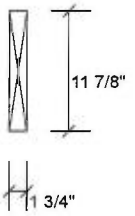
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F11-D 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	53	28	0	0
2	53	28	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	3%	35 / 79	114	L	1.25D+1.5L
2 - Hanger	3.000"	3%	35 / 79	114	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	83 ft-lb	1'9 11/16"	17130 ft-lb	0.005 (0%)	1.25D+1.5L	L
Unbraced	83 ft-lb	1'9 11/16"	13233 ft-lb	0.006 (1%)	1.25D+1.5L	L
Shear	40 lb	1'2 1/8"	5798 lb	0.007 (1%)	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/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-7-5	(Span)1-5-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

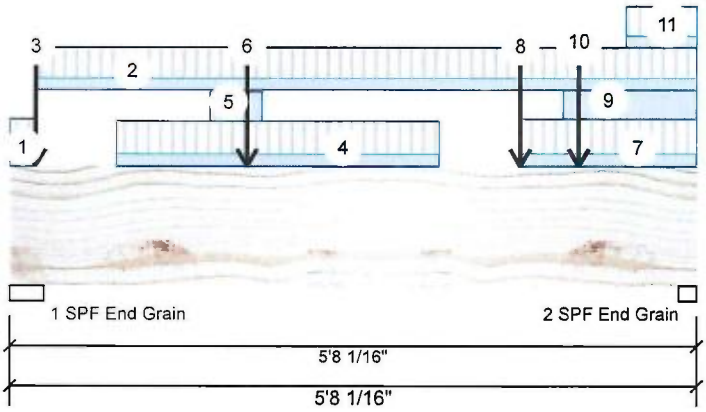
EWP Studio
Simpson Strong-Tie® Component Solutions™

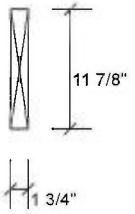
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F12-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	798	349	0	0
2	933	449	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.375"	37%	436 / 1197	1633	L	1.25D+1.5L
2 - SPF End Grain	1.750"	86%	562 / 1399	1961	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2299 ft-lb	2'4 7/16"	17130 ft-lb	0.134 (13%)	1.25D+1.5L	L
Unbraced	2299 ft-lb	2'4 7/16"	8377 ft-lb	0.274 (27%)	1.25D+1.5L	L
Shear	1466 lb	4'7 3/16"	5798 lb	0.253 (25%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/7964)	2'9 5/8"	0.179 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.018 (L/3518)	2'9 5/8"	0.179 (L/360)	0.100 (10%)	L	L
TL Defl inch	0.026 (L/2440)	2'9 5/8"	0.268 (L/240)	0.100 (10%)	D+L	L

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

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

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

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

Design Notes

1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
2 Girders are designed to be supported on the bottom edge only.
3 Top braced at bearings.
4 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-9	(Span)3-9-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-2-8 to 5-8-1	(Span)3-4-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-2-9		Near Face	23 lb	61 lb	0 lb	0 lb	J1
4	Part. Uniform	0-10-9 to 3-6-9		Near Face	27 PLF	72 PLF	0 PLF	0 PLF	
5	Part. Uniform	1-7-13 to 2-0-15		Top	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Point	1-11-7		Top	188 lb	468 lb	0 lb	0 lb	F11 F11
7	Tie-In	4-2-9 to 5-8-1	(Span)3-9-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

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

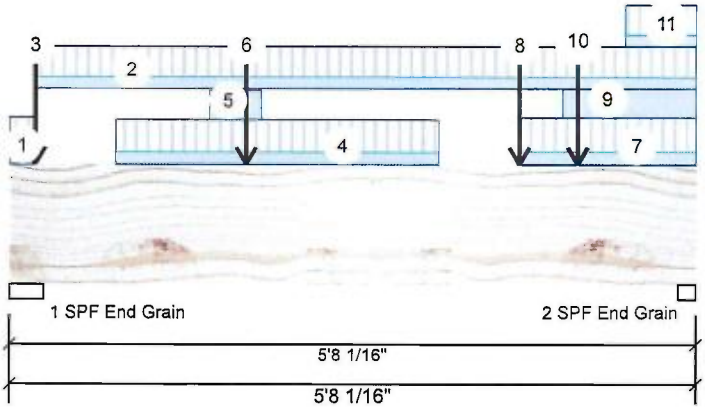
EWP Studio
Simpson Strong-Tie®
Component Solutions™

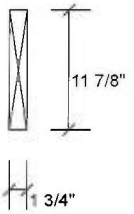
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F12-B Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED

Level: Ground Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
8	Point	4-2-9		Near Face	38 lb	101 lb	0 lb	0 lb	J1
9	Part. Uniform	4-6-13 to 5-8-1		Top	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
10	Point	4-8-5		Top	154 lb	381 lb	0 lb	0 lb	F11 F11
11	Part. Uniform	5-1-1 to 5-8-1		Top	25 PLF	65 PLF	0 PLF	0 PLF	J1
	Self Weight				5 PLF				

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

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

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

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

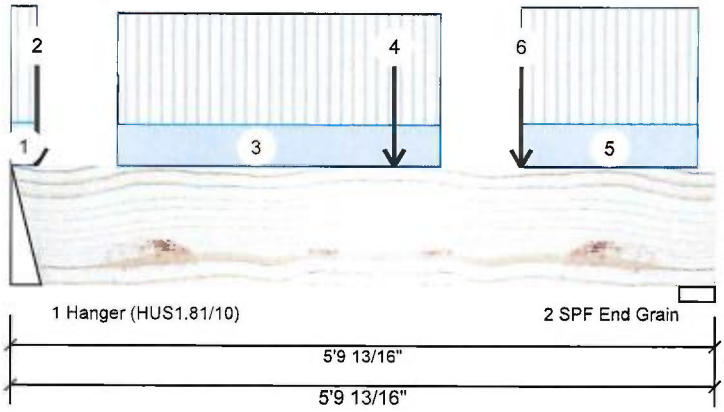
EWP Studio
Simpson Strong-Tie® Component Solutions™

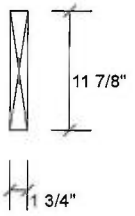
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F12-C 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	537	221	0	0
2	613	251	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	28%	276 / 805	1081	L	1.25D+1.5L
2 - SPF End Grain	3.500"	27%	314 / 920	1234	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2367 ft-lb	3'1 15/16"	17130 ft-lb	0.138 (14%)	1.25D+1.5L	L
Unbraced	2367 ft-lb	3'1 15/16"	8328 ft-lb	0.284 (28%)	1.25D+1.5L	L
Shear	1110 lb	4'7 3/16"	5798 lb	0.191 (19%)	1.25D+1.5L	L
Perm Defl in.	0.007 (L/9287)	3'1 15/16"	0.180 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.017 (L/3759)	3'1 15/16"	0.180 (L/360)	0.100 (10%)	L	L
TL Defl inch	0.024 (L/2676)	3'1 15/16"	0.270 (L/240)	0.090 (9%)	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.

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-9	(Span)3-9-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-2-9		Far Face	23 lb	61 lb	0 lb	0 lb	J1
3	Part. Uniform	0-10-9 to 3-6-9		Far Face	27 PLF	72 PLF	0 PLF	0 PLF	
4	Point	3-1-15		Top	264 lb	671 lb	0 lb	0 lb	C4
5	Tie-In	4-2-9 to 5-8-1	(Span)3-9-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Point	4-2-9		Far Face	38 lb	101 lb	0 lb	0 lb	J1
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

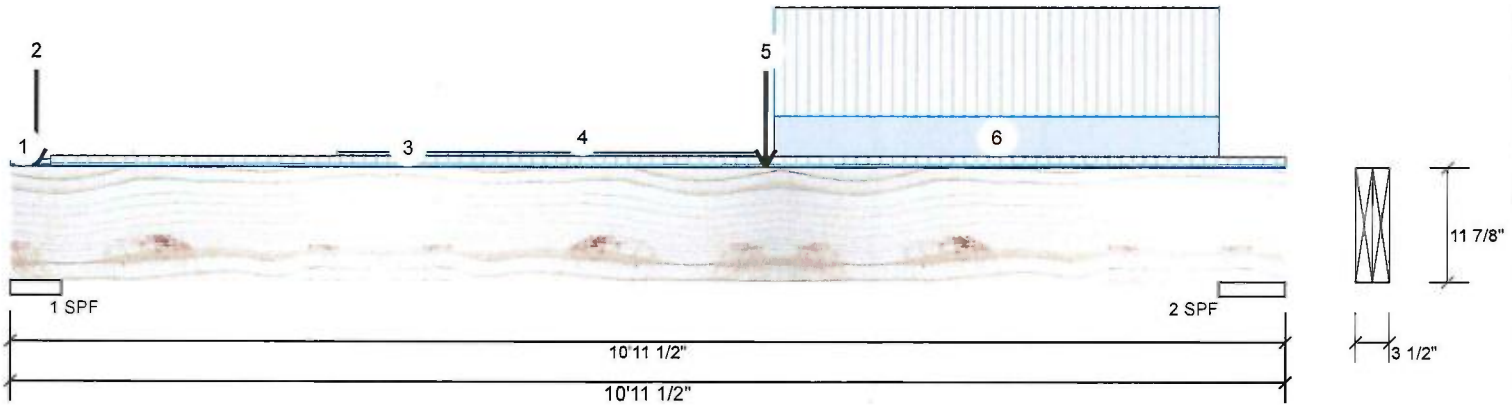
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F14-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	532	295	0	0
2	1275	542	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	10%	369 / 798	1167	L	1.25D+1.5L
2 - SPF	6.875"	17%	678 / 1913	2590	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5728 ft-lb	6'5 7/8"	34261 ft-lb	0.167 (17%)	1.25D+1.5L	L
Unbraced	5728 ft-lb	6'5 7/8"	29540 ft-lb	0.194 (19%)	1.25D+1.5L	L
Shear	2022 lb	9'5 1/2"	11596 lb	0.174 (17%)	1.25D+1.5L	L
Perm Defl in.	0.023 (L/5246)	5'11 1/2"	0.336 (L/360)	0.070 (7%)	D	Uniform
LL Defl inch	0.053 (L/2301)	6' 3/8"	0.336 (L/360)	0.160 (16%)	L	L
TL Defl inch	0.076 (L/1600)	6' 1/16"	0.504 (L/240)	0.150 (15%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-2	(Span)0-7-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-2-10		Top	37 lb	0 lb	0 lb	0 lb	Wall Self Weight
3	Tie-In	0-4-2 to 10-11-8	(Span)0-11-11 to 0-11-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	2-9-11 to 6-5-0	(Span)0-4-5 to 0-4-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

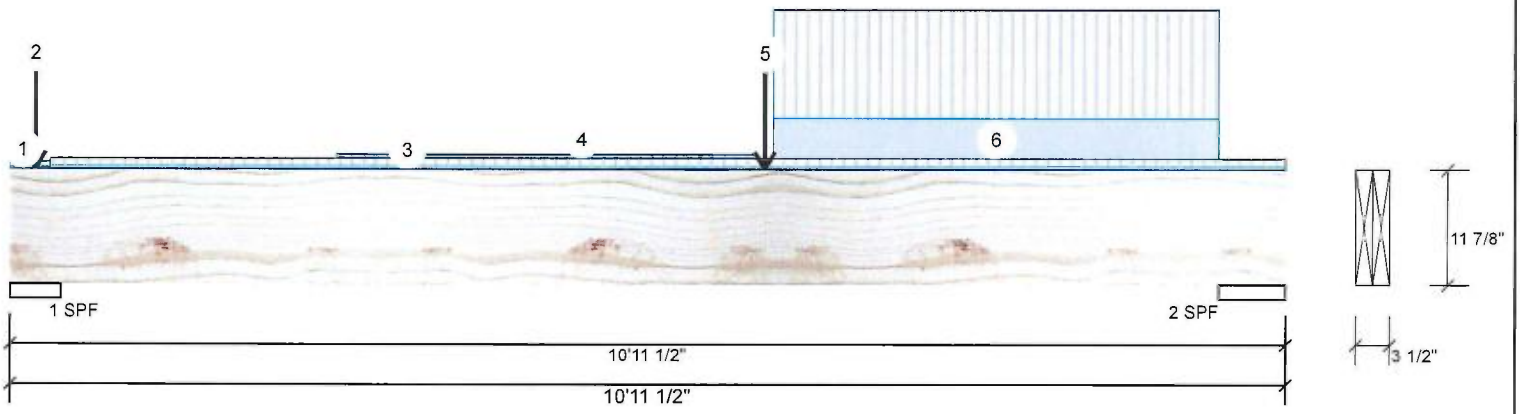
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F14-B 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
5	Point	6-5-14		Far Face	221 lb	537 lb	0 lb	0 lb	F12
6	Part. Uniform	6-6-12 to 10-4-10		Top	101 PLF	270 PLF	0 PLF	0 PLF	
	Self Weight				10 PLF				

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

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

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

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

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

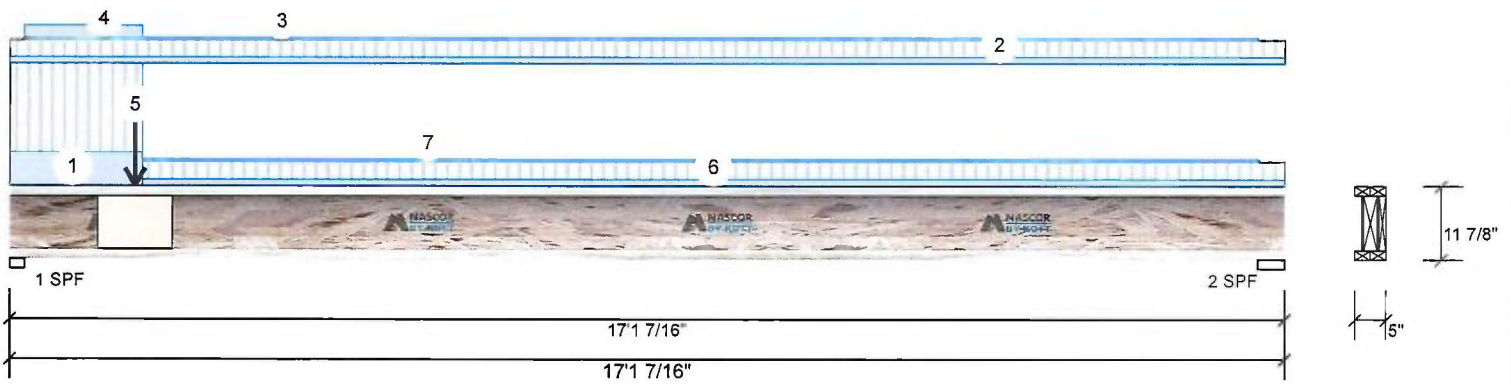
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F15-A NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	755	381	0	0
2	279	144	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	49%	477 / 1133	1609	L	1.25D+1.5L
2 - SPF	4.319"	17%	180 / 419	599	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2960 ft-lb	6'8 1/8"	10780 ft-lb	0.275 (27%)	1.25D+1.5L	L
Unbraced	2960 ft-lb	6'8 1/8"	2970 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	1588 lb	1 5/8"	3620 lb	0.439 (44%)	1.25D+1.5L	L
Perm Defl in.	0.065 (L/3060)	8' 1/16"	0.556 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.127 (L/1581)	7'11 15/16"	0.556 (L/360)	0.230 (23%)	L	L
TL Defl inch	0.192 (L/1042)	8'	0.834 (L/240)	0.230 (23%)	D+L	L

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

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

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

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

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top flange must be laterally braced at a maximum of 7'9" o.c.
5 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-1-7	(Span)0-7-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-5 to 16-9-2		Top	2 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-5 to 1-9-6		Top	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Far Face	240 lb	480 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 17-1-7	(Span)0-8-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-1		Top	2 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

KOTT

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

NASCOR

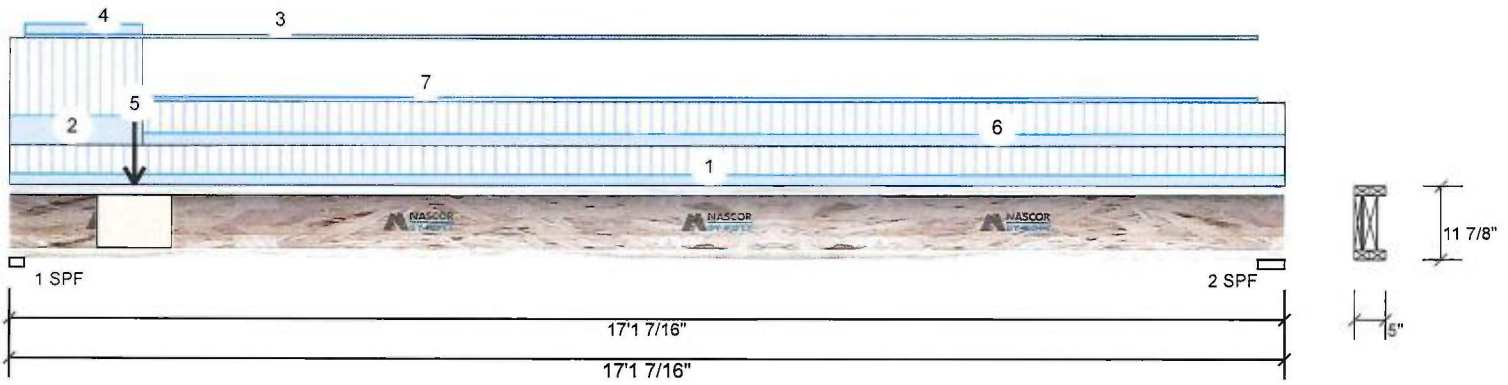
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F15-B NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	832	417	0	0
2	496	248	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	53%	521 / 1248	1769	L	1.25D+1.5L
2 - SPF	4.319"	29%	310 / 744	1054	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4604 ft-lb	7'9 15/16"	10780 ft-lb	0.427 (43%)	1.25D+1.5L	L
Unbraced	4604 ft-lb	7'9 15/16"	4611 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	1744 lb	1 5/8"	3620 lb	0.482 (48%)	1.25D+1.5L	L
Perm Defl in.	0.100 (L/2004)	8'3 3/16"	0.556 (L/360)	0.180 (18%)	D	Uniform
LL Defl inch	0.198 (L/1013)	8'3 3/16"	0.556 (L/360)	0.360 (36%)	L	L
TL Defl inch	0.298 (L/673)	8'3 3/16"	0.834 (L/240)	0.360 (36%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 17-1-7	(Span)1-3-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 16-9-1		Top	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 1-9-6		Top	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	172 lb	343 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 17-1-7	(Span)1-4-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-1		Top	4 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

KOTT

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

NASCOR

SIMPSON Strong-Tie

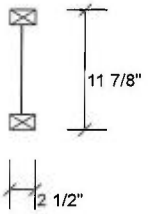
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F5-A NJH 11.875" - PASSED

Level: Ground Floor



Member Information

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

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	104	39	0	0
2	79	30	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	13%	49 / 156	204	L	1.25D+1.5L
2 - SPF	2.375"	9%	37 / 119	156	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	47 ft-lb	7 3/4"	5390 ft-lb	0.009 (1%)	1.25D+1.5L	L
Unbraced	47 ft-lb	7 3/4"	5334 ft-lb	0.009 (1%)	1.25D+1.5L	L
Shear	180 lb	1 1/4"	1810 lb	0.100 (10%)	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/34775)	7 13/16"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/25291)	7 13/16"	0.061 (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 flange unbraced.
4 Bottom flange braced at bearings.

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-10	(Span)2-8-1 to 1-2-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-5-10	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-4-3		Far Face	12 lb	32 lb	0 lb	0 lb	J1

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

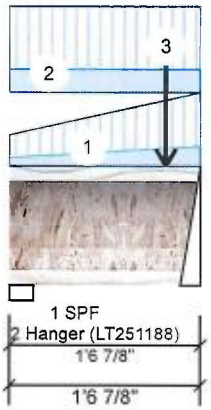
EWP Studio
Simpson Strong-Tie®
Component Solutions™

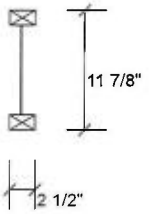
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F5-B NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	83	31	0	0
2	114	43	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	10%	39 / 124	163	L	1.25D+1.5L
2 - Hanger	2.000"	14%	53 / 172	225	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	52 ft-lb	10 3/8"	5390 ft-lb	0.010 (1%)	1.25D+1.5L	L
Unbraced	52 ft-lb	10 3/8"	5319 ft-lb	0.010 (1%)	1.25D+1.5L	L
Shear	201 lb	1'5 5/8"	1810 lb	0.111 (11%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/33591)	10 5/16"	0.044 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/24438)	10 5/16"	0.067 (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 flange unbraced.
4 Bottom flange braced at bearings.

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-6-14	(Span)1-1-15 to 2-8-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-6-14	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-3-7		Far Face	13 lb	35 lb	0 lb	0 lb	J1

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

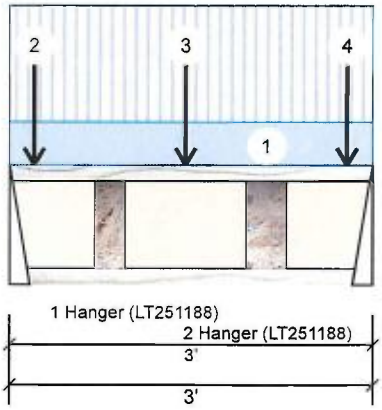
EWP Studio
Simpson Strong-Tie®
Component Solutions™

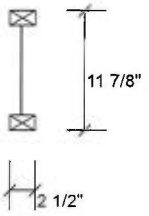
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F6-A NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	441	166	0	0
2	439	165	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	54%	207 / 662	869	L	1.25D+1.5L
2 - Hanger	2.000"	53%	206 / 659	865	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	571 ft-lb	1'5 7/16"	5390 ft-lb	0.106 (11%)	1.25D+1.5L	L
Unbraced	571 ft-lb	1'5 7/16"	4800 ft-lb	0.119 (12%)	1.25D+1.5L	L
Shear	862 lb	1 1/4"	1810 lb	0.476 (48%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/14698)	1'5 7/16"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.006 (L/5525)	1'5 7/16"	0.093 (L/360)	0.070 (7%)	L	L
TL Defl inch	0.008 (L/4016)	1'5 7/16"	0.140 (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 flange unbraced.
4 Bottom flange braced at bearings.

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

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

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

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	0-2-7		Far Face	81 lb	215 lb	0 lb	0 lb	J4
3	Point	1-5-7		Far Face	126 lb	335 lb	0 lb	0 lb	J4
4	Point	2-9-7		Far Face	85 lb	227 lb	0 lb	0 lb	J4

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

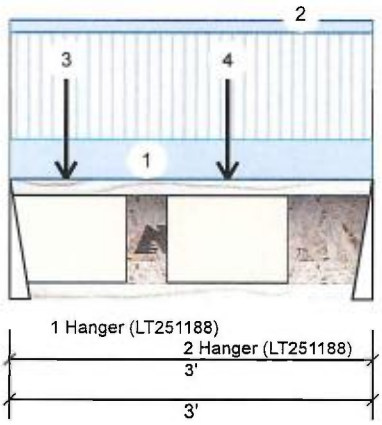
EWP Studio
Simpson Strong-Tie® Component Solutions™

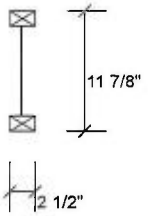
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F6-B NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	480	240	0	0
2	343	172	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	63%	300 / 721	1021	L	1.25D+1.5L
2 - Hanger	2.000"	45%	215 / 515	729	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	749 ft-lb	1'9 9/16"	5390 ft-lb	0.139 (14%)	1.25D+1.5L	L
Unbraced	749 ft-lb	1'9 9/16"	4800 ft-lb	0.156 (16%)	1.25D+1.5L	L
Shear	1013 lb	1 1/4"	1810 lb	0.560 (56%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/9092)	1'9 9/16"	0.093 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.007 (L/4555)	1'9 9/16"	0.093 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.011 (L/3035)	1'9 9/16"	0.140 (L/240)	0.080 (8%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 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	0-5-9		Near Face	152 lb	304 lb	0 lb	0 lb	J8
4	Point	1-9-9		Near Face	209 lb	416 lb	0 lb	0 lb	J8

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. lJoist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

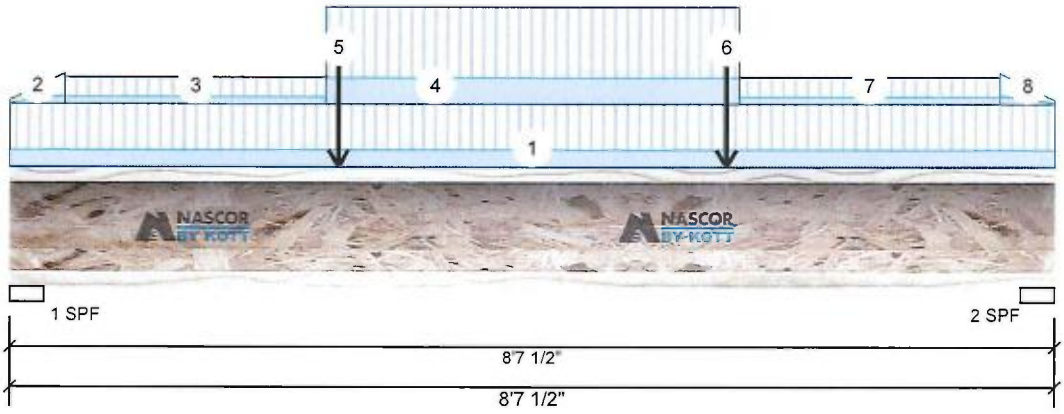
EWP Studio
Simpson Strong-Tie® Component Solutions™

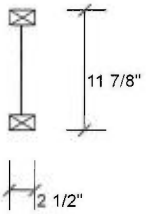
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F7-A NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	272	102	0	0
2	272	102	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.375"	31%	127 / 408	535	L	1.25D+1.5L
2 - SPF	3.375"	31%	127 / 408	535	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1259 ft-lb	4'3 3/4"	5390 ft-lb	0.234 (23%)	1.25D+1.5L	L
Unbraced	1259 ft-lb	4'3 3/4"	1315 ft-lb	0.958 (96%)	1.25D+1.5L	L
Shear	525 lb	8'4 7/8"	1810 lb	0.290 (29%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/7253)	4'3 13/16"	0.273 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.036 (L/2720)	4'3 13/16"	0.273 (L/360)	0.130 (13%)	L	L
TL Defl inch	0.050 (L/1978)	4'3 13/16"	0.409 (L/240)	0.120 (12%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Top flange unbraced.
3 Bottom flange braced at bearings.

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 8-7-8	(Span)1-0-9	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-5-7	(Span)0-0-13 to 0-6-4	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-5-7 to 2-7-4	(Span)0-5-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	2-7-4 to 6-0-4	(Span)1-7-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	2-8-8		Near Face	39 lb	104 lb	0 lb	0 lb	F5
6	Point	5-11-0		Near Face	39 lb	104 lb	0 lb	0 lb	F5
7	Tie-In	6-0-4 to 8-2-1	(Span)0-5-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
8	Tie-In	8-2-1 to 8-7-8	(Span)0-6-4 to 0-0-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

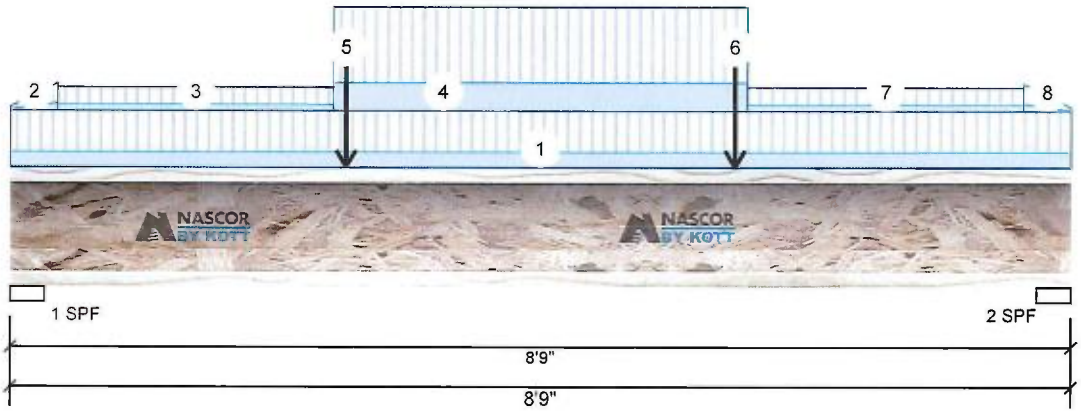
EWP Studio
Simpson Strong-Tie® Component Solutions™

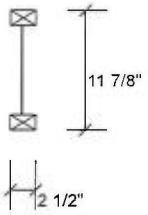
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F7-B NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	275	103	0	0
2	275	103	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.375"	31%	129 / 413	542	L	1.25D+1.5L
2 - SPF	3.375"	31%	129 / 413	542	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1323 ft-lb	4'4 1/2"	5390 ft-lb	0.246 (25%)	1.25D+1.5L	L
Unbraced	1323 ft-lb	4'4 1/2"	1326 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	533 lb	2 5/8"	1810 lb	0.294 (29%)	1.25D+1.5L	L
Perm Defl in.	0.015 (L/6852)	4'4 9/16"	0.277 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.039 (L/2576)	4'4 9/16"	0.277 (L/360)	0.140 (14%)	L	L
TL Defl inch	0.053 (L/1872)	4'4 9/16"	0.416 (L/240)	0.130 (13%)	D+L	L

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

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

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Top flange must be laterally braced at a maximum of 8'2" o.c.
3 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 8-9-0	(Span)0-11-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-4-11	(Span)0-0-13 to 0-5-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-4-11 to 2-8-0	(Span)0-4-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	2-8-0 to 6-1-0	(Span)1-8-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	2-9-4		Near Face	43 lb	114 lb	0 lb	0 lb	F5
6	Point	5-11-12		Near Face	43 lb	114 lb	0 lb	0 lb	F5
7	Tie-In	6-1-0 to 8-4-5	(Span)0-4-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
8	Tie-In	8-4-5 to 8-9-0	(Span)0-5-8 to 0-0-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

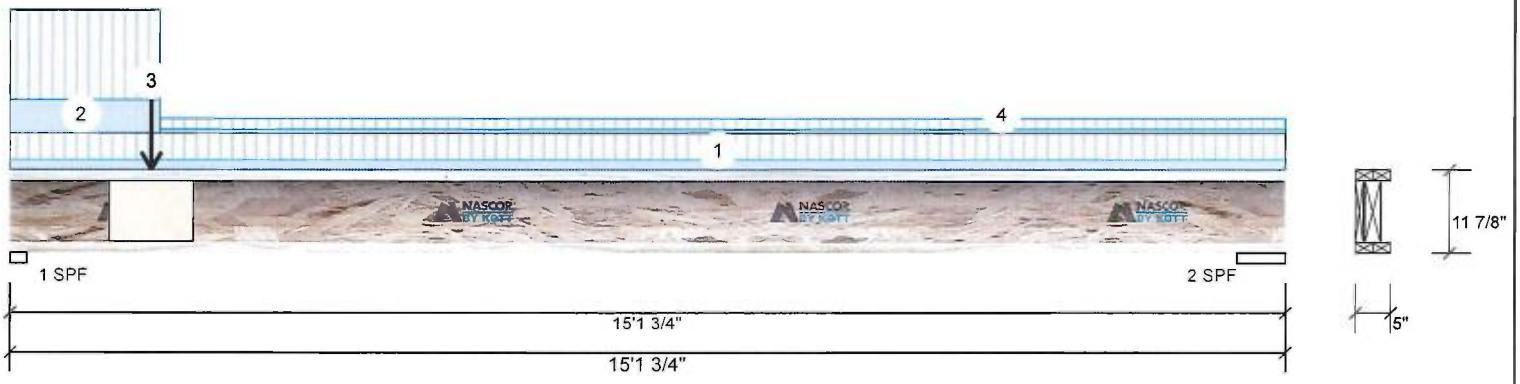
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F8-A NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	705	265	0	0
2	272	102	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	42%	331 / 1057	1388	L	1.25D+1.5L
2 - SPF	6.875"	15%	128 / 409	536	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2312 ft-lb	5'6 3/8"	10780 ft-lb	0.214 (21%)	1.25D+1.5L	L
Unbraced	2312 ft-lb	5'6 3/8"	2331 ft-lb	0.992 (99%)	1.25D+1.5L	L
Shear	1365 lb	1 5/8"	3620 lb	0.377 (38%)	1.25D+1.5L	L
Perm Defl in.	0.031 (L/5557)	6'10 3/4"	0.483 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.083 (L/2086)	6'10 3/4"	0.483 (L/360)	0.170 (17%)	L	L
TL Defl inch	0.115 (L/1517)	6'10 3/4"	0.725 (L/240)	0.160 (16%)	D+L	L

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 15-1-12	(Span)1-0-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-8-2		Near Face	166 lb	441 lb	0 lb	0 lb	F6
4	Tie-In	1-9-6 to 15-1-12	(Span)0-4-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info
Nascor by Kott

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

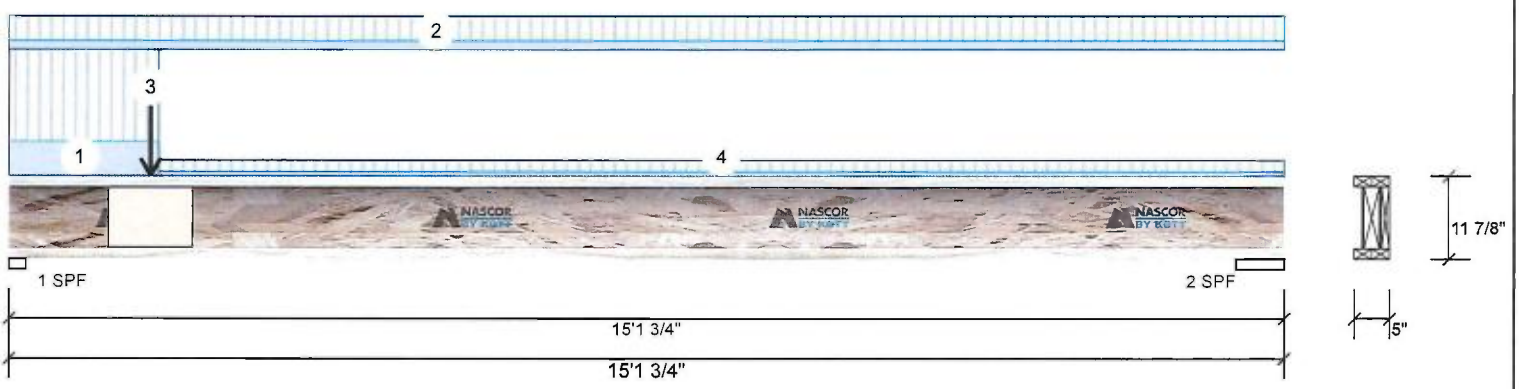
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F8-B NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	690	259	0	0
2	259	97	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	41%	324 / 1036	1360	L	1.25D+1.5L
2 - SPF	6.875"	14%	122 / 389	510	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2227 ft-lb	5'5 1/16"	10780 ft-lb	0.207 (21%)	1.25D+1.5L	L
Unbraced	2227 ft-lb	5'5 1/16"	2234 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	1336 lb	1 5/8"	3620 lb	0.369 (37%)	1.25D+1.5L	L
Perm Defl in.	0.030 (L/5780)	6'10 9/16"	0.483 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.080 (L/2169)	6'10 9/16"	0.483 (L/360)	0.170 (17%)	L	L
TL Defl inch	0.110 (L/1577)	6'10 9/16"	0.725 (L/240)	0.150 (15%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top flange must be laterally braced at a maximum of 8'9" o.c.
5 Bottom flange braced at bearings.

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 15-1-12	(Span) 0-10-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-8-2		Far Face	165 lb	439 lb	0 lb	0 lb	F6
4	Tie-In	1-9-6 to 15-1-12	(Span)0-5-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info
Nascor by Kott

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

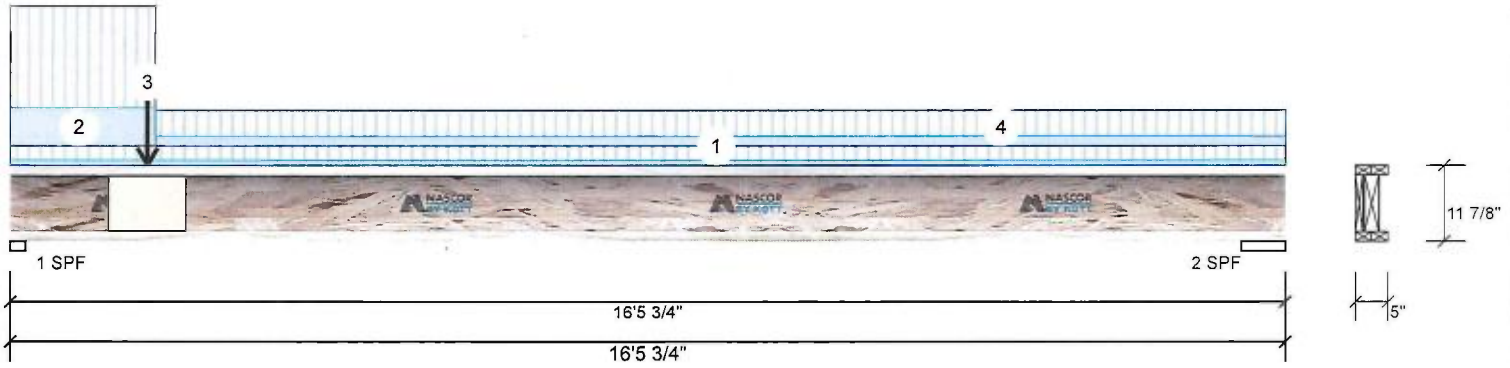
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV-2)
Project #:

F15-A NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	684	256	0	0
2	273	102	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	41%	320 / 1026	1346	L	1.25D+1.5L
2 - SPF	6.875"	15%	128 / 410	538	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2487 ft-lb	6'2 13/16"	10780 ft-lb	0.231 (23%)	1.25D+1.5L	L
Unbraced	2487 ft-lb	6'2 13/16"	2497 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	1325 lb	1 5/8"	3620 lb	0.366 (37%)	1.25D+1.5L	L
Perm Defl in.	0.039 (L/4815)	7'6 7/8"	0.528 (L/360)	0.070 (7%)	D	Uniform
LL Defl inch	0.105 (L/1805)	7'6 7/8"	0.528 (L/360)	0.200 (20%)	L	L
TL Defl inch	0.145 (L/1313)	7'6 7/8"	0.792 (L/240)	0.180 (18%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-5-12	(Span)0-5-9	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-10-8	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-9-4		Near Face	158 lb	422 lb	0 lb	0 lb	F6
4	Tie-In	1-10-8 to 16-5-12	(Span)0-10-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

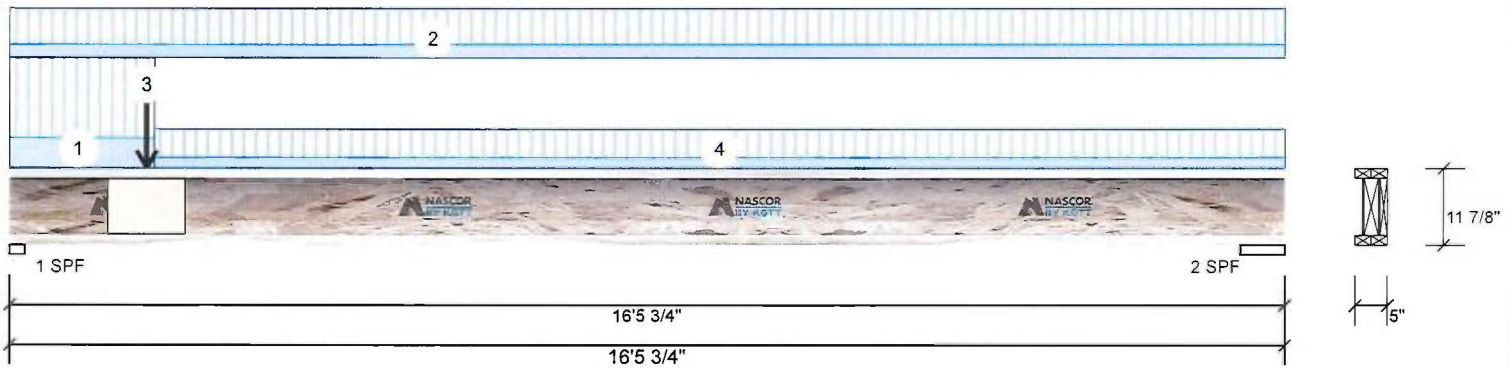
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV2)
Project #:

F15-B NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	846	317	0	0
2	505	189	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	50%	397 / 1269	1666	L	1.25D+1.5L
2 - SPF	6.875"	27%	237 / 758	994	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4073 ft-lb	7'3 9/16"	10780 ft-lb	0.378 (38%)	1.25D+1.5L	L
Unbraced	4073 ft-lb	7'3 9/16"	4080 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	1639 lb	1 5/8"	3620 lb	0.453 (45%)	1.25D+1.5L	L
Perm Defl in.	0.065 (L/2937)	7'9 11/16"	0.528 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.172 (L/1102)	7'9 11/16"	0.528 (L/360)	0.330 (33%)	L	L
TL Defl inch	0.237 (L/801)	7'9 11/16"	0.792 (L/240)	0.300 (30%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top flange must be laterally braced at a maximum of 6'8" o.c.
5 Bottom flange braced at bearings.

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-10-8	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-5-12	(Span)1-6-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-9-4		Far Face	136 lb	362 lb	0 lb	0 lb	F6
4	Tie-In	1-10-8 to 16-5-12	(Span)1-2-9	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

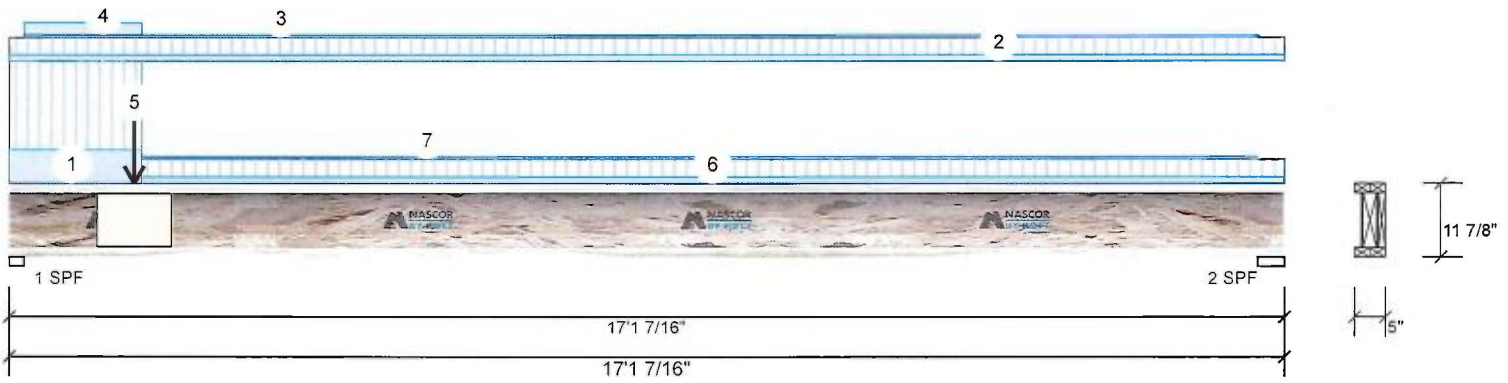
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F15-C NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	755	381	0	0
2	279	144	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	49%	477 / 1133	1609	L	1.25D+1.5L
2 - SPF	4.319"	17%	180 / 419	599	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2960 ft-lb	6'8 1/8"	10780 ft-lb	0.275 (27%)	1.25D+1.5L	L
Unbraced	2960 ft-lb	6'8 1/8"	2970 ft-lb	0.997 (100%)	1.25D+1.5L	L
Shear	1588 lb	1 5/8"	3620 lb	0.439 (44%)	1.25D+1.5L	L
Perm Defl in.	0.065 (L/3060)	8' 1/16"	0.556 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.127 (L/1581)	7'11 15/16"	0.556 (L/360)	0.230 (23%)	L	L
TL Defl inch	0.192 (L/1042)	8'	0.834 (L/240)	0.230 (23%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top flange must be laterally braced at a maximum of 7'9" o.c.
5 Bottom flange braced at bearings.

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-1-7	(Span)0-7-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-5 to 16-9-2		Top	2 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-5 to 1-9-6		Top	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Far Face	240 lb	480 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 17-1-7	(Span)0-8-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-1		Top	2 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

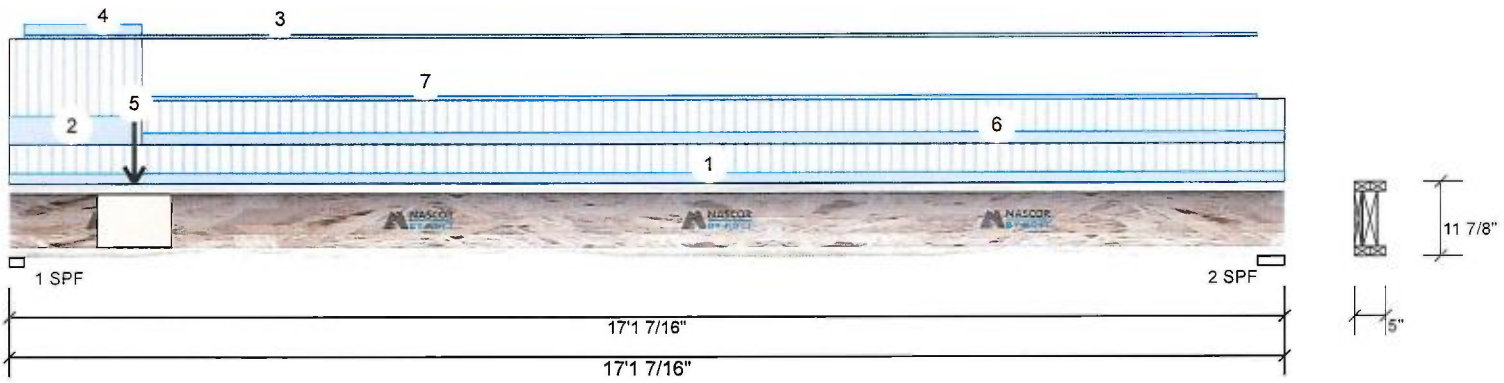
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F15-D NJH 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	832	417	0	0
2	496	248	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	53%	521 / 1248	1769	L	1.25D+1.5L
2 - SPF	4.319"	29%	310 / 744	1054	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4604 ft-lb	7'9 15/16"	10780 ft-lb	0.427 (43%)	1.25D+1.5L	L
Unbraced	4604 ft-lb	7'9 15/16"	4611 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	1744 lb	1 5/8"	3620 lb	0.482 (48%)	1.25D+1.5L	L
Perm Defl in.	0.100 (L/2004)	8'3 3/16"	0.556 (L/360)	0.180 (18%)	D	Uniform
LL Defl inch	0.198 (L/1013)	8'3 3/16"	0.556 (L/360)	0.360 (36%)	L	L
TL Defl inch	0.298 (L/673)	8'3 3/16"	0.834 (L/240)	0.360 (36%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 17-1-7	(Span)1-3-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-9-6	(Span)3-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 16-9-1		Top	3 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-2-6 to 1-9-6		Top	9 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-2		Near Face	172 lb	343 lb	0 lb	0 lb	F6
6	Tie-In	1-9-6 to 17-1-7	(Span)1-4-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-6 to 16-9-1		Top	4 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

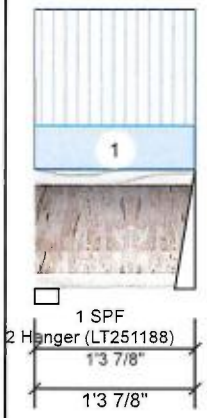
EWP Studio
Simpson Strong-Tie® Component Solutions™

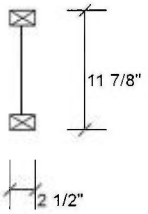
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F5-A NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	43	16	0	0
2	41	16	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	5%	20 / 65	86	L	1.25D+1.5L
2 - Hanger	2.000"	5%	19 / 62	82	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	19 ft-lb	8 1/8"	5390 ft-lb	0.003 (0%)	1.25D+1.5L	L
Unbraced	19 ft-lb	8 1/8"	5352 ft-lb	0.003 (0%)	1.25D+1.5L	L
Shear	68 lb	1 5/8"	1810 lb	0.038 (4%)	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/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-3-14	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

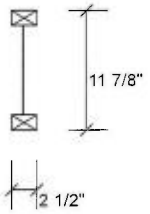
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F5-B NJH 11.875" - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	74	28	0	0
2	83	31	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	9%	35 / 112	147	L	1.25D+1.5L
2 - SPF	2.375"	10%	39 / 125	164	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	35 ft-lb	7 3/4"	5390 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	35 ft-lb	7 3/4"	5352 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	131 lb	1 1/4"	1810 lb	0.072 (7%)	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/40749)	7 3/4"	0.036 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.000 (L/29636)	7 3/4"	0.054 (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 flange unbraced.
4 Bottom flange braced at bearings.

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-3-14	(Span)3-2-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-0 to 1-3-14	(Span)2-11-3	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

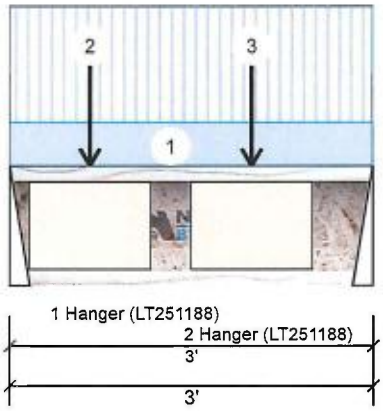
EWP Studio
Simpson Strong-Tie® Component Solutions™

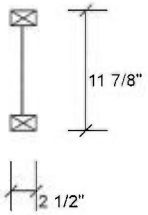
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F6-A NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	422	158	0	0
2	362	136	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	51%	197 / 633	830	L	1.25D+1.5L
2 - Hanger	2.000"	44%	170 / 543	713	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	607 ft-lb	1'11 15/16"	5390 ft-lb	0.113 (11%)	1.25D+1.5L	L
Unbraced	607 ft-lb	1'11 15/16"	4800 ft-lb	0.126 (13%)	1.25D+1.5L	L
Shear	823 lb	1 1/4"	1810 lb	0.455 (45%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/13854)	1'11 1/16"	0.093 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.006 (L/5198)	1'11 1/16"	0.093 (L/360)	0.070 (7%)	L	L
TL Defl inch	0.009 (L/3780)	1'11 1/16"	0.140 (L/240)	0.060 (6%)	D+L	L

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-9-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-7-15		Far Face	117 lb	313 lb	0 lb	0 lb	J8
3	Point	1-11-15		Far Face	136 lb	362 lb	0 lb	0 lb	J8

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

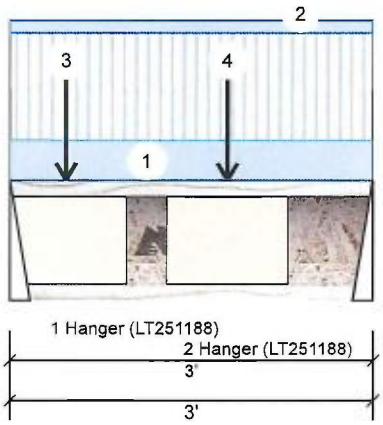
EWP Studio
Simpson Strong-Tie® Component Solutions™

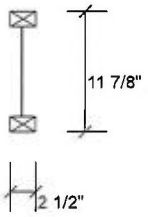
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F6-B NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	480	240	0	0
2	343	172	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	63%	300 / 721	1021	L	1.25D+1.5L
2 - Hanger	2.000"	45%	215 / 515	729	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	749 ft-lb	1'9 9/16"	5390 ft-lb	0.139 (14%)	1.25D+1.5L	L
Unbraced	749 ft-lb	1'9 9/16"	4800 ft-lb	0.156 (16%)	1.25D+1.5L	L
Shear	1013 lb	1 1/4"	1810 lb	0.560 (56%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/9092)	1'9 9/16"	0.093 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.007 (L/4555)	1'9 9/16"	0.093 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.011 (L/3035)	1'9 9/16"	0.140 (L/240)	0.080 (8%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 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	0-5-9		Near Face	152 lb	304 lb	0 lb	0 lb	J8
4	Point	1-9-9		Near Face	209 lb	416 lb	0 lb	0 lb	J8

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

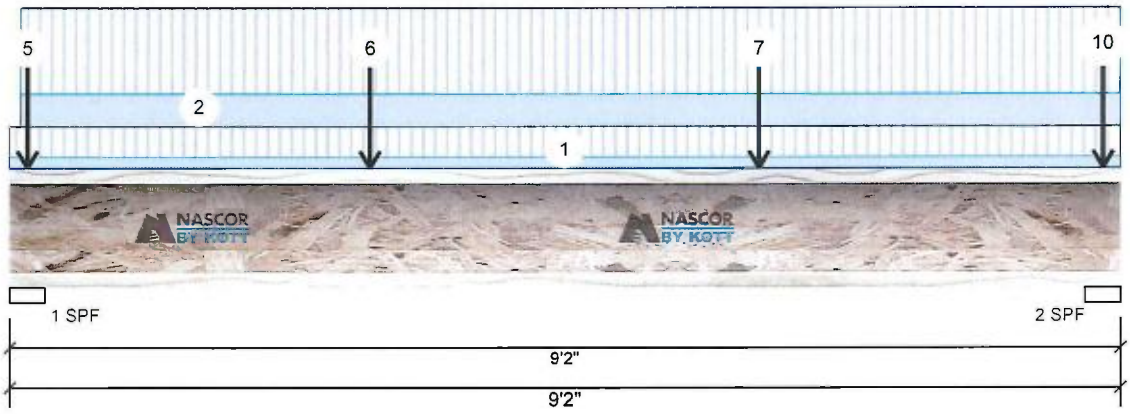
EWP Studio
Simpson Strong-Tie® Component Solutions™

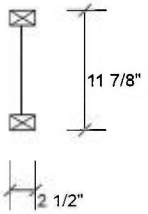
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F7-A NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	326	394	69	0
2	328	395	69	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	59%	492 / 523	1015	L	1.25D+1.5L +0.5S
2 - SPF	3.500"	59%	493 / 527	1020	L	1.25D+1.5L +0.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1148 ft-lb	4'7"	5174 ft-lb	0.222 (22%)	1.25D+1.5L	L
Unbraced	1148 ft-lb	4'7"	1155 ft-lb	0.994 (99%)	1.25D+1.5L	L
Shear	489 lb	8'11 1/4"	1738 lb	0.281 (28%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/7693)	4'7"	0.290 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.036 (L/2894)	4'7"	0.290 (L/360)	0.120 (12%)	L+0.5S	L
TL Defl inch	0.050 (L/2103)	4'7"	0.435 (L/240)	0.110 (11%)	D+L+0.5S	L

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

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

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

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Top flange must be laterally braced at a maximum of 8'8" o.c.
3 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 9-2-0	(Span)0-6-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 9-2-0	(Span)1-5-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-1-12		Top	18 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	0-1-12		Top	261 lb	71 lb	69 lb	0 lb	F3 F3
5	Point	0-1-12		Top	19 lb	0 lb	0 lb	0 lb	Wall Self Weight
6	Point	2-11-12		Near Face	28 lb	74 lb	0 lb	0 lb	F5
7	Point	6-2-4		Near Face	28 lb	74 lb	0 lb	0 lb	F5
8	Point	9-0-4		Top	261 lb	71 lb	69 lb	0 lb	F3 F3
9	Point	9-0-4		Top	19 lb	0 lb	0 lb	0 lb	Wall Self Weight
10	Point	9-0-4		Top	18 lb	0 lb	0 lb	0 lb	Wall Self Weight

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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

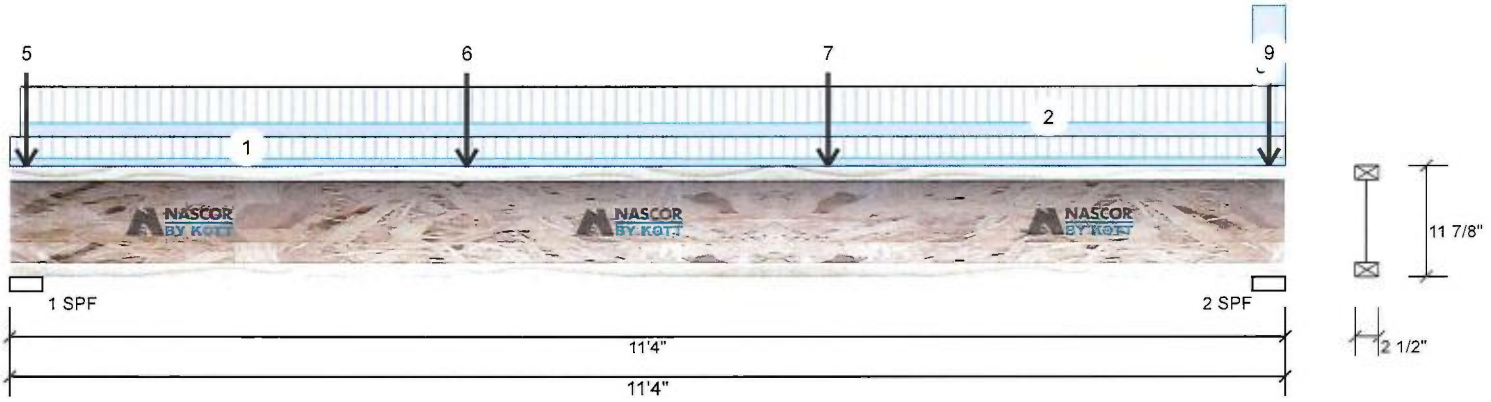
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.2)
Project #:

F8-A NJH 11.875" - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	405	660	136	0
2	407	644	136	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	92%	825 / 675	1500	L	1.25D+1.5L +0.5S
2 - SPF	3.500"	91%	805 / 679	1484	L	1.25D+1.5L +0.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1671 ft-lb	5'8"	4851 ft-lb	0.344 (34%)	1.25D+1.5L	L
Unbraced	1671 ft-lb	5'8"	1680 ft-lb	0.994 (99%)	1.25D+1.5L	L
Shear	586 lb	11'1 1/4"	1629 lb	0.360 (36%)	1.25D+1.5L	L
Perm Defl in.	0.028 (L/4732)	5'8"	0.362 (L/360)	0.080 (8%)	D	Uniform
LL Defl inch	0.073 (L/1788)	5'8"	0.362 (L/360)	0.200 (20%)	L+0.5S	L
TL Defl inch	0.101 (L/1298)	5'8"	0.544 (L/240)	0.180 (18%)	D+L+0.5S	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Top flange must be laterally braced at a maximum of 7'2" o.c.
3 Bottom flange braced at bearings.

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-4-0	(Span)0-10-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 11-4-0	(Span)1-5-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-1-12		Top	21 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	0-1-12		Top	512 lb	102 lb	136 lb	0 lb	F4 F4
5	Point	0-1-12		Top	13 lb	0 lb	0 lb	0 lb	Wall Self Weight
6	Point	4-0-12		Near Face	16 lb	41 lb	0 lb	0 lb	F5
7	Point	7-3-4		Near Face	16 lb	41 lb	0 lb	0 lb	F5
8	Part. Uniform	11-0-8 to 11-4-0		Top	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
9	Point	11-2-4		Top	510 lb	102 lb	136 lb	0 lb	F4 F4

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

KOTT

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

NASCOR

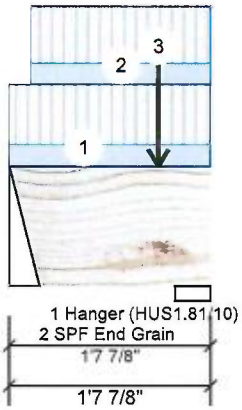
EWP Studio
Simpson Strong-Tie® Component Solutions™

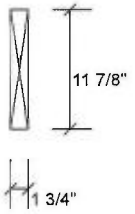
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F10-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	121	49	0	0
2	182	73	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	6%	62 / 182	244	L	1.25D+1.5L
2 - SPF End Grain	3.500"	8%	91 / 273	363	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	72 ft-lb	10 7/16"	17130 ft-lb	0.004 (0%)	1.25D+1.5L	L
Unbraced	72 ft-lb	10 7/16"	16556 ft-lb	0.004 (0%)	1.25D+1.5L	L
Shear	95 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	0.000 (L/67338)	10 3/8"	0.041 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-7-14	(Span)3-11-9	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-2-2 to 1-7-14	(Span)3-9-4	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-12		Far Face	23 lb	60 lb	0 lb	0 lb	J1
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

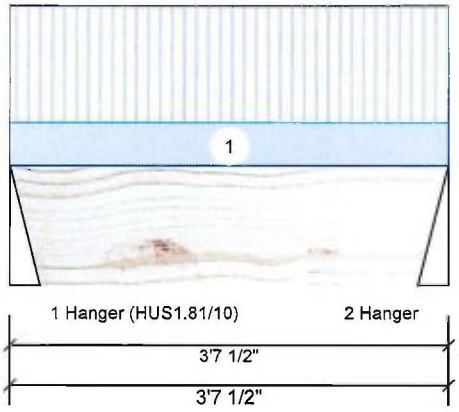
EWP Studio
Simpson Strong-Tie® Component Solutions™

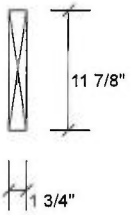
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F11-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	489	192	0	0
2	489	192	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	25%	240 / 734	973	L	1.25D+1.5L
2 - Hanger	3.000"	25%	240 / 734	973	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	709 ft-lb	1'9 3/4"	17130 ft-lb	0.041 (4%)	1.25D+1.5L	L
Unbraced	709 ft-lb	1'9 3/4"	13201 ft-lb	0.054 (5%)	1.25D+1.5L	L
Shear	341 lb	1'2 1/8"	5798 lb	0.059 (6%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/29614)	1'9 3/4"	0.108 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.003 (L/11600)	1'9 3/4"	0.108 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.005 (L/8335)	1'9 3/4"	0.162 (L/240)	0.030 (3%)	D+L	L

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

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-7-8		Top	101 PLF	270 PLF	0 PLF	0 PLF	
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

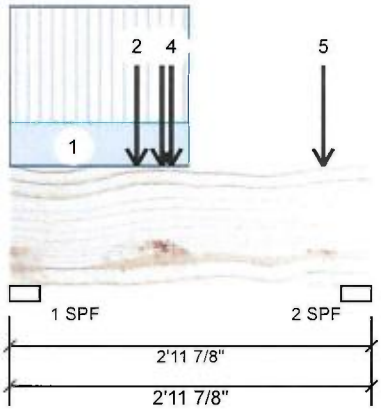
EWP Studio
Simpson Strong-Tie®
Component Solutions™

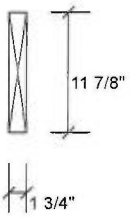
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F11-B 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	468	188	0	0
2	381	154	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.000"	29%	235 / 701	936	L	1.25D+1.5L
2 - SPF	3.000"	24%	193 / 571	764	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	889 ft-lb	1'4"	17130 ft-lb	0.052 (5%)	1.25D+1.5L	L
Unbraced	889 ft-lb	1'4"	14588 ft-lb	0.061 (6%)	1.25D+1.5L	L
Shear	757 lb	1'9 3/4"	5798 lb	0.131 (13%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/23259)	1'4"	0.087 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.003 (L/9252)	1'4"	0.087 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.005 (L/6619)	1'4"	0.131 (L/240)	0.040 (4%)	D+L	L

Design Notes

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-12	(Span)3-9-4	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-0-9		Near Face	23 lb	60 lb	0 lb	0 lb	J1
3	Point	1-3-1		Far Face	37 lb	98 lb	0 lb	0 lb	J1
4	Point	1-4-0		Near Face	192 lb	489 lb	0 lb	0 lb	F11
5	Point	2-7-1		Far Face	34 lb	90 lb	0 lb	0 lb	J1
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

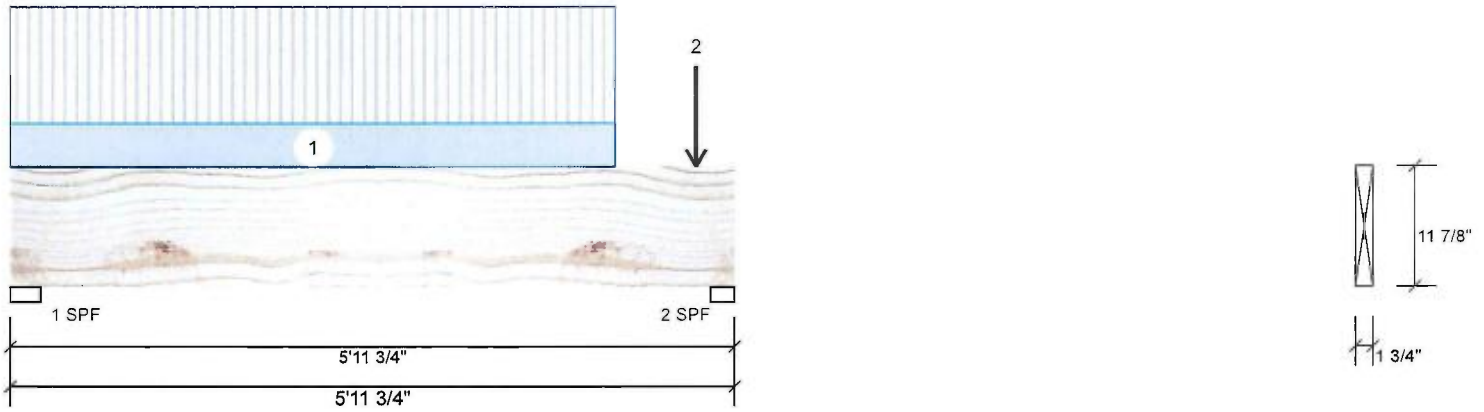
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F12-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	214	95	0	0
2	202	90	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.000"	14%	118 / 322	440	L	1.25D+1.5L
2 - SPF	2.375"	16%	112 / 303	415	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	575 ft-lb	2'11 3/4"	17130 ft-lb	0.034 (3%)	1.25D+1.5L	L
Unbraced	575 ft-lb	2'11 3/4"	7949 ft-lb	0.072 (7%)	1.25D+1.5L	L
Shear	529 lb	4'10 1/4"	5798 lb	0.091 (9%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/31643)	3'	0.189 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.005 (L/14020)	2'11 15/16"	0.189 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.007 (L/9715)	2'11 15/16"	0.283 (L/240)	0.020 (2%)	D+L	L

Design Notes

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

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 4-11-15		Far Face	27 PLF	72 PLF	0 PLF	0 PLF	
2	Point	5-7-15		Far Face	21 lb	57 lb	0 lb	0 lb	J1
	Self Weight				5 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

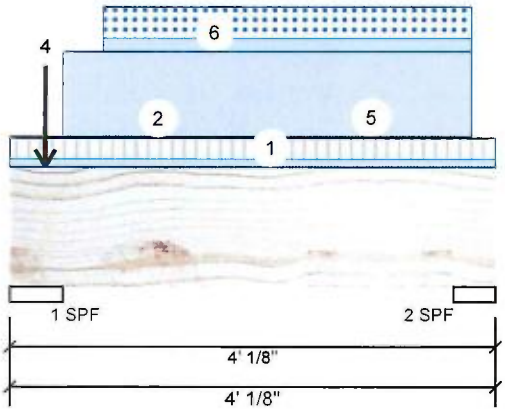
EWP Studio
Simpson Strong-Tie® Component Solutions™

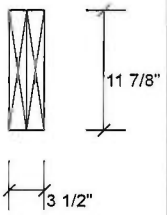
Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F13-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	158	31	0
2	32	162	42	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	3%	198 / 50	248	L	1.25D+1.5L
2 - SPF	4.125"	4%	203 / 63	265	L	1.25D+1.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	208 ft-lb	2' 3/4"	23297 ft-lb	0.009 (1%)	1.25D+1.5S	L
Unbraced	208 ft-lb	2' 3/4"	23297 ft-lb	0.009 (1%)	1.25D+1.5S	L
Shear	104 lb	1'4 3/8"	7885 lb	0.013 (1%)	1.25D+1.5S	L
Perm Defl in.	0.001 (L/65472)	2' 11/16"	0.112 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-0-2	(Span)0-9-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-8-2		Top	1 PLF	0 PLF	0 PLF	0 PLF	
4	Point	0-3-8		Top	8 lb	0 lb	0 lb	0 lb	Wall Self Weight
5	Part. Uniform	0-5-4 to 3-9-12		Top	64 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Part. Uniform	0-9-4 to 3-9-12		Top	10 PLF	0 PLF	24 PLF	0 PLF	
	Self Weight				10 PLF				

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

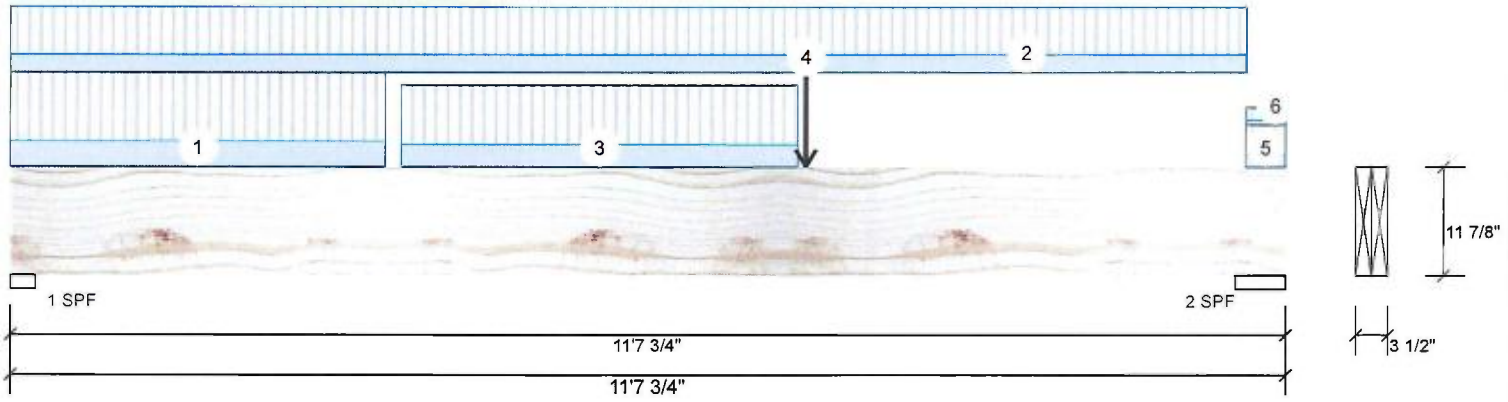
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client: GREEN YORK HOMES
Project:
Address:

Date: 6/1/2018
Designer: RCO
Job Name: INDIGO 1 (ELEV.1)
Project #:

F14-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	313	173	0	0
2	268	159	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.750"	12%	216 / 470	686	L	1.25D+1.5L
2 - SPF	5.500"	5%	199 / 402	601	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1948 ft-lb	6'1 1/2"	34261 ft-lb	0.057 (6%)	1.25D+1.5L	L
Unbraced	1948 ft-lb	6'1 1/2"	28546 ft-lb	0.068 (7%)	1.25D+1.5L	L
Shear	551 lb	1'1 7/8"	11596 lb	0.048 (5%)	1.25D+1.5L	L
Perm Defl in.	0.012 (L/10848)	5'9 1/8"	0.369 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.022 (L/5964)	5'9 1/4"	0.369 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.035 (L/3848)	5'9 1/4"	0.554 (L/240)	0.060 (6%)	D+L	L

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

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-5-2	(Span)1-7-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 11-3-8	(Span)1-1-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	3-6-14 to 7-2-6	(Span)1-4-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	7-3-4		Far Face	49 lb	121 lb	0 lb	0 lb	F10
5	Tie-In	11-3-6 to 11-7-12	(Span)0-8-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	11-3-8 to 11-7-12	(Span)0-3-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				10 PLF				

Notes

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

Lumber

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

Handling & Installation

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