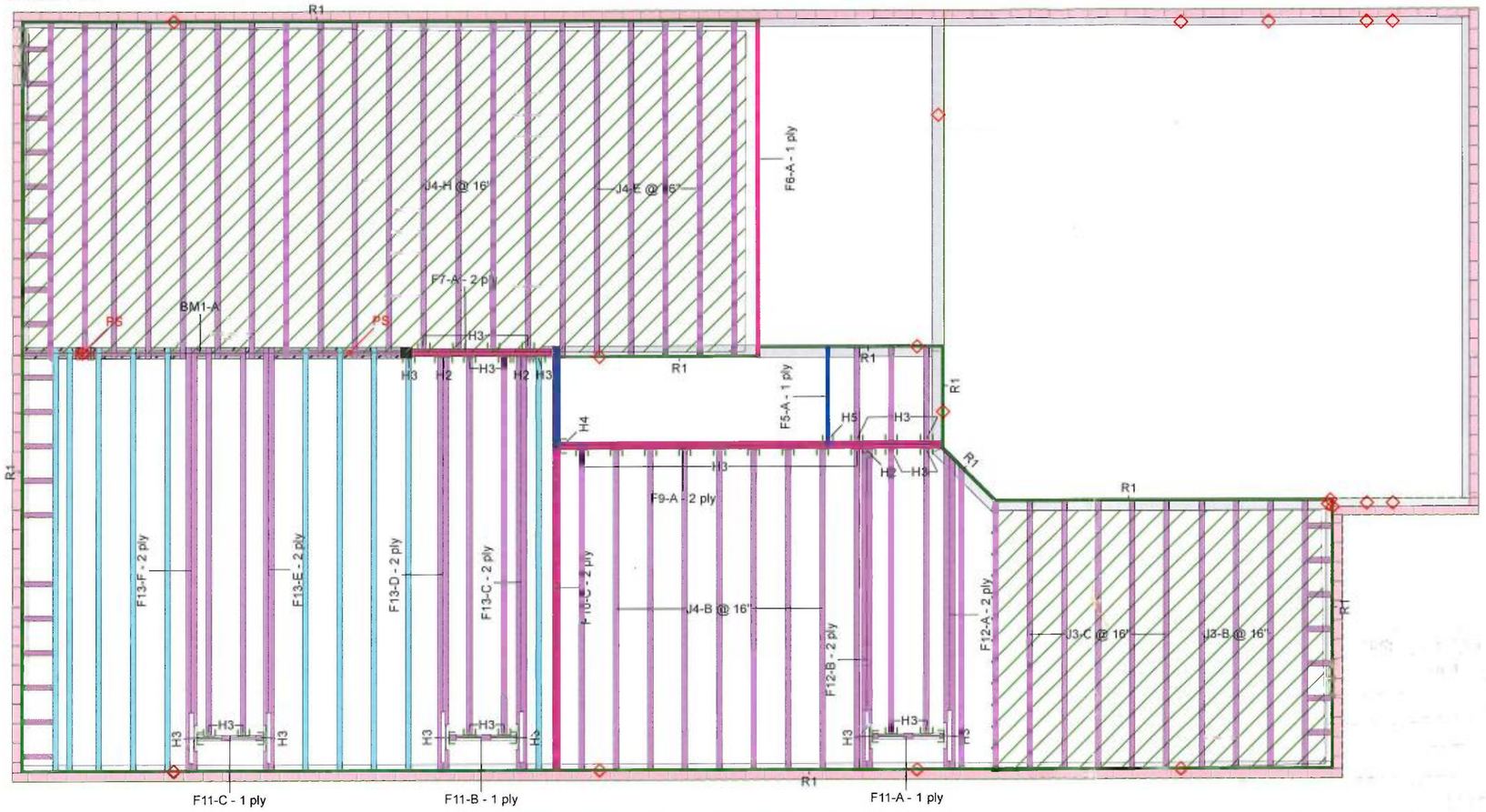
Ground Floor



Ground Floor
LVL/LSL

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F10	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	18-0-0
F9	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	16-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	11.875			1	14-0-0
F7	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	6-0-0
F5	Forex 2.0E-3000Fb LVL	1.75	11.875			1	4-0-0

I Joist

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J8	NJ60H	2.5	11.875			10	18-0-0
F13	NJH	2.5	11.875	4	2	8	18-0-0
F12	NJH	2.5	11.875	2	2	4	14-0-0
F11	NJH	2.5	11.875			3	4-0-0
J5	NJH	2.5	11.875			4	16-0-0
J4	NJH	2.5	11.875			30	14-0-0
J3	NJH	2.5	11.875			13	12-0-0
J2	NJH	2.5	11.875			3	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			13	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	11.875	LinFt		Varies	37-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H2	3	HU310-2			14 16d	6 10d
H3	34	LF2511			12 10d	1 #8x1 1/4WS
H4	1	HGUS410			46 16d	16 16d
H5	1	HUS1.81/10			30 16d	10 16d

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-loadbearing walls.
4. Install single-ply flush window header along inside face of rimboard/rimjoist
5. Refer to Nascor specifier guide for installation details.
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"x4" block (1/16" longer than rim depth) @ 16" o/c.
All other components and structural elements supporting the floor system such as beams, walls, columns and foundation walls and footings including anchorage of components and bracing for lateral stability are the responsibility of others.

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

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

Legend

PS	Point Load Support
	Load from Above
	Wall
	Norbord Rimboard Plus 1.125 X 11.875
	NJ60H 11.875
	NJH 11.875
	Forex 2.0E-3000Fb LVL 1.75 X 11.875
	5.25 X 10.25 (Dropped)

Architectural Drawing Info

JARDIN DESIGN GROUP
64 JARDIN DR, SUITE 3A
VAUGHAN,ON L4K 3P3
Project # 17-55
Model: AMELIA 2
Date: MAY 22,2018 REV : 2

NASCOR

Layout Name
AMELIA 2 EL- 1 & 2
Design Method
LSD
Description
GREEN YORK HOMES
GRANELLI HOMES PROJECT
BRAMPTON,ON
Created
May 28, 2018
Builder
Sales Rep
Designer
S B
Shipping
Project
Builder's Project

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

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	

1. OBC 2012 O.Reg 332/12 as amended
2. Nascor CCMC - 13535-R
3. LVL CCMC -12904-R
4. CAN/CSA-O86-09
5. CCMC -12787-R APA PR-L310(C)

JOISTS SPACING 16"O/C UNLESS NOTED OTHERWISE

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.

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

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

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

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

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 2018
NE0618-017

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

CITY OF BRAMPTON
BUILDING DIVISION
REVIEWED
MAR 05 2019
MARY FAGNETTE

M-2057
LOT 4

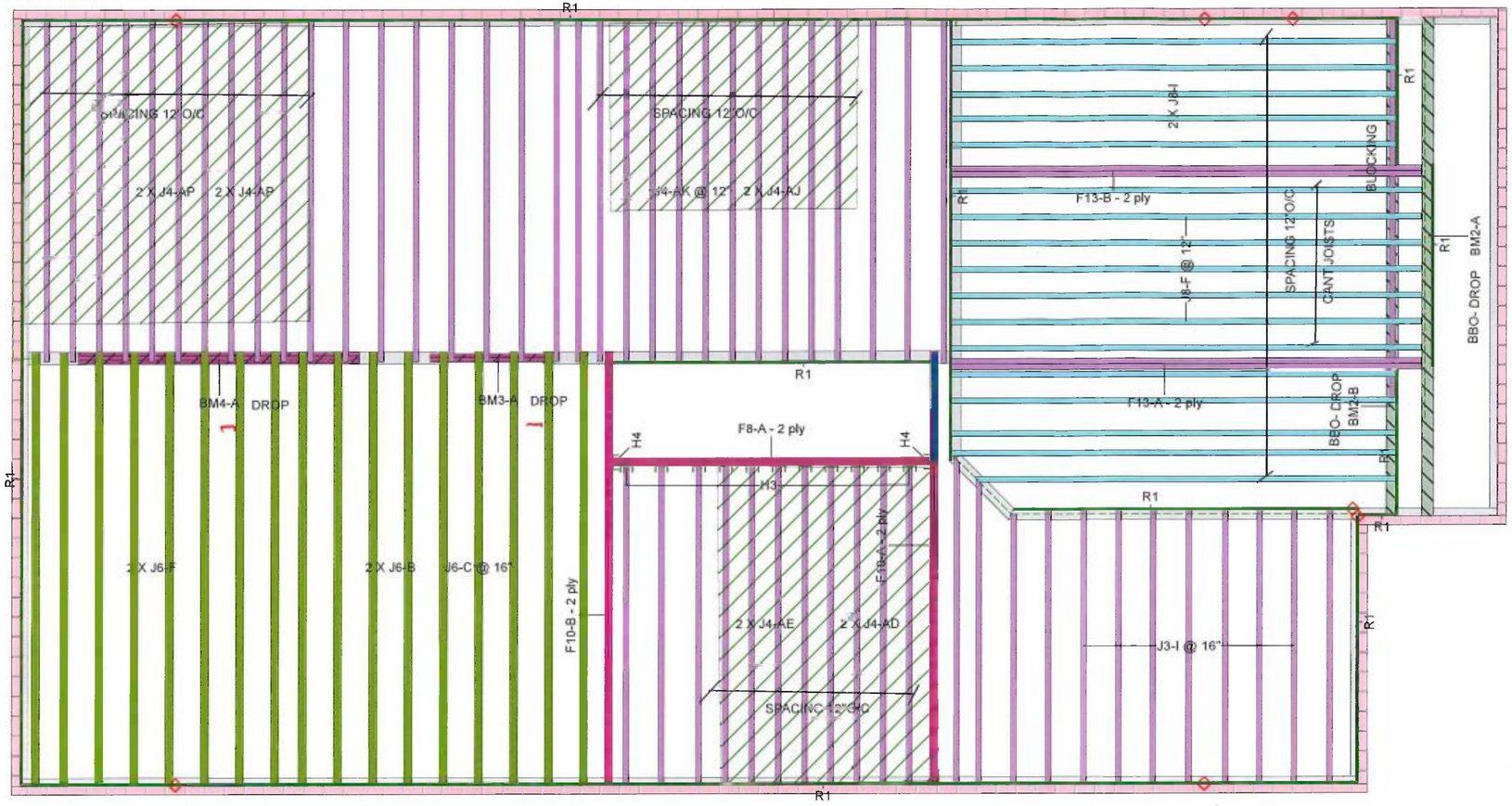
19-444457.000:00RR.

EWP Studio
Simpson Strong-Tie® Component Solutions™

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

SIMPSON StrongTie

Second Floor



Second Floor

LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F10	Forex 2.0E-3000Fb LVL	1.75	11.875	2	2	4	18-0-0
F8	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	14-0-0

LVL/LSL (Dropped)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BM4	Forex 2.0E-3000Fb LVL	1.75	9.5	1	3	3	12-0-0
BM3	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	6-0-0

I Joist (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J6	NJ40U	3.5	11.875			17	18-0-0
J8	NJ60H	2.5	11.875			16	18-0-0
J7	NJ60H	2.5	11.875			1	16-0-0
J4	NJH	2.5	11.875			44	14-0-0
J3	NJH	2.5	11.875			11	12-0-0
F13	NJH	2.5	11.875	2	2	4	18-0-0

Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			18	12

Blocking

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
BLK2	NJH	2.5	11.875	LinFt		Varies	11-0-0

Hanger

					Beam/Girder	Supported Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H3	11	LF2511			12 10d	1 #8x1 1/4WS
H4	2	HGUS410			46 16d	16 16d

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-loadbearing walls.
4. Install single-ply flush window header along inside face of rimboard/rimjoist
5. Refer to Nascor specifier guide for installation details.
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.

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Rim parallel to joists: 1-1/8" rimboard with 2"x4" block (1/16" longer than rim depth) @ 16" o/c. All other components and structural elements supporting the floor system such as beams, walls, columns and foundation walls and footings including anchorage of components and bracing for lateral stability are the responsibility of others.

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

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

Legend

PS	Point Load Support
◇	Load from Above
	Wall
	Norbord Rimboard Plus 1.125 X 11.875
	NJ40U 11.875
	NJ60H 11.875
	NJH 11.875
	Forex 2.0E-3000Fb LVL 1.75 X 9.5 (Dropped)
	Forex 2.0E-3000Fb LVL 1.75 X 11.875
	5.25 X 10.25 (Dropped)

NASCOR

Layout Name
AMELIA 2 EL- 2

Design Method
LSD

Description
GREEN YORK HOMES
BRAMPTON,ON

Created
May 28, 2018

Builder

Sales Rep

Designer
S B

Shipping

Project

Builder's Project

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

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 4.

Architectural Drawing Info

JARDIN DESIGN GROUP
64 JARDIN DR, SUITE 3A
VAUGHAN,ON L4K 3P3
Project # 17-55
Model: AMELIA 2
Date: MAY 22,2018

JOISTS SPACING 16"O/C UNLESS NOTED OTHERWISE

1. OBC 2012 O.Reg 332/12 as amended
2. Nascor CCMC - 13535-R
3. LVL CCMC -12904-R
4. CAN/CSA-O86-09
5. CCMC -12787-R APA PR-L310(C)

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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.

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.

EWP Studio
Simpson Strong-Tie®
Component Solutions™

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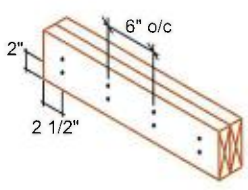
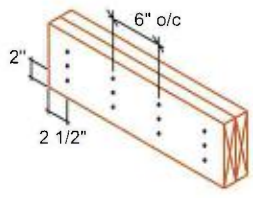
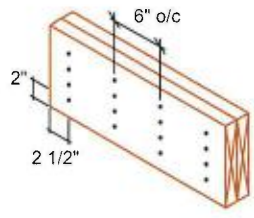
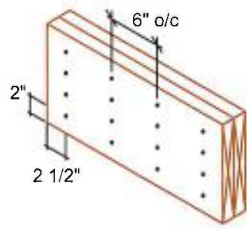
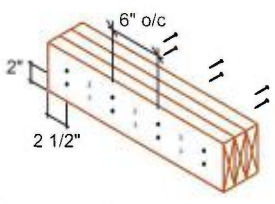
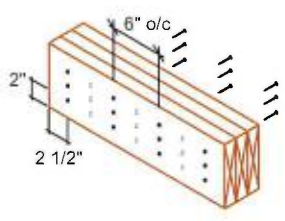
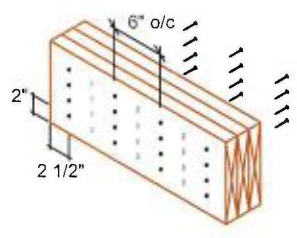
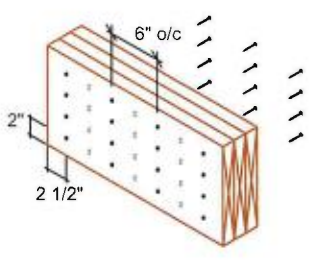
SIMPSON Strong-Tie

MULTIPLE MEMBER CONNECTIONS

GREEN YORK HOMES-BRAMPTON-ON-AMELIA 2 ELE-1-2

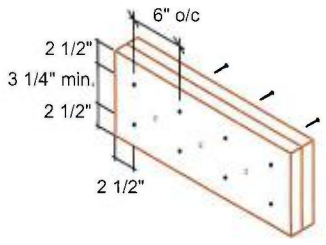
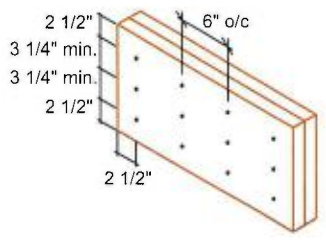
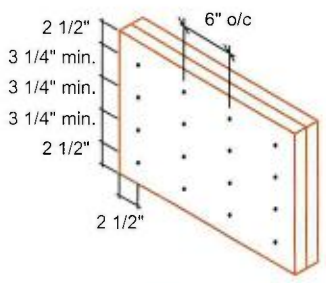
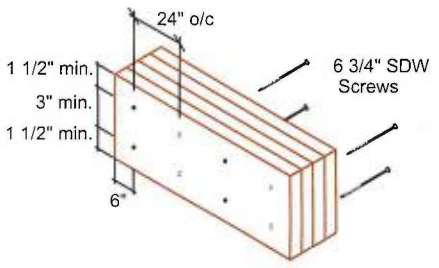
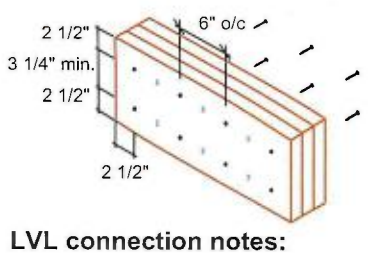
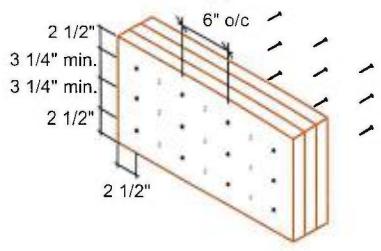
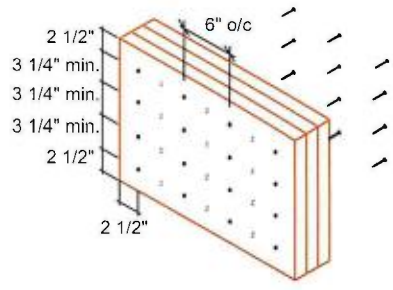
Conventional Connections (for uniform distributed loads)

	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)

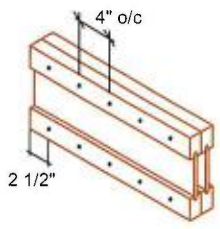
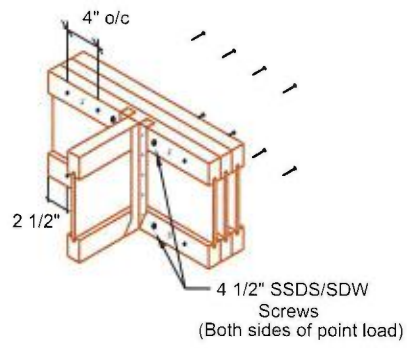
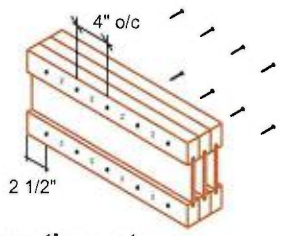
	9 1/2" LVL	11 7/8" - 14" LVL	16"-18" LVL	4-ply (Top load only)
				
				

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

M-2057
LOT 4

Engineering Note Page (ENP-2)

REVISION 2009-10-09

Please read all notes prior to installation of the component

GREEN YORK HOMES-BRAMPTON-ON-AMELIA 2 ELE-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

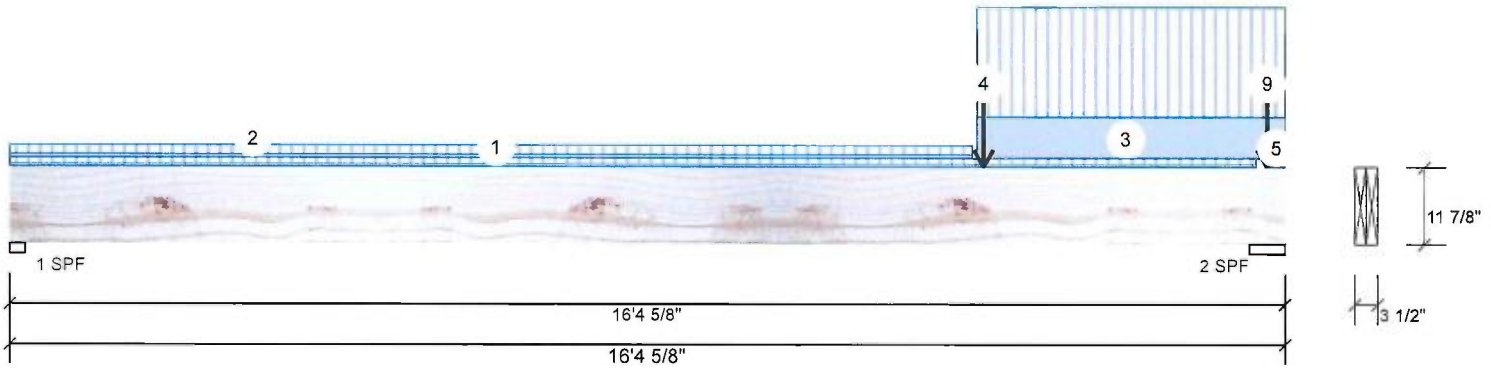
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F10-C Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	970	457	0	0
2	3301	1385	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	40%	571 / 1454	2025	L	1.25D+1.5L
2 - SPF	5.500"	56%	1731 / 4951	6682	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	19001 ft-lb	12'6 3/16"	34261 ft-lb	0.555 (55%)	1.25D+1.5L	L
Unbraced	19001 ft-lb	12'6 3/16"	22688 ft-lb	0.837 (84%)	1.25D+1.5L	L
Shear	5852 lb	15'	11596 lb	0.505 (50%)	1.25D+1.5L	L
Perm Defl in.	0.158 (L/1204)	8'11 7/8"	0.528 (L/360)	0.300 (30%)	D	Uniform
LL Defl inch	0.363 (L/523)	9'1"	0.528 (L/360)	0.690 (69%)	L	L
TL Defl inch	0.522 (L/365)	9' 5/8"	0.793 (L/240)	0.660 (66%)	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 04, 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 Multiple plies must be fastened together as per manufacturer's details.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 Lateral slenderness ratio based on full section width.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-0-2	(Span)0-8-3	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-4-7	(Span) 0-11-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	12-5-3 to 16-4-10		Top	90 PLF	240 PLF	0 PLF	0 PLF	
4	Point	12-6-3		Near Face	1124 lb	2798 lb	0 lb	0 lb	F9
5	Part. Uniform	16-1-14 to 16-4-10		Top	1 PLF	0 PLF	0 PLF	0 PLF	

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

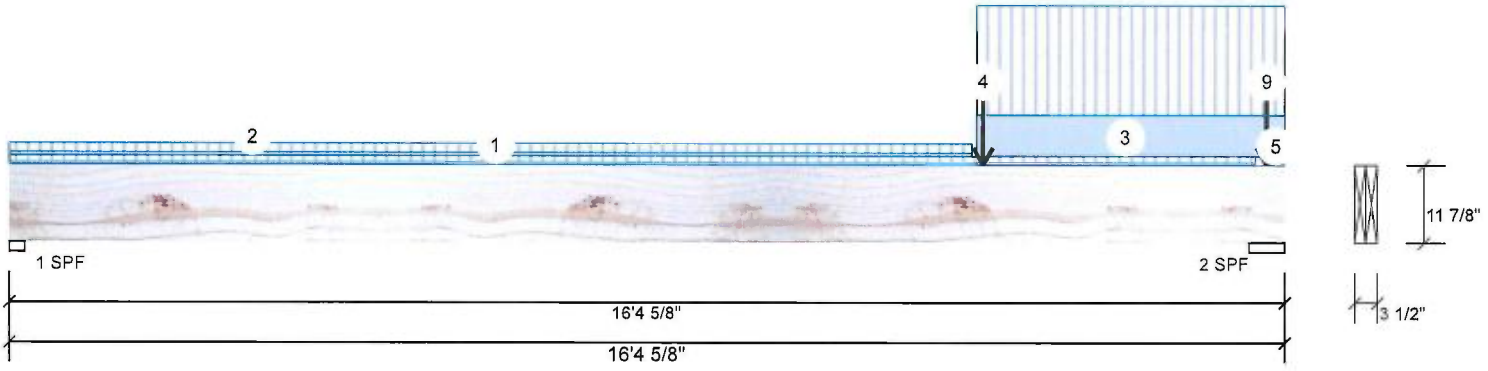
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F10-C Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	16-1-14		Top	10 lb	26 lb	0 lb	0 lb	J1
7	Point	16-1-14		Top	2 lb	5 lb	0 lb	0 lb	J1
8	Point	16-1-14		Top	11 lb	30 lb	0 lb	0 lb	J4
9	Point	16-1-14		Top	9 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				10 PLF				

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

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

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

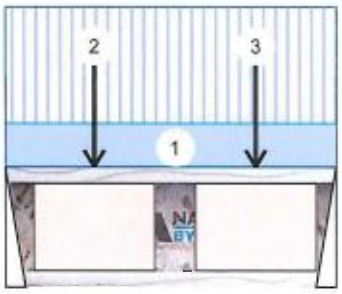
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

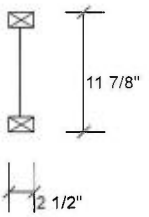
F11-A NJH 11.875" - PASSED

Level: Ground Floor



1 Hanger (LF2511)
2 Hanger (LF2511)
2'8 13/16"
2'8 13/16"

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.



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	277	104	0	0
2	287	107	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	34%	130 / 416	546	L	1.25D+1.5L
2 - Hanger	2.000"	35%	134 / 430	565	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	333 ft-lb	1' 5/16"	5390 ft-lb	0.062 (6%)	1.25D+1.5L	L
Unbraced	333 ft-lb	1' 5/16"	4941 ft-lb	0.067 (7%)	1.25D+1.5L	L
Shear	559 lb	2'7 9/16"	1810 lb	0.309 (31%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/22796)	1'3 1/16"	0.084 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/8538)	1'3 1/16"	0.084 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.005 (L/6212)	1'3 1/16"	0.126 (L/240)	0.040 (4%)	D+L	L

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

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

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 2-8-13	(Span)1-3-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-8-13		Far Face	94 lb	251 lb	0 lb	0 lb	J3
3	Point	2-0-13		Far Face	91 lb	243 lb	0 lb	0 lb	J3

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 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. I-Joist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

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

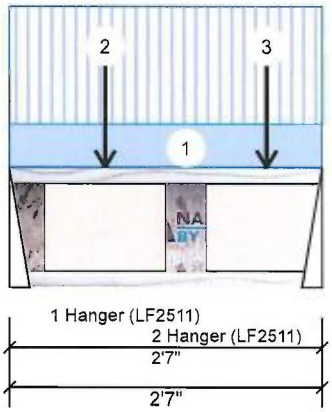
EWP Studio
Simpson Strong-Tie®
Component Solutions™

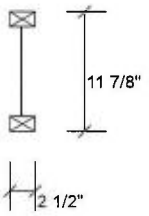
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F11-B NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	320	120	0	0
2	382	143	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	39%	150 / 480	630	L	1.25D+1.5L
2 - Hanger	2.000"	46%	179 / 572	751	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	417 ft-lb	9 1/2"	5390 ft-lb	0.077 (8%)	1.25D+1.5L	L
Unbraced	417 ft-lb	9 1/2"	5011 ft-lb	0.083 (8%)	1.25D+1.5L	L
Shear	746 lb	2'5 3/4"	1810 lb	0.412 (41%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/18292)	9 1/2"	0.079 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/6850)	9 1/2"	0.079 (L/360)	0.050 (5%)	L	L
TL Defl inch	0.006 (L/4984)	9 1/2"	0.119 (L/240)	0.050 (5%)	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 2-7-0	(Span)1-3-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-9-8		Far Face	128 lb	342 lb	0 lb	0 lb	J5
3	Point	2-1-8		Far Face	110 lb	293 lb	0 lb	0 lb	J5

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

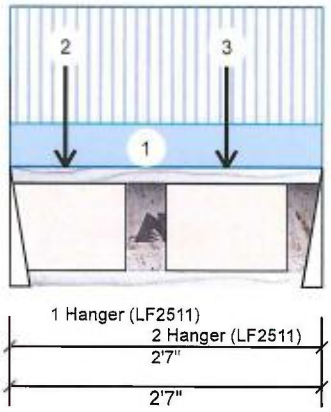
EWP Studio
Simpson Strong-Tie® Component Solutions™

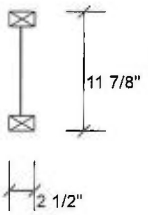
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F11-C NJH 11.875" - PASSED

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	384	144	0	0
2	322	121	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	47%	180 / 576	756	L	1.25D+1.5L
2 - Hanger	2.000"	39%	151 / 482	633	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	420 ft-lb	1'9 1/2"	5390 ft-lb	0.078 (8%)	1.25D+1.5L	L
Unbraced	420 ft-lb	1'9 1/2"	5011 ft-lb	0.084 (8%)	1.25D+1.5L	L
Shear	751 lb	1 1/4"	1810 lb	0.415 (41%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/18157)	1'9 1/2"	0.079 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/6812)	1'9 1/2"	0.079 (L/360)	0.050 (5%)	L	L
TL Defl inch	0.006 (L/4954)	1'9 1/2"	0.119 (L/240)	0.050 (5%)	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 2-7-0	(Span)1-3-7 to 1-3-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-5-8		Far Face	111 lb	295 lb	0 lb	0 lb	J5
3	Point	1-9-8		Far Face	129 lb	344 lb	0 lb	0 lb	J5

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. I-Joist not to be treated with fire retardant or corrosive chemicals

Handling & Installation

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

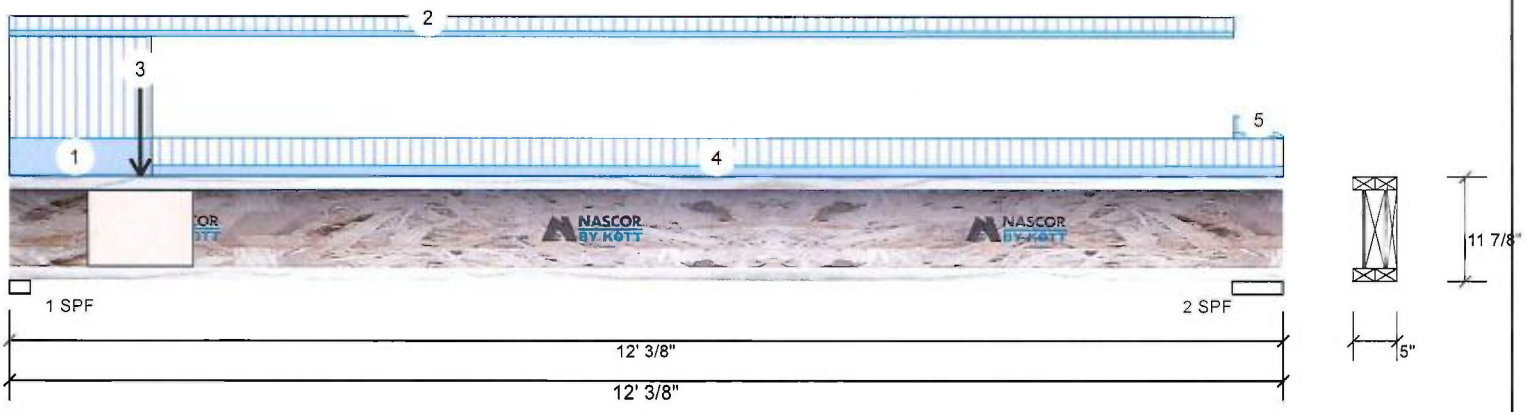
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F12-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	474	177	0	0
2	193	72	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	28%	222 / 711	933	L	1.25D+1.5L
2 - SPF	5.754"	10%	90 / 290	380	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1243 ft-lb	4'8 13/16"	10780 ft-lb	0.115 (12%)	1.25D+1.5L	L
Unbraced	1243 ft-lb	4'8 13/16"	1248 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	914 lb	1 5/8"	3620 lb	0.252 (25%)	1.25D+1.5L	L
Perm Defl in.	0.011 (L/12159)	5'6 3/16"	0.383 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.030 (L/4552)	5'6 3/16"	0.383 (L/360)	0.080 (8%)	L	L
TL Defl inch	0.042 (L/3312)	5'6 3/16"	0.574 (L/240)	0.070 (7%)	D+L	L

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

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

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

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top flange must be laterally braced at a maximum of 11'2" 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 1-4-2	(Span)3-1-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 11-6-14	(Span)0-5-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-14		Far Face	107 lb	287 lb	0 lb	0 lb	F11
4	Tie-In	1-4-2 to 12-0-6	(Span)0-10-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	11-6-14 to 12-0-6	(Span)0-6-5 to 0-0-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 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. 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

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

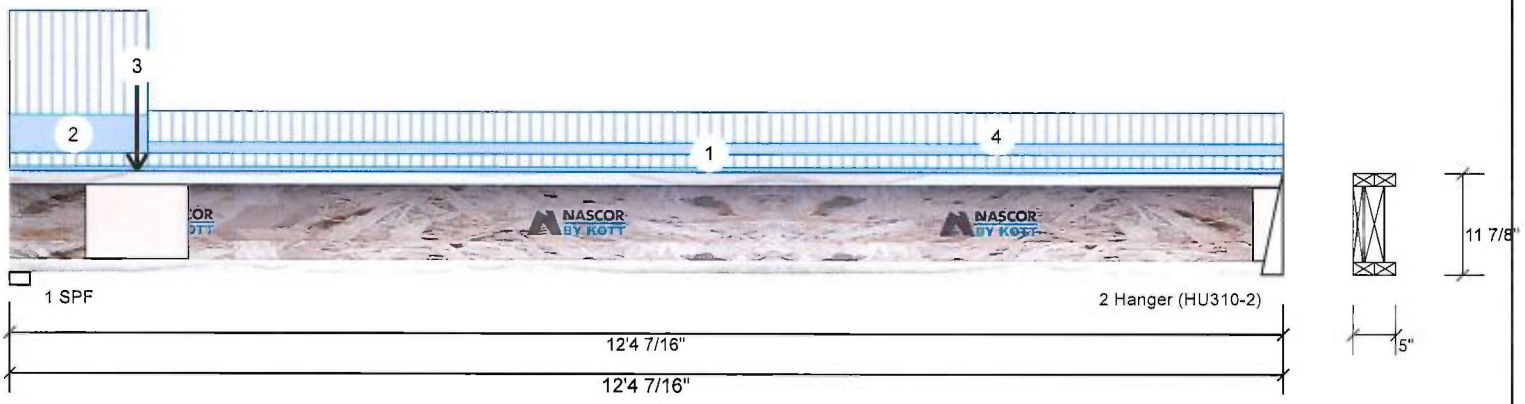
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F12-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	473	178	0	0
2	193	72	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	28%	222 / 710	932	L	1.25D+1.5L
2 - Hanger	2.500"	10%	91 / 290	380	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1321 ft-lb	5'1 9/16"	10780 ft-lb	0.123 (12%)	1.25D+1.5L	L
Unbraced	1321 ft-lb	5'1 9/16"	1322 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	913 lb	1 5/8"	3620 lb	0.252 (25%)	1.25D+1.5L	L
Perm Defl in.	0.013 (L/11026)	5'10 1/8"	0.403 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.035 (L/4136)	5'10 1/8"	0.403 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.048 (L/3008)	5'10 1/8"	0.604 (L/240)	0.080 (8%)	D+L	L

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

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

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

Design Notes

1 Fill all hanger nailing holes.
2 Girders are designed to be supported on the bottom edge only.
3 Multiple plies must be fastened together as per manufacturer's details.
4 Top loads must be supported equally by all plies.
5 Top flange must be laterally braced at a maximum of 10'10" o.c.
6 Bottom flange braced at bearings.
7 Web stiffeners required at Bearing 2.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-4-7	(Span)0-4-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-4-2	(Span)3-1-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-14		Near Face	104 lb	277 lb	0 lb	0 lb	F11
4	Tie-In	1-4-2 to 12-4-7	(Span)0-11-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 2018

Notes

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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

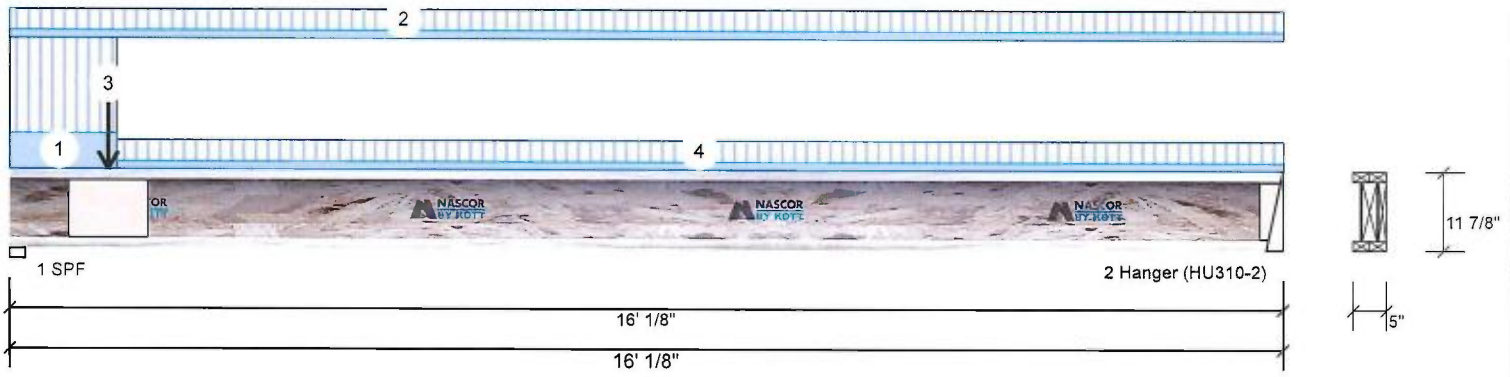
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-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	629	236	0	0
2	243	91	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	37%	295 / 944	1238	L	1.25D+1.5L
2 - Hanger	2.500"	13%	114 / 364	478	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2103 ft-lb	6'10 15/16"	10780 ft-lb	0.195 (20%)	1.25D+1.5L	L
Unbraced	2103 ft-lb	6'10 15/16"	2107 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	1219 lb	1 5/8"	3620 lb	0.337 (34%)	1.25D+1.5L	L
Perm Defl in.	0.033 (L/5696)	7'8"	0.524 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.088 (L/2135)	7'8"	0.524 (L/360)	0.170 (17%)	L	L
TL Defl inch	0.122 (L/1553)	7'8"	0.786 (L/240)	0.150 (15%)	D+L	L

Design Notes

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

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 1-4-2	(Span)3-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-0-2	(Span)0-8-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-14		Far Face	143 lb	382 lb	0 lb	0 lb	F11
4	Tie-In	1-4-2 to 16-0-2	(Span)0-8-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	

LICENSED PROFESSIONAL ENGINEER N.A. EL-MASRI PROVINCE OF ONTARIO
Jun 04, 2018

Notes

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Lumber

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

Handling & Installation

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

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

NASCOR

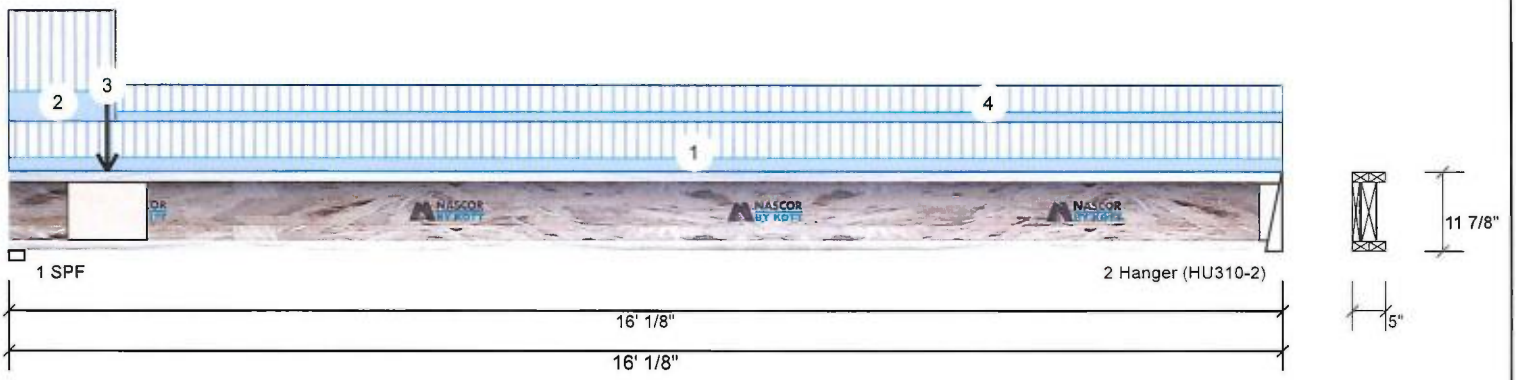
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-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	723	271	0	0
2	398	149	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	43%	339 / 1084	1423	L	1.25D+1.5L
2 - Hanger	2.500"	22%	187 / 597	784	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3230 ft-lb	7'5 3/4"	10780 ft-lb	0.300 (30%)	1.25D+1.5L	L
Unbraced	3230 ft-lb	7'5 3/4"	3243 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	1400 lb	1 5/8"	3620 lb	0.387 (39%)	1.25D+1.5L	L
Perm Defl in.	0.051 (L/3734)	7'9 13/16"	0.524 (L/360)	0.100 (10%)	D	Uniform
LL Defl inch	0.135 (L/1400)	7'9 13/16"	0.524 (L/360)	0.260 (26%)	L	L
TL Defl inch	0.185 (L/1018)	7'9 13/16"	0.786 (L/240)	0.240 (24%)	D+L	L

Design Notes

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

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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 16-0-2	(Span)1-4-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-4-2	(Span)3-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-14		Near Face	120 lb	320 lb	0 lb	0 lb	F11
4	Tie-In	1-4-2 to 16-0-2	(Span)1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 2018

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

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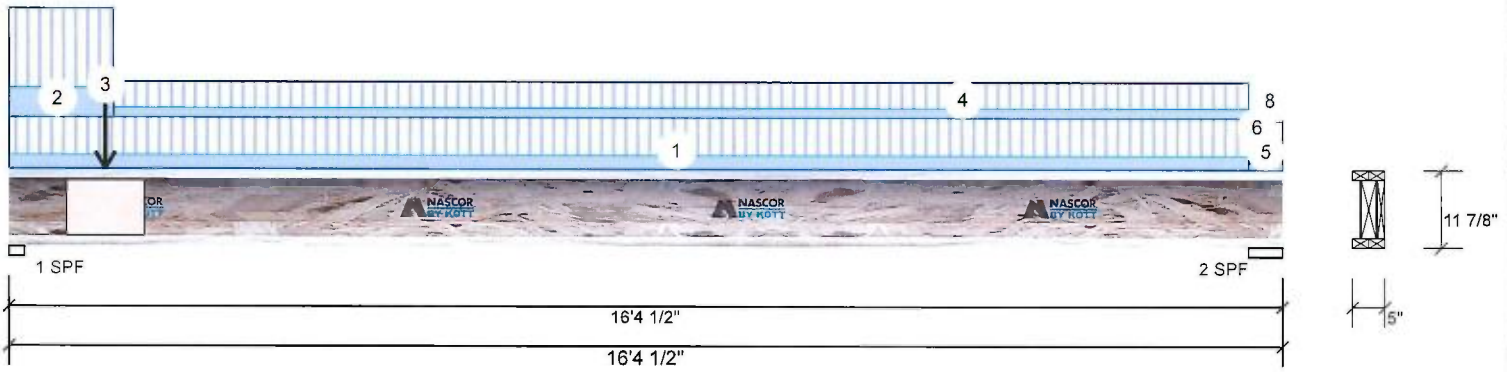
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-E 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	741	278	0	0
2	416	157	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	44%	348 / 1112	1460	L	1.25D+1.5L
2 - SPF	5.250"	23%	196 / 624	821	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3385 ft-lb	7'6 13/16"	10780 ft-lb	0.314 (31%)	1.25D+1.5L	L
Unbraced	3385 ft-lb	7'6 13/16"	3390 ft-lb	0.999 (100%)	1.25D+1.5L	L
Shear	1436 lb	1 5/8"	3620 lb	0.397 (40%)	1.25D+1.5L	L
Perm Defl in.	0.054 (L/3540)	7'10 3/4"	0.529 (L/360)	0.100 (10%)	D	Uniform
LL Defl inch	0.143 (L/1328)	7'10 3/4"	0.529 (L/360)	0.270 (27%)	L	L
TL Defl inch	0.197 (L/966)	7'10 3/4"	0.793 (L/240)	0.250 (25%)	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 7'3" o.c.
5 Bottom flange braced at bearings.

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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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 15-11-4	(Span)1-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-4-2	(Span)3-0-0 to 3-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-14		Far Face	121 lb	322 lb	0 lb	0 lb	F11
4	Tie-In	1-4-2 to 15-11-4	(Span)1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	15-11-4 to 16-4-8	(Span)0-8-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	15-11-4 to 16-4-8	(Span)0-8-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 2018

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Lumber

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

Handling & Installation

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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

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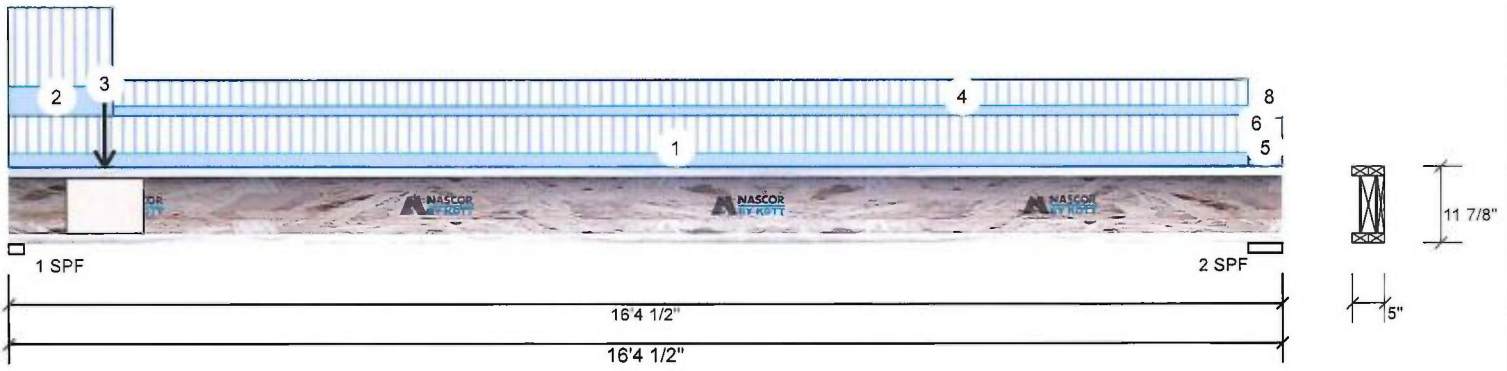
Level: Ground Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	16-1-14 to 16-4-8		Top	2 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	16-1-14 to 16-4-8		Top	2 PLF	0 PLF	0 PLF	0 PLF	

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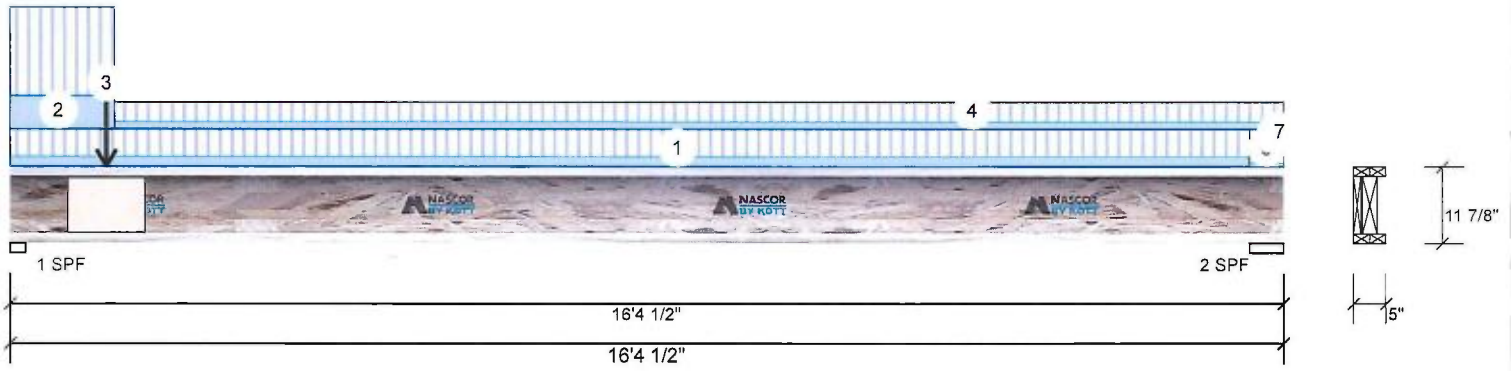

Member Information

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	673	252	0	0
2	287	108	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	40%	316 / 1010	1326	L	1.25D+1.5L
2 - SPF	5.250"	16%	135 / 430	566	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2438 ft-lb	7'1 7/8"	10780 ft-lb	0.226 (23%)	1.25D+1.5L	L
Unbraced	2438 ft-lb	7'1 7/8"	2454 ft-lb	0.994 (99%)	1.25D+1.5L	L
Shear	1305 lb	1 5/8"	3620 lb	0.360 (36%)	1.25D+1.5L	L
Perm Defl in.	0.039 (L/4884)	7'9 3/8"	0.529 (L/360)	0.070 (7%)	D	Uniform
LL Defl inch	0.104 (L/1832)	7'9 3/8"	0.529 (L/360)	0.200 (20%)	L	L
TL Defl inch	0.143 (L/1332)	7'9 3/8"	0.793 (L/240)	0.180 (18%)	D+L	L

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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 8'5" 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 15-11-4	(Span)0-11-0 to 0-11-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-4-2	(Span)3-0-0 to 3-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-2-14		Near Face	144 lb	384 lb	0 lb	0 lb	F11
4	Tie-In	1-4-2 to 16-4-8	(Span)0-8-0 to 0-8-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	15-11-4 to 16-4-8	(Span)0-4-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
6	Part. Uniform	16-1-14 to 16-4-8		Top	2 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	16-1-14 to 16-4-8		Top	1 PLF	0 PLF	0 PLF	0 PLF	

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 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. 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 Lumber Company
14 Anderson Blvd, Ontario
Canada
L4A 7X4
905-642-4400

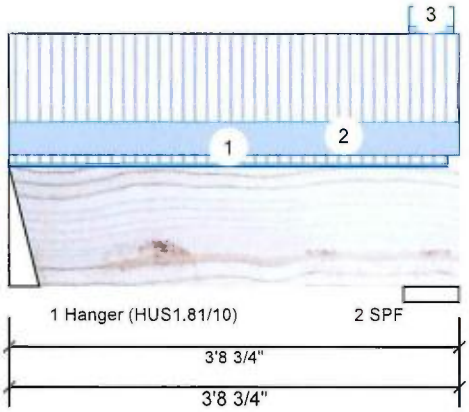
EWP Studio
Simpson Strong-Tie® Component Solutions™

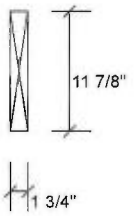
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

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

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	462	182	0	0
2	534	210	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	24%	227 / 693	920	L	1.25D+1.5L
2 - SPF	5.500"	18%	262 / 801	1063	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	646 ft-lb	1'9 1/8"	17130 ft-lb	0.038 (4%)	1.25D+1.5L	L
Unbraced	646 ft-lb	1'9 1/8"	13452 ft-lb	0.048 (5%)	1.25D+1.5L	L
Shear	304 lb	1'2 1/8"	5798 lb	0.052 (5%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/32215)	1'9 1/8"	0.105 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.003 (L/12665)	1'9 1/8"	0.105 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.004 (L/9091)	1'9 1/8"	0.157 (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.

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 3-7-9	(Span)1-1-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-8-12		Top	90 PLF	240 PLF	0 PLF	0 PLF	
3	Tie-In	3-3-12 to 3-8-3	(Span)2-7-10 to 2-7-9	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04, 2018

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

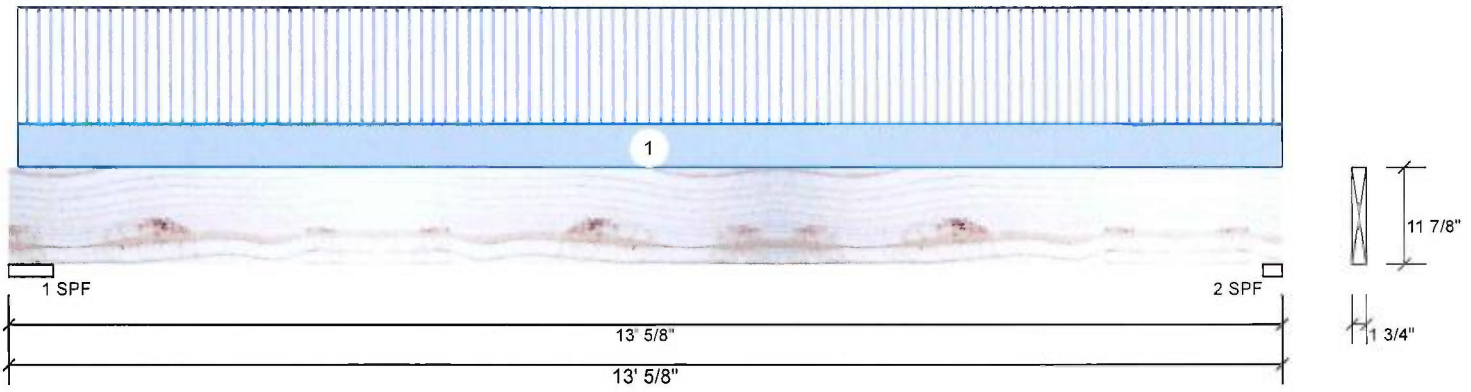
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

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

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	120	77	0	0
2	117	74	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	5%	96 / 180	276	L	1.25D+1.5L
2 - SPF	2.375"	11%	93 / 176	269	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	824 ft-lb	6'7 7/8"	17130 ft-lb	0.048 (5%)	1.25D+1.5L	L
Unbraced	824 ft-lb	6'7 7/8"	3591 ft-lb	0.229 (23%)	1.25D+1.5L	L
Shear	222 lb	1'4 5/8"	5798 lb	0.038 (4%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/10405)	6'7 7/8"	0.417 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.023 (L/6605)	6'7 7/8"	0.417 (L/360)	0.050 (5%)	L	L
TL Defl inch	0.037 (L/4040)	6'7 7/8"	0.626 (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 Girders are designed to be supported on the bottom edge only.
2 Top braced at bearings.
3 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-1-2 to 13-0-10	(Span)0-11-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
PROVINCE OF ONTARIO
Jun 04 2018

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info
Forex
APA: PR-L318

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

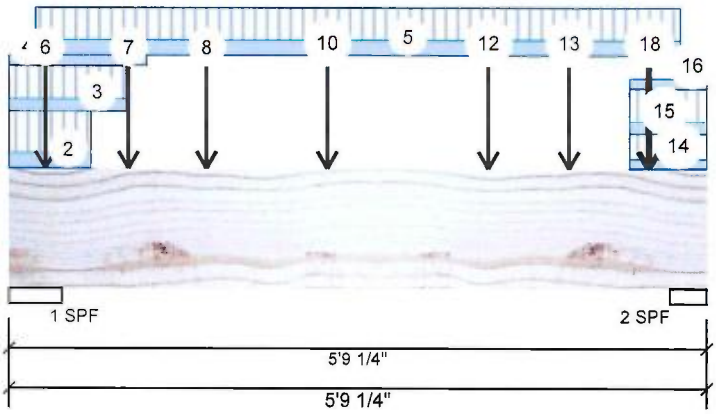
EWP Studio
Simpson Strong-Tie® Component Solutions™

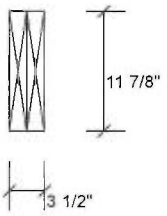
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

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

Level: Ground Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	3319	1453	0	0
2	3053	1319	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	60%	1817 / 4978	6795	L	1.25D+1.5L
2 - SPF	3.625"	80%	1648 / 4579	6227	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5096 ft-lb	2'7 5/8"	34261 ft-lb	0.149 (15%)	1.25D+1.5L	L
Unbraced	5096 ft-lb	2'7 5/8"	33024 ft-lb	0.154 (15%)	1.25D+1.5L	L
Shear	4068 lb	1'4 3/8"	11596 lb	0.351 (35%)	1.25D+1.5L	L
Perm Defl in.	0.008 (L/7346)	2'9 3/4"	0.172 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.019 (L/3189)	2'9 1/2"	0.172 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.028 (L/2224)	2'9 9/16"	0.258 (L/240)	0.110 (11%)	D+L	L

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

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

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

Design Notes

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

LICENSED PROFESSIONAL ENGINEER
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PROVINCE OF ONTARIO
Jun 04, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
2	Part. Uniform	0-0-0 to 0-8-2		Top	122 PLF	326 PLF	0 PLF	0 PLF	J1
3	Part. Uniform	0-0-0 to 0-11-10		Top	96 PLF	255 PLF	0 PLF	0 PLF	J4
4	Part. Uniform	0-0-0 to 1-1-10		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
5	Part. Uniform	0-2-10 to 5-6-10		Far Face	123 PLF	253 PLF	0 PLF	0 PLF	
6	Point	0-3-10		Near Face	111 lb	296 lb	0 lb	0 lb	J8

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info
Forex
APA: PR-L318

KOTT

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

NASCOR

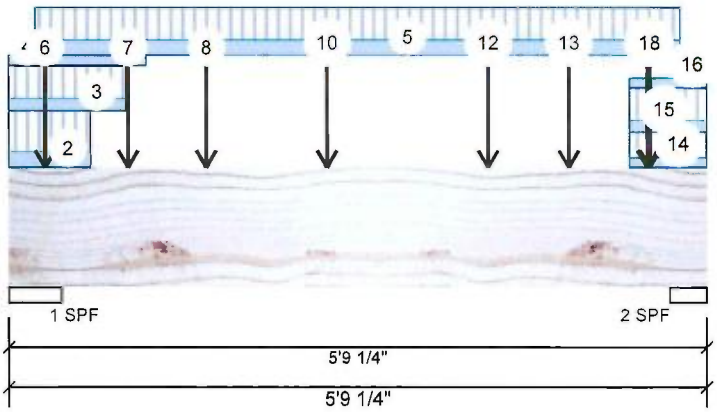
EWP Studio
Simpson Strong-Tie®
Component Solutions™

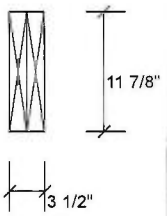
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

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

Level: Ground Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Point	0-11-14		Top	520 lb	1340 lb	0 lb	0 lb	BM3 BM3
8	Point	1-7-10		Near Face	149 lb	398 lb	0 lb	0 lb	F13
10	Point	2-7-10		Near Face	128 lb	342 lb	0 lb	0 lb	J5
12	Point	3-11-10		Near Face	110 lb	293 lb	0 lb	0 lb	J5
13	Point	4-7-10		Near Face	91 lb	243 lb	0 lb	0 lb	F13
14	Part. Uniform	5-1-10 to 5-9-4		Top	75 PLF	199 PLF	0 PLF	0 PLF	J1
15	Part. Uniform	5-1-10 to 5-9-4		Top	96 PLF	255 PLF	0 PLF	0 PLF	J4
16	Part. Uniform	5-1-10 to 5-9-4		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
17	Point	5-3-7		Top	445 lb	1139 lb	0 lb	0 lb	BM3 BM3
18	Point	5-3-10		Near Face	81 lb	215 lb	0 lb	0 lb	J8
	Self Weight				10 PLF				

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

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

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

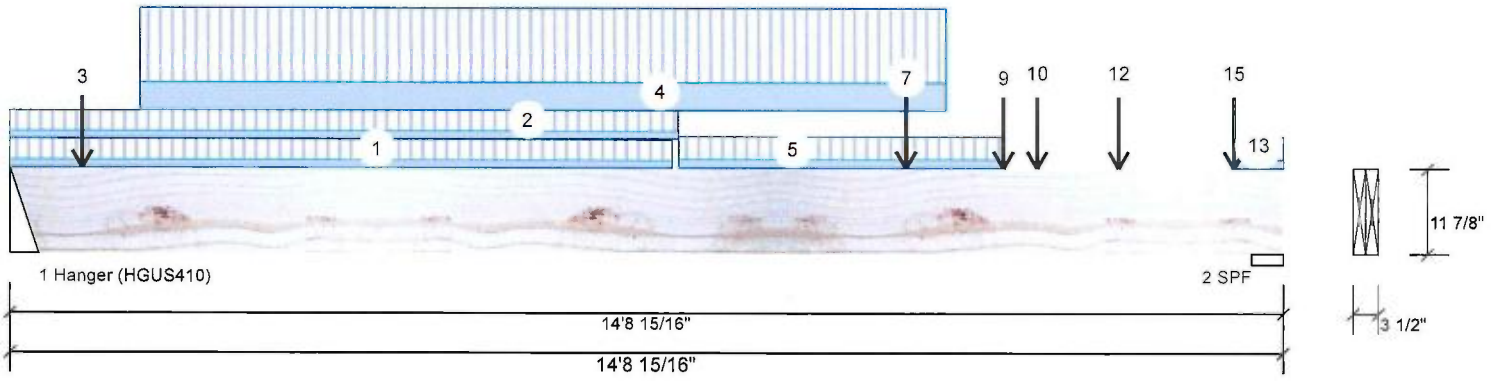
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

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

Level: Ground Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	2798	1124	0	0
2	2830	1139	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	54%	1405 / 4197	5602	L	1.25D+1.5L
2 - SPF	4.376"	60%	1424 / 4245	5668	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	20001 ft-lb	7'5 13/16"	34261 ft-lb	0.584 (58%)	1.25D+1.5L	L
Unbraced	20001 ft-lb	7'5 13/16"	24916 ft-lb	0.803 (80%)	1.25D+1.5L	L
Shear	5567 lb	13'5 7/16"	11596 lb	0.480 (48%)	1.25D+1.5L	L
Perm Defl in.	0.160 (L/1060)	7'4 7/8"	0.472 (L/360)	0.340 (34%)	D	Uniform
LL Defl inch	0.400 (L/426)	7'4 7/8"	0.472 (L/360)	0.850 (85%)	L	L
TL Defl inch	0.560 (L/304)	7'4 7/8"	0.709 (L/240)	0.790 (79%)	D+L	L

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

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

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

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 7-8-1	(Span)3-6-1 to 3-4-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 7-8-15	(Span)3-5-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-10-1		Near Face	107 lb	286 lb	0 lb	0 lb	J4
4	Part. Uniform	1-6-1 to 10-10-1		Near Face	93 PLF	247 PLF	0 PLF	0 PLF	
5	Tie-In	7-9-0 to 11-6-1	(Span)3-9-15 to 3-9-14	Top	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

LICENSED PROFESSIONAL ENGINEER N.A. EL-MASRI PROVINCE OF ONTARIO
Jun 04, 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

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14 Anderson Blvd, Ontario
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NASCOR

EWP Studio
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Client:
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Date: 5/30/2018
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Job Name: AMELIA 2 EL- 1
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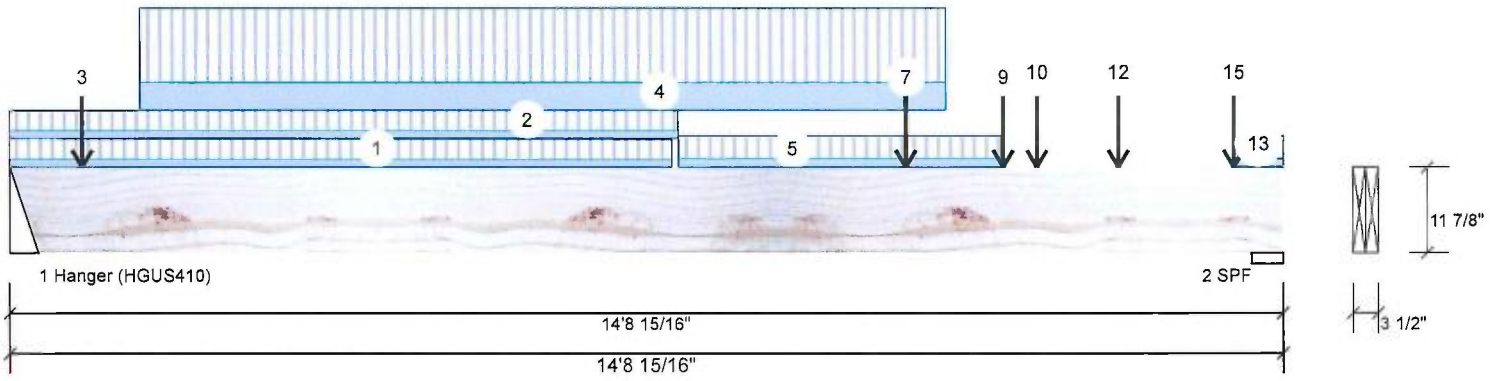
F9-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	10-4-9		Top	13 lb	35 lb	0 lb	0 lb	
7	Point	10-4-9		Far Face	182 lb	462 lb	0 lb	0 lb	F5
8	Point	11-6-1		Far Face	32 lb	84 lb	0 lb	0 lb	J2
9	Point	11-6-1		Near Face	80 lb	213 lb	0 lb	0 lb	J4
10	Point	11-10-12		Near Face	72 lb	193 lb	0 lb	0 lb	F12
11	Point	12-10-1		Far Face	34 lb	92 lb	0 lb	0 lb	J2
12	Point	12-10-1		Near Face	94 lb	251 lb	0 lb	0 lb	J3
13	Tie-In	14-2-1 to 14-8-15	(Span)3-9-14 to 3-9-14	Top	15 PSF	40 PSF	0 PSF	0 PSF	
14	Point	14-2-1		Far Face	25 lb	67 lb	0 lb	0 lb	J2
15	Point	14-2-1		Near Face	91 lb	242 lb	0 lb	0 lb	J3
	Self Weight				10 PLF				

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

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

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

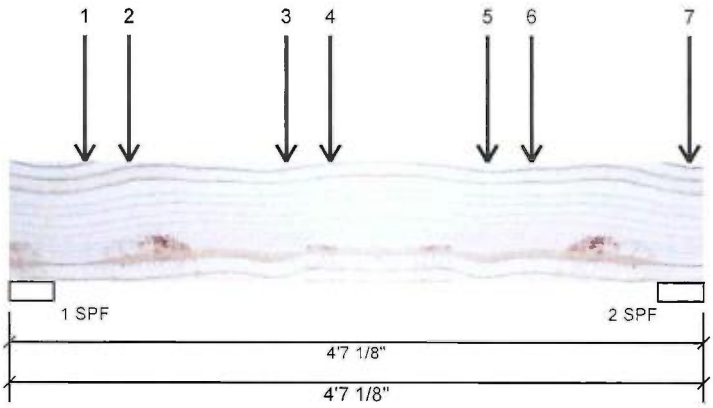
EWP Studio
Simpson Strong-Tie®
Component Solutions™

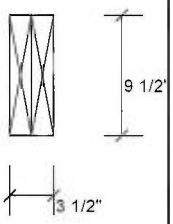
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

BM3-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED

Level: Second Floor





Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	1340	520	0	0
2	1139	445	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.516"	35%	650 / 2010	2660	L	1.25D+1.5L
2 - SPF	3.625"	29%	556 / 1709	2265	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2504 ft-lb	2'1 1/2"	22724 ft-lb	0.110 (11%)	1.25D+1.5L	L
Unbraced	2504 ft-lb	2'1 1/2"	22724 ft-lb	0.110 (11%)	1.25D+1.5L	L
Shear	1923 lb	3'6 3/4"	9277 lb	0.207 (21%)	1.25D+1.5L	L
Perm Defl in.	0.005 (L/10742)	2'1 9/16"	0.137 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.012 (L/4171)	2'1 9/16"	0.137 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.016 (L/3005)	2'1 9/16"	0.206 (L/240)	0.080 (8%)	D+L	L

Design Notes

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

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

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

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-6-0		Top	162 lb	432 lb	0 lb	0 lb	J1
2	Point	0-9-8		Top	127 lb	338 lb	0 lb	0 lb	J4
3	Point	1-10-0		Top	162 lb	432 lb	0 lb	0 lb	J1
4	Point	2-1-8		Top	127 lb	338 lb	0 lb	0 lb	J4
5	Point	3-2-0		Top	162 lb	432 lb	0 lb	0 lb	J1

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

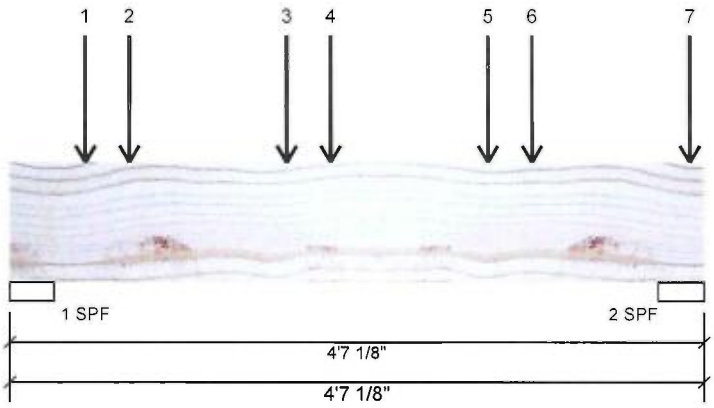
EWP Studio
Simpson Strong-Tie®
Component Solutions™

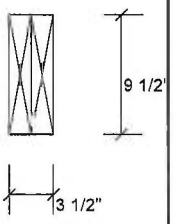
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

BM3-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 2-Ply - PASSED

Level: Second Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	3-5-8		Top	127 lb	338 lb	0 lb	0 lb	J4
7	Point	4-6-0		Top	63 lb	169 lb	0 lb	0 lb	J1
	Self Weight				8 PLF				

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

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

Notes

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6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON StrongTie

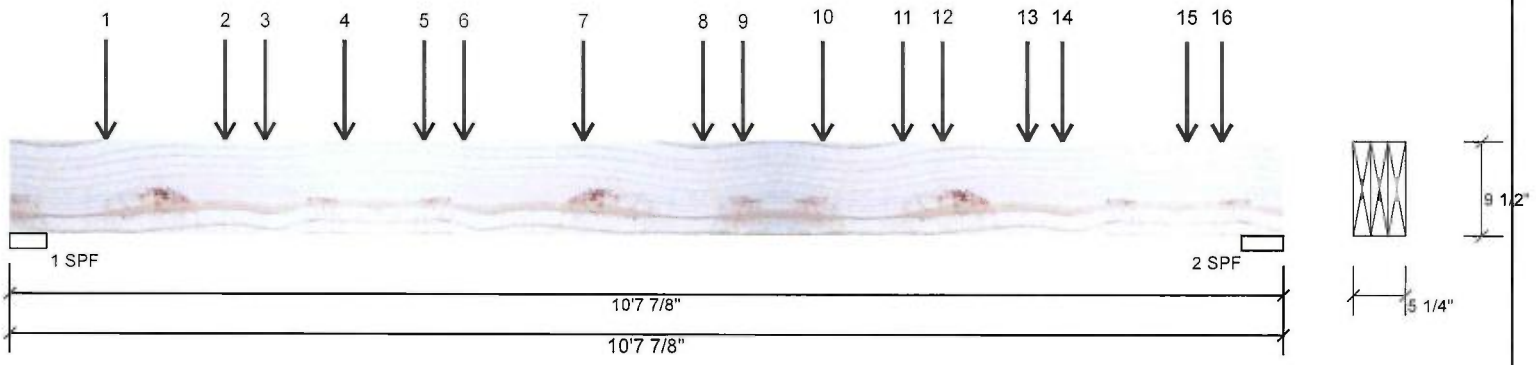
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

BM4-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 3-Ply - PASSED

Level: Second Floor



Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	3	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012
Deflection LL:	360	Load Sharing:	Yes
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	2952	1269	0	0
2	3096	1297	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.688"	50%	1586 / 4428	6014	L	1.25D+1.5L
2 - SPF	4.188"	46%	1621 / 4644	6265	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	15176 ft-lb	4'9 11/16"	35449 ft-lb	0.428 (43%)	1.25D+1.5L	L
Unbraced	15176 ft-lb	4'9 11/16"	35449 ft-lb	0.428 (43%)	1.25D+1.5L	L
Shear	5599 lb	1' 7/16"	13915 lb	0.402 (40%)	1.25D+1.5L	L
Perm Defl in.	0.086 (L/1413)	5'3 9/16"	0.337 (L/360)	0.250 (25%)	D	Uniform
LL Defl inch	0.201 (L/605)	5'3 5/8"	0.337 (L/360)	0.600 (60%)	L	L
TL Defl inch	0.287 (L/424)	5'3 5/8"	0.506 (L/240)	0.570 (57%)	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 04, 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 Multiple plies must be fastened together as per manufacturer's details.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 Lateral slenderness ratio based on full section width.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-9-11		Top	278 lb	686 lb	0 lb	0 lb	J1 J4
2	Point	1-9-11		Top	117 lb	257 lb	0 lb	0 lb	J4
3	Point	2-1-11		Top	162 lb	431 lb	0 lb	0 lb	J1
4	Point	2-9-11		Top	117 lb	257 lb	0 lb	0 lb	J4
5	Point	3-5-11		Top	162 lb	431 lb	0 lb	0 lb	J1

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

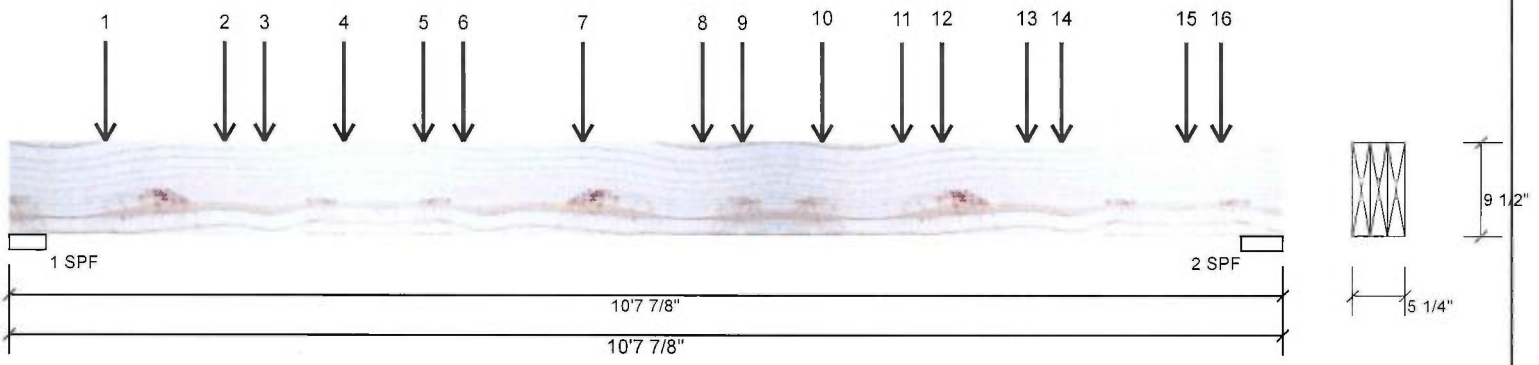
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

BM4-A Forex 2.0E-3000Fb LVL 1.750" X 9.500" 3-Ply - PASSED

Level: Second Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	3-9-11		Top	117 lb	257 lb	0 lb	0 lb	J4
7	Point	4-9-11		Top	278 lb	686 lb	0 lb	0 lb	J1 J4
8	Point	5-9-11		Top	117 lb	257 lb	0 lb	0 lb	J4
9	Point	6-1-11		Top	162 lb	431 lb	0 lb	0 lb	J1
10	Point	6-9-11		Top	117 lb	257 lb	0 lb	0 lb	J4
11	Point	7-5-11		Top	144 lb	385 lb	0 lb	0 lb	J1
12	Point	7-9-11		Top	116 lb	255 lb	0 lb	0 lb	J4
13	Point	8-6-3		Top	144 lb	385 lb	0 lb	0 lb	J1
14	Point	8-9-11		Top	122 lb	299 lb	0 lb	0 lb	J4
15	Point	9-10-3		Top	163 lb	434 lb	0 lb	0 lb	J1
16	Point	10-1-11		Top	128 lb	340 lb	0 lb	0 lb	J4
	Self Weight				11 PLF				

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

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

Notes

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Lumber

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

Handling & Installation

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

Manufacturer Info

Forex
APA: PR-L318

KOTT

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

NASCOR

SIMPSON Strong-Tie

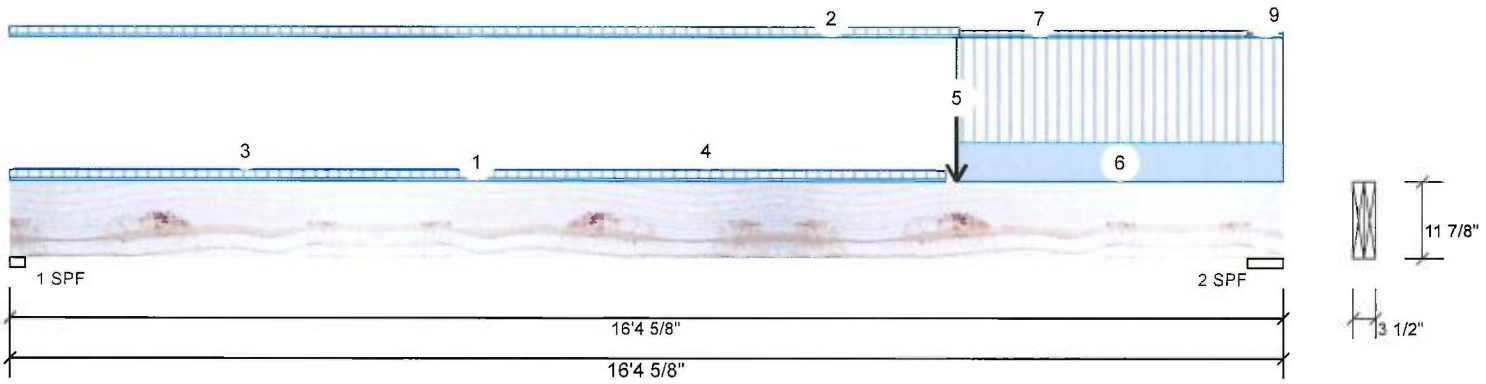
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F10-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	818	446	0	0
2	2494	1160	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	35%	557 / 1228	1785	L	1.25D+1.5L
2 - SPF	5.500"	44%	1450 / 3741	5191	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	15265 ft-lb	12'2 1/4"	34261 ft-lb	0.446 (45%)	1.25D+1.5L	L
Unbraced	15265 ft-lb	12'2 1/4"	22688 ft-lb	0.673 (67%)	1.25D+1.5L	L
Shear	4477 lb	15'	11596 lb	0.386 (39%)	1.25D+1.5L	L
Perm Defl in.	0.145 (L/1312)	8'10 3/4"	0.528 (L/360)	0.270 (27%)	D	Uniform
LL Defl inch	0.290 (L/656)	9'	0.528 (L/360)	0.550 (55%)	L	L
TL Defl inch	0.435 (L/437)	8'11 9/16"	0.793 (L/240)	0.550 (55%)	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 04, 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	Comment
1	Tie-In	0-0-0 to 12-0-8	(Span) 0-10-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-2-10	(Span)0-10-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-0-9 to 11-11-1		Top	2 PLF	0 PLF	0 PLF	0 PLF	
4	Tapered Start	0-0-10		Top	1 PLF	0 PLF	0 PLF	0 PLF	
	End	11-11-1			0 PLF	0 PLF	0 PLF	0 PLF	
5	Point	12-2-4		Far Face	862 lb	1824 lb	0 lb	0 lb	F8

Continued on page 2...

Notes

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Lumber

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Handling & Installation

1. LVL beams must not be cut or drilled
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3. Damaged Beams must not be used
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Manufacturer Info
Forex
APA: PR-L318

KOTT

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

NASCOR

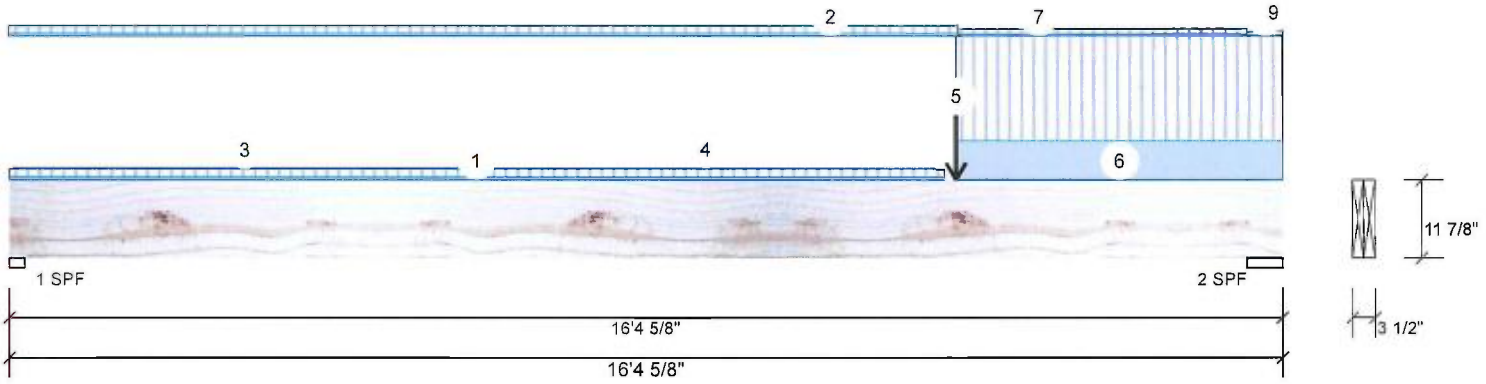
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F10-A Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Part. Uniform	12-2-4 to 16-4-10		Top	90 PLF	240 PLF	0 PLF	0 PLF	
7	Tie-In	12-2-10 to 15-11-2	(Span)0-7-6	Top	15 PSF	40 PSF	0 PSF	0 PSF	
8	Tie-In	15-11-2 to 16-4-10	(Span)0-4-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
9	Tie-In	16-0-4 to 16-4-10	(Span)0-11-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				10 PLF				

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

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Notes

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NASCOR

SIMPSON StrongTie

EWP Studio
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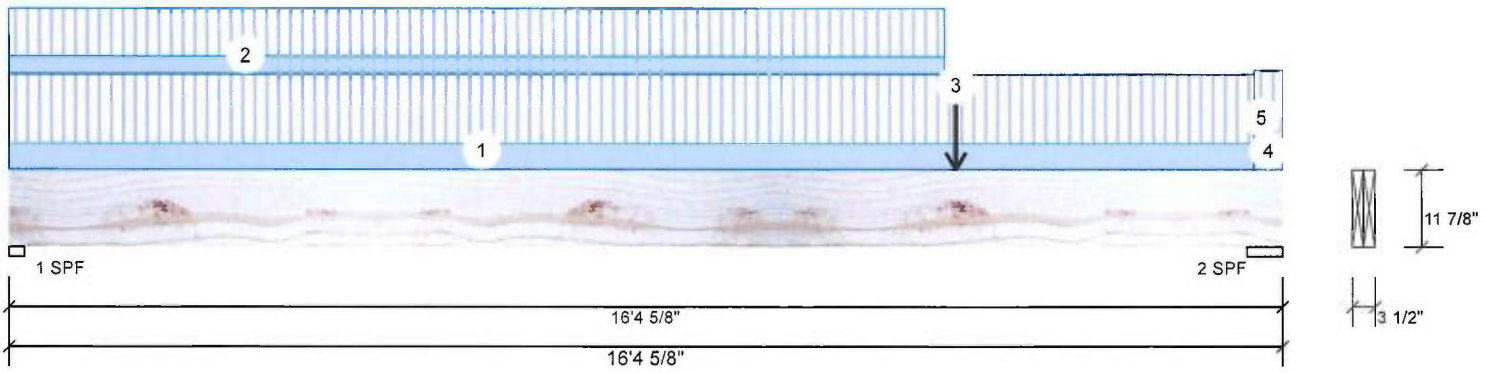
Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F10-B Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	700	368	0	0
2	1629	782	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	30%	460 / 1050	1511	L	1.25D+1.5L
2 - SPF	5.500"	29%	977 / 2443	3420	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	12574 ft-lb	12'2 1/4"	34261 ft-lb	0.367 (37%)	1.25D+1.5L	L
Unbraced	12574 ft-lb	12'2 1/4"	22688 ft-lb	0.554 (55%)	1.25D+1.5L	L
Shear	3351 lb	15'	11596 lb	0.289 (29%)	1.25D+1.5L	L
Perm Defl in.	0.118 (L/1617)	8'10 3/8"	0.528 (L/360)	0.220 (22%)	D	Uniform
LL Defl inch	0.241 (L/788)	8'11 7/16"	0.528 (L/360)	0.460 (46%)	L	L
TL Defl inch	0.359 (L/530)	8'11 1/16"	0.793 (L/240)	0.450 (45%)	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 04, 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	Comment
1	Tie-In	0-0-0 to 16-0-4	(Span)0-11-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 12-0-8	(Span)0-8-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	12-2-4		Near Face	816 lb	1854 lb	0 lb	0 lb	F8
4	Tie-In	16-0-4 to 16-4-10	(Span)0-4-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	16-0-4 to 16-4-10	(Span)0-8-0	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
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

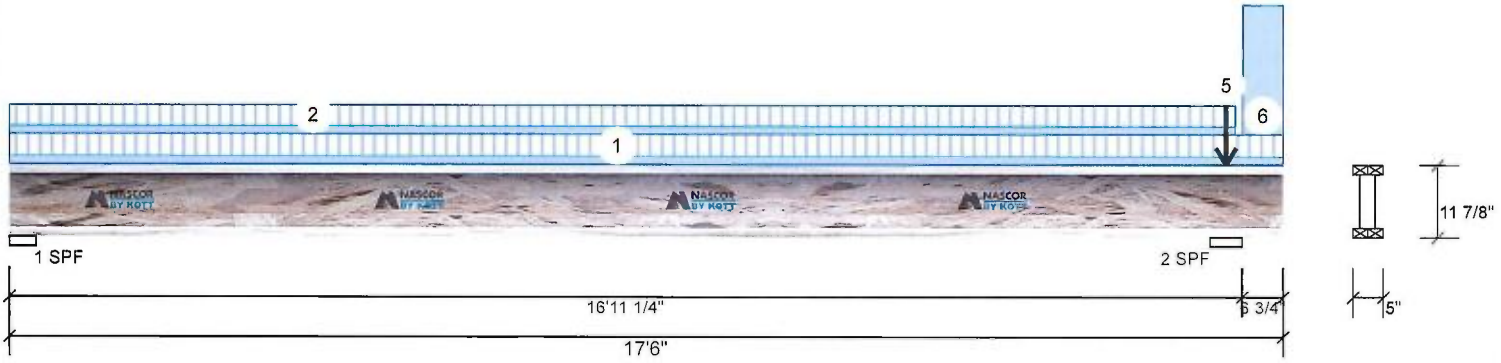
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-A NJH 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	224	82	0 (-2)	0
2	261	300	217	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.375"	12%	102 / 337	440	L_	1.25D+1.5L
2 - SPF	5.250"	24%	375 / 500	875	LL	1.25D+1.5L +0.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-103 ft-lb	16'11 1/4"	9702 ft-lb	0.011 (1%)	1.25D+1.5S +0.5L	_L
Unbraced	-103 ft-lb	16'11 1/4"	9651 ft-lb	0.011 (1%)	1.25D+1.5S +0.5L	_L
Pos Moment	1711 ft-lb	8'4 1/2"	10780 ft-lb	0.159 (16%)	1.25D+1.5L	L_
Unbraced	1711 ft-lb	8'4 1/2"	1717 ft-lb	0.996 (100%)	1.25D+1.5L	L_
Shear	589 lb	16'11 1/4"	3186 lb	0.185 (18%)	1.25D+1.5S	_L
Perm Defl in.	0.027 (L/7357)	8'4 1/4"	0.542 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.076 (L/2581)	8'5 1/4"	0.542 (L/360)	0.140 (14%)	L	L_
TL Defl inch	0.102 (L/1911)	8'4 15/16"	0.813 (L/240)	0.130 (13%)	D+L	L_
LL Cant	-0.008 (2L/1791)	Rt Cant	0.200 (2L/480)	0.038 (4%)	L	L_
TL Cant	-0.010 (2L/1395)	Rt Cant	0.300 (2L/360)	0.032 (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 04, 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 9'9" o.c.
5 Bottom flange must be laterally braced at a maximum of 10'5" o.c.

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

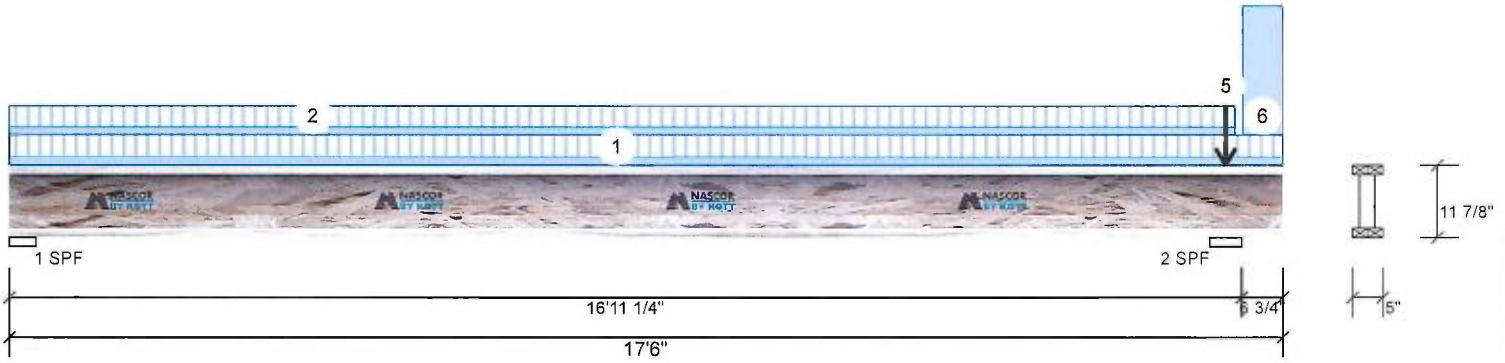
EWP Studio
Simpson Strong-Tie® Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-A NJH 11.875" 2-Ply - PASSED

Level: Second Floor



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 17-6-0	(Span)0-8-3	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 16-10-2	(Span)0-7-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	16-8-10		Top	35 lb	0 lb	0 lb	0 lb	Wall Self Weight
4	Point	16-8-10		Top	126 lb	27 lb	215 lb	0 lb	F1 F1
5	Point	16-8-10		Top	5 lb	0 lb	0 lb	0 lb	Wall Self Weight
6	Part. Uniform	16-11-6 to 17-6-0		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

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

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

Notes

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Lumber

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

Handling & Installation

1. I-Joist flanges must not be cut or drilled
2. Refer to latest copy of the I-Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
3. Damaged I-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 Lumber Company
14 Anderson Blvd, Ontario
Canada
L4A 7X4
905-642-4400

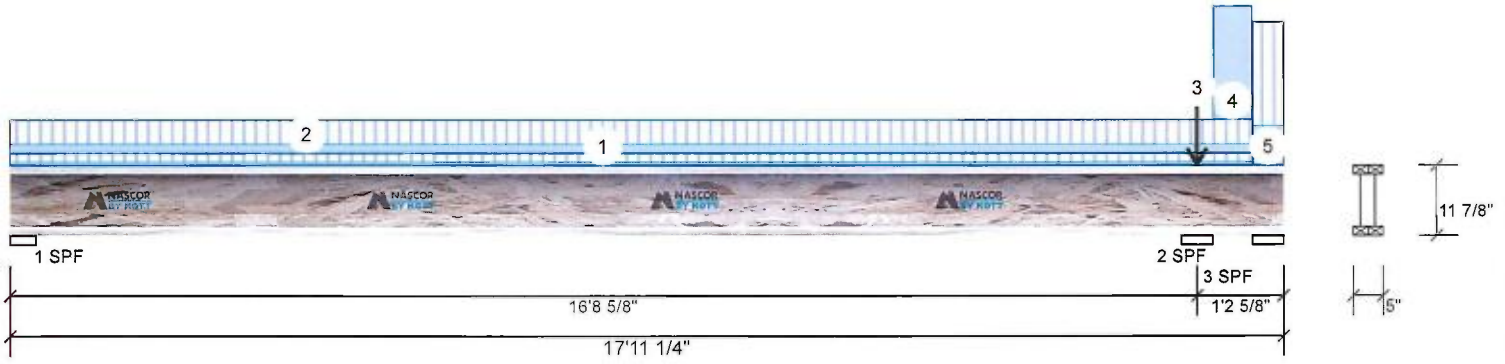
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-B NJH 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	171	64	0	0
2	764	335	0	0
3	0 (-494)	(-160)	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.375"	9%	80 / 257	337	L_	1.25D+1.5L
2 - SPF	5.250"	23%	419 / 1146	1565	LL	1.25D+1.5L
3 - SPF	5.250"	27%	-224 / -737	-961 (-961)	L_	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-889 ft-lb	16'8 5/8"	10780 ft-lb	0.082 (8%)	1.25D+1.5L	LL
Unbraced	-889 ft-lb	16'8 5/8"	10039 ft-lb	0.089 (9%)	1.25D+1.5L	LL
Pos Moment	1135 ft-lb	7'4"	10780 ft-lb	0.105 (11%)	1.25D+1.5L	L_
Unbraced	1135 ft-lb	7'4"	1139 ft-lb	0.997 (100%)	1.25D+1.5L	L_
Shear	1095 lb	16'8 5/8"	3620 lb	0.302 (30%)	1.25D+1.5L	LL
Perm Defl in.	0.018 (L/11068)	8' 5/16"	0.547 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.047 (L/4149)	8' 5/16"	0.547 (L/360)	0.090 (9%)	L	L_
TL Defl inch	0.065 (L/3018)	8' 5/16"	0.821 (L/240)	0.080 (8%)	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 Tie-down connection required at bearing 3 for uplift 961 lb (Combination 1.25D+1.5L, Load Case L_).
5 Top flange must be laterally braced at a maximum of 11'6" o.c.
6 Bottom flange must be laterally braced at a maximum of 10'5" o.c.

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 04, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 17-6-0	(Span)0-3-11	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-6-0	(Span)0-10-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	16-8-10		Top	31 lb	0 lb	0 lb	0 lb	Wall Self Weight

Continued on page 2...

Notes

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

Lumber

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

Handling & Installation

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

Manufacturer Info

Nascor by Kott

KOTT

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

NASCOR

SIMPSON StrongTie

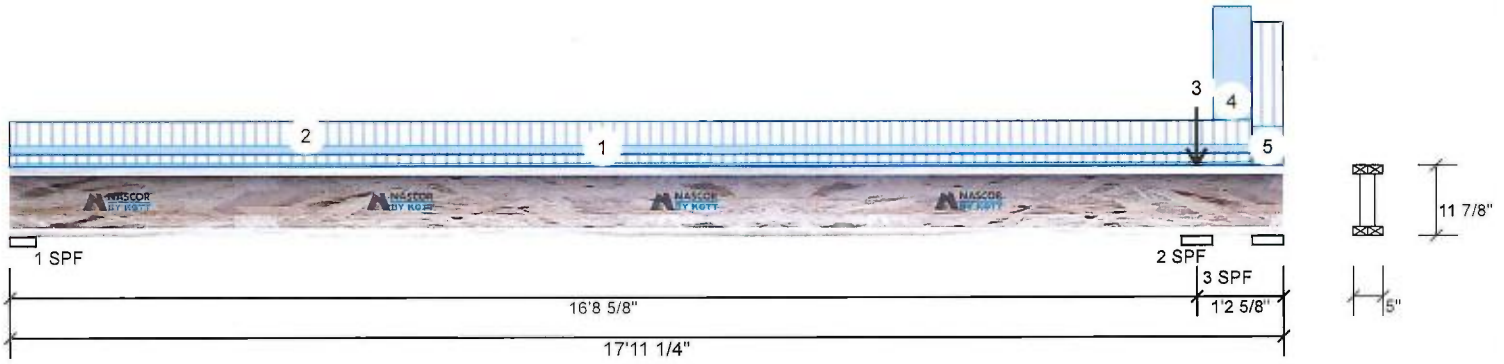
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

F13-B NJH 11.875" 2-Ply - PASSED

Level: Second Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	16-11-6 to 17-5-14		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
5	Tie-In	17-6-0 to 17-11-4	(Span)3-8-3	Top	15 PSF	40 PSF	0 PSF	0 PSF	

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

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

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

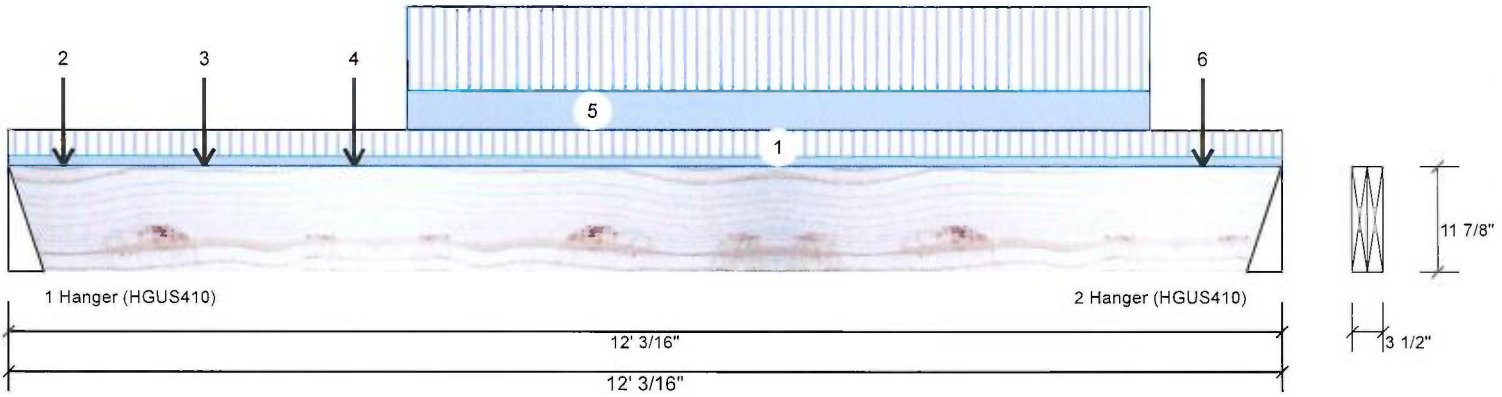
EWP Studio
Simpson Strong-Tie®
Component Solutions™

Client:
Project:
Address:

Date: 5/30/2018
Designer: S B
Job Name: AMELIA 2 EL- 1
Project #:

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

Level: Second Floor



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	1854	816	0	0
2	1824	862	0	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	37%	1021 / 2780	3801	L	1.25D+1.5L
2 - Hanger	4.000"	37%	1078 / 2736	3814	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10792 ft-lb	6' 7/16"	34261 ft-lb	0.315 (31%)	1.25D+1.5L	L
Unbraced	10792 ft-lb	6' 7/16"	28134 ft-lb	0.384 (38%)	1.25D+1.5L	L
Shear	3604 lb	1'3 1/8"	11596 lb	0.311 (31%)	1.25D+1.5L	L
Perm Defl in.	0.065 (L/2121)	6' 7/16"	0.383 (L/360)	0.170 (17%)	D	Uniform
LL Defl inch	0.140 (L/983)	6' 1/8"	0.383 (L/360)	0.370 (37%)	L	L
TL Defl inch	0.205 (L/671)	6' 1/4"	0.574 (L/240)	0.360 (36%)	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 MEMBI 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 04, 2018

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 12-0-3	(Span)3-9-7	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-6-4		Near Face	90 lb	240 lb	0 lb	0 lb	J4
3	Point	1-10-4		Near Face	124 lb	330 lb	0 lb	0 lb	J4
4	Point	3-3-4		Near Face	109 lb	290 lb	0 lb	0 lb	J4
5	Part. Uniform	3-9-4 to 10-9-4		Near Face	113 PLF	240 PLF	0 PLF	0 PLF	
6	Point	11-3-4		Near Face	109 lb	227 lb	0 lb	0 lb	J4
	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

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NASCOR

SIMPSON StrongTie