LSD

40

15

480

360

480

360

360

240

480

360

3/4"

SPF Plywood

Nailed & Glued

Dead **Deflection Joist**

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

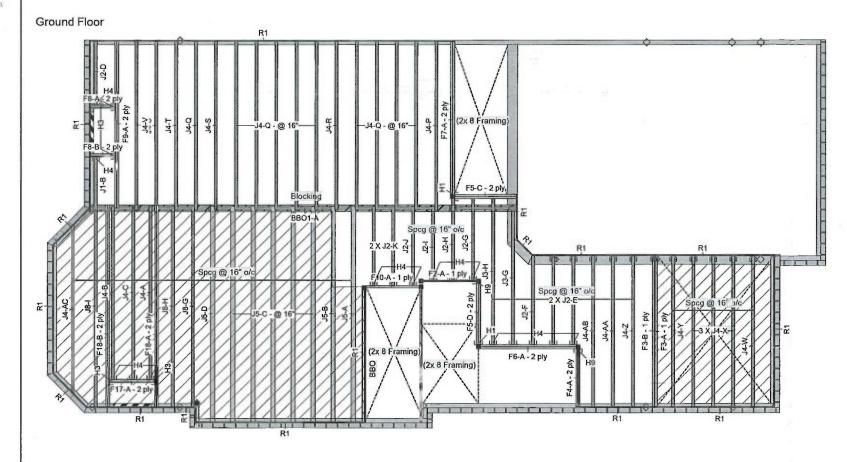
Thickness

LoT 11L

Fastener

Deck

Deflection Girder



neered floor jois cordance with the fications forming p s shall be installed supplier's layout and to the permit drawings.

Legend



Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ 9.5 NJ40U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

THIS CERTIFICATION IS TO CONFIRM THAT:

Version 18.40.162 Powered by iStruct™

- 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.

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

CITY OF BRAMPTOI BUILDING DIVISION DERKSEN

Ground Floor LVL/LSL (Flush) Label Description Width | Depth | Qty Plies Pcs Length F3 1.75 12-0-0 Forex 2 .0E-3000Fb LVL Layout Name 12-0-0 1.75 Forex 9.5 2 2 2.0E-3000Fb LVL HEMLOCK 5-1 & 5-2 F6 1.75 9.5 2 8-0-0 **Design Method** .0E-3000Fb LVL LSD F5 1.75 9.5 6-0-0 4 огех Description 2.0E-3000Fb LVL MINNISALE HOMES F10 1.75 6-0-0 Forex BRAMPTON, ONT. 2.0E-3000Fb LVL F4 1.75 9.5 2 4-0-0 Forex 2 Created 2.0E-3000Fb LVL June 26, 2018 4-0-0 F2 1.75 Forex 2.0E-3000Fb LVL Builder GREENPARK Joist (Flush) Label Description Pcs Length Width Depth Qty Plies Sales Rep F18 NJ 1.5 9.5 4 14-0-0 RM F9 NJ 1.5 9.5 2 12-0-0 Designer F17 NJ 1.5 9.5 2 2 4-0-0 RCO 4 2-0-0 F8 NJ 1.5 9.5 J5 NJ40U 3.5 8 16-0-0 Shipping 9.5 J8 NJH 3 14-0-0 Project 2.5 9.5 28 12-0-0 J4 NJH 2.5 9.5 **Builder's Project** J3 NJH 2.5 9.5 2 10-0-0 **Kott Lumber Company** J2 NJH 2.5 9.5 10 6-0-0 14 Anderson Blvd 1 4-0-0 J1 NJH 2.5 9.5 Stouffville, Ontario Rim Board Label Description Width Depth Qty Plies Pcs Length Canada L4A 7X4 Norbord Rimboard 1.125 R1 Plus 1.125 X 9.5 905-642-4400 Blocking Job Path Label Description Width Depth | Qty | Plies | Pcs | Length S:\CUSTOMERS\GREENPARK BLK1 NJH 2.5 9.5 LinFt Varies 17-0-0 MINNISALE HOMES\MODELS Hanger HEMLOCK 5\HEMLOCK 5-1\FLOOP

\REV\F-HEMLOCK 5-1 & 5-2 ENGG Ream/Girder Supported Member **Ground Floor** Pcs Description Skew Slope Label fasteners fasteners Design Method H1 2 HUC410 (Min) 14 16d 6 10d Building Code NBCC 2010 / OBC НЗ 4 LT2-159 4 10dx1 1/2 2 10dx1 1/2 16 LT259 H4 4 10dx1 1/2 2 10dx1 1/2 Floor H9 2 HUCQ1.81/9 Loads Live

NOTES:

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

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

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

Hatch area represents ceramic tiled floor with an additional dead load

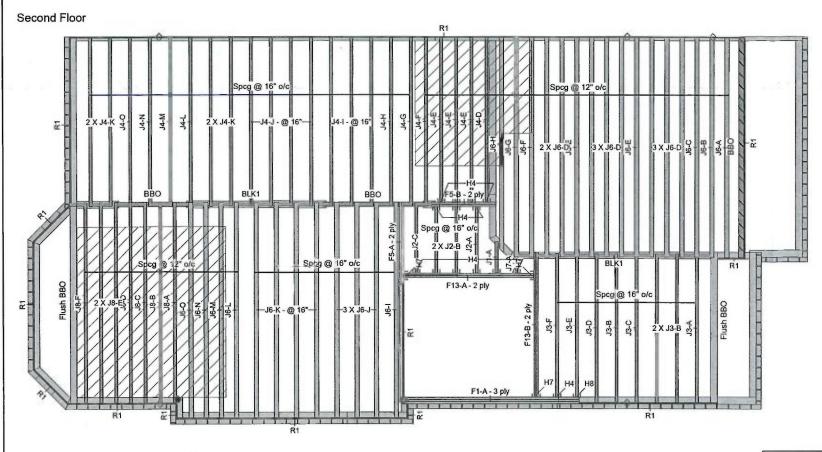
The faming shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and approve the deviation prior

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: May 2018 Project No: Model: Hemlock 5-5C

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







Load from Above Norbord Rimboard Plus 1.125 X 9.5 NJ60U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

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

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.
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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.

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F1	Forex 2.0E-3000Fb LVL	1.75	9.5	1	3	3	12-0-0
F13	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	10-0-0
F5	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	6-0-0
Joist (Flush)						
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J6	NJ60U	3.5	9.5			28	16-0-0
J8	NJH	2.5	9.5			7	14-0-0
J4	NJH	2.5	9.5			22	12-0-0
J3	NJH	2.5	9.5			8	10-0-0
J2	NJH	2.5	9.5			4	6-0-0
J1	NJH	2.5	9.5			1	4-0-0
J7	NJH	2.5	9.5			1	2-0-0
Rim Bo	ard						
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			11	12

3 HGUS410

NOTES:

14 LT259

H8 1 LT259

- Framer to verify dimensions on the architectural drawings.
- 2. Double joist only require filler/backer ply when supporting another member using a face-mounted hanger.
- . Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls. 4. Install single-ply flush window header along inside face of

Label Pcs Description Skew Slope fasteners

- rimboard/rimjoist. . Refer to Nascor specifier guide for installation works.
- . Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels floor or roof.
- . Load transfer blocks to be installed under all point loads. 3. It shall be the framer's responsibility that floor joists and beams are
- fastened as per the hanger manufacturer's standards.

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

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

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

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

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: May 2018 Project No:

Model: Hemlock 5-5C

3	12-0-0	- 44-6	
-			
4	10-0-0		
		HEMLOCK 5-1 & 5	-2
4	6-0-0	Design Metrica	
		LSD	
Pcs	Longil	Description	
28	Length 16-0-0	MINIMUCAL E LIGHE	S
7	14-0-0	T PRAMPTON ONE	
22	12-0-0	0	
8	10-0-0		
4	6-0-0		
1	4-0-0		
1	2-0-0		
		RM	70
Pcs	Length		
11	12		
		RCO	
2000		Shipping	
	ported	Project	
	ember	Builder's Project	-
	teners	Kott Lumber	Company
	dx1 1/2		Company
- 11	6 16d	14 Anderson Blvd	
		Stouffville, Ontario	
		Canada	
		L4A 7X4	
		905-642-4400	
		Job Path	
		S:\CUSTOMERS\G	
		MINNISALE HOME	
		\HEMLOCK 5\HEM \REV\HEMLOCK 5-	
		Second Floor	1.10)
			LSD
	H	Design Method	
		Building Code NE	2012
		Floor	2012
		Loads	
		Live	40
		Dead	15
n	- 1	Deflection Joist	10
	- 1	LL Span L/	480
	- 1		360
	- 1	TL Span L/	480
	- 1	LL Cant 2L/	7 4 34 34
	- 1	TL Cant 2L/	360
		Deflection Girder	200
	8.1	LL Span L/	360
viatior	prior	TL Span L/	240
		LL Cant 2L/	480
1		TL Cant 2L/	360
		Decking	
		Deck	SPF Plywood
		Thickness	5/8"
		Fastener	Nailed & Glued

4 10dx1 1/2

46 16d

Gypsum 1/2"

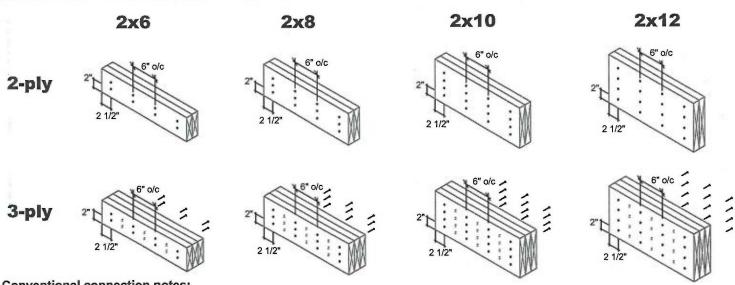
Vibration



IPLE MEMBER CONNECTIONS

GREENPARK-MINNISALE HOMES MODEL HEMLOCK 5-1 & 5-2

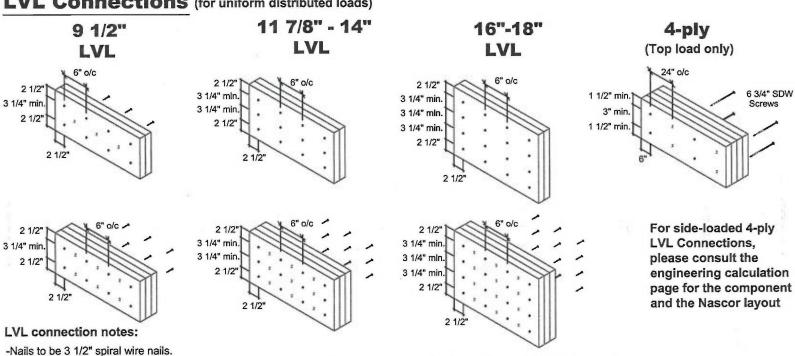
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

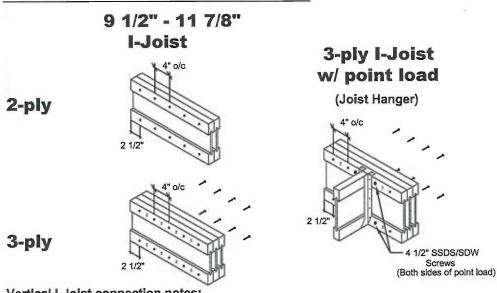
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



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

Vertical I-Joist Connections (for uniform distributed loads)



Vertical I-Joist connection notes:

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

MULTI-PLY CONNECTION **DETAILS**

> Date: November 30, 2016 Scale: NTS

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

Engineering Note Page (ENP-2)

GREENPARK-MINNISALE HOMES-

REVISION 2009-10-09

MODEL HEMLOCK 5-1 & 5-2 LOT //L

Please read all notes prior to installation of the component

DESIGN INFORMATION

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

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

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

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

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

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

CODE

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

COMPONENT

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

HANDLING AND INSTALLATION

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



MULTIPLE MEMBER CONNECTIONS

GREENPARK-MINNISALE HOMES-MODEL HEMLOCK 5-1 & 5-2

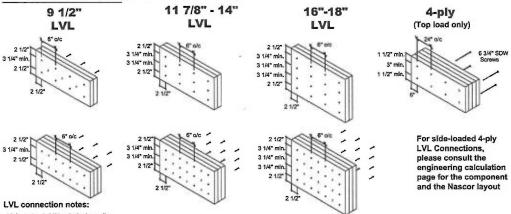
Conventional Connections (for uniform distributed loads)

2x12 2x6 2x8 2-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)



- -Nails to be 3 1/2" spiral wire nails.

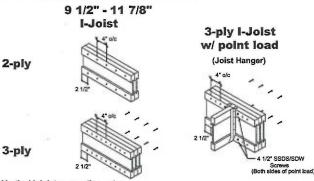
 -Nails to be located a minimum of 2 1/2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.

 -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)



Vertical I-Joist connection notes:

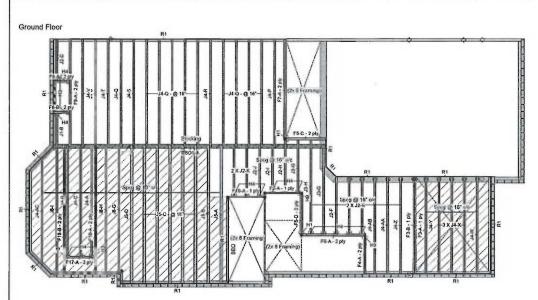
- -Nails to be 3" spiral wire nails
- -Nails to be located at centre of top and bottom flanges. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted other.

 -"X" represents nail driven from the opposite side.

MULTI -PLY CONNECTION DETAILS



котт 3228 Moodle Drive Ottawa, ON K2H 7V1 Ph: 613-838-2775 Fx: 613-838-475



Legend



Load from Above Wall Opening Norbord Rimboard Pkus 1,125 X 9,5 NJ 9.5 NJ40U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

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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. **PAGE 3 OF 28**

Label	L (Flush) Description	Width	Depth	Qty	Plies	Pcs	Length
F3	Forex 2.0E-3000Fb LVL	1.75	9.5			2	12-0-0
F7	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	12-0-0
F6	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	8-0-0
F5	Forex 2.0E-3000Fb LVL	1.75	9,5	2	2	4	6-0-0
F10	Forex 2.0E-3000Fb LVL	1.75	9.5			1	6-0-0
F4	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	4-0-0
F2	Forex 2.0E-3000Fb LVL	1.75	9,5			1	4-0-0
Joist (Flush)						
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F18	NJ	1.5	9.5	2	2	4	14-0-0
F9	NJ	1.5	9.5	1	2	2	12-0-0
F17	NJ	1.5	9.5	1	2	2	4-0-0
F8	ŃJ	1.5	9.5	2	2	4	2-0-0
J5	NJ40U	3.5	9.5			8	16-0-0
J8	NJH	2.5	9.5			3	14-0-0
J4	NJH	2.5	9.5			28	12-0-0
J3	HLM	2.5	9.5			2	10-0-0
32	NJH	2.5	9.5			10	6-0-0
J1	NJH	2.5	9.5			1	4-0-0
Rim Bo	ard						
	Description	Width	Depth	Qty	Plies	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			11	12
Blockin	9						
Label	Description	Widlh	Depth	Qty	Plies	Pcs	Length
BLK1	NJH	2.5	9.5	LinFt		Varies	17-0-0

					Deanvolidei	Member
Label	Pcs	Description	Skew	Slope	fasteners	fasteners
H1	2	HUC410 (Min)			14 16d	6 10d
Н3	4	LT2-159			4 10dx1 1/2	2 10dx1 1/2
H4	16	LT259			4 10dx1 1/2	2 10dx1 1/2
H9	2	HUCQ1.81/9- SDS				

NOTES:

- . Framer to verify dimensions on the architectura 2. Double joist only require filer/backer ply when so another member using a face-mounted hanger. 3. Install 2x4 blocking @ 24" o/c under parallel nor

bolting requirements.

- 3. Install 234 blocking @ 24* of under paratel non install fundation with the paratel non install fundation wheader along installation with the paratel fundation with the paratel fun
- Load transfer blocks to be installed under all poi

. It sha'll be the framer's responsibility that foor jo fastened as per the hanger manufacturer's stan Refer to Mulliple Member Connection Delail to ply

Rim para/lel to joists: 1-1/8' nimboard with 2'x 4" block (1/ nm depth @ 16" otc). All other components and structural supporting the floor system such as beams, walls, column foundation walls and footings including anchorage of com 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 deviate from the architectural and structural drawings. Project Engineer to review and approve the deviation pnor to construction.

ARCHITECTURAL DRAWINGS:

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: May 2018 Project No: lodel: Hemlock 5-5C

	1	2	2	12-0-0	HEMLOCK 5-1 & 5-2
	1	2	2	8-0-0	Design Method
					LSD
	2	2	4	6-0-0	Description
			1	6-0-0	MINNISALE HOMES
					BRAMPTON, ONT.
	1	2	2	4-0-0	Created
_			1	4-0-0	June 26. 2018
				100	Builder
					GREENPARK
-	Ωty	Plies	Pcs	Length	Sales Rep
	2	2	4	14-0-0	RM
_	1	2	2	12-0-0	Designer
	2	2	4	2-0-0	RCO
_	_	-	8	16-0-0	Shipping
			3	14-0-0	Project
			28	12-0-0	Builder's Project
			2	10-0-0	Kott Lumber Company
			10	6-0-0	14 Anderson Blvd
			1	4-0-0	Stouffville, Ontario
-	24.	Plies	Pcs	11	Canada
_	(ty	Piles	11	Length 12	L4A 7X4
			"	12	905-642-4400
					Job Path
(Qty	Plies	Pcs	Length	S.ICUSTOMERSIGREENPARK
L				17-0-0	VMINNISALE HOMESVMODELS
					WEMLOCK SWEMLOCK 5-1/FLOOR
	Bea	m/Girde		ported	VREVIF-HEMLOCK 5-1 & 5-2 ENGG
		-1		mber	Ground Floor
ре		steners 14 16d		teners 10d	Design Method LSD Building Code NBCC 2010 / OBC
-		0dx1 1/2		dx1 1/2	Building Code NBCC 2010 / OBC 2012
		Odx1 1/2		dx1 1/2	Floor
					Loads
					Live 40
					Dead 15
ral d	lrawin	en e			Deflection Joist
	portir				LL Span L/ 480
		earing wal	to.	- 1	TL Span L/ 360
	face		15.		LL Cant 2L/ 480
		-		- 1	TL Cant 2L/ 360
wor		ring on			Deflection Girder
		ceeding			LL Span L/ 360
					TL Span L/ 240
	loads	i. beams ar		1	LL Out LL
	s and rds.	Dedina 30	c	- 1	TL Cant 2L/ 360 Decking
					Deck SPF Plywood
y to	ply n	ading or			Thickness 3/4*
					Fastener Named & Glued
		16° longer	than		Vibration Named & Gilled
		elements			VIDIGUOII
		s, and conents ar	vd		
	hers.				

Client:

Address:

GREENPARK

Project:

Date:

8/14/2018

RCO Designer:

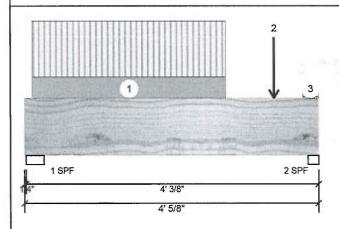
Job Name: HEMLOCK 5-1

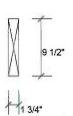
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Ground Floor





Member Info	rmation			Unfacto	red Reac	tions UN	IPATTERN!	ED lb (L	Jplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	1	Design Method:	LSD	1	197		81	0		0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	203		83	0		0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	s and Fac	tored R	eactions			
Dead:	15 PSF			Bearing	Length	Cap. F	React D/L lb	Total I	Ld. Case	Ld. Comb.
				1 - SPF	3.000"	12%	102 / 296	397	_L	1.25D+1.5L
				2-SPF	1.750"	22%	104 / 305	409	L	1.25D+1.5L

Analysis Results

•	Tidiyala itea	uics					
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	369 ft-lb	2' 1/2"	11362 ft-lb	0.033 (3%)	1.25D+1.5L	_L
	Unbraced	369 ft-lb	2' 1/2"	9055 ft-lb	0.041 (4%)	1.25D+1.5L	_L
	Shear	560 lb	3'2 1/8"	4638 lb	0.121 (12%)	1.25D+1.5L	L
	Perm Defl in.	0.001 (L/34817)	2' 5/8"	0.127 (L/360)	0.010 (1%)	D	Uniform
	LL Defl inch	0.003 (L/14269)	2' 5/8"	0.127 (L/360)	0.030 (3%)	L	LL
	TL Defl inch	0.005 (L/10121)	2' 5/8"	0.191 (L/240)	0.020 (2%)	D+L	LL
	LL Cant	-0.000 (2L/14762)	Lt Cant	0.200 (2L/480)	0.000 (0%)	L	LL
	TL Cant	-0.000 (2L/10472)	Lt Cant	0.300 (2L/360)	0.000 (0%)	D+L	LL

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	Part. Uniform	0-1-5 to 2-9-5		Far Face	38 PLF	102 PLF	0 PLF	0 PLF	
2	Point	3-5-5		Far Face	47 lb	127 lb	0 lb	0 ib	J2
3	Tie-In	3-10-0 to 4-0-10	(Span)0-4-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				4 PLF				

Notes

Lumber

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

chemicals

Handling & Installation

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

 Damaged Beams must not be used

 Design assumes top adge is laterally restrained

 Provide lateral support at bearing points to avoid

 lateral displacement and rotation

This design is valid until 7/10/2021



APA: PR-L318

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





Client:

Project:

GREENPARK

Address:

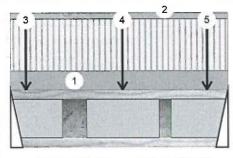
8/14/2018 Date:

RCO Designer:

Job Name: HEMLOCK 5-1

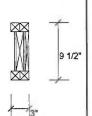
Project #:

9.500" 2-Ply - PASSED Level: Ground Floor



1 Hanger (LT2-159) 2 Hanger (LT2-159)

15 PSF



Member	Information

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

Application: Design Method: **Building Code:**

Load Sharing: Deck:

Vibration:

Floor (Residential) NBCC 2010 / OBC 2012

Not Checked

Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	384	190	0	0
2	374	186	0	0

Cap. React D/L lb

237 / 576

233 / 561

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	549 ft-lb	1'6 9/16"	7340 ft-lb	0.075 (7%)	1.25D+1.5L	L
Unbraced	549 ft-lb	1'6 9/16"	4678 ft-lb	0.117 (12%)	1.25D+1.5L	L
Shear	805 lb	1 1/4"	3080 lb	0.262 (26%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/17400)	1'6 9/16"	0.093 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.004 (L/8629)	1'6 9/16"	0.093 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.006 (L/5768)	1'6 9/16"	0.140 (L/240)	0.040 (4%)	D+L	L

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

31%

31%

Bearings and Factored Reactions

Bearing Length 2.000"

2.000"

Hanger

Hanger

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

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



Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Total Ld. Case

813 L

794 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 braced at bearings.
- 6 Bottom flange braced at bearings.

ID) L	oad Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Т	īe-ln	0-0-0 to 3-0-0	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	P	Part. Uniform	0-0-0 to 3-0-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
3	P	Point	0-2-9		Far Face	94 lb	190 lb	0 lb	0 lb	J4
4	P	Point	1-6-9		Far Face	141 lb	284 lb	0 lb	0 lb	J4
5	F	Point	2-8-9		Far Face	90 lb	179 lb	0 lb	0 lb	J4

Notes

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

Lumber

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

Handling & Installation

- nannuling & Installation

 1. Joist flanges must not be cut or drilled

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

 3. Damaged bloists must not be used

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

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

Manufacturer Info

Nascor by Kott

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





Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

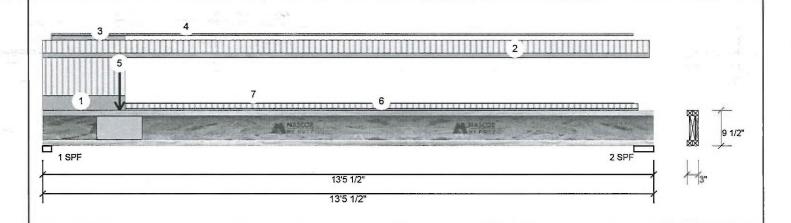
Designer: RCO

Job Name: HEMLOCK 5-1

Project #:

2-Ply - PASSED 9,500" NJ

evel; Ground Floor



Member Infor	mation			Unfactor	ed Reac	tions U	NPATTERNI	ED lb ((Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	W	Wind
Plies:	2	Design Method:	LSD	1	624		311		0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	252		126		0	0 .
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored R	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld, Case	Ld. Comb.
				1 - SPF	2.375"	49%	388 / 937	1325	L	1.25D+1.5L
				2-SPF	5.250"	17%	158 / 378	536	L	1.25D+1.5L

Analysis Results

Design Notes

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2141 ft-lb	4'10 7/8"	7340 ft-lb	0.292 (29%)	1.25D+1.5L	L
Unbraced	2141 ft-lb	4'10 7/8"	2170 ft-lb	0.987 (99%)	1.25D+1.5L	L
Shear	1302 lb	1 5/8"	3080 lb	0.423 (42%)	1.25D+1.5L	L
Perm Defl in.	0.061 (L/2552)	6'2 3/8"	0.432 (L/360)	0.140 (14%)	D	Uniform
LL Defl inch	0.121 (L/1286)	6'2 5/16"	0.432 (L/360)	0.280 (28%)	L	L
TL Defl inch	0.182 (L/855)	6'2 5/16"	0.647 (L/240)	0.280 (28%)	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



3 Top loads must be supported equally by all plies.

4 Top flange must be laterally braced at a maximum of 4'6" o.c.

1 Girders are designed to be supported on the bottom edge only.

2 Multiple plies must be fastened together as per manufacturer's details.

5 Bottom flange braced at bearings.

o Bottom	manage braces at bearing.					IPOINT LOAL	72 OVEK BE	AKINGS.L	
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-4-6	(Span)1-1-1 to 1-1-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-2-6 to 1-9-14		Тор	8 PLF	0 PLF	0 PLF	0 PLF	
4	Part, Uniform	0-2-6 to 13-0-4		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
5	Point	1-8-6		Far Face	186 lb	374 lb	0 lb	0 lb	F17
6	Tie-In	1-9-14 to 13-1-6	(Span)0-4-15 to 0-4-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	1-9-14 to 13-0-4		Тор	1 PLF	0 PLF	0 PLF	0 PLF	

Notes

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

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

Handling & Installation

Handling & Installation

1. Most flarges must not be cut or drilled

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

3. Damaged lobists must not be used

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

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

Manufacturer Info

Nascor by Kott

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



Client:

Project: Address:

GREENPARK

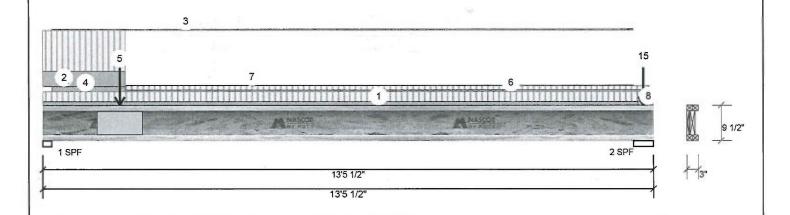
8/14/2018 Date:

Designer: RCO Job Name: HEMLOCK 5-1

Project #:

2-Ply - PASSED 9.500"

Level: Ground Floor



Member Inform	nation	_			Unfacto	red React	ions UN	NPATTERNI	ED lb (Uplift)	
Туре:	Girder		Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind
Plies:	2	10	Design Method:	LSD	1	586		290		0	0
Moisture Condition:	Dry		Building Code:	NBCC 2010 / OBC 2012	2	300		161		0	0
Deflection LL:	360		Load Sharing:	No	_						
Deflection TL:	240		Deck:	Not Checked							
Importance:	Normal)	Vibration:	Not Checked							
General Load											
Floor Live:	40 PSF				Bearing:	s and Fact	tored R	eactions			
Dead:	15 PSF			E 1	Bearing	Length	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
					1-SPF	2.375"	46%	363 / 879	1242	L	1.25D+1.5L
					2-SPF	5.250"	21%	201 / 450	651	L	1.25D+1.5L

Analysis Results

l	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	1860 ft-lb	4'3 7/16"	7340 ft-lb	0.253 (25%)	1.25D+1.5L	L
l	Unbraced	1860 ft-lb	4'3 7/16"	1875 ft-lb	0.992 (99%)	1.25D+1.5L	L
ı	Shear	1220 lb	1 5/8"	3080 lb	0.396 (40%)	1.25D+1.5L	L
l	Perm Defl in.	0.052 (L/2989)	6'1 5/16"	0.432 (L/360)	0.120 (12%)	D	Uniform
ı	LL Defl inch	0.104 (L/1501)	6'1 3/16"	0.432 (L/360)	0.240 (24%)	L	L
l	TL Defl inch	0.156 (L/999)	6'1 1/4"	0.647 (L/240)	0.240 (24%)	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.

Load Type

Part, Uniform

Part. Uniform

Tie-In

Tie-In

Point

Tie-In

- 4 Top flange must be laterally braced at a maximum of 4'10" o.c.
- 5 Bottom flange braced at bearings.

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

READ ALL NOTES ON THIS PAGE AND ON

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

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL



Continued on page 2...

ID

1

2

3

5

6

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 linenedd application, and to verify the dimensions and loads.

Lumber

Dry service conditions, unless noted otherwise
 Use to be treated with fire retardant or corrosive

Handling & Installation

Location

0-0-0 to 13-1-6

0-0-0 to 1-9-14

0-2-6 to 13-0-4

0-2-6 to 1-9-14

1-9-14 to 13-4-6

1-8-6

Andling & Installation
Lioist flanges must not be cut or drilled
Refer to latest copy of the Lioist product information
details for framing details, stiffener tables, web hole
chart, bridging details, muttl-ply tastening details and
handling/erection details
Damaged Lioists must not be used

Trib Width

(Span)0-9-7

(Span)3-3-0

(Span)0-4-1

to 0-4-1

to 0-9-7

Side

Top

Top

Top

Top

Top

Near Face

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

40 PSF

15 PSF

Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent

Manufacturer Info

0 PSF

Nascor by Kott

0 PSF

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

SUPROFESSIONAL PLO



Page 2 of 2



Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

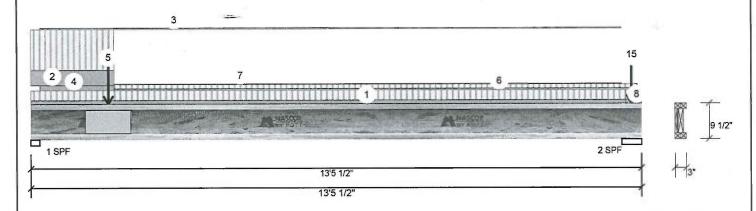
RCO Designer:

Job Name: HEMLOCK 5-1

Project #:

9.500" 2-Ply - PASSED NJ F18-B

Level: Ground Floor



Continued t	from page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	1-9-14 to 13-0-4		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
8	Tie-In	13-1-6 to 13-5-8	(Span)0-9-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
10	Point	13-2-14		Тор	7 lb	16 lb	0 lb	0 lb	J8
11	Point	13-2-14		Тор	8 lb	20 lb	0 lb	0 lb	J4
12	Point	13-2-14		Тор	7 lb	0 lb	dl 0	di 0	Wall Self Weight
13	Point	13-2-14		Тор	12 lb	26 lb	0 lb	0 lb	J8
14	Point	13-2-14		Тор	12 lb	32 lb	0 lb	0 lb	J4
15	Point	13-2-14		Тор	12 lb	0 lb	0 lb	0 lb	Wall Self Weight

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.



Notes

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

Lumber

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

Handling & Installation

andling & Installation.

Lioist lenges must not be cut or drilled.

Refer to latest copy of the Lioist product information details for framing details, estiffener tables, web hole-teart, bridging details, multi-phy fastening details and handling/erection details.

Demaged Lioists must not be used.

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

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





Client: GREENPARK

Project:

Address:

8/14/2018 Date:

RCO Designer:

HEMLOCK 5-1 Job Name:

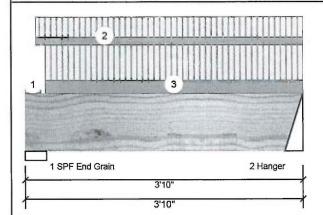
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Brg

Level: Ground Floor



Wind

Member Info	rmation		
Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Conditi	on: 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		

1	285	116	0	0
2	315	127	0	0

Dead

Snow

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

Analysis Res	ults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	485 ft-lb	1'11 1/4"	11362 ft-lb	0.043 (4%)	1.25D+1.5L	L
Unbraced	485 ft-lb	1'11 1/4"	9518 ft-lb	0.051 (5%)	1.25D+1.5L	L
Shear	470 lb	1' 1/4"	4638 lb	0.101 (10%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/27437)	1'11 5/16"	0.114 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.004 (L/11043)	1'11 5/16"	0.114 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.005 (L/7874)	1'11 5/16"	0.171 (L/240)	0.030 (3%)	D+L	L

Bearings and Factored Reactions Cap. React D/L lb Bearing Length Total Ld. Case Ld. Comb. 1-SPF 3.500" 13% 145 / 428 573 L 1.25D+1.5L End Grain 1.25D+1.5L 16% 158 / 472 630 L 3.000" 2 -Hanger

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

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

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



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 0-2-10	(Span)0-4-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-1-12 to 3-10-0		Тор	23 PLF	60 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-3-5 to 3-10-0		Far Face	40 PLF	106 PLF	0 PLF	0 PLF	
	Self Weight				4 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 Inlanded application, and to varify the dimensions and loads.

Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardent or corrosiv

Handling & Installation

- landling & Installation

 I. M. beams must not be cut or drilled

 Refer to menufacturer's product information regarding installation requirements, multi-ply fistening details, beam strength values, and code approvals

 Demagad Beams must not be used

 Design assumes top edge is laterally restrained

 Design assumes to be dige is laterally restrained

 Design assumes top edge is laterally restrained is provided in the provided in th

Manufacturer Info APA: PR-L318

Kott Lumber Company 14 Anderson Blvd, Ontario 14A7X4 905-642-4400







Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

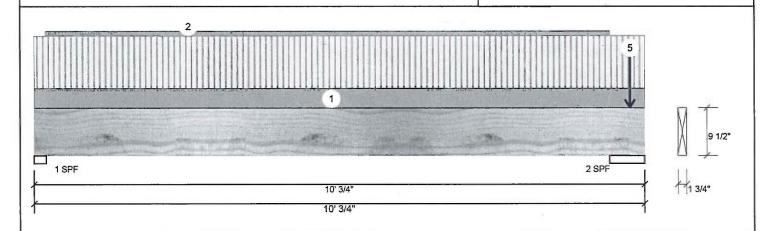
RCO Designer:

Job Name: HEMLOCK 5-1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Ground Floor



Member Inform	nation			Unfacto	red Reac	tions U	NPATTERN	ED lb (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	V	Wind
Plies:	1	Design Method:	LSD	1	109		69		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	276		158		0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load							w			
Floor Live:	40 PSF			Bearing:	s and Fac	tored	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	2.375"	10%	86 / 164	250	L	1.25D+1.5L
				2-SPF	6.875"	8%	198 / 414	612	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	574 ft-lb	4'10 1/8"	11362 ft-lb	0.050 (5%)	1.25D+1.5L	L
Unbraced	574 ft-lb	4'10 1/8"	3959 ft-lb	0.145 (14%)	1.25D+1.5L	L
Shear	203 lb	8'9 1/8"	4638 lb	0.044 (4%)	1.25D+1.5L	L
Perm Defl in.	0.011 (L/10085)	4'10 1/8"	0.314 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.018 (L/6374)	4'10 1/8"	0.314 (L/360)	0.060 (6%)	L	L
TL Defl inch	0.029 (L/3906)	4'10 1/8"	0.471 (L/240)	0.060 (6%)	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 Top braced at bearings.
- 4 Bottom braced at bearings.

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

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

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-0-12	(Span)1-1-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-5 to 9-5-14		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
3	Point	9-9-14		Тор	23 lb	63 lb	0 lb	0 lb	J3
4	Point	9-9-14		Тор	36 lb	95 lb	0 lb	0 lb	J6
5	Point	9-9-14		Тор	26 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				4 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

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

Handling & Installation

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

 Damaged Beams must not be used

 Design assumes top edge is leterally restrained

 Environmental support at bearing points to avoid lateral displacement and rotation

This design is valid until 7/10/2021

Manufacturer Info APA: PR-L318

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



Client:

GREENPARK

Project: Address: Date:

8/14/2018

Designer: **RCO**

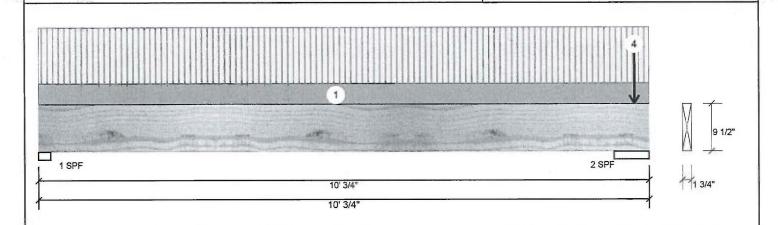
Job Name: HEMLOCK 5-1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Ground Floor



Member Inforn	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	٧	Wind
Plies:	1	Design Method:	LSD	1	133		68		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	330		174		0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked	1						
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings	and Fact	tored R	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	2.375"	11%	85 / 199	284	L	1.25D+1.5L
				2-SPF	6.875"	10%	218 / 495	713	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	651 ft-lb	4'10 1/8"	11362 ft-lb	0.057 (6%)	1.25D+1.5L	L
Unbraced	651 ft-lb	4'10 1/8"	3959 ft-lb	0.164 (16%)	1.25D+1.5L	L
Shear	230 lb	11 1/8"	4638 lb	0.050 (5%)	1.25D+1.5L	L
Perm Defl in.	0.011 (L/10231)	4'10 1/8"	0.314 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.021 (L/5259)	4'10 1/8"	0.314 (L/360)	0.070 (7%)	L	L
TL Defl inch	0.033 (L/3474)	4'10 1/8"	0.471 (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.

Design Notes 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4 5

2 Girders are designed to be supported on the bottom edge only.

3 Top braced at bearings.

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.



1	4 DURUIII D	naced at bearings.					-			
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 10-0-12	(Span)1-4-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Point	9-9-14		Тор	28 lb	74 lb	0 lb	0 16	J3
	3	Point	9-9-14		Тор	42 lb	113 lb	0 lb	0 lb	J6
	4	Point	9-9-14		Тор	31 lb	0 lb	0 lb	0 lb	Wall Self Weight
		Self Weight				4 PLF				

Calculated Shuctured 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 anctior the contractor to ensure the component suitability of the Intended application, and to verify the dimensions and loads.

Lumber

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

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info APA: PR-L318

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



Client:

GREENPARK

Project: Address: Date:

8/14/2018

RCO

Designer: Job Name: HEMLOCK 5-1

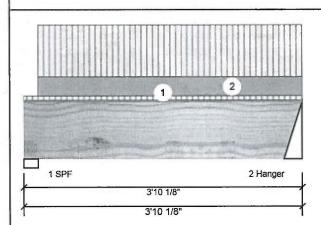
Project #:

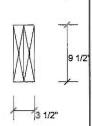
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Wind

Ld. Comb.

Member Inform	nation		
Type:	Girder		Appli
Plies:	2		Desig
Moisture Condition	Dry		Buildi
Deflection LL:	360		Load
Deflection TL:	240		Deck
Importance:	Normal		Vibra
General Load			3
Floor Live:	40 PSF		
Dead:	15 PSF		
Analysis Result	s		
Analysis Act	ual	Location	Allowed

808 ft-lb

808 ft-lb

(L/32707)

(L/13223)

506 lb

0.003

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

446	182	0	0
507	205	0	0
	446	446 182	446 182 0

Cap. React D/L lb

Dead

Snow

Total Ld. Case

Unfactored Reactions UNPATTERNED lb (Uplift)

			2 - Ha
Capacity	Comb.	Case	
0.036 (4%)	1.25D+1.5L	L	
0.036 (4%)	1.25D+1.5L	L	RE
0.055 (5%)	1.25D+1.5L	L	EN
0.010 (1%)	D	Uniform	NC
0.030 (3%)	L	L	CA

Brg

1 - SPF 2.375" 18% 227 / 669 896 L 1.25D+1.5L 1017 | 1.25D+1.5L 3.000" 13% 256 / 760 inger

AD ALL NOTES ON THIS PAGE AND ON IGINEERING NOTE PAGE ENP-2. THIS OTE PAGE IS AN INTEGRAL PART OF THIS ALCUI ATION SUMMARY PAGE AS IT ONTAINS 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

Bearings and Factored Reactions

Bearing Length



Design Notes

LL Defl inch

Perm Defl in. 0.001

Moment

Shear

Unbraced

- 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.

TL Defl inch 0.004 (L/9416) 1'10 13/16" 0.176 (L/240) 0.030 (3%) D+L

1'10 3/4" 22724 ft-lb

1'10 3/4" 22724 ft-lb

11 1/8" 9277 lb

1'10 13/16" 0.117 (L/360) 0.010 (1%) D

1'10 13/16" 0.117 (L/360) 0.030 (3%) L

- 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 3-10-2	(Span)1-0-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-6 to 3-10-2		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
	Self Weight				8 PLF				

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

Lumber

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

chemicals

- LIVIL beams must not be cut or drilled

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex APA: PR-L318

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



isDesign™

Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

Designer: RCO

Job Name: HEMLOCK 5-1

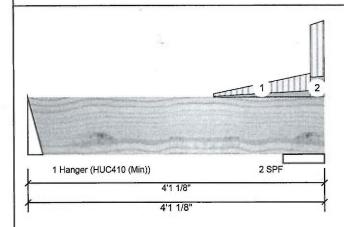
Project #:

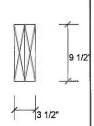
Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor





Member Infor	mation				Unfactored Reactions UNPATTERNED lb (Uplift)						
Type:	Girder	Appli	cation:	Floor (Residential)	Brg	Live		Dead	Snow	/	Wind
Plies:	2	Desi	gn Method:	LSD	1	1		15	0)	0
Moisture Condition	n: Dry	Build	ing Code:	NBCC 2010 / OBC 2012	2	26		27	C)	0
Deflection LL:	360	Load	Sharing:	No							
Deflection TL:	240	Deck		Not Checked							
Importance:	Normal	Vibra	ition:	Not Checked							
General Load											
Floor Live:	40 PSF	3			Bearing	s and Fac	tored R	eactions			
Dead:	15 PSF	- 1			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
					1 - Hanger	2.500"	0%	20 / 0	20	Uniform	1.4D
Analysis Resul	ts				2-SPF	6.875"	1%	34 / 40	73	L	1.25D+1.5L
	tual	Location Allowed	Capaci	ty Comb. Case							

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	17 ft-lb	1'11"	14770 ft-lb	0.001 (0%)	1.4D	Uniform
Unbraced	17 ft-lb	1'11"	14770 ft-lb	0.001 (0%)	1.4D	Uniform
Shear	10 lb	11 1/4"	6030 lb	0.002 (0%)	1.4D	Uniform
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

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

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

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



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.

Design Notes

- 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	2-6-13 to 3-10-13	(Span)0-1-12 to 1-0-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	3-10-13 to 4-1-2	(Span)3-0-11 to 3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				8 PLF				

Notes

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

Lumber

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

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





Client: GREENPARK

Project: Address:

Date: 8/14/2018

Designer: RCO

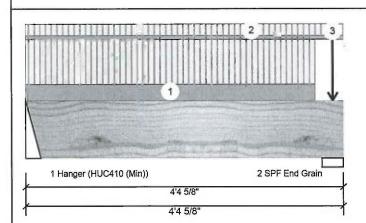
Job Name: HEMLOCK 5-1

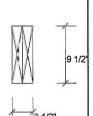
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" 2-Ply - PASSED

Level: Ground Floor





Wind

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

Member Info	rmation		1700
Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition	on: 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	- N	

1	206	94	0	0
2	500	213	0	0

Cap. React D/L lb

117 / 309

267 / 750

Dead

Snow

Total Ld. Case

426 L

1017 L

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

Bearings and Factored Reactions

Bearing Length

2-SPF 3.500"

Hanger

End

2.500"

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 2'1 13/16" 22724 ft-lb Moment 398 ft-lb 0.017 (2%) 1.25D+1.5L L 398 ft-lb 2'1 13/16" 22724 ft-lb 0.017 (2%) 1.25D+1.5L L Unbraced 241 lb 3'4 3/8" 9277 lb 0.026 (3%) 1.25D+1.5L L Shear 2'1 3/4" 0.134 (L/360) 0.010 (1%) D Perm Defl in. 0.001 Uniform (L/59539) 0.002 2'1 3/4" 0.134 (L/360) 0.010 (1%) L LL Defl inch (L/27068) 0.003 2'1 3/4" 0.200 (L/240) 0.010 (1%) D+L TL Defl inch (L/18608)

Grain 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**

7%

11%

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 naîling 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 4-0-0	(Span)3-10-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 4-4-10	(Span)0-11-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	4-2-14		Far Face	127 lb	315 lb	0 lb	0 lb	F2
	Self Weight				8 PLF				

Notes

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

Lumber

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

Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product inform regarding installation requirements, mul
- tasening details, approvals
 Damaged Beams must not be used
 Design assumes top adge is laterally restrair
 Provide lateral support at bearing points
 lateral displacement and rotation

Manufacturer Info APA: PR-L318

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







GREENPARK Client:

Project:

Address:

8/14/2018 Date:

Designer: RCO

Job Name: HEMLOCK 5-1

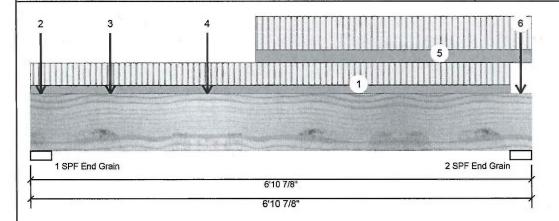
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



Floor (Residential)

Not Checked

Not Checked

NBCC 2010 / OBC 2012

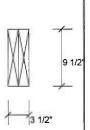
Application:

Design Method: **Building Code:**

Load Sharing:

Deck:

Vibration:



Member	Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	

40 PSF Floor Live: 15 PSF Dead:

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	901	381	0	0
Brg 1 2	1169	481	0	0
1				

Analysis Re	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2139 ft-lb	3'4 3/8"	22724 ft-lb	0.094 (9%)	1.25D+1.5L	L
Unbraced	2139 ft-lb	3'4 3/8"	21903 ft-lb	0.098 (10%)	1.25D+1.5L	L
Shear	1419 lb	1' 1/4"	9277 lb	0.153 (15%)	1.25D+1.5L	L
Perm Defl in	. 0.008 (L/9522)	3'5 1/16"	0.215 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.020 (L/3932)	3'5"	0.215 (L/360)	0.090 (9%)	L	L
TI Deflinch	0.028 (L/2783)	3'5 1/16"	0.322 (L/240)	0.090 (9%)	D+L	L

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L Ib	Iotai	Ld. Case	La. Comb.	
1 - SPF End Grain	3.500"	20%	476 / 1352	1829	L	1.25D+1.5L	
2 - SPF End Grain	3.500"	26%	601 / 1753	2354	L	1.25D+1.5L	

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

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

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL



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 wid

dth.				POINT LOAD	S OVER BE	ARINGS.
tion	Trib Width	Side	Dead	Live	Snow	Wind
-7-6	(Span)3-10-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 6-7-6	(Span)3-10-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-1-12		Far Face	94 lb	206 lb	0 lb	0 lb	F5
3	Point	1-1-5		Far Face	86 lb	230 lb	0 lb	0 lb	J3
4	Point	2-5-5		Far Face	66 lb	177 lb	0 lb	0 lb	J3
5	Part. Uniform	3-1-5 to 6-10-14		Far Face	44 PLF	116 PLF	0 PLF	0 PLF	
6	Point	6-9-2		Near Face	205 lb	507 lb	0 lb	0 lb	F4
	Self Weight				8 PLF				

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

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

chemicals

Handling & Installation

- 1. LVL beams must not be cut or drilled
 2. Refer to manufacturar's product information regarding installation requirements, multi-ply (astening details, beam strength values, and code approvals

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

This design is valid until 7/10/2021

Manufacturer Info Forex APA: PR-L318

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







Client:

Project: Address: GREENPARK

Date: 8/14/2018 Designer: RCO

Job Name: HEMLOCK 5-1

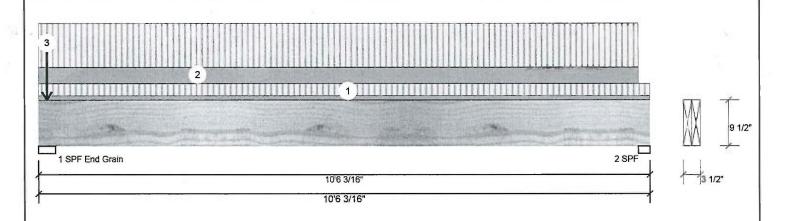
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Ground Floor



wember intorn	nation			Untacto	rea Keac	tions U	NPATIEKN	ED ID (UPIITE)	V-15-1-
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	535		256	0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	509		231	0	0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF			Bearing:	s and Fac	tored	Reactions		
Dead:	15 PSF	1/4		Bearing	Length	Cap.	React D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF End	3.500"	12%	320 / 803	1123 L	1.25D+1.5L
Analysis Result	\$			Grain					

Design Notes

4 Top braced at bearings.

Manufacularian --

Analysis	Actual	Location	Ailowed	Capacity	Comb.	Case
Moment	2676 ft-lb	5'3 5/8"	22724 ft-lb	0.118 (12%)	1.25D+1.5L	L
Unbraced	2676 ft-lb	5'3 5/8"	20689 ft-lb	0.129 (13%)	1.25D+1.5L	L
Shear	890 lb	9'7 1/16"	9277 lb	0.096 (10%)	1.25D+1.5L	L
Perm Defl in.	0.024 (L/5139)	5'3 11/16"	0.338 (L/360)	0.070 (7%)	a	Uniform
LL Defl inch	0.053 (L/2316)	5'3 11/16"	0.338 (L/360)	0.160 (16%)	L	L
TL Defl inch	0.076 (L/1597)	5'3 11/16"	0.508 (L/240)	0.150 (15%)	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.

21%

288 / 764

1052 L

Unfactored Deactions UNDATTERMED In (Unlift)

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY

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

2 - SPF 2.375"

NAILING OR BOLTING REQUIREMENTS.



1.25D+1.5L

ш		Diaded at Dearings.		
L	6 Lateral	slenderness ratio based	on full section width.	
Γ	ID	Load Type	Location	Trib Width
ı	1	Tie In	0.0.0 to 10.6.3	(Span)1 0

1 Girders are designed to be supported on the bottom edge only.

3 Top loads must be supported equally by all plies.

2 Multiple plies must be fastened together as per manufacturer's details.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 10-6-3	(Span)1-0-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 10-3-13	(Span)3-11-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-1-12		Near Face	15 lb	1 lb	0 lb	0 lb	F5
	Self Weight				8 PLF				

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. If 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

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

chemicals

Handling & Installation

LVL beams must not be cut or drilled

Refer to manufacturer's product information
regarding installation requirements, multi-ply
fastaning details, beam strength values, and code
approvats

Demonated Beams and a service of the code of

Damaged Beams must not be used

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

For flat roofs provide proper drainage to prevent ponding

Forex APA: PR-L318

Manufacturer Info

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







Client:

GREENPARK

Project: Address: Date: 8/14/2018

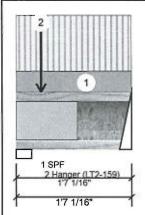
Designer: **RCO**

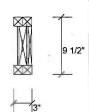
Job Name: HEMLOCK 5-1

9.500"

2-Ply - PASSED

Level: Ground Floor





Wind

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

+0.5S

72

Total Ld. Case

484 L

156 L

Member Information	M	em	ber	Inf	orm	ati	on
--------------------	---	----	-----	-----	-----	-----	----

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

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead Snow

116

Bearings and Factored Reactions

Bearing Length

1-SPF 2.563"

Hanger

2.000"

1

0	12	52	61	2

273 / 211

65 / 91

Cap. React D/L lb

19%

7%

219

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	71 ft-lb	4 1/8"	5505 ft-lb	0.013 (1%)	1.25D+1.5S	L
Unbraced	71 ft-lb	4 1/8"	5261 ft-lb	0.014 (1%)	1.25D+1.5S	L
Shear	377 lb	1 13/16"	2310 lb	0.163 (16%)	1.25D+1.5S	L
Perm Defl in.	0.000 (L/35252)	4 1/8"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.000 (L/49439)	7 1/4"	0.044 (L/360)	0.010 (1%)	L+0.5S	L
TL Defl inch	0.001 (L/21305)	4 13/16"	0.067 (L/240)	0.010 (1%)	D+L+0.5S	L

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

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

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



Design Notes

- 1 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.

15 PSF

- 5 Top flange braced at bearings.
- 6 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 1-7-1	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Point	0-4-2		Far Face	232 lb	74 lb	84 lb	0 lb	J2	

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

Lumber

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

Handling & Installation

- Harnolling & Installation

 1. Disist larges must not be cut or drilled

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

 3. Damaged bloist must not be used
- Learnaged Lioists must not be used
 Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Wab stiffeners for point load as shown Minimum point toad bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent ponding 7.

Manufacturer info

Nascor by Kott

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





Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

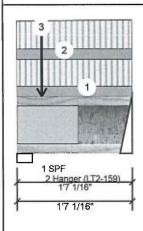
Designer: RCO

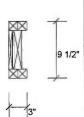
Job Name: HEMLOCK 5-1

Project #:

2-Ply - PASSED 9.500"

Level: Ground Floor





Wind

0

0

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

+0.5S

+0.5S

252 L

Member Inform	nation			4 (697) Line	Unfacto	red Reac	tions U	NPATTERN	ED Ib (Uplift)
Туре:	Girder		Application:	Floor (Residential)	Brg	Live		Dead	Snov	V
Plies:	2		Design Method:	LSD	1	158		199	5	7
Moisture Condition:	Dry		Building Code:	NBCC 2010 / OBC 2012	2	111		65	1	0
Deflection LL:	360		Load Sharing:	No						
Deflection TL:	240		Deck:	Not Checked	i					
Importance:	Normal		Vibration:	Not Checked						
General Load										
Floor Live:	40 PSF				Bearing	s and Fac	tored	Reactions		
Dead:	15 PSF	24			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case
					1-SPF	2.563"	19%	249 / 266	515	L

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	97 ft-lb	7 1/2"	7340 ft-lb	0.013 (1%)	1.25D+1.5L +0.5S	L
Unbraced	97 ft-lb	7 1/2"	6913 ft-lb	0.014 (1%)	1.25D+1.5L +0.5S	L
Shear	476 lb	1 13/16"	3080 lb	0.154 (15%)	1.25D+1.5L +0.5S	L
Perm Defl in.	0.000 (L/39739)	5"	0.044 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.000 (L/34789)	8 3/4"	0.044 (L/360)	0.010 (1%)	L+0.5S	L
TL Defl inch	0.001 (L/19110)	7 9/16"	0.067 (L/240)	0.010 (1%)	D+L+0.5S	L

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

10%

81 / 171

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

2.000"

2 -

Hanger



Design Notes

Amalusia Desulta

- 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 braced at bearings.

6 Bottom flange braced at bearings

ı										
I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
Į	1	Tie-In	0-0-0 to 1-7-1	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Tie-In	0-0-0 to 1-7-1	(Span)3-3-14 to 3-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
I	3	Point	0-4-2		Near Face	185 lb	59 lb	67 lb	0 lb	J1

Notes

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

Lumber

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

Handling & Installation

- arrouning & Installation.

 I Joist flanges must not be cut or drilled.
 Refer to latest copy of the Usolst product information details for framing details, suffigerer tables, web hole chart, bridging details, multiply fastering details and handling/erection details.

 Damaged Loists must not be used.
 Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

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

Manufacturer Info

Nascor by Kott

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





isDesign™

Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

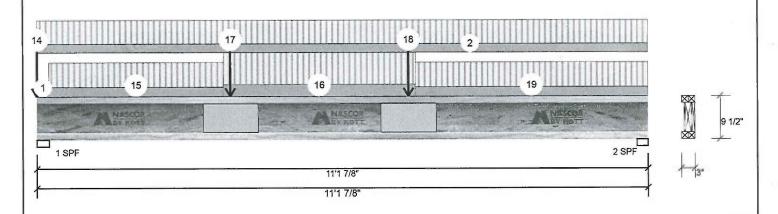
RCO Designer:

Job Name: HEMLOCK 5-1

Project #:

2-Ply - PASSED 9.500"

Level: Ground Floor



Member Info	rmation			Unfacto	red React	tions U	NPATTERNI	D lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	685		342	12	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	381		168	10	0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load									
Floor Live:	40 PSF			Bearings	and Fac	tored I	Reactions		
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total Ld. Case	Ld. Comb.
				1-SPF	2.625"	53%	427 / 1034	1461 L	1.25D+1.5L

		L	Resu	
Д	na	IVSIS	Kesu	ITS

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2443 ft-lb	5'5 1/16"	7340 ft-lb	0.333 (33%)	1.25D+1.5L +0.5S	L
Unbraced	2443 ft-lb	5'5 1/16"	2477 ft-lb	0.986 (99%)	1.25D+1.5L +0.5S	L
Shear	835 lb	1 7/8"	3080 lb	0.271 (27%)	1.25D+1.5L +0.5S	L
Perm Defi in.	0.046 (L/2807)	5'6 1/2"	0.362 (L/360)	0.130 (13%)	D	Uniform
LL Defl inch	0.102 (L/1272)	5'6 1/4"	0.362 (L/360)	0.280 (28%)	L+0.5S	L
TL Defl inch	0.149 (L/875)	5'6 3/8"	0.543 (L/240)	0.270 (27%)	D+L+0.5S	L

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

29%

210 / 577

787

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.

2-SPF 2.375"



1.25D+1.5L +0.58 1.25D+1.5L

+0.5S

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 4'3" 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 0-2-10	(Span)0-7-0 to 0-7-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 11-1-14	(Span)1-3-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-0-0		Тор	7 lb	15 lb	0 lb	0 lb	J8
4	Point	0-0-0		Тор	1 lb	2 lb	0 lb	0 lb	J8
5	Point	0-0-0		Тор	6 lb	17 lb	0 lb	0 lb	J4
Continued or	n page 2								

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

Lumber

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

Handling & Installation

- Libert larges must not be cut or drilled Refer to letest copy of the I-loist product information details for framing details, stiffner tables, web hole chart. bridging details, smith-ly fastening details and handling/erection details Damaged I-loist must not be used Design assumes top flenge to be leterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeness for point load as shown Minimum point load bearing length>= 3.5 Inches
 To fair roofs provide proper drainage to prevent ponding

Manufacturer Info

Nascor by Kott

Kott Lumber Company 14 Anderson Blvd, Ontario Canada 14A7X4 905-642-4400





GREENPARK Client:

Project: Address:

Date: 8/14/2018

Designer: RCO

Job Name: HEMLOCK 5-1

Project #:

Live

0 lb

83 lb

30 lb

93 lb

0 lb

16 lb

20 lb

0 lb

40 PSF

40 PSF

111 lb

Snow

0 lb

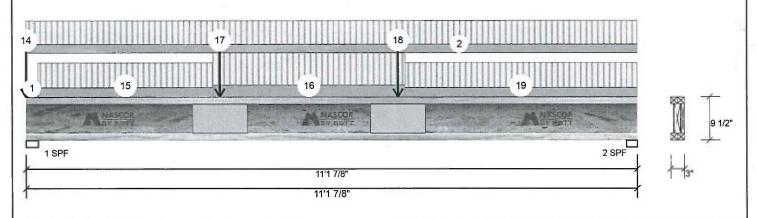
0 PSF

0 PSF

10 lb

9.500" 2-Ply - PASSED NJ F9-A

Level: Ground Floor



Continued	from page 1		-		
ID	Load Type	Location	Trib Width	Side	Dead
6	Point	0-0-0		Тор	6 lb
7	Point	0-0-0		Тор	37 lb
8	Point	0-0-0		Тор	14 lb
9	Point	0-0-0		Тор	35 lb
10	Point	0-0-0		Тор	33 lb
12	Point	0-0-0		Тор	7 lb
13	Point	0-0-0		Тор	8 lb
14	Point	0-0-0		Тор	7 lb
15	Tie-In	0-2-10 to 3-5-0	(Span)1-4-7	Тор	15 PSF
16	Tie-In	3-5-0 to 6-11-0	(Span)1-9-2	Тор	15 PSF
17	Point	3-6-8		Far Face	65 lb
18	Point	6-9-8		Far Face	52 lb
19	Tie-In	6-11-0 to 11-1-14	(Span)1-4-7	Тор	15 PSF

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.

Wind

0 lb

0 lb J8

0 lb J8

0 lb

0 lb

0 lb **J8**

0 lb

0 lb

0 PSF

0 PSF

0 lb F8

J4

Comments

Wall Self Weight

Wall Self Weight

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.



Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design critista 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

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

Handling & Installation

- aurolling & Installation

 I Joist flenges must not be cut or drilled

 Refer to latest copy of the Judist product information
 details for framing details, stiffener tables, web hote
 beart. bridging details, multi-pit fastening details end
 handling/erection details

 Demaged Loists must not be used

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

- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Milnimum point load bearing lengths—3.5 inches.
 Provide proper drainage to prevent ponding.

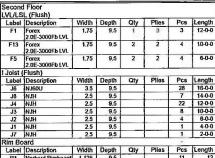
Manufacturer Info

Nascor by Kott

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



Second Floor



F13	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	10-0-
F5	Forex 2.0E-3000Fb LVL	1.75	9.5	2	2	4	6-0-
Joist (Flush)						
Label	Description	Width	Depth	Qty	Plies	Pcs	Lengt
J6	NJ60U	3.5	9.5			28	16-0-
JB	NJH	2.5	9.5			7	14-0-
J4	HLM	2.5	9.5			22	12-0-
J3	NJH	2.5	9.5			8	10-0-
J2	NJH	2.5	9.5			4	6-0-
J1	HUNI	2.5	9.5			1	4.0
J7	NJH	2.5	9.5			1	2-0-
Rim Bo	ard						
Label	Description	Width	Depth	Qty	Plies	Pcs	Lengt
R1	Norbord Rimboard Plus 1.125 X 9.5	1.125	9.5			11	1:

anger					Beam/Girder	Supported Member
abei	Pcs	Description	Skew	Slope	fasteners	fasteners
H4	14	LT259	1		4 10dx1 1/2	2 10dx1 1/2
H7	3	HGUS410			46 16d	16 16d
LIR		17250				

- 1. Framer to verify dimensions on the architectural drawings.
 2. Double joist only require filer/backer ply when supporting another member using a face-mountled hanger.
 3. Install 24b blocking @ 24* of under paratel non-load bearing walls.
 4. Install single-ply flush window header slong inside face of
- I. install single-py flush window header elong inside race of imboard/injoles.
 6. Refer to Nascor specifier guide for installation works.
 6. Squash tolock recommended to be installed at end bearing on all first level joists which support loading from above exceeding two levels foor or toof.
 7. Load transfer blocks to be installed under all point loads.
- It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

Rim parallel to joists: 1-1/8° rimboard with 2°x 4° block (1/16° longer than rim depth @ 15° oci). All other components and structural elements supporting the floor system such as beams, while, columns, and foundation walls and foolings including anchorage of components and bracing for letteral stability are the responsibility of Others.

Hatch area represents ceramic tited floor with an additional dead load

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

ARCHITECTURAL DRAWINGS

REGION DESIGN INC. 8700 Dufferin St., Concord, ON Date: May 2018 Project No: Model: Hernlock 5-5C

Le	ge	nd	۸		
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i					100

Load from Above Norbord Rimboard Plus 1.125 X 9 5 NJ60U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

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.

PAGE 23 OF 28

Layout Name HEMLOCK 5-1 & 5-2 Design Method LSD Description MINNISALE HOMES BRAMPTON, ONT Created June 26, 2018 Builder GREENPARK Sales Rep RM Designer RCO Shipping Project Builder's Project Kott Lumber Company 14 Anderson Blvd Stouffville, Ontario Canada L4A7X4

905-642-4400 Job Path

Floor

Loads

Live

Dead

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span U

TL Span L/ LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Ceiling:

Deck

Deflection Girder

S:CUSTOMERSIGREENPARK WINNISALE HONESWODELS HEMLOCK 5-HEMLOCK 5-HELOO

2012

15

480 360

480

360

360

240

480

360

5/8

SPF Plywood

Nailed & Glued

Gypsum 1/2*

VREVHEMLOCK 5-1.isl Second Floor Design Method Building Code NBCC 2010 / OBC

Version 18.40.162 Powered by iStruct**

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

Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

Designer: **RCO** Job Name: HEMLOCK 5-1

Project #:

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

Application:

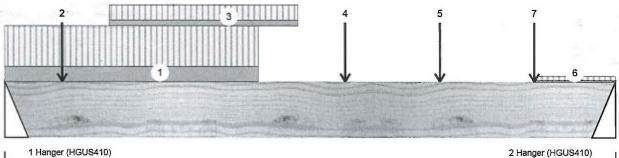
Design Method:

Building Code: Load Sharing:

Deck:

Vibration:

Level: Second Floor



1 Hanger (HGUS410)

8'7 1/2'

8'7 1/2"

Floor (Residential)

Not Checked

Not Checked

NBCC 2010 / OBC 2012

LSD

No

Member Information

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

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live	Dead	Snow	vvina
1031	419	0	0
406	184	0	0
	1031	1031 419	1031 419 0

Dead: 15 PSF

Analysis Re	Analysis Results									
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case				
Moment	2859 ft-lb	3'2 3/4"	22724 ft-lb	0.126 (13%)	1.25D+1.5L	L				
Unbraced	2859 ft-lb	3'2 3/4"	21433 ft-lb	0.133 (13%)	1.25D+1.5L	L				
Shear	1559 lb	1' 3/4"	9277 lb	0.168 (17%)	1.25D+1.5L	L				
Perm Defl in	n. 0.015 (L/6456)	3'11 3/4"	0.269 (1/360)	0.060 (6%)	D	Uniform				
LL Defl inch	0.036 (L/2715)	3'11 1/4"	0.269 (L/360)	0.130 (13%)	L	L				
TL Defl inch	0.051 (L/1911)	3'11 3/8"	0.404 (L/240)	0.130 (13%)	D+L	L				

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	4.000"	20%	524 / 1547	2071	L	1.25D+1.5L
2 - Hanger	4.000"	8%	231 / 608	839	L	1.25D+1.5L

READ ALL NOTES ON THIS PAGE AND ON **ENGINEERING NOTE PAGE ENP-2. THIS** NOTE PAGE IS AN INTEGRAL PART OF THIS

CALCULATION SUMMARY PAGE AS IT **CONTAINS SPECIFICATIONS AND CRITERIA** USED IN THE DESIGN OF THIS COMPONENT

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

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



Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 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	Part. Uniform	0-0-0 to 3-7-0		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
2	Point	0-9-12		Far Face	40 lb	106 lb	0 lb	0 lb	J2
3	Part. Uniform	1-5-12 to 4-1-12		Far Face	33 PLF	89 PLF	0 PLF	0 PLF	
4	Point	4-9-12		Far Face	46 lb	123 lb	0 lb	0 lb	J2
5	Point	6-1-12		Far Face	20 lb	53 lb	0 lb	0 lb	J1
6	Tie-In	7-5-12 to 8-7-8	(Span)1-2-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Continued on page 2...

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

Lumber

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

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

 Damaged Beams must not be used.

 Design assumes top edge is laterally restrained.

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

For flat roofs provide proper drainage to prevent ponding

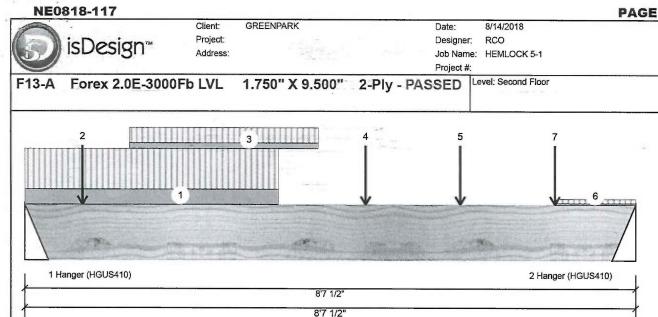
Manufacturer Info Forex APA: PR-L318

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





Page 2 of 2



.Continued from page 1

ID Load Type Location Trib Width Side Live Dead Snow Wind Comments 7 Point 7-5-12 Far Face 11 lb 30 lb 0 lb 0 lb J7 Self Weight 8 PLF

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

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

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



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

Lumber

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

chemicals

Handling & Installation

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

restering disease, verification approvals

Demaged Beams must not be used

Design assumes top adge is laterally restrained

Provide lateral support at bearing points to avoid

lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info APA: PR-L318

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





Client:

Project:

GREENPARK

Address:

8/14/2018 Date:

Designer: **RCO**

Job Name: HEMLOCK 5-1

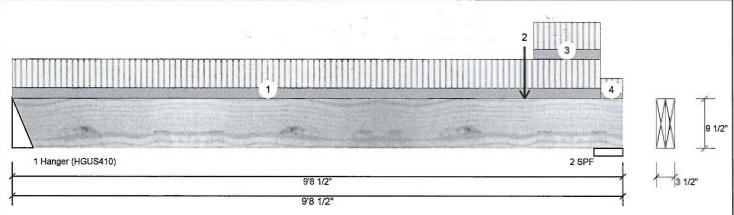
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Info	ormation				Unfacto	red React	tions U	INPATTERNI	ED lb (Uplift)	
Type:	Girder		Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2		Design Method:	LSD	1	186		110	0	0
Moisture Condit	ion: Dry		Building Code:	NBCC 2010 / OBC 2012	2	510		256	0	0
Deflection LL:	360		Load Sharing:	No						
Deflection TL:	240		Deck:	Not Checked						
Importance:	Normal		Vibration:	Not Checked						
General Load										
Floor Live:	40 PSF				Bearings	s and Fac	tored l	Reactions		
Dead:	15 PSF				Bearing	Length	Сар.	React D/L lb	Total Ld. Case	Ld. Comb.
					1 -	4.000"	4%	138 / 279	416 L	1.25D+1.5L
					Hanger					
Analysis Resi	ults				2-SPF	5.500"	9%	321 / 765	1086 L	1.25D+1.5L
Analysis	Actual	Location A	llowed Capaci	ty Comb. Case						
Moment	1251 ft-lb	6'6 7/16" 22	724 ft-lb 0.055 (f	5%) 1.25D+1.5L I						

ı	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	1251 ft-lb	6'6 7/16"	22724 ft-lb	0.055 (6%)	1.25D+1.5L	L
l	Unbraced	1251 ft-lb	6'6 7/16"	21109 ft-lb	0.059 (6%)	1.25D+1.5L	L
l	Shear	977 lb	8'6 1/4"	9277 lb	0.105 (11%)	1.25D+1.5L	L
۱	Perm Defl in.	0.010 (L/10574)	5'1 3/8"	0.301 (L/360)	0.030 (3%)	D	Uniform
l	LL Defl inch	0.019 (L/5813)	5'2 5/16"	0.301 (L/360)	0.060 (6%)	L	L
l	TL Defl inch	0.029 (L/3751)	5'2"	0.452 (L/240)	0.060 (6%)	D+L	L
ì							

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.

Γ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 9-4-4	(Span)1-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Point	8-1-12		Far Face	184 lb	406 lb	0 lb	0 ib	F13
l	3	Tie-In	8-3-8 to 9-4-4	(Span)1-3-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	4	Tie-In	9-4-4 to 9-8-8	(Span)0-8-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l		Self Weight				8 PLF				

Celeurated 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

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

chemicals

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info APA: PR-L318

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







Client:

GREENPARK

Project: Address:

Designer:

RCO

Job Name: HEMLOCK 5-1

Project #:

Date:

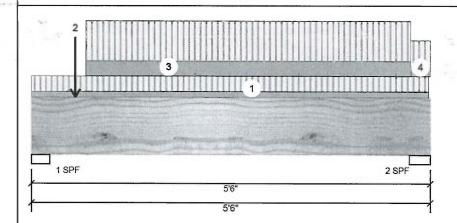
Forex 2.0E-3000Fb LVL

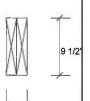
1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor

8/14/2018





Page 1 of 1

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

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead Snow Wind 1 1005 428 0 0 156 2 0 0

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.000" 32% 534 / 1508 2043 L 1.25D+1.5L 2-SPF 3.500" 4% 103 / 234 337 L 1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	847 ft-lb	7 1/4"	22724 ft-lb	0.037 (4%)	1.25D+1.5L	L
Unbraced	847 ft-lb	7 1/4"	22724 ft-lb	0.037 (4%)	1.25D+1.5L	L
Shear	2010 lb	11 3/4"	9277 lb	0.217 (22%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/29945)	2'3 3/4"	0.169 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.004 (L/14030)	2'2 3/4"	0.169 (L/360)	0.030 (3%)	L	L
TL Defl inch	0.006 (L/9556)	2'3 1/8"	0.254 (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 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.

I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
I	1	Tie-In	0-0-0 to 5-5-12	(Span)0-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
I	2	Point	0-7-4		Near Face	419 lb	1031 lb	0 lb	0 lb	F13
I	3	Tie-In	0-9-0 to 5-2-12	(Span)0-11-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı	4	Tie-In	5-2-12 to 5-6-0	(Span)0-7-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
I		Self Weight				8 PLF				
ı										

Notes

Celculated 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 receivable and to warfs the dimensions and loads.

Lumber

Handling & Installation

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

permission states and core approvals

Damaged Beams must not be used

Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Forex APA: PR-L318 Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4 905-642-4400





isDesign

Client:

GREENPARK

Project: Address:

8/14/2018

Designer: **RCO**

Job Name: HEMLOCK 5-1

Project #:

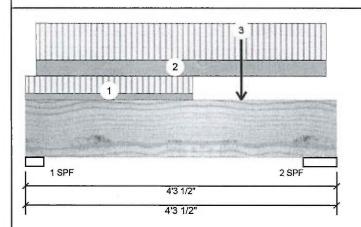
Date:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Wind

Ld Comb

1.25D+1.5I

1.25D+1.5L

Total Ld. Case

1282 L

1287 L

Member Information

-			
	Type:	Girder	
	Plies:	2	
	Moisture Condition:	Dry	
	Deflection LL:	360	
	Deflection TL:	240	
	Importance:	Normal	
	General Load		

40 PSF

15 PSF

Application: Design Method: **Building Code:** Load Sharing: Deck:

Vibration:

Floor (Residential) LSD NBCC 2010 / OBC 2012

Not Checked Not Checked Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead Snow

625

Bearings and Factored Reactions

Bearing Length

1-SPF 3.000"

2 - SPF 5.500"

	023	210	0	U
2	625	280	0	0

Cap. React D/L lb

345 / 937

350 / 937

276

Analysis Results

Floor Live:

Dead:

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
ı	Moment	1130 ft-lb	2' 7/16"	22724 ft-lb	0.050 (5%)	1.25D+1.5L	L
l	Unbraced	1130 ft-lb	2' 7/16"	22724 ft-lb	0.050 (5%)	1.25D+1.5L	L
l	Shear	1323 lb	3'1 1/4"	9277 lb	0.143 (14%)	1.25D+1.5L	L
	Perm Defl in.	0.002 (L/21697)	2' 7/16"	0.124 (L/360)	0.020 (2%)	D	Uniform
l	LL Defl inch	0.005 (L/9576)	2' 7/16"	0.124 (L/360)	0.040 (4%)	L	L
ı	TI Deflinch	0.007 (1/6644)	2' 7/16"	0 185 (1/240)	0.040 (4%)	D+L	L

READ ALL NOTES ON THIS PAGE AND ON **ENGINEERING NOTE PAGE ENP-2. THIS** CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA

NOTE PAGE IS AN INTEGRAL PART OF THIS USED IN THE DESIGN OF THIS COMPONENT

20%

11%

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 braced at bearings.
- 4 Bottom braced at bearings.
- 5 Lateral slenderness ratio based on full section width,

Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
Part. Uniform	0-0-0 to 2-3-12		Near Face	39 PLF	103 PLF	0 PLF	0 PLF	
Part. Uniform	0-1-12 to 4-1-12		Far Face	96 PLF	220 PLF	0 PLF	0 PLF	
Point	2-11-12		Near Face	49 lb	131 lb	0 lb	0 lb	J2
Self Weight				8 PLF				
	Part. Uniform Part. Uniform Point	Part. Uniform 0-0-0 to 2-3-12 Part. Uniform 0-1-12 to 4-1-12 Point 2-11-12	Part. Uniform 0-0-0 to 2-3-12 Part. Uniform 0-1-12 to 4-1-12 Point 2-11-12	Part. Uniform 0-0-0 to 2-3-12 Near Face Part. Uniform 0-1-12 to 4-1-12 Far Face Point 2-11-12 Near Face	Part. Uniform 0-0-0 to 2-3-12 Near Face 39 PLF Part. Uniform 0-1-12 to 4-1-12 Far Face 96 PLF Point 2-11-12 Near Face 49 lb	Part. Uniform 0-0-0 to 2-3-12 Near Face 39 PLF 103 PLF Part. Uniform 0-1-12 to 4-1-12 Far Face 96 PLF 220 PLF Point 2-11-12 Near Face 49 lb 131 lb	Part. Uniform 0-0-0 to 2-3-12 Near Face 39 PLF 103 PLF 0 PLF Part. Uniform 0-1-12 to 4-1-12 Far Face 96 PLF 220 PLF 0 PLF Point 2-11-12 Near Face 49 lb 131 lb 0 lb	Part. Uniform 0-0-0 to 2-3-12 Near Face 39 PLF 103 PLF 0 PLF 0 PLF Part. Uniform 0-1-12 to 4-1-12 Far Face 96 PLF 220 PLF 0 PLF 0 PLF Point 2-11-12 Near Face 49 lb 131 lb 0 lb 0 lb

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

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

chemicals

Handling & Installation

- and ling & Installation
 LVL beams must not be cut or drilled
 Refer to manufacturer's product information
 regarding installation requirements, mutil-ply
 festening details, beam strength velues, and code
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 Demaged Beams must not be used
 Design assumes top adge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

Forex APA: PR-L318

Manufacturer Info

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

