Engineering Note Page (ENP-2)

REVISION 2009-10-09

Please read all notes prior to installation of the component

DESIGN INFORMATION

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

The responsibility of the undersigned engineer is <u>only</u> 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

Conventional Connections (for uniform distributed loads)

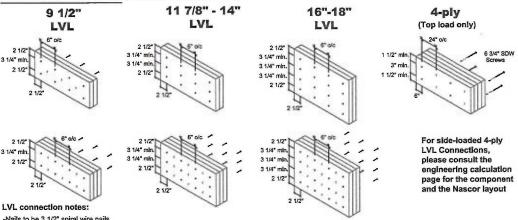
2x12 2x6 2x8 2x10 2-ply 3-ply

Conventional connection notes:

-Nalls to be 3" 10d spiral wire nails.

- -Nalls to be located a minimum of 2 1/2" In from ends.
 -Number of rows and spacing as per details shown, unless noted otherwise.
 "X" represents nall driven from the opposite side,

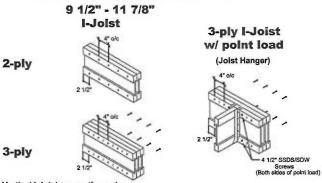
LVL Connections (for uniform distributed loads)



- -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:

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

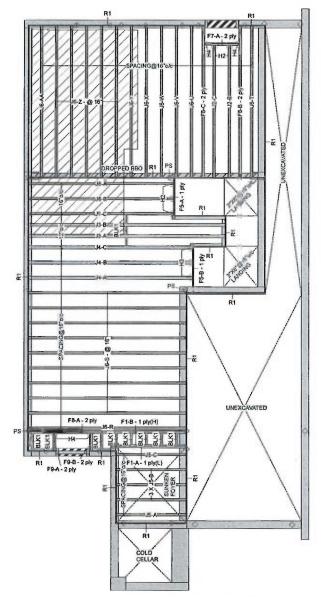
 -"X" represents nall driven from the opposite side.

Layout Name

CLOVER 1-ELEV 1

Design Method

LSD



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.

WHERE FOUNDATION WALLS MUST BE LATERALLY SUPPORTED AND NO DETAIL IS PROVIDED BY THE BUILDING DESIGNER, SEE DETAIL US IN THE NASCOR SPECIFIER GUIDE



Ground Floor LVL/LSL (Flush) Label Description Width Depth Qty Plies Pcs Length 2 8-0-0 Forex 2.0E-3000Fb LVL 1.75 F5 Forex 2.0E-3000Fb LVL I Joist (Flush) Width Depth Qty 1.5 9.5 3 Label Description F8 NJ Plies Pcs Length 2 2 6 14-0-0 Description 9.5 1 F7 NJ 2 4-0-0 1.5 F9 NJ Created 2 J3 NJ80U J4 NJ80U J8 NJH 3.5 9.5 2 18-0-0 3.5 9.5 3 16-0-0 25 14-0-0 9.5 J2 NJH J5 NJH 2 12-0-0 5 8-0-0 2.5 9.5 2.5 9.5 Rim Board Label Description Width Depth Qty Plies Pcs Length Norbord Rimboard Plus 1.125 X 9.5 1.125 9.5 RI Hanger Supported Label Pcs Description Skew Slope fasteners fasteners H2 6 LT259 H3 3 MIT49.5 4 10dx1 1/2 2 10dx1 1/2 4 10dx1 1/2 4 10dx1 1/2 H4 4 LT2-169 4 10dx1 1/2 2 10dx1 1/2 Blocking Label Description Width Depth Qty Piles Pcs Length BLK1 NJH

NOTES:

- 1. Framer to verify dimensions on the architectural drawings.
- 1. Framer to verify dimensions on the architectural drawings.
 2. Double joist only require filerflocker by when supporting another member using a face-mounted hanger.

 I install 224 beloching (g) 24-00 under parallel non-load bearing walls.

 It install single-pty flush window header along inside face of imboard/finglest difference of the properties of the properties.

 F. Refer to Nascor specifier guide for installation works.

 Supersh Decks recommended to be installed at end bearing on the properties.
- 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. It shall be the frame'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 bolling requirements,

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

Hatch are 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 apporve the deviation to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Clover 1A, Elevation 1

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3 IVI CCMC-14058-R 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

Legend



Point Load Support Load from Above Wall Opening Norbord Rimboard Plus 1,125 X 9.5 NJ 95 NJ60U 9.5 NJH 9.5

Forex 2.0E-3000Fb LVL 1.75 X 9.5

June 25, 2018 Builder GREENPARK Sales Rep Designer RO Shipping Project Builder's Project Kott Lumber Company 14 Anderson Blvd Stouffville, Ontario Canada K2H7V1 905-642-4400 Job Path S.YCUSTOMERSYGREENPARK MINNISALE HOMESWIDDELS/BLOCK 316/CLOVER 1A/FLOORS/CLOVER ELEV 1.isl **Ground Floor** LSD Design Method **Building Code** NBCC 2010 / OBC 2012 Floor Loads 40 Dead 15 Deflection Joist LL Span L 480 TL Span L/ 360 LL Cent 2L/ 480 360 TL Cant 2L/ Deflection Girder 360 LL Span L/ TL Span L/ 240

LL Cant 2L/

TI Capt 21/

Decking

Thickness Fastene

Vibration Strapping

Deck

240

SPF Plywood

Nailed & Glued

1°X4", 1 Row at Midspan

CLOVER 1-ELEV 2

June 25, 2018

Kott Lumber Company

S ICUSTOMERS/GREENPARK WINNISALE HOMESWODELSBLOCK 318/CLOVER 1A/FLOORS/ELEV. 2

Building Code NBCC 2010 / OBC

LSD

2012

40

15

480

360

460

360

240

480

240

SPF Plywood

Natled & Glued

1"X4", 1 Row at Midspan

VCLOVER 1-ELEV 2.isl Ground Floor Design Method

14 Anderson Blvd Stouffville, Ontario

Canada

K2H7V1

lob Path

Floor

Loads

Dead

Deflection Joist

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

Ti Span I/

LL Cant 2L/

TI. Cant 2L/

Decking

Thicknes:

Fastener

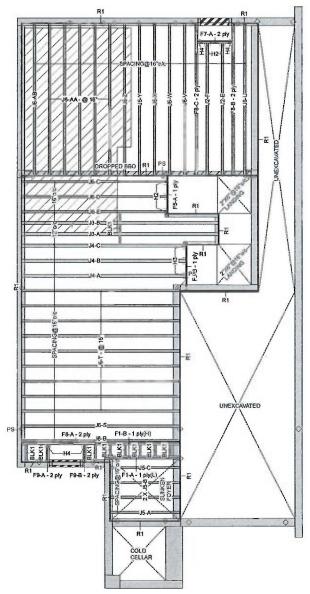
Vibration Strapping

Deck

Deflection Girder

905-642-4400

RO



WHERE FOUNDATION WALLS MUST BE LATERALLY SUPPORTED AND NO DETAIL IS PROVIDED BY THE BUILDING DESIGNER, SEE DETAIL US IN THE NASCOR SPECIFIER GUIDE

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.



Ground Floor LVL/LSL (Flush) Width Depth | Qty Label Description Plies Pcs Length 1.75 2 2.0E-3000Fb LVL Layout Name F5 6-0-0 1,75 2 Forex 2.0E-3000Fb LVL Joist (Flush) Design Method Depth 9.5 9.5 Label Description Width Qty Plies Pcs Length F8 NJ F7 NJ F9 NJ J3 NJ60U 2 6 14-0-0 2 2 4-0-0 1.5 Description 1.5 Created 9.5 4 2-0-0 3.5 18-0-0 J4 NJ60U J6 NJH 3.5 9.5 3 16-0-0 Builder 25 9.5 GREENPARK J2 NJH 2 12-0-0 2.5 9.5 Sales Rep J5 NJH 9.5 4 8-0-0 Rim Board Designer Label Description R1 Norbord Rimboard 1.126 Plus 1.125 X 9.5 Shipping Hanger Project Ream/Girder Supported Builder's Project Member Label Pcs Description Skew Slope fasteners fasteners 5 LT259 H2 4 10dx1 1/2 2 10dx1 1/2 4 LT2-159 4 10dx1 1/2 2 10dx1 1/2 Blocking Label Description Width Depth Qty Piles Pos Length
2.5 9.5 LinFt Varies 12-0-0 BLK1 NJH

NOTES:

- Framer to verify dimensions on the architectural drawings.
 Double joist only require filter/backer ply when supporting another member using a face-mounted nanger.
 Install 2x4 blooking @ 24*0/c under paralfel non-load bearing walls.
 Install 2x4 blooking @ 24*0/c under paralfel non-load bearing walls.
 Install single-ply flusth window header along inside face of
- rimboard/rimjoist. 5. 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. It shall be the frame'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 bolling requirements.

Rim parallel to joists: 1-1/6" rimboard with 2"x4" block (1/16" longer than rim depth @ 16"o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and foundation walls, and footings including anchorage of components and bracing for lateral stability are the responsibility of Others

Hatch are represents ceramic tiled 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 apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. JARDIN DESIGN GROUP INC 64 Jardin Dr, Suile 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Clover 1A, Elevation 2

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14058-R 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

Legend



Point Load Support Load from Above Walt Opening Norbord Rimboard Plus 1,125 X 9.5 N.195 NJ60U 9.5 NJH 9.5

Forex 2.0E-3000Fb LVL 1.75 X 9.5



Version 18.40.105 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:

Date:

9/7/2018

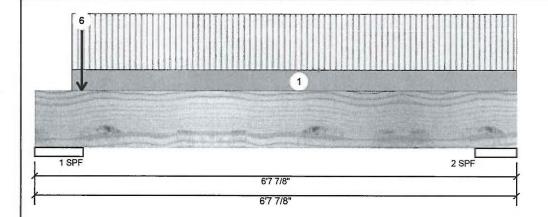
Designer: RO

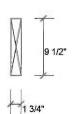
Job Name: CLOVER 1-ELEV 1

Project #:

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

Level: Ground Floor





Page 1 of 1

Member Infor	nber Information			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	N	Wind
Plies:	1	Design Method:	LSD	1	38		462	25	5	0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	44		29		0	0
Deflection LL:	360	Load Sharing:	No	-					-	-
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings	and Fac	tored F	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	8.000"	23%	578 / 383	960	L	1.25D+1.5S
				2-SPF	6.875"	2%	36 / 66	102	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	119 ft-lb	3'4 1/2"	7385 ft-lb	0.016 (2%)	1.25D+1.5L	L
Unbraced	119 ft-lb	3'4 1/2"	6053 ft-lb	0.020 (2%)	1.25D+1.5L	L
Shear	61 lb	5'4 1/4"	3015 lb	0.020 (2%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/67760)	3'4 1/2"	0.185 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.001 (L/44790)	3'4 1/2"	0.185 (L/360)	0.010 (1%)	L+0.5S	L
TL Defl inch	0.002 (L/26965)	3'4 1/2"	0.277 (L/240)	0.010 (1%)	D+L+0.5S	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

-6.	I.MATIJEVIC	ENGINEE
ī	100528832	Ä

September 13, 2018

Comments

BBO1 BBO1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-6-2 to 6-7-14	(Span)0-8-0	Тор	15 PSF	40 PSF	0 PSF
2	Point	0-7-12		Тор	397 lb	0 lb	240 lb
3	Point	0-7-12		Тор	6 lb	0 lb	13 lb
4	Point	0-7-12		Тор	29 lb	0 lb	0 lb
5	Point	0-7-12		Тор	1 lb	0 lb	2 lb
6	Point	0-7-12		Тор	2 lb	0 lb	0 lb
	Self Weight			Pacc_Thru	4 PLF	isch Block	ie

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

Notes

Lumber

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

Handling & Installation

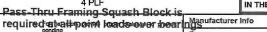
I. LVL beams must not be cut or drilled
 Refer to manufacturer's product in Bratier to Multiple Member Connection regarding installation requirements. applicable of the ply to ply nailing or boiltime.

The product of the product of the product in Bratier to Multiple Member Connection regarding details, been strength values. Additional for ply to ply nailing or boiltime.

The product of the product of

thesensing approvals approvals provide agreement and to be used paragraphic positions are provide lateral support at bearing points to avoid lateral displacement and rotation requirements

This design is valid until 7/10/2021



Wind

0 PSF 0 lb

0 lb

Forex

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400



GREENPARK Client:

Project: Address:

9/7/2018

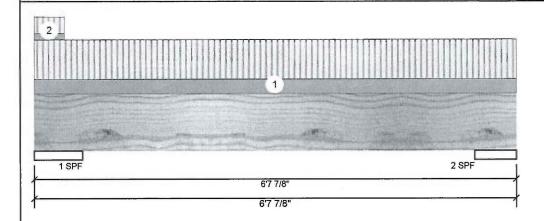
Designer: RO

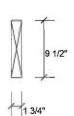
Job Name: CLOVER 1-ELEV 1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Ground Floor





Page 1 of 1

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

Unfacto	red Reactions	S UNPATTER	NED lb (Uplif	t)
 Brg	Live	Dead	Snow	Wind
1	83	44	0	0
2	77	41	0	0

	Bearing:	s and Fa	ctored I	Reactions				
	Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
	1 - SPF	8.000"	2%	55 / 125	180	L	1.25D+1.5L	
_	2-SPF	6.875"	2%	52 / 116	168	L	1.25D+1.5L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	196 ft-lb	3'4 1/2"	11362 ft-lb	0.017 (2%)	1.25D+1.5L	L
Unbraced	196 ft-lb	3'4 1/2"	6727 ft-lb	0.029 (3%)	1.25D+1.5L	L
Shear	101 lb	1'4 3/4"	4638 lb	0.022 (2%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/47210)	3'4 1/2"	0.185 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.003 (L/25344)	3'4 1/2"	0.185 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.004 (L/16491)	3'4 1/2"	0.277 (L/240)	0.010 (1%)	D+L	L



September 13, 2018

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

2 Top braced at bearings.

Design Notes

3 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 6-7-14	(Span)1-2-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-5-0	(Span)0-5-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				4 PLF				

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

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

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

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

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

Handling & Installation

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

Manufacturer Info

APA: PR-L318

Kott Lumber Company 14 Anderson Bivd, Ontario Canada K2H7V1 905-642-4400







Client:

Project: Address: GREENPARK

Date:

Designer: RO Page 1 of 1

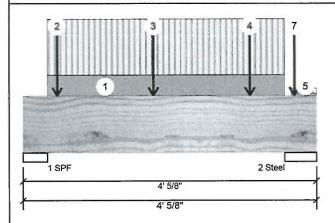
Job Name: CLOVER 1-ELEV 1

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED Level: Ground Floor

9/7/2018



Member Inform	nation			Unfactore	d Reacti	ons UNPATTERN	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	900	368	0	0
Moisture Condition	Dry	Building Code:	NBCC 2010 / OBC 2012	2	859	374	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 a	and Fact	ored Reactions		
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
				1-SPF 4	.000"	42% 460 / 1350	1810 L	1.25D+1.5L
				2 - Steel 5	.250"	26% 467 / 1288	1755 L	1.25D+1.5L

Analysis Results	Ana	vsis	Resu	lts
------------------	-----	------	------	-----

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1450 ft-lb	1'9 5/8"	11362 ft-lb	0.128 (13%)	1.25D+1.5L	L
Unbraced	1450 ft-lb	1'9 5/8"	9529 ft-lb	0.152 (15%)	1.25D+1.5L	L
Shear	1460 lb	1' 3/4"	4638 lb	0.315 (31%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/9422)	1'9 7/8"	0.114 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.011 (L/3831)	1'9 15/16"	0.114 (L/360)	0.090 (9%)	L	L
TL Defl inch	0.015 (L/2724)	1'9 15/16"	0.170 (L/240)	0.090 (9%)	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.

required at all point loads over bearings



September 13, 2018

Comments

J6 016 0 lb **J6**

4 Bottom	braced at bearings.						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Part, Uniform	0-4-0 to 3-7-6		Тор	90 PLF	240 PLF	0 PLF
2	Point	0-5-10		Far Face	125 lb	298 lb	0 lb
3	Point	1-9-10		Far Face	144 lb	341 lb	0 lb
4	Point	3-1-10		Far Face	100 lb	237 lb	0 lb
5	Tie-In	3-8-8 to 4-0-10	(Span)1-1-12	Тор	15 PSF	40 PSF	0 PSF
6	Point	3-9-0		Тор	33 lb	87 lb	0 lb
7	Point	3-9-0		Тор	26 lb	0 lb	0 lb
	Self Weight		Pas	s-Thru Fra	min g Ba ua	sh Block is	

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

Notes

Lumber

chemicals

Refer to Multiple Member Connection

1. LVL beams must not be cut or drilled Detail for ply to ply nailing or bolting 2. Refer to manufacturer's product, information menutacturer's product in the menutacturer's production in t Handling & Installation

This design is valid until 7/10/2021



Wind

0 PLF 0 lb

0 PSF

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400





Client:

Project:

GREENPARK

Address:

Date:

9/7/2018

Designer: RO

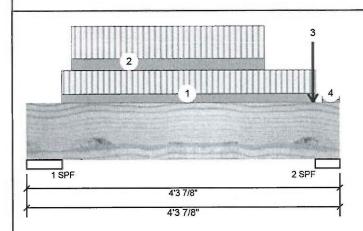
Job Name: CLOVER 1-ELEV 1

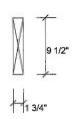
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500" - PASSED

Level: Ground Floor





Page 1 of 1

Member Infor	mation		
Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Conditio	n: 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	

				-
Brg	Live	Dead	Snow	Wind
1	821	316	0	0
2	1036	397	0	0

Unfactored Reactions UNPATTERNED Ib (Uplift)

s and Fact	ored I	Reactions				
Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.	
5.875"	26%	395 / 1232	1627	L	1.25D+1.5L	
4.000"	48%	496 / 1554	2050	L	1.25D+1.5L	
		ricea	5 C	MATIJEV	IC ENGINEE	
	Length 5.875"	Length Cap. 5.875" 26%	5.875" 26% 395 / 1232 4.000" 48% 496 / 1554	Length Cap. React D/L lb Total 5.875" 26% 395 / 1232 1627 4.000" 48% 496 / 1554 2050	Length Cap. React D/L lb Total Ld. Case 5.875" 26% 395 / 1232 1627 L 4.000" 48% 496 / 1554 2050 L	Length Cap. React D/L lb Total Ld. Case Ld. Comb. 5.875" 26% 395 / 1232 1627 L 1.25D+1.5L 4.000" 48% 496 / 1554 2050 L 1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1564 ft-lb	2'2 9/16"	11362 ft-lb	0.138 (14%)	1.25D+1.5L	L
Unbraced	1564 ft-lb	2'2 9/16"	9286 ft-lb	0.168 (17%)	1.25D+1.5L	L
Shear	2036 lb	3'3 1/8"	4638 lb	0.439 (44%)	1.25D+1.5L	L
Perm Defl in.	0.005 (L/8801)	2'2 11/16"	0.121 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.013 (L/3369)	2'2 11/16"	0.121 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.018 (L/2436)	2'2 11/16"	0.181 (L/240)	0.100 (10%)	D+L	L
, L Doi; illoit						

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	
1	Part. Uniform	0-5-14 to 3-11-14		Тор	79 PLF	210 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-7-8 to 3-3-8		Far Face	108 PLF	289 PLF	0 PLF	0 PLF	
3	Point	3-11-8		Far Face	127 lb	338 lb	0 lb	0 lb	J۷
4	Tie-In	4-1-0 to 4-3-14	(Span)2-10-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				4 PLF				

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

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

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

Notes

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

 Demaged Beams must not be used

 Design assumes top edge is leterally restrained

 Provide lateral support at bearing points to avoid

 lateral displacement and rotation

Forex APA: PR-L318

Manufacturer Info

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400

OVINCE OF ONTRE

September 13, 2018

Brg



GREENPARK Client:

Date:

9/7/2018 Designer: RO

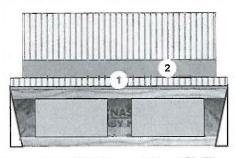
Page 1 of 1

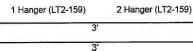
Project: Address:

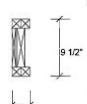
Job Name: CLOVER 1-ELEV 1

2-Ply - PASSED 9.500"

Level: Ground Floor







Wind

Member Infor	mation		
Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition	n: 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		1	
Floor Live:	40 PSF		

1	316	118	0	0
2	319	119	0	0

Dead

Snow

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

Analysis Res	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	447 ft-lb	1'6"	7340 ft-lb	0.061 (6%)	1.25D+1.5L	L
Unbraced	447 ft-lb	1'6"	4678 ft-lb	0.096 (10%)	1.25D+1.5L	L
Shear	621 lb	2'10 3/4"	3080 lb	0.202 (20%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/25134)	1'6"	0.093 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.004 (L/9398)	1'6"	0.093 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.005 (L/6840)	1'6"	0.140 (L/240)	0.040 (4%)	D+L	L

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 24% 148 / 474 622 L 1.25D+1.5L 2.000" Hanger 1.25D+1.5L 2.000" 24% 149 / 479 628 L Hanger



Dead:

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

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September 13, 2018

O DOLLOIT	i hange bracea at bearinge	/-							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-2-2 to 2-10-2		Near Face	74 PLF	198 PLF	0 PLF	0 PLF	

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

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

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

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
 Lioist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Lioist flanges must not be cut or drilled

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

 3. Demegad Lioists must not be used

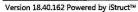
 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengthers 3.5 Inches
 For flat roofs provide proper drainage to prevent populing.

Manufacturer Info

Kott Lumber Company 14 Anderson Blvd, Ontario K2H7V1 905-642-4400







Client:

GREENPARK

Project:

Address:

Date:

Designer: RO

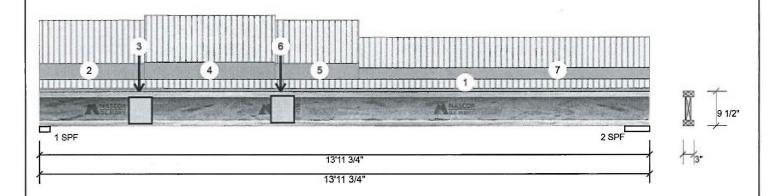
Job Name: CLOVER 1-ELEV 1

Project #:

2-Ply - PASSED 9.500"

Level: Ground Floor

9/7/2018



Member Inform	nation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	v	Wind
Plies:	2	Design Method:	LSD	1	366		137	(0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	272		102	(0	0
Deflection LL:	360	Load Sharing:	No	1						
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bearings	and Fact	tored F	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	2.875"	26%	171 / 549	720	L	1.25D+1.5L
				2-SPF	6.875"	17%	128 / 408	536	L	1.25D+1.5L

Analysis Results

Anal	ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Mom	ent	2090 ft-lb	5'7 1/16"	7340 ft-lb	0.285 (28%)	1.25D+1.5L	L
Unbr	aced	2090 ft-lb	5'7 1/16"	2107 ft-lb	0.992 (99%)	1.25D+1.5L	L
Shea	ar	706 lb	2 1/8"	3080 lb	0.229 (23%)	1.25D+1.5L	L
Perm	n Defl in.	0.048 (L/3301)	6'6 3/4"	0.443 (L/360)	0.110 (11%)	D	Uniform
LLD	efl inch	0.129 (L/1238)	6'6 3/4"	0.443 (L/360)	0.290 (29%)	L	L
TLD	efl inch	0.177 (L/900)	6'6 3/4"	0.665 (L/240)	0.270 (27%)	D+L	L

Design Notes

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

5 Bottom flange braced at bearings.



September 13, 2018

O DOLLOIN	hange bracea at beam	190.					
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 13-11-12	(Span)0-4-2	Тор	15 PSF	40 PSF	0 PSF
2	Tie-In	0-0-0 to 2-4-14	(Span)1-7-15	Тор	15 PSF	40 PSF	0 PSF
3	Point	2-3-6		Near Face	31 lb	84 lb	0 lb
4	Tie-In	2-4-14 to 5-4-14	(Span)1-9-8	Тор	15 PSF	40 PSF	0 PSF
5	Tie-In	5-4-14 to 7-3-14	(Span)1-7-15	Тор	15 PSF	40 PSF	0 PSF
6	Point	5-6-6		Near Face	19 lb	50 lb	0 lb
7	Tie-In	7-3-14 to 13-11-12	(Span)1-2-2	Тор	15 PSF	40 PSF	0 PSF
			Pass	-Thru Fran	ning Squas	h Block is	

required at all point loads over bearings

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

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component besed 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 werlfy the dimensions and load.

Lumber

Dry service conditions, unless noted otherwise
 Usist not to be treated with fire retardant or corresive

chemicals

Refer to Multiple Member Connection

Andling & Installation

Loist langes must not be cut or drilled Defail for production and a second medical for production and a second medical for production and a second medical for formating details, stiffener techniques and production of the loist product information of the loist production of the loist prod Handling & Installation

This design is valid until 7/10/2021



Nascor by Kott

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400



Wind

0 PSF 0 PSF 0 lb F9

0 PSF 0 PSF Comments





Client: Project: Address: **GREENPARK**

Date:

RO Designer:

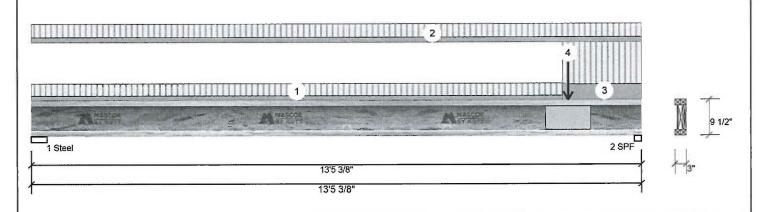
Job Name: CLOVER 1-ELEV 1

9/7/2018

Project #:

2-Ply - PASSED 9.500"

Level: Ground Floor



Member Infor	mation			Unfactore	d React	ions U	NPATTERNI	ED lb (U	Jplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow		Wind
Plies:	2	Design Method:	LSD	1	315		118	0		0
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	622		233	0		0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked	1						
General Load										
Floor Live:	40 PSF			Bearings a	ind Fact	ored F	Reactions			
Dead:	15 PSF	290		Bearing Le	ength	Cap.	React D/L lb	Total I	.d. Case	Ld. Comb.
				1 - Steel 4.	.125"	20%	147 / 472	619 l	L	1.25D+1.5L
				2-SPF 1.	.875"	48%	291 / 934	1225 I		1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2264 ft-lb	7'10 3/8"	7340 ft-lb	0.308 (31%)	1.25D+1.5L	L
Unbraced	2264 ft-lb	7'10 3/8"	2268 ft-lb	0.998 (100%)	1.25D+1.5L	L
Shear	1209 lb	13'4 1/4"	3080 lb	0.392 (39%)	1.25D+1.5L	L
Perm Defl in.	0.053 (L/2956)	7'1 5/16"	0.436 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.142 (L/1107)	7'1 5/16"	0.436 (L/360)	0.330 (33%)	L	L
TL Defl inch	0.195 (L/805)	7'1 5/16"	0.654 (L/240)	0.300 (30%)	D+L	L

Design Notes

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

5 Bottom flange braced at bearings.



September 13, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 11-8-8	(Span)0-11-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-5-6	(Span)1-0-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	11-8-8 to 13-5-6	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	11-10-0		Far Face	119 lb	319 lb	0 lb	0 lb	F7

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

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

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

Cereminals 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
 Upist not to be treated with fire retardant or corrosive

chemicals

requirements

and ling & Installation

I. Joist flanges must not be cut or drilled

Refer to latest copy of the IJoist product information details for framing details, sufficient rables, web hole-cutr. bddging details, sufficient rables, web hole-cutr. bddging details, multiply fastering details and handling/erection details

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

Manufacturer Info

Nascor by Kott

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400



GREENPARK Client:

Project: Address:

Designer: RO

Job Name: CLOVER 1-ELEV 1

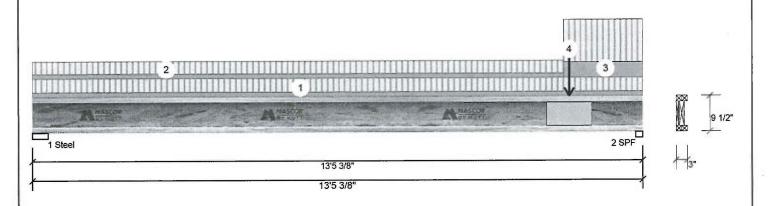
Project #:

9.500"

2-Ply - PASSED

Level: Ground Floor

9/7/2018



Member Infor	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg I	ive	Dead	Snow	Wind		
Plies:	2	Design Method:	LSD	1	314	118	0	0		
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	619	232	0	0		
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal	Vibration:	Not Checked							
General Load						- HE				
Floor Live:	40 PSF			Bearings and	Factored	Reactions				
Dead:	15 PSF	28		Bearing Length	т Сар	React D/L lb	Total Ld. Case	Ld. Comb.		
				1 - Steel 4.125"	20%	147 / 471	619 L	1.25D+1.5L		
				2-SPF 1.875"	47%	290 / 929	1218 L	1.25D+1.5L		

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2258 ft-lb	7'10 1/4"	7340 ft-lb	0.308 (31%)	1.25D+1.5L	L
Unbraced	2258 ft-lb	7'10 1/4"	2268 ft-lb	0.996 (100%)	1.25D+1.5L	L
Shear	1203 lb	13'4 1/4"	3080 lb	0.390 (39%)	1.25D+1.5L	L
Perm Defl in.	0.053 (L/2963)	7'1 5/16"	0.436 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.141 (L/1110)	7'1 5/16"	0.436 (L/360)	0.320 (32%)	L	L
TL Defl inch	0.194 (L/807)	7'1 5/16"	0.654 (L/240)	0.300 (30%)	D+L	L

Design Notes

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

5 Bottom flange braced at bearings.

ı	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
I	1	Tie-In	0-0-0 to 13-5-6	(Span)1-0-6	Тор	15 PSF	40 PSF	0 PSF
١	2	Tie-In	0-0-0 to 11-8-8	(Span) 0-11-10	Тор	15 PSF	40 PSF	0 PSF
ĺ	3	Tie-In	11-8-8 to 13-5-6	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF
ĺ	4	Point	11-10-0		Near Face	118 lb	316 lb	0 lb
ı				Pas	s-Thru Fran	ning Squa	sh Block is	

Refer to Multiple Member Connection

Detail for ply to ply nailing or bolting

required at all point loads over bearings IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

Comments

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design critaria 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 verify the dimensions and loads. Lumber

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

Handling & Installation

amouring & instealiation

Librist flanges must not be cut or drilled

Refer to latest copy of the Librist product information
details for framing details, sufflener tables, web hole
chart, bridging details, multi-ply fastening 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.

requirements of the lateral support at bearing points to avoid teateral displacement and rotation.

Web stiffeness for point toad as shown Minimum point load bearing length>= 3.5 inches

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Nascor by Kott

Wind

0 PSF 0 PSF 0 PSF 0 lb F7

> Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400

PROFESSIONAL

I.MATUEVIC 100528832

OVINCE OF ONTOR

September 13, 2018





Client: GREENPARK

Project: Address: Date:

RO Designer:

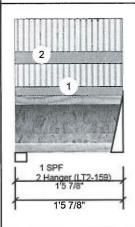
Job Name: CLOVER 1-ELEV 1

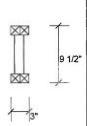
Project #:

2-Ply - PASSED 9.500"

Level: Ground Floor

9/7/2018





Page 1 of 1

Member In	formation		Unfactored Reactions UNPATTERNED lb (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	83	31	0	0	
Moisture Con	ndition: Dry	Building Code:	NBCC 2010 / OBC 2012	2	84	31	0	0	
Deflection LL	: 360	Load Sharing:	No						
Deflection TL	: 240	Deck:	Not Checked						

General Load Floor Live: 40 PSF Dead: 15 PSF

Normal

Importance:

Not Checked

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 6% 39 / 124 162 L 1.25D+1.5L 1 - SPF 1.875" 39 / 126 165 L 1.25D+1.5L 6% 2-2.000" Hanger

Analysis Re	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	46 ft-lb	8 7/8"	7340 ft-lb	0.006 (1%)	1.25D+1.5L	L
Unbraced	46 ft-lb	8 7/8"	6948 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	142 lb	1 1/8"	3080 lb	0.046 (5%)	1.25D+1.5L	L
Perm Defl in	ı. 0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/56750)	8 7/8"	0.043 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.000	8 7/8"	0.065 (L/240)	0.010 (1%)	D+L	L

Vibration:

Design Notes

PROFESSIONAL I.MATUEVIC 100528832 VINCE OF ONTARIO

September 13, 2018

- 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	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-14	(Span)2-3-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-5-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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

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

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

Notes

Celculated Structured Designs is responsible only of the structural adequacy of this component based 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 Intended application, and to verify the dimensions and loading.

Lumber

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

chemicals

Handling & Installation

- andling & Installation.

 Loist flanges must not be cut or drilled.
 Refer to latest copy of the Lioist product information details for framing details, stiffener tables, web hole-bark, bridging details, multi-phy fastening details and handling/erection details.

 Demaged Loiest 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 stiffeness for point load as shown Minimum point load bearing length= 3.5 inches
 For flat roofs provide proper drainage to prevent ponding.

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400



Client:

GREENPARK

Project: Address: Date:

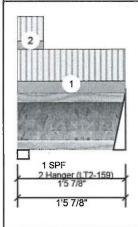
9/7/2018 Designer: RO

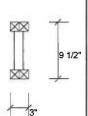
Job Name: CLOVER 1-ELEV 1

Project #:

2-Ply - PASSED 9,500"

Level: Ground Floor





Page 1 of 1

Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift) Brg Live Dead Snow Wind 1 64 24 0 0 0 0 2 50 19

Rearings and Factored Reactions

Bearing	Length	Cap. Re	eact D/L lb	Total	Ld. Case	Ld. Comb.
1-SPF	1.875"	5%	30 / 97	127	L	1.25D+1.5L
2 - Hanger	2.000"	4%	24 / 75	99	L	1.25D+1.5L

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	28 ft-lb	8 5/8"	7340 ft-lb	0.004 (0%)	1.25D+1.5L	L	
Unbraced	28 ft-lb	8 5/8"	6948 ft-lb	0.004 (0%)	1.25D+1.5L	L	
Shear	106 lb	1 1/8"	3080 lb	0.034 (3%)	1.25D+1.5L	L	
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)			
							_

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 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.



September 13, 2018

I	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
I	1	Tie-In	0-0-0 to 1-5-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
I	2	Tie-In	0-0-0 to 0-4-6	(Span)2-5-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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

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

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

Notes

Calculated Structured Designs is responsible only of the structurel 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 sent the design of the contractor to ensure the component suitability of the intended application, and to sent the design of the contractor to ensure the component suitability of the intended

Lumber

- chemicals

Handling & Installation

- Handling & Installation

 1. Joist flanges must not be cut or drilled

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

 3. Damaged Joists must not be used

 4. Design assumes top 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 stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent poorting.

Manufacturer Info

Kott Lumber Company 14 Anderson Blvd, Ontario K2H7V1 905-642-4400

CLOVER 1-ELEV 1

Design Method

ISD

Description

June 25, 2018

GREENPARK

Sales Rep

Designer RO Shipping Project Builder's Project **Kott Lumber Company** 14 Anderson Blvd Stouffville, Ontario

Canada

K2H7V1 905-642-4400 Job Path

ELEV 1.lsl Second Floor

Design Method **Building Code**

Deflection Joist

LL Span IJ

TL Span L

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Ceiling:

Deck

Deflection Girder

Floor

Loads

Live

Dead

S:VCUSTOMERS/GREENPARK

MINNISALE HOMES/MODELS/BLOCK 316/CLOVER 1A/FLOORS/CLOVER

LSD

2012

40

15

480

350

480

360

360

240

480

240

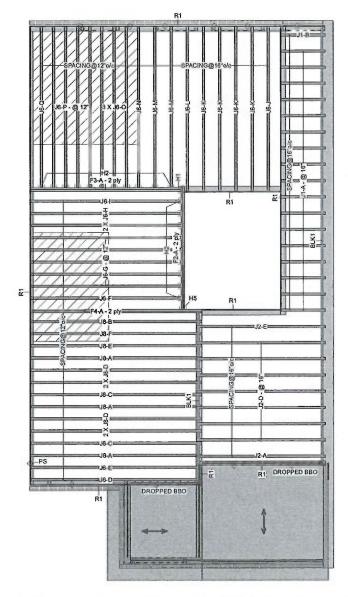
Nailed & Glued

Gypsum 1/2"

NBCC 2010 / OBC

RM

Created



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.



Second Floor I Joist (Flush) Label Description Width Depth Qty Plies Pcs Length 12 16-0-0 28 14-0-0 J8 NJH 2.5 9.5 J6 NJH 9.5 Layout Name J2 NJH 2.5 9.5 9 12-0-0 18 4-0-0 J1 NJH 2.5 9.5 LVL/LSL (Flush) Width Depth Qty Plies Pcs Length 2 16-0-0 Label Description 1.75 9.5 F4 2 Forex 2.0E-3000Fb LVL 1 F3 1.76 9.5 2 Forey F2 Forex 2.0E-3000Fb LVL 1.75 9.5 2 12-0-0 Builder Rim Board Width Depth Qty Plies Pcs Length Label Description Norbord Rimboard Plus 1.125 X 9.5 1.125 9.5

(lange						В	leam/Girde		ported ember
Label	Pcs	Descrip	tion	Skew	Slop	ре	fasteners	fas	teners
Ht	5	HGUS41	0				46 16d	1	6 16d
H2	20	LT259				4 10dx1 1/2		2 10	dx1 1/2
H5	1	HHU841	0			T	30 16d	1	0 16d
Blockin	g								
Label	Descr	iption	Wid	th De	pth	Qty	Plies	Pcs	Length
BLK1	NJH		2	.5	9.5	LinF	t	Varies	41-0-0

- Framer to verify dimensions on the architectural drawings.
- I. Fraine to very interestrict on the actinecture drawnings.
 Chouble jobs only require filler/backer ply when supporting another member using a face-mounted hanger.
 I. Install 24 blocking @ 24 o'cu under parallel non-load bearing walls.
- nmpoeruningos.

 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
- ar hiss lever joists which support loading from above exceeding two levels floor or tool.

 7. Load transfer blocks to be installed under all point loads.

 8. It shall be the frame's responsibility that floor joists and beams are fistened 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"x4" block (1/16" longer than rim depth @ 16"clc). All other components and structural elements supporting the floor system such se beams, wells, columns, and foundation waits, and footings including anchorage of components and bracing for lateral stability are the responsibility of Others.

Hatch are represents ceramic tiled 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 apporve the deviate prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 84 Jardin Dr. Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Milhwood 2, Elevation 1

- 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)

egend



Point Load Support Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ 95 NJ60U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.76 X 9.5

Version 18.40.105 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

June 25, 2018

GREENPARK

Shipping Project Builder's Project **Kott Lumber Company** 14 Anderson Blvd Stouffville, Ontario Canada K2H7V1

905-642-4400

Second Floor

Design Method

Deflection Joist

LL Spen L/

TL Span L/

11. Cant 21./

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Thickness

Fastener

Vibration

Ceiling

Deck

Deflection Girder

Floor

Loads

Live

Dead

S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS\BLOCK

LSD

40

15

480

360

480

380

360

240

480

240

SPF Plywood

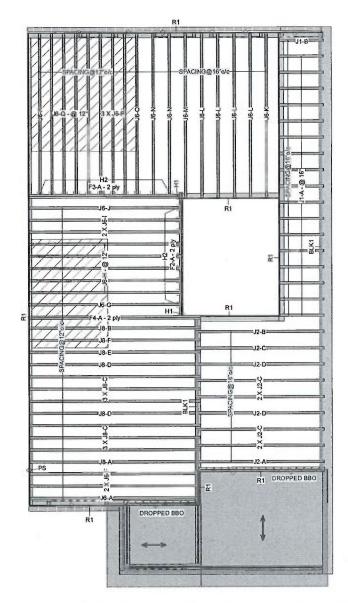
Nailed & Glued

Gypsum 1/2"

316/CLOVER 1A/FLOORS/ELEV. 2 VCLOVER 1-ELEV 2.1sl

Building Code NBCC 2010 / OBC

Job Path



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.



Second Floor I Joist (Flush) Width Depth 2.5 9.5 Label Description Qty Plies Pcs Length 12 16-0-0 J8 NJH J6 NJH 2.5 9.5 29 14-0-0 Layout Name J2 NJH 25 9.5 9 12-0-0 CLOVER 1-FLEV 2 2.5 JI NJH LVL/LSL (Flush) Design Method LSD Qty Plies Pcs Length Width Depth Label Description 1.75 9.5 Description 2 2 Forex 2.0E-3000Fb LVL Created 14-0-0 F3 1.75 2.0E-3000Fb LVL 12-0-0 F2 Forex 2.0E-3000Fb LVL 1.75 9.5 2 Builder Rim Board Sales Rep Label Description Width Depth Qty Plies Pcs Length RM R1 Norbord Rimboard Plus 1.125 X 9.5 1.125 9.5 12 Designer RO

Hange	Г						Be	am/Girder		pported ember
Label	Pcs	Descript	ion	Sk	ew	Slope) fa	steners	fas	teners
H1	2	HGUS41	JS410					46 16d	16 16d	
H2	20	LT259		4 10dx1 1/2		0dx1 1/2	2 16	Xbx1 1/2		
Blockir	Q									
Label	Desci	iption	Wid	th	Dep	th	Qty	Plies	Pcs	Length
BLK1	NJH	NJH		2.5		1.5	LinFt		Varies	41-0-0
			_							

NOTES:

- . Framer to verify dimensions on the architectural drawings.
- Frame to verry dimensions on the accinectural orwings.
 Double joist only require filterbacker by when supporting another member using a face-mounted hanger.
 Install 2x4 becking @ 2x40c under parallel non-load bearing walls.
 Install single-ply flush window header along inside face of imboard/mijotst.
- fimboard/implots.

 5. Refer to Nascor specifier guide for installation works.

 6. Squash blocks recommended to be installed at end bearing on all first level joists which support loading from above exceeding. two levels floor or roof.
- two levels soor or root.

 Load transfer blocks to be installed under all point loads,
 It shall be the frame's responsibility that floor joists and beams are tastened as per the hanger manufacturer's standards.

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

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

Hatch are represents ceramic tiled 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 apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

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- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R 4. CAN/CSA-088-09
- 5. CCMC-12787-R APA PR-L310(C)

Legend



Point Load Support Load from Above

Wall Opening Norbord Rimboard Plus 1.125 X 9.5

NJ 9.5 NJ60U 9.5 NJH 9.5

Forex 2.0E-3000Fb LVL 1,76 X 9.5

Wind 0

0

Page 1 of 2



Client: GREENPARK

Project:

Address:

Date:

9/7/2018

Designer: RO

Job Name: CLOVER 1-ELEV 1

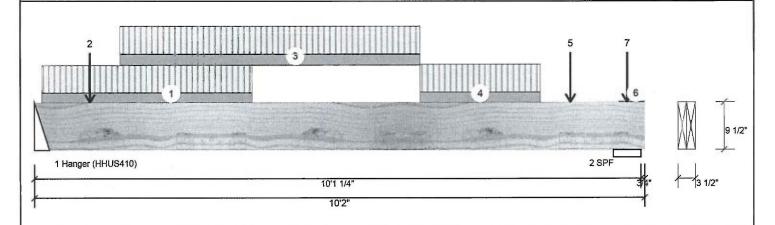
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Info	rmation			Unfactor	ed Reac	tions U	NPATTERN	ED lb (Uplift)
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snow
Plies:	2	Design Method:	LSD	1	1837		754	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	2943		1248	0
Deflection LL:	360	Load Sharing:	No					
Deflection TL:	240	Deck:	Not Checked	1				
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. Cas
				1.	3 000"	47%	942 / 2755	3697 L

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 -	3.000"	47%	942 / 2755	3697	L_	1.25D+1.5L	
Hanger							
2 - SPF	5.500"	50%	1560 / 4414	5974	LL	1.25D+1.5L	

Analysis Res	ults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7339 ft-lb	4'5 1/4"	22724 ft-lb	0.323 (32%)	1.25D+1.5L	L_
Unbraced	7339 ft-lb	4'5 1/4"	20871 ft-lb	0.352 (35%)	1.25D+1.5L	L_
Shear	3284 lb	11 3/4"	9277 lb	0.354 (35%)	1.25D+1.5L	L_
Perm Defl in.	0.056 (L/2062)	4'10 9/16"	0.323 (L/360)	0.170 (17%)	D	Uniform
LL Defl inch	0.136 (L/854)	4'10 9/16"	0.323 (L/360)	0.420 (42%)	L	L_
TL Defl inch	0.193 (L/604)	4'10 9/16"	0.484 (L/240)	0.400 (40%)	D+L	L_
LL Cant	-0.002 (2L/608)	Rt Cant	0.200 (2L/480)	0.012 (1%)	L	L_
TL Cant	-0.003 (2L/430)	Rt Cant	0.300 (2L/240)	0.012 (1%)	D+L	L_



- 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

Latera	Sicriacificos fallo basca o	i iui ocodon man.					
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Part. Uniform	0-1-8 to 3-7-8		Тор	90 PLF	240 PLF	0 PLF
2	Point	0-11-2		Far Face	104 lb	256 lb	0 lb
3	Part. Uniform	1-5-2 to 6-5-2		Far Face	99 PLF	247 PLF	0 PLF
Continued o	n page 2					uash Block i	

0 PLF READ ALL NOTES ON THIS PAGE AND ON THE

Comments

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

I.MATIJEVIC 100528832

WINCE OF ON

September 13, 2018

Lumber

consumed structured uesigns 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 corre

Refer to Multiple Member Connection Forex Handling & Installation Andling & Installation

Livit beams must not be cut or drilled
Refer to manufacturer's product
regarding installation requirements, recording testening details, beem strength values, and tode
approvals
Design assumes top edge is laterally restrened
Design assumes top edge is laterally restrened
Provide lateral duppor at bearing points to avoid
lateral displacement and rotation

This design is valid until 7/10/2021

This design is valid until 7/10/2021



Manufacturer Info

Wind

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1 905-642-4400





Page 2 of 2



Client:

Address:

GREENPARK Project:

9/7/2018

Designer: RO

Job Name: CLOVER 1-ELEV 1

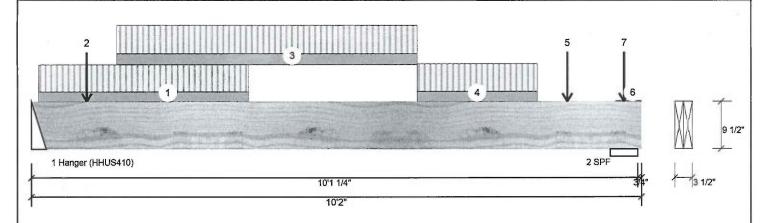
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Continued from p	age 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	6-5-2 to 8-5-2		Far Face	92 PLF	247 PLF	0 PLF	0 PLF	
5	Point	8-11-2		Far Face	90 lb	240 lb	0 lb	0 lb	J6
6	Tie-In	9-8-14 to 10-2-0	(Span)0-4-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Point	9-10-8		Far Face	735 lb	1711 lb	0 lb	0 lb	F3
	Self Weight				8 PLF				



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

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

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

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

Handling & Installation

LV/L beams must not be cut or drilled

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

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

Manufacturer Info

APA: PR-L318

Kott Lumber Company 14 Anderson Blvd, Ontario Canada K2H7V1



905-642-4400





Client: GREENPARK

Project: Address: Date:

Designer: RO

9/7/2018 Job Name: CLOVER 1-ELEV 1

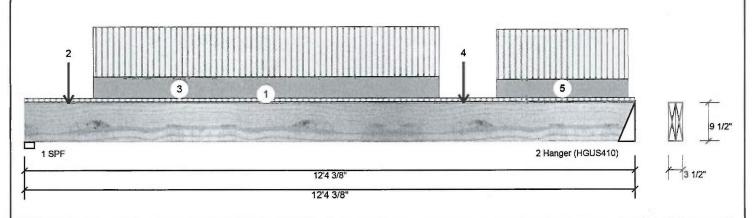
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Hanger

Member Infor	mation	_		Unfacto	red Reac	tions (NPATTERN	ED lb ((Uplift)
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	W
Plies:	2	Design Method:	LSD	1	1604		723		0
Moisture Condition	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1711		735		0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load		- 147							
Floor Live:	40 PSF	3 E		Bearing	s and Fac	tored	Reactions		
Dead:	15 PSF	× 10		Bearing	Length	Сар.	React D/L lb	Total	Ld. Case
				1-SPF	2.375"	65%	904 / 2407	3310	L
				- 2-	4.000"	34%	918 / 2566	3484	L

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case 10302 ft-lb 6'1 3/8" 22724 ft-lb 0.453 (45%) 1.25D+1.5L L Moment 10302 ft-lb 6'1 3/8" 19900 ft-lb 0.518 (52%) 1.25D+1.5L L Unbraced 3674 lb 0.396 (40%) 1.25D+1.5L L Shear 11 1/8" 9277 lb Perm Defl in. 0.122 (L/1174) 6'1 1/4" 0.399 (L/360) 0.310 (31%) D Uniform LL Defl inch 0.275 (L/522) 6'1 3/8" 0.399 (L/360) 0.690 (69%) L 6'1 3/8" 0,598 (L/240) 0.660 (66%) D+L TL Defl inch 0.397 (L/361)

PROFESSIONAL I.MATIJEVIC 100528832 OVINCE OF ONIGHT

Wind 0 0

Ld. Comb. 1.25D+1.5L 1.25D+1.5L

September 13, 2018

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 12-4-6	(Span)0-11-6	Тор	15 PSF	40 PSF	0 PSF
2	Point	0-10-12		Far Face	109 lb	253 lb	0 lb
3	Part. Uniform	1-4-12 to 8-4-12		Far Face	112 PLF	261 PLF	0 PLF
4	Point	8-10-12		Far Face	121 lb	305 lb	0 lb
5	Part. Uniform	9-6-12 to 12-2-12		Far Face	98 PLF	261 PLF	0 PLF
	Self Weight		Pas	s-Thru Fra	8 PLF aming Squa	sh Block is	

required at all point loads over bearings

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

Notes

Lumber

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

chemicals

Refer to Markiple Member Connection Handling & Installation

LVL beams must not be cut or drilled Detail for ply to ply nailing or bolting Refer to manufacturer's product information regarding installation requirements Cequippements fastening details, beam strength values, add 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

This design is valid until 7/10/2021



Wind

0 PSF 0 lb J6

0 PLF

Comments

Kott Lumber Company 14 Anderson Blvd, Ontario K2H7V1 905-642-4400





GREENPARK Client:

Project: Address: Date:

9/7/2018 Designer: RO

Job Name: CLOVER 1-ELEV 1

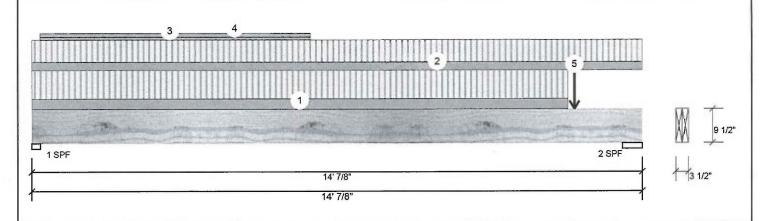
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Infor	mation			Unfactore	ed React	ions U	NPATTERNI	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	v	Wind
Plies:	2	Design Method:	LSD	1	422		240)	0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2010 / OBC 2012	2	1918		841	9	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 a	and Fact	ored I	Reactions			
Dead:	15 PSF			Bearing L	.ength	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF 2	2.375"	18%	300 / 632	933	L	1.25D+1.5L
				2-SPF 5	5.500"	33%	1051 / 2877	3928	L	1.25D+1.5L
1 ' - 1										

Analysis Results

	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	4703 ft-lb	10'6 3/16"	22724 ft-lb	0.207 (21%)	1.25D+1.5L	L
	Unbraced	4703 ft-lb	10'6 3/16"	19102 ft-lb	0.246 (25%)	1.25D+1.5L	L
l	Shear	3877 lb	12'10 5/8"	9277 lb	0.418 (42%)	1.25D+1.5L	L
	Perm Defl in.	0.075 (L/2175)	7'4 3/4"	0.451 (L/360)	0.170 (17%)	D	Uniform
	LL Defl inch	0.150 (L/1087)	7'6 11/16"	0.451 (L/360)	0.330 (33%)	L	L
	TL Defl inch	0.224 (L/725)	7'6 1/16"	0.677 (L/240)	0.330 (33%)	D+L	L

Design Notes

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



September 13, 2018

Comments

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 12-4-6	(Span)1-0-14	Тор	15 PSF	40 PSF	0 PSF
2	Tie-In	0-0-0 to 14-0-14	(Span)0-10-2	Тор	15 PSF	40 PSF	0 PSF
3	Part, Uniform	0-2-6 to 6-5-3		Тор	2 PLF	0 PLF	0 PLF
4	Part. Uniform	0-2-6 to 6-5-3		Тор	3 PLF	0 PLF	0 PLF
5	Point	12-6-2		754 lb	1837 lb	0 lb	
	Self Weight	Pass-Thru Framin required at all poi		8 PLF			

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

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

- 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.

This design is valid until 7/10/2021



Wind

0 PSF 0 PSF 0 PLF 0 PLF

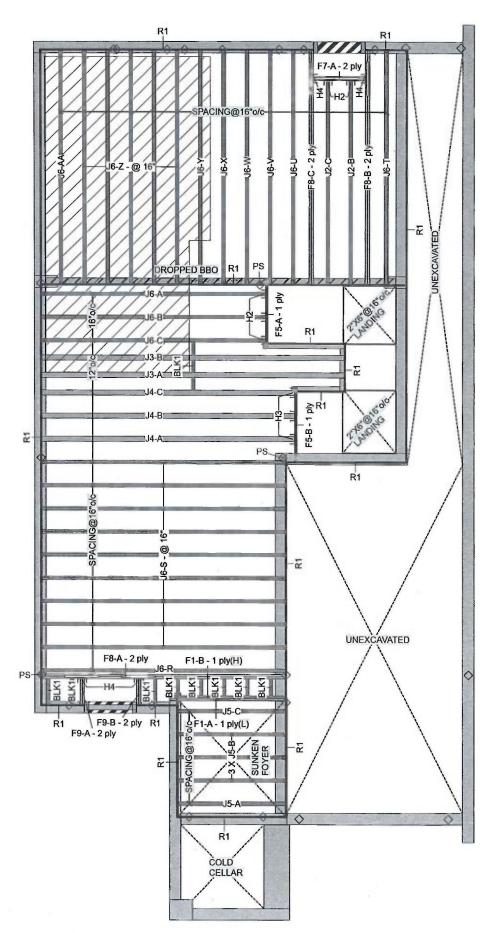
> Kott Lumber Company 14 Anderson Blvd, Ontario K2H7V1 905-642-4400



Version 18.40.162 Powered by iStruct™

Lumber





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.

WHERE FOUNDATION WALLS MUST BE LATERALLY SUPPORTED AND NO DETAIL IS PROVIDED BY THE BUILDING DESIGNER, SEE DETAIL U3 IN THE NASCOR SPECIFIER GUIDE



Engin in ac Engineered floor jois in accordance with the specifications forming it floor joi s shall be installed e supplier's layout and ut of the permit drawings.

	d Floor													
	Descr		Width	Dep	oth (Qty	Plies	Pcs	Length	NASCOR				
F1	Forex	000Fb LVL	1.75	_	9.5	acy	7 1103	2	8-0-0					
F5	Forex 2.0E-3	000Fb LVL	1.75		9.5			2	6-0-0	Layout Name CLOVER 1-ELEV 1				
Joist	(Flush)									Design Method				
Label	Descr	iption	Width	Dep	oth (Qty	Plies	Pcs	Length	LSD				
F8	NJ		1.5		9.5	3	2	6	14-0-0	Description				
F7	NJ		1.5		9.5	1	2	2	4-0-0	Description				
F9	NJ		1.5		9.5	2	2	4	2-0-0	Created				
J3	NJ60U		3.5		9.5			2	18-0-0	June 25, 2018				
J4	NJ60L		3.5		9.5			3	16-0-0	Builder				
J6	NJH		2.5		9.5			25	14-0-0	GREENPARK				
J2	2 NJH		2.5		9.5			2	12-0-0					
J5	NJH		2.5		9.5			5	8-0-0	Sales Rep				
im Bo										RM				
Label	Descr		Width	Dep	oth (Qty	Plies	Pcs	Length	Designer				
R1		d Rimboard	1.125		9.5			13	12	RO				
		.125 X 9.5		1		-	L			Shipping				
ange						P.	am/Girde	- C.	ported	Project				
						De	am/Girde		ember	Builder's Project				
Label	Pcs	Description	n S	kew	Slope	fa	asteners	fas	teners	Kott Lumber Company				
H2	5	LT259				4	10dx1 1/2	2 10	Odx1 1/2	14 Anderson Blvd				
НЗ	3	MIT49.5				4	4 10dx1 1/2 4 10dx1		Odx1 1/2	Stouffville, Ontario				
H4	4	LT2-159				4	10dx1 1/2	2 10	Odx1 1/2	Canada				
lockir	na	-								K2H7V1				
Label			Width	Dep	oth	Qty	Plies	Pcs	Length					
BLK1	NJH				2.5			inFt		Varies	12-0-0	905-642-4400		
		NOTES:								Job Path				
	NOID	.5.								S:\CUSTOMERS\GREENPARK				

- . 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. . Install single-ply flush window header along inside face of
- . 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. . It shall be the frame's responsibility that floor joists and beams are

fastened as per the hanger manufacturer's standards. Refer to Multiple Member Connection Detail to ply to ply nailing or bolting requirements.

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

Hatch are represents ceramic tiled 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 apporve the deviation

ARCHITECTURAL DRAWINGS:

ARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No. 2645 Model: Clover 1A, Elevation 1

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R 4. CAN/CSA-086-09

0

5. CCMC -12787-R APA PR-L310(C)

egend

Point Load Support

NJ60U 9.5 NJH 9.5

Load from Above Wall Opening

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

Norbord Rimboard Plus 1.125 X 9.5 NJ 9.5

Forex 2.0E-3000Fb LVL 1,75 X 9.5

OF BRAMPTON

BUILDING DIVISION

MARK DERKSEN

REVIEWED

MINNISALE HOMES/MODELS/BLOCK

LSD

2012

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

1"X4", 1 Row at

Midspan

316\CLOVER 1A\FLOORS\CLOVER

Building Code NBCC 2010 / OBC

ELEV 1.isl

Floor

Loads

Live

Dead

Ground Floor

Design Method

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

Fastener

Vibration

Strapping

Deck

Deflection Girder

Version 18.40.105 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

Job Path

S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS\BLOCK 316\CLOVER 1A\FLOORS\ELEV. 2

Building Code NBCC 2010 / OBC

LSD

2012

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

1"X4", 1 Row at

Midspan

\CLOVER 1-ELEV 2.isl

Ground Floor

Design Method

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

Fastener

Vibration

Strapping

Deck

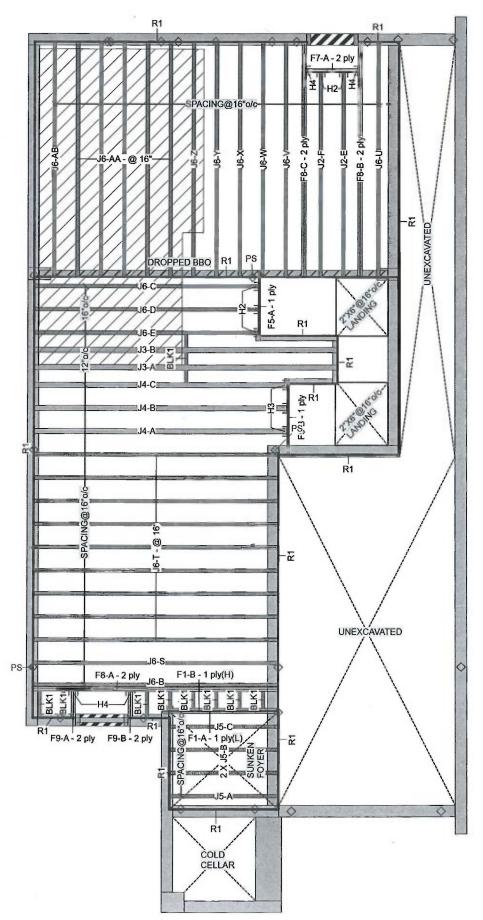
Deflection Girder

Floor

Loads

Live

Dead



WHERE FOUNDATION WALLS MUST BE LATERALLY SUPPORTED AND NO DETAIL IS PROVIDED BY THE BUILDING DESIGNER, SEE DETAIL U3 IN THE NASCOR SPECIFIER GUIDE

This certification is to confirm that:

The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.

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.



LVL/LSL (Flush) Width Depth Qty Plies Pcs Length Label Description F1 Forex 1.75 2 2.0E-3000Fb LVL Layout Name F5 1.75 9.5 2 6-0-0 Forex 2.0E-3000Fb LVL **CLOVER 1-ELEV 2** Joist (Flush) Design Method Qty Plies Pcs Length Label Description Width Depth LSD F8 NJ 1.5 9.5 2 6 14-0-0 Description F7 NJ 9.5 4-0-0 4 2-0-0 Created F9 N.I 9.5 15 2 2 J3 NJ60U 3.5 9.5 18-0-0 June 25, 2018 3 16-0-0 J4 NJ60U 3.5 9,5 Builder 26 14-0-0 J6 NJH 2.5 9.5 **GREENPARK** J2 NJH 2.5 9.5 2 12-0-0 Sales Rep 4 8-0-0 J5 NJH 2.5 9.5 Rim Board Pcs Length Width Depth Qty Plies Designer Label Description Norbord Rimboard 1.125 9.5 13 RO Plus 1.125 X 9.5 Shipping Hanger Project Beam/Girder Supported Member **Builder's Project** Label Pcs Description Skew Slope fasteners fasteners **Kott Lumber Company** H2 5 LT259 4 10dx1 1/2 2 10dx1 1/2 14 Anderson Blvd 3 MIT49.5 НЗ 4 10dx1 1/2 4 10dx1 1/2 Stouffville, Ontario H4 4 LT2-159 4 10dx1 1/2 2 10dx1 1/2 Canada Blocking K2H7V1 Label Description Width Depth Qty Plies Pcs Length 905-642-4400 2.5 9.5 LinFt BLK1 NJH Varies 12-0-0

NOTES:

polting requirements.

Ground Floor

Framer to verify dimensions on the architectural drawings.
 Double joist only require filler/backer ply when supporting

another member using a face-mounted hanger.

3. Install 2x4 blocking @ 24*o/c under parallel non-load bearing walls.

Install single-ply flush window header along inside face of 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.

7. Load transfer blocks to be installed under all point loads.

8. It shall be the frame'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"x4" block (1/16" longer than rim depth @ 16"o/c). All other components and structural elements supporting the floor system such as beams, walls, columns, and foundation walls, and footings including anchorage of components and bracing for lateral stability are the responsibility of Others.

Hatch are 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 apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Clover 1A, Elevation 2

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

Legend

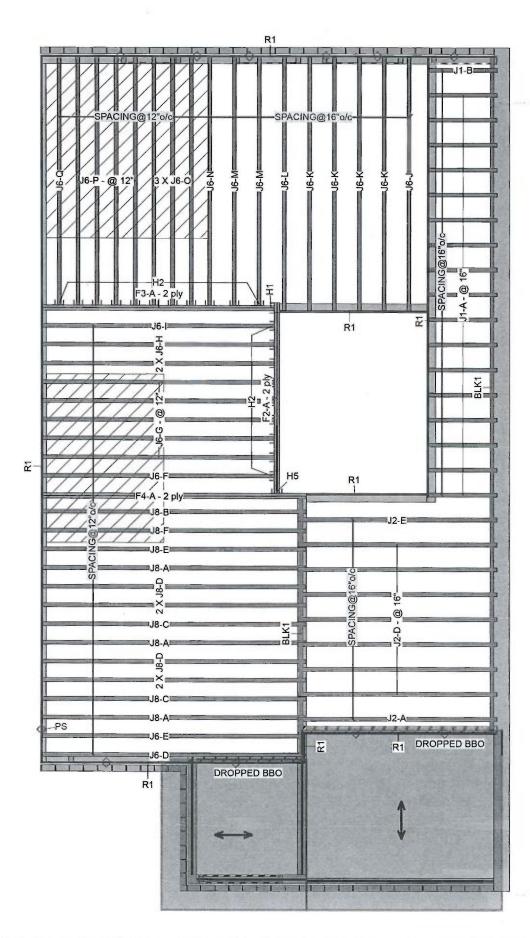
Point Load Support Load from Above

Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ 9.5

NJ60U 9.5 NJH 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5 **WOTT**

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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



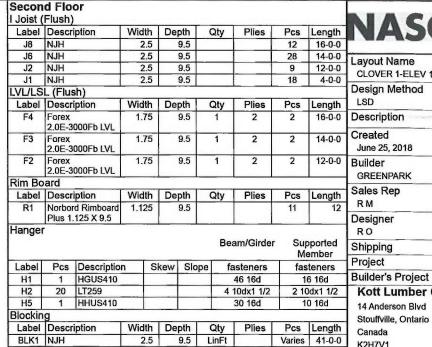
his certification is to confirm that: . The loads used in the calculation of the attached approved components conform to the floor assembly shown on this layout.

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.





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.
- Install single-ply flush window header along inside face of
- 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.
- It shall be the frame's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch are represents ceramic tiled 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 apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No. 2645 Model: Millwood 2, Elevation 1

1. OBC 2012 O.Reg 332/12 as amended

NJH 9.5

- 2. Nascor CCMC 13535-R
- 3. LVL CCMC -14056-R
- 4. CAN/CSA-086-09
- 5. CCMC -12787-R APA PR-L310(C)

Legend

0

Point Load Support Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 9.5 NJ 9.5 NJ60U 9.5

Forex 2.0E-3000Fb LVL 1.75 X 9.5

Kott Lumber Company

S:\CUSTOMERS\GREENPARK

Building Code NBCC 2010 / OBC

MINNISALE HOMES/MODELS/BLOCK 316/CLOVER 1A/FLOORS/CLOVER |-

LSD

2012

40

15

480

360

480

360

360

240

480

240

SPF Plywood

Nailed & Glued

Gypsum 1/2"

Page 15 of 20 IM0918-060

_ayout Name

LSD

Created

Builder

RM

RO

June 25, 2018

GREENPARK

Sales Rep

Designer

Shipping

Canada

K2H7V1

ELEV 1.isl

Floor

Loads

Live

Dead

Second Floor

Design Method

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 Fastener

Vibration

Ceiling:

Deck

Deflection Girder

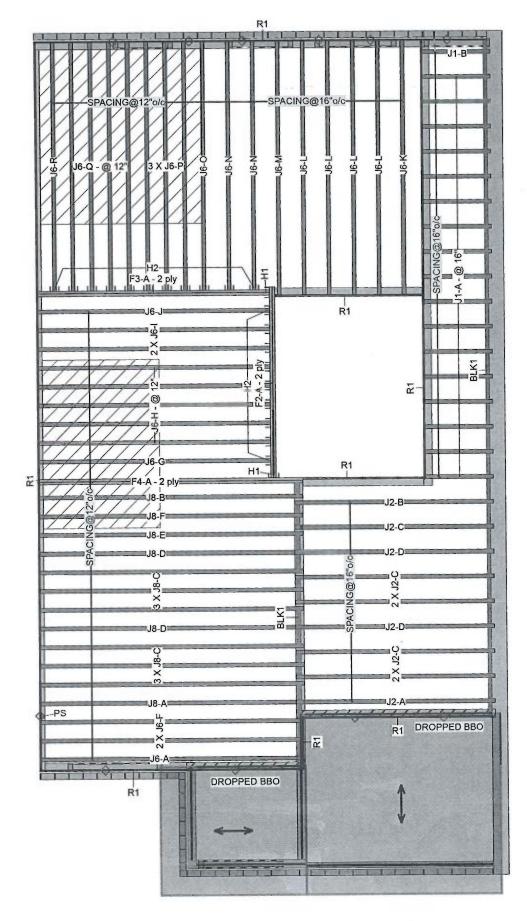
905-642-4400 Job Path

14 Anderson Blvd

Stouffville, Ontario

CLOVER 1-ELEV 1

Design Method



This certification is to confirm that:

attached approved components conform to the floor assembly shown on this layout.

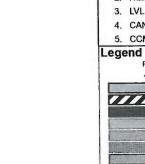
2. The floor joists comply with the Nascor span table for the loads and spacing shown on this layout.

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.



1. The loads used in the calculation of the

1. OBC 2012 O.Reg 332/12 as amended

2. Nascor CCMC - 13535-R

3. LVL CCMC -14056-R

4. CAN/CSA-086-09

111111

Point Load Support Load from Above Wall Opening

NJ60U 9.5 N.H 9 5

Designer RO

Shipping Project

Canada

K2H7V1 905-642-4400

Job Path

Second Floor

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

Fastener

Vibration

Ceiling:

Deck

Deflection Girder

Design Method

Floor

Loads

Live

Dead

Builder's Project

14 Anderson Blvd Stouffville, Ontario

Kott Lumber Company

S:\CUSTOMERS\GREENPARK \MINNISALE HOMES\MODELS\BLOCK 316\CLOVER 1A\FLOORS\ELEV. 2 \CLOVER 1-ELEV 2.isl

Building Code NBCC 2010 / OBC

LSD

40

15

480

360

480

360

360

240

480

240

5/8"

SPF Plywood

Nailed & Glued

Gypsum 1/2"

Pcs Length 12 16-0-0

J6	NJH	2.5	9.5			29	14-0-0	Layout Name
J2	NJH	2.5	9.5			9	12-0-0	CLOVER 1-ELEV 2
J1	NJH	2.5	9.5			18	4-0-0	
LVL/LS	L (Flush)							Design Method
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	LSD
F4	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	16-0-0	Description
F3	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	14-0-0	Created June 25, 2018
F2	Forex 2.0E-3000Fb LVL	1.75	9.5	1	2	2	12-0-0	Builder GREENPARK
Rim Bo	pard							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Sales Rep
R1	Norbord Rimboard	1 125	9.5			11	12	RM

2.5 9.5

Width Depth Qty Plies

Plus 1.125 X 9.5 Hanger

Second Floor

Label Description

Joist (Flush)

J8 NJH

							Bea	ım/Girder		ported ember			
Label	Pcs	Description		cs Description Skew Slope				е	fa	steners	fasteners		
H1	2 HGUS410					-	46 16d	10	16 16d				
H2	20	LT259					4 1	0dx1 1/2	2 10dx1 1/2				
Blockin	g												
Label	Desci	ription	Width	De	pth	Qty		Plies	Pcs	Length			
BLK1	NJH		2.5		9.5	5 LinFt			Varies	41-0-0			

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.

4. Install single-ply flush window header along inside face of rimboard/rimioist.

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 frame's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch are represents ceramic tiled 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 apporve the deviation prior to construction.

ARCHITECTURAL DRAWINGS:

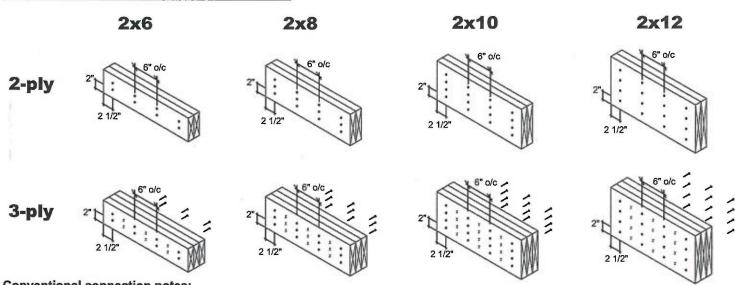
JARDIN DESIGN GROUP INC. 64 Jardin Dr, Suite 3A Date: Rev. 1, 4/26/2018 Project No: 2645 Model: Millwood 2, Elevation 2

5. CCMC -12787-R APA PR-L310(C)

Norbord Rimboard Plus 1.125 X 9.5 NJ 9.5 Forex 2.0E-3000Fb LVL 1.75 X 9.5

MULTIPLE MEMBER CONNECTIONS

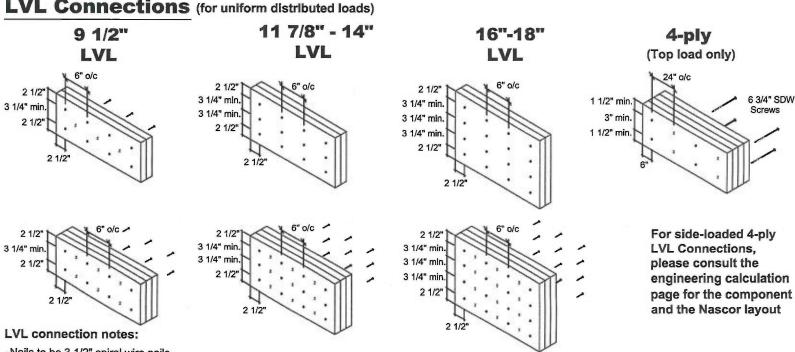
Conventional Connections (for uniform distributed loads)



Conventional connection notes:

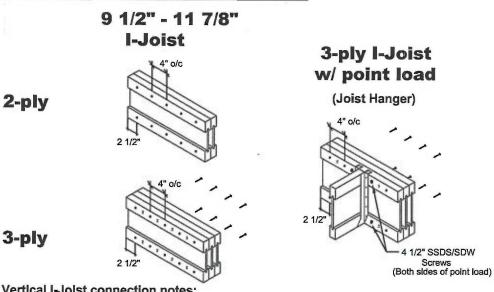
- -Nails to be 3" 10d spiral wire nails.
- -Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



- -Nails to be 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 otherwise.
- "X" represents nail driven from the opposite side.

