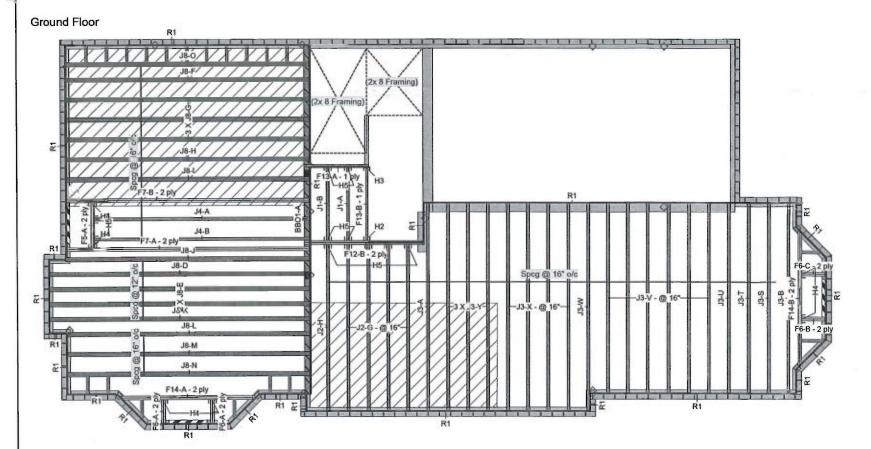
Supported



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

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



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.





Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 NJ 11.875 NJ40U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

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

2. Nascor CCMC - 13535-R

3. LVL CCMC -14056-R

4. CAN/CSA-O86-09

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



Ground LVL/LS	l Floor L (Flush)							NIACC
	Description	Width	Depth	Qty	Plies	Pcs	Length	NASC
F12	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	8-0-0	
F13	Forex 2.0E-3000Fb LVL	1.75	11.875			2	6-0-0	Layout Name GRANDBROOKE 11-2
I Joist (Flush)							Design Method
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	LSD
_ F7_	NJ .	1.5	11.875	2	2	4	18-0-0	Description
F14	NJ	1.5	11.875	2	2	4	10-0-0	MINNISALE HOMES
F5	NJ	1.5	11.875	1	2	2	4-0-0	BRAMPTON, ONT.
F6	NJ	1.5	11.875	4	2	8	2-0-0	
J8	NJ40U	3.5	11.875		12 4	15	18-0-0	Created
J4	NJH	2.5	11.875			2	16-0-0	June 29, 2018
J3	NJH	2.5	11.875			19	14-0-0	Builder
J2	NJH	2.5	11.875			5	12-0-0	GREENPARK
J1	NJH	2.5	11.875			2	6-0-0	Sales Rep
Rim Bo	ard							RM
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	(5,000)
R1	Norbord Rimboard Plus 1.125 X	1.125	11.875			14	12	Designer RCO
	11.875							Shipping
Blockin	g _				(Tea			Project
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	
BLK1	NJH	2.5	11.875	LinFt	-	Varies	22-0-0	Builder's Project
Hangei								Kott Lumber Con

H2	1	HUS1.81/10	30 16d	10 16d
Н3	1	LS90		
H4	6	LT2-151188	4 10dx1 1/2	2 10dx1 1/2
H5	11	LT251188	4 10dx1 1/2	2 10dx1 1/2

fasteners

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.

Label Pcs Description Skew Slope

Install 2x4 blocking @ 24" o/c under parallel non-load bearing walls. I. 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 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 framing shown on this layout may deviate from the architectural and structural drawings. Project Engineer to review and approve the deviation prior

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC 64 Jardin Dr., Suite 3A, Vaughan, ON Date: June 11.2018 Project No: 18-24 Model: Grandbrooke 11

Page 3 of 20 IM0918-055

uilder's Project Kott Lumber Company

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

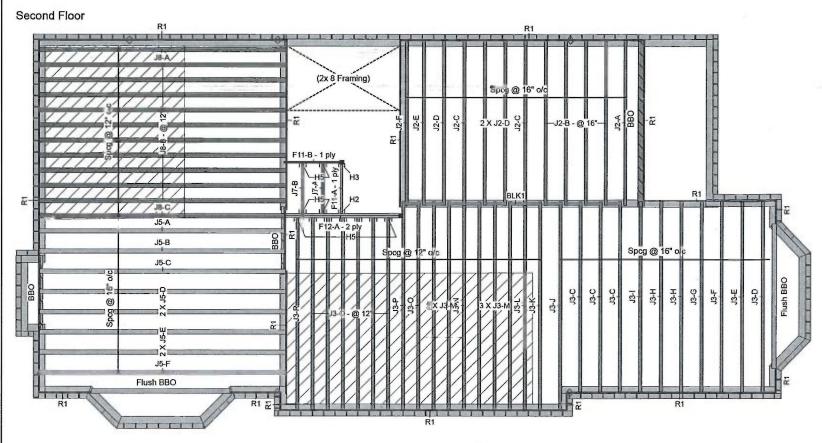
Job Path D:\Users\rochavillo\WORK FROM HOME\GREENPARK\MINNISALE HOMES\GRANDBROOKE 11 \GRANDBROOKE 11-2\FLOOR \GRANDBROOKE 11-2.isl

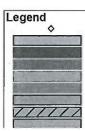
Ground Floor Design Method LSD Building Code NBCC 2010 / OBC Floor

Loads 40 Live Dead 15 **Deflection Joist** 480 LL Span L/ 360 TL Span L/ 480 LL Cant 2L/ TL Cant 2L/ 360 Deflection Girder 360 LL Span L/ TL Span L/ 240 480 LL Cant 2L/ TL Cant 2L/ 360 Decking Deck SPF Plywood Thickness Nailed & Glued Fastener

LOT 9







Load from Above Norbord Rimboard Plus 1,125 X 11,875 NJ40U 11.875 NJ60U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875 1.75 X 11.875 (Dropped) 3.5 X 11.875

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



September 13, 2018

							1 49	
Second	d Floor L (Flush)							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	NASC
F12	Forex 2.0E-3000Fb LVL	1.75	11.875	1	2	2	8-0-0	
F11	Forex 2.0E-3000Fb LVL	1.75	11.875			2	4-0-0	Layout Name GRANDBROOKE 11-2
I Joist (Flush)							Design Method
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	LSD
J8	NJ40U	3.5	11.875			12	18-0-0	Description
J5	NJ60U	3.5	11.875			8	18-0-0	MINNISALE HOMES
J3	NJH	2.5	11.875			28	14-0-0	BRAMPTON, ONT.
J2	NJH	2.5	11.875			12	12-0-0	
J7	NJH	2.5	11.875			2	4-0-0	Created
Rim Bo	ard							June 29, 2018
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Builder
R1	Norbord Rimboard Plus 1.125 X	1.125	11.875			13	12	GREENPARK
	11.875							Sales Rep
Blockin	g							RM
Label	Description	Width	Depth	Qty	Plies	Pcs	Length	Designer
BLK1	NJH	2.5	11.875	LinFt		Varies	9-0-0	RCO
Hangei								Shipping
				Bea	m/Girde	r Sui	ported	Project

Skew Slope

NOTES:

НЗ

Label Pcs Description

H2 1 HUS1.81/10

H5 11 LT251188

1 LS90

- . 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" of cunder 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.
- 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 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 to construction.

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: June 11,2018 Project No: 18-24 Model: Grandbrooke 11

		12	12-0-0	Broam Torr, Stri.	
		2	4-0-0	Created	
-			4-0-0	June 29, 2018	
24	Dil	D	1	Builder	
Qty	Plies	Pcs	Length		
T I		13	12	GREENPARK	
				Sales Rep	
				RM	
Qty	Plies	Pcs	Length	Designer	
a≀y inFt	Files	Varies	9-0-0	RCO	
IIII		varies	9-0-0		
D	(0):!-			Shipping	
Bea	am/Girde		ported	Project	
				Builder's Project	
	steners		teners	Kott Lumber Company	
	30 16d	10) 16d	14 Anderson Blvd	
	10 1 4 4 10	0.40	1.4.40		
4 '	10dx1 1/2	2 10	dx1 1/2	Stouffville, Ontario	
				Canada	
			- 1	L4A 7X4	
lrawin portir			- 1	905-642-4400	
porta	.8		- 1	Job Path	
oad b	earing wa	lls.		D:\Users\rochavillo\WORK FROM	л I
face	of		- 1	HOME\GREENPARK\MINNISAL	E
			- 1	HOMES\GRANDBROOKE 11	
ks.	ring on		- 1	\GRANDBROOKE 11-2\FLOOR	
	ceeding			\GRANDBROOKE 11-2.isl	
	oobug			Second Floor	
loads				Design Method La	SD
	beams a	re		Building Code NBCC 2010 / OI	вс
rds.				20	112
nly n	ailing or			Floor	- 4
Pij II	uming of			Loads	
				Live	40
	16" longer			Dead	15
	elements			Deflection Joist	
	s, and conents a	nd			80
hers.	Jone III a	iid			60
					80
ltiona	l dead loa	d			60
					ou
he ar	chitectural			Deflection Girder	
	prove the		prior		60
•					40
_			- 0	LL Cant 2L/ 4	80
				TL Cant 2L/ 3	60
				Decking	
				Deck SPF Plywo	od
				Thickness 5	/8"
				Fastener Nailed & Glu	ed
				Vibration	
				Colling: Gypsum 1	12"

This certification is to confirm that:

shown on this layout.

connection detail.

responsibility of others.

1. The loads used in the calculation of the attached

the loads and spacing shown on this layout.

approved components conform to the floor assembly

2. The floor joists comply with the Nascor span table for

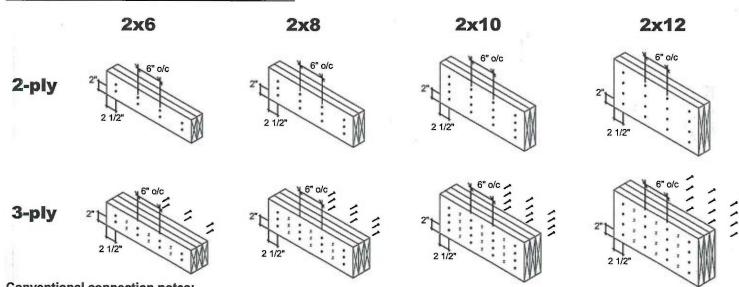
The floor system must be assembled in accordance to the Nascor Specifier Guide. Multi-ply members must be attached together as per the included multiple member

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

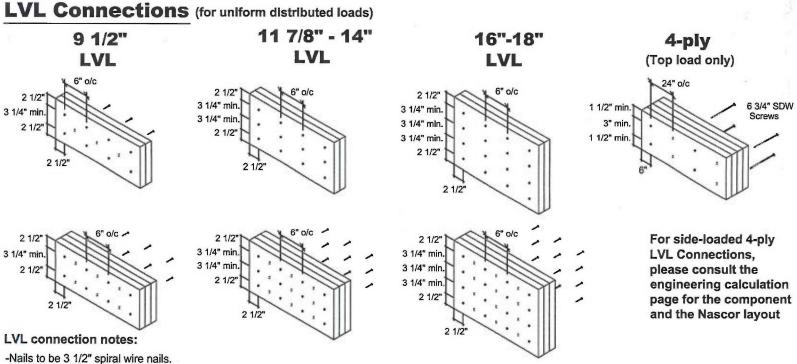
MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)



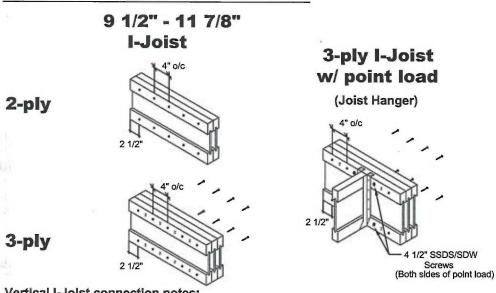
Conventional connection notes:

- -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.



- -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.

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.

KOTT

MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)

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

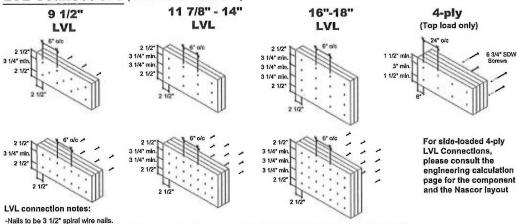
Conventional connection notes:

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



- -Natis to be 3 U.2 spiral with trains.

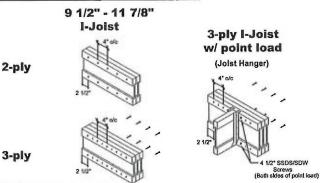
 Alalis to be located a minimum of 2 1/2* from the top and bottom of the member. Start all nails a minimum of 2 1/2* in from ends.

 -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.
- -*X" represents nall driven from the opposite skle.

Layout Name

GRANDBROOKE 11-2

Kott Lumber Company

HOME\GREENPARK\MINNISALE HOMES\GRANDBROOKE 11

LSD

40

15

480

360

480

360

360

240

480

380

SPF Plywood

Nailed & Glued

905-642-4400

LL Span L/

TL Span L

TL Cant 2L/

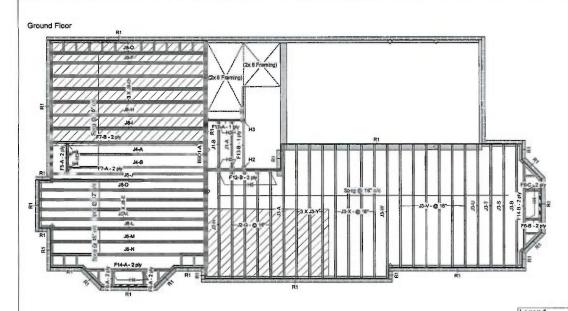
Decking

Thickness

Fastener

Vibration

Deck





Load from Above Wall Opening Norbord Rimboard Plus 1.125 X 11.875 NJ 11.875 NJ40U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875

- 1. OBC 2012 O.Reg 332/12 as amended
- 2. Nascor CCMC 13535-R
- 4 CAN/CSA-088-09

ROFESSIONA I.MATUEVIC 100528832 INCE OF ON

September 13, 2018

Legend

3. LVL CCMC -14056-R

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

I Joist (Flush) Design Method
 Width
 Depth
 Qty
 Plies
 Pcs
 Length

 1.5
 11.875
 2
 2
 4
 18-0-0
 Label Description LSD F7 NJ Description 2 4 10-0-0 F14 NJ 1.5 11.875 MINNISALE HOMES BRAMPTON, ONT. F5 NJ F6 NJ 1.5 11.875 2 2 4-0-0 1.5 11.875 8 2-0-0 Created J8 NJ40U 3.5 11.875 15 18-0-0 2 18-0-0 June 29, 2018 J4 NJH 2.5 11,875 19 14-0-0 Builder J3 NJH 2.5 11.875 5 12-0-0 GREENPARK J2 NJH 2.5 11.875 2.5 11.875 J1 NJH 2 6-0-0 Sales Rep Rim Board RM
 Width
 Depth
 Qty
 Plies
 Pcs
 Length

 1,125
 11.875
 14
 12
 Label Description Designer R1 Norbord Rimbo Plus 1.125 X 11.875 Shipping Blocking Project Width Depth Qty Plies Pcs Length Label Description Builder's Project 2.5 11.875 LinFt BLK1 NJH Varies 22-0-0 Hanger Beam/Girder 14 Anderson Blvd Member Stouffville, Ontario Label Pcs Description Skew Slope fastenera fasteners Canada H2 1 HUS1.81/10 H3 1 LS90 30 16d 10 16d L4A 7X4 H4 6 LT2-151188 4 10dx1 1/2 2 10dx1 1/2 Job Path 4 10dx1 1/2 2 10dx1 1/2 H5 11 LT251188 D:\Users\rochavillo\WORK FROM NOTES: Framer to verify dimensions on the architectural drawings.
 Double joist only require filler/backer py when supporting another member using a face-mounted hanger.
 Install 2x4 blocking @ 2x4* o/c under parallel non-load bearing walls.
 Install 3x4 blocking @ 3x4* o/c under parallel non-load bearing walls.
 Install single-ply flush window header along inside face of VGRANDBROOKE 11-2/FLOOR VGRANDBROOKE 11-2/Isi **Ground Floor** Design Method Building Code NBCC 2010 / OBC rimboard/implost.

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 Floor Loads two levels floor or roof. two levels floor of root.
Load transfer blocks to be installed under all point loads.
It shall be the framer's responsibility that floor joists and beams are festened as per the hanger manufacturer's atendards. Live Dead Deflection Joist LL Span L/ Refer to Multiple Member Connection Detail to ply to ply nailing or TI Span I/ LL Cant 2L/ 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 TL Cant 2L/ Deflection Girder

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 framing shown on this layout may deviate from the architectural

ARCHITECTURAL DRAWINGS:

and structural drawings. Project Engineer to review and approve the deviation prior

Width | Depth | Qty | Piles | Pcs | Length

2 2

> 2 6-0-0

11.875

1.75 11.875

Ground Floor LVL/LSL (Flush)

F13

Label Description

2.0E-3000Fb LVL

2.0E-3000Fb LVL

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: June 11,2016 Project No: 18-24 Model: Grandbrooke 11

This certification is to confirm that:

shown on this layout.

connection detail.

responsibility of others.

1. The loads used in the calculation of the attached

approved components conform to the floor assembly

the loads and spacing shown on this layout.

2. The floor joists comply with the Nascor span table for

The floor system must be assembled in accordance to the Nascor Specifier Guide. Multi-ply members must be

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

attached together as per the included multiple member



Client: GREENPARK

Project:

Address:

Date:

9/7/2018

Designer: RCO

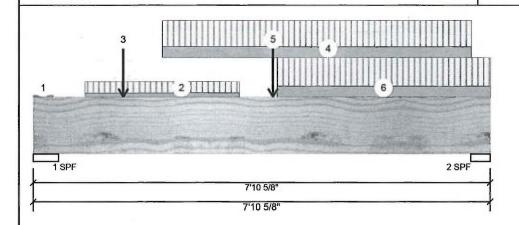
Job Name: GRANDBROOKE 11-2

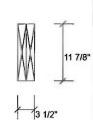
Project #

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

2-Ply - PASSED Level: Ground Floor





Page 1 of 1

IBA	am	hor	Into	MPM T	tion
ни	CIII	NCI	41111	rrilla	UUII

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

Application: Floor (Residential) Design Method: LSD NBCC 2010 / OBC 2012 **Building Code:**

Load Sharing: No

Deck: Not Checked Vibration: Not Checked

Unfactored Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind
1	1152	507	0	0
2	1639	694	0	0

Bearings and Factored Reactions

Bearing Leng	th Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	_
1 - SPF 5.250	" 21%	634 / 1727	2361	L	1.25D+1.5L	
2-SPF 4.000	" 39%	868 / 2458	3326	L	1.25D+1.5L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5565 ft-lb	4'1 5/8"	34261 ft-lb	0.162 (16%)	1.25D+1.5L	L
Unbraced	5565 ft-lb	4'1 5/8"	31822 ft-lb	0.175 (17%)	1.25D+1.5L	L
Shear	2671 lb	1'4 3/8"	11596 lb	0.230 (23%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/6074)	4'1 5/8"	0.241 (L/360)	0.060 (6%)	D	Uniform
LL Defl inch	0.033 (L/2609)	4'1 5/8"	0.241 (L/360)	0.140 (14%)	L	L
TL Defl inch	0.048 (L/1825)	4'1 5/8"	0.362 (L/240)	0.130 (13%)	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

o Luicius S	icilacilicas fallo basca	on full acoupin muti.						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind Comments
1	Tie-In	0-0-0 to 0-4-2	(Span)0-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Part. Uniform	0-10-12 to 3-6-12		Far Face	35 PLF	94 PLF	0 PLF	Pass-Thru Framing Squash Block is
3	Point	1-6-12		Near Face	117 lb	276 lb	0 lb	required/at all point loads over bearings
4	Part. Uniform	2-2-12 to 7-6-12		Near Face	93 PLF	220 PLF	0 PLF	0 PLF Refer to Multiple Member Connection
5	Point	4-1-10		Far Face	88 lb	205 lb	0 lb	Delan for by to ply nailing or bolting
6	Part. Uniform	4-2-8 to 7-10-10		Тор	90 PLF	240 PLF	0 PLF	requirements
	Self Weight				10 PLF			

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

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.

Kott Lumber Company 14 Anderson Blvd, Ontario Canada





Client: **GREENPARK**

Project:

Address:

Date:

Designer: **RCO**

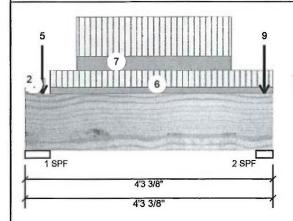
9/7/2018 Job Name: GRANDBROOKE 11-2

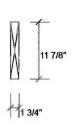
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 1 of 2

Unfactored Reactions UNPATTERNED Ib (Uplift) Member Information Wind Live Туре: Girder Application: Floor (Residential) Brg Dead Snow Plies: Design Method: LSD 517 239 0 0 Moisture Condition: Dry **Building Code:** NBCC 2010 / OBC 2012 2 818 342 0 0 Deflection LL: 360 Load Sharing: No Not Checked Deflection TL: 240 Deck: Importance: Normal Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 5.250" 19% 299 / 776 1075 L 1.25D+1.5L 44% 427 / 1227 1655 L 1.25D+1.5L 2-SPF 3.500"

-			-	
Д	na	IVSIS	Resu	Its

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	432 ft-lb	2'2 5/8"	17130 ft-lb	0.025 (3%)	1.25D+1.5L	L
Unbraced	432 ft-lb	2'2 5/8"	12098 ft-lb	0.036 (4%)	1.25D+1.5L	L
Shear	322 lb	1'4 3/8"	5798 lb	0.056 (6%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/47810)	2'2 5/8"	0.123 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/19645)	2'2 5/8"	0.123 (L/360)	0.020 (2%)	L	L
TL Defl inch	0.003 (L/13924)	2'2 5/8"	0.184 (L/240)	0.020 (2%)	D+L	L



- 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

13	PROFESSIONAL	100
Q.	I.MATIJEVIC	É
-1	100528832	20
1	(1)	
13		8
-	INCE OF ONT	

September 13, 2018

4 DOLLOITI	ordeca at bearings.						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 0-4-2	(Span)0-5-7	Тор	15 PSF	40 PSF	0 PSF
2	Tie-In	0-0-0 to 0-4-2	(Span)0-10-9	Тор	15 PSF	40 PSF	0 PSF
3	Point	0-3-10		Тор	81 lb	205 lb	0 lb
4	Point	0-3-10		Тор	44 lb	108 lb	0 lb
5	Point	0-3-10		Тор	27 lb	0 lb	0 lb
6	Part, Uniform	0-5-4 to 4-3-6		Тор	15 PLF	40 PLF	0 PLF

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

Comments

Refer to Multiple Member Connection Detail for ally to play mailing or bolting requirements

Continued on page 2...

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

Lumber

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

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

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.

Wind

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





GREENPARK Client:

Project:

Address:

Date:

RCO Designer:

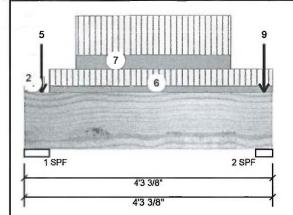
9/7/2018 Job Name: GRANDBROOKE 11-2

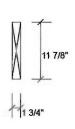
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Page 2 of 2

Continued II	rom page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	0-10-12 to 3-6-12		Near Face	35 PLF	94 PLF	0 PLF	0 PLF	
8	Point	4-1-9		Тор	219 lb	536 lb	0 lb	0 lb	C3
9	Point	4-1-10		Near Face	35 lb	73 lb	0 lb	0 lb	F13
	Self Weight				5 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.

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

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

chemicals

Handling & Installation

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Forex

APA: PR-L318

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



Brg

1

2

Hanger



GREENPARK Client:

Address:

Project:

Date:

RCO Designer:

Job Name: GRANDBROOKE 11-2

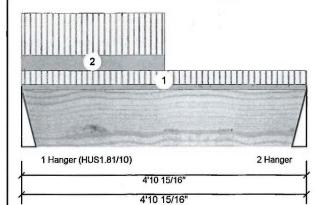
9/7/2018

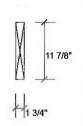
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Ground Floor





Wind

0

0

Page 1 of 1

Member Info	rmation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	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 DSE		

Bearings and	Factored	Reactions
--------------	-----------------	-----------

Live

205

104

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

88

51

Snow

0

0

	_					
Bearin	g Length	Cap. R	leact D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hange	3.000" r	11%	111 / 307	418	L	1.25D+1.5L
2-	3.000"	6%	64 / 157	220	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	353 ft-lb	2' 9/16"	17130 ft-lb	0.021 (2%)	1.25D+1.5L	L
Unbraced	353 ft-lb	2' 9/16"	9906 ft-lb	0.036 (4%)	1.25D+1.5L	L
Shear	177 lb	1'2 1/8"	5798 lb	0.031 (3%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/55926)	2'2 13/16"	0.151 (᠘360)	0.010 (1%)	D	Uniform
LL Defl inch	0.002 (L/25065)	2'2 3/8"	0.151 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.003 (L/17309)	2'2 1/2"	0.227 (L/240)	0.010 (1%)	D+L	L

Design Notes

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

PROFESSIONAL **I.MATIJEVIC** 100528832 POVINCE OF ONTRE

September 13, 2018

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-10-15	(Span)1-2-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 2-5-10	(Span)3-9-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 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.

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

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

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

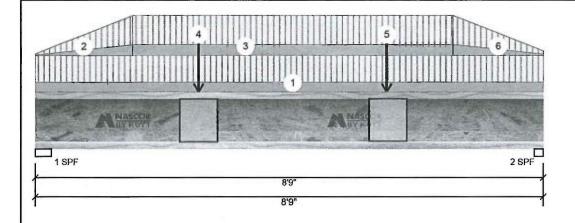
Project: Address: Date:

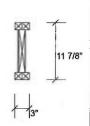
9/7/2018 Designer:

RCO Job Name: GRANDBROOKE 11-2

Project #:

11.875" 2-Ply - PASSED Level: Ground Floor





Page 1 of 1

Member Inforn	nation			Unfactor	ed React	ions U	NPATTERN	ED lb ((Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Sno	w	Wind
Plies:	2	Design Method:	LSD	1	353		132		0	0
Moisture Condition:	Dry	Building Code:	NBCC 2010 / OBC 2012	2	348		131		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 I	Reactions			
Dead:	15 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1-SPF	3.375"	22%	165 / 529	694	L	1.25D+1.5L
				2-SPF	1.875"	26%	163 / 523	686	L	1,25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1582 ft-lb	4'5 1/4"	9020 ft-lb	0.175 (18%)	1.25D+1.5L	L
Unbraced	1582 ft-lb	4'5 1/4"	1595 ft-lb	0.992 (99%)	1.25D+1.5L	L
Shear	679 lb	8'7 7/8"	3400 lb	0.200 (20%)	1.25D+1.5L	L
Perm Defl in.	0.010 (L/9752)	4'5 5/16"	0.281 (L/360)	0.040 (4%)	D	Uniform
LL Defl inch	0.028 (L/3661)	4'5 5/16"	0.281 (L/360)	0.100 (10%)	L	L
TL Defl inch	0.038 (L/2662)	4'5 5/16"	0.422 (L/240)	0.090 (9%)	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 5'8" 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 8-9-0	(Span)1-7-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Tie-In	0-0-0 to 1-8-2	(Span)0-0-13 to 1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF
3	Tie-In	1-8-2 to 7-2-6	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF
4	Point	2-9-12		Near Face	32 lb	85 lb	0 lb	PassaThru Framing Squash Block is
5	Point	6-0-12		Near Face	32 lb	85 lb	0 lb	required at all point loads over bearings
6	Tie-In	7-2-6 to 8-9-0	(Span)1-8-15 to 0-2-5	Тор	15 PSF	40 PSF	0 PSF	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 inlended application, and to verify the dimensions and loads.

Lumber

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

Handling & Installation

- Handling & Installation

 1. Joist flanges must not be cut or drilled

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

 3. Damaged Joists must not be used

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

READ ALL NOTES ON THIS PAGE AND ON THE

IN THE DESIGN OF THIS COMPONENT.

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

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



rements





GREENPARK Client:

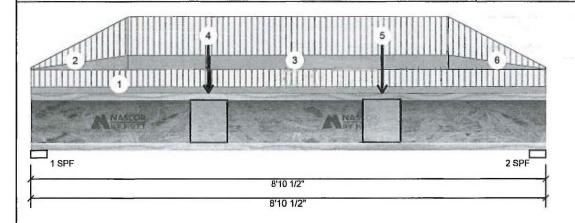
Project: Address: Date:

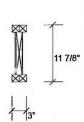
Designer: RCO

9/7/2018 Job Name: GRANDBROOKE 11-2

Project #:

11.875" 2-Ply - PASSED Level: Ground Floor





Page 1 of 1

intermation
Girder

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

Application: Floor (Residential) Design Method: LSD **Building Code:** NBCC 2010 / OBC 2012

Load Sharing: No Deck: Not Checked Vibration: Not Checked

Unfactored	Reactions	UNPATTERNED Ib	(Uplift)

Brg	Live	Dead	Snow	Wind
1	277	104	0	0
2	281	105	0	0

Bearings and Factored Reactions

Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.375"	17%	130 / 416	546	L	1.25D+1.5L
2-SPF	3.375"	17%	131 / 421	552	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1309 ft-lb	4'4 5/16"	9020 ft-lb	0.145 (15%)	1.25D+1.5L	L
Unbraced	1309 ft-lb	4'4 5/16"	1321 ft-lb	0.991 (99%)	1.25D+1.5L	L
Shear	544 lb	8'7 7/8"	3400 lb	0.160 (16%)	1.25D+1.5L	L
Perm Defl in.	0.009 (L/11833)	4'5 1/16"	0.281 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.023 (L/4431)	4'5 1/8"	0.281 (∐360)	0.080 (8%)	L	L
TL Defl inch	0.031 (L/3224)	4'5 1/8"	0.422 (L/240)	0.070 (7%)	D+L	L

Design Notes

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

5 Bottom flange braced at bearings.



September 13, 2018

O DOLLOITI	lange braces at bearings.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind
1	Tie-In	0-0-0 to 8-10-8	(Span)0-9-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Tie-In	0-0-0 to 1-8-2	(Span)0-0-13 to 1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF
3	Tie-In	1-8-2 to 7-2-6	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF Pass-Th
4	Point	3-0-12		Near Face	32 lb	85 lb	0 lb	regulte
5	Point	6-0-12		Near Face	30 lb	81 lb	0 lb	0 lb
6	Tie-In	7-2-6 to 8-10-8	(Span)1-8-15 to 0-0-13	Тор	15 PSF	40 PSF	0 PSF	Refer to Detail fo

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

Comments

Refer to Multiple Member Connection betail for ply to ply nailing or bolting equirements

Notes

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 in variety the dimensional to the component suitability of the intended application and in variety the dimensional to the component of the compon Lumber

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

chemicals

Handling & Installation

landling & Installation

Lodst flanges must not be cut or drilled.
Refer to latest copy of the Losist product information details for framing details, stiffener tables, web hole chart, bridging details, must help to stering details and handling/erection details

Damaged Losist must not be used

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

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.

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

Brg

1

2

2 -



Client: Project: Address: **GREENPARK**

Date:

9/7/2018 Designer: **RCO**

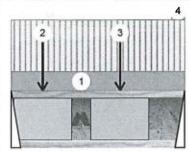
Job Name: GRANDBROOKE 11-2

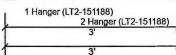
Project #:

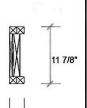
11.875" NJ

2-Ply - PASSED

Level: Ground Floor







Wind

0

0

Page 1 of 1

Member Information							
Туре:	Girder	Application:	Floor (Residential)				
Plies:	2	Design Method:	LSD				
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012				
Deflection LL:	360	Load Sharing:	No				
Deflection TL:	240	Deck:	Not Checked				
Importance:	Normal	Vibration:	Not Checked				
General Load							
Floor Live:	40 PSF						
Dead:	15 PSF	1					

Unfactored Reactions UNPATTERNED Ib (Uplift)

Live

423

329

Dead

158

124

Snow

0

0

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case Moment 614 ft-lb 1'10 9/16" 9020 ft-lb 0.068 (7%) 1.25D+1.5L L 614 ft-lb 1'10 9/16" 5749 ft-lb 0.107 (11%) 1.25D+1.5L L Unbraced 825 lb 1 1/4" 3400 lb 0.243 (24%) 1.25D+1.5L L Shear 1'10 9/16" 0.093 (L/360) 0.010 (1%) D Uniform Perm Defl in. 0.001 (L/26335) LL Defl inch 0.003 (L/9849) 1'10 9/16" 0.093 (L/360) 0.040 (4%) L L TL Defl inch 0.005 (L/7168) 1'10 9/16" 0.140 (L/240) 0.030 (3%) D+L L

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 2.000" 31% 198 / 634 832 L 1.25D+1.5L Hanger

24% 155 / 493 648 L 1.25D+1.5L 2.000° Hanger

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 Rottom flange braced at bearings



September 13, 2018

O DOMONI	itunge braced at bearinge.	•						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	
1	Tie-In	0-0-0 to 3-0-0	(Span)1-8-15	Тор	15 PSF	40 PSF	0 PSF	
2	Point	0-6-9		Near Face	106 lb	283 lb	0 lb	
3	Point	1-10-9		Near Face	136 lb	364 lb	0 lb	
4	Part. Uniform	2-9-5 to 3-0-0		Тор	4 PLF	0 PLF	0 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.

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

Comments

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

Notes

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

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

Handling & Installation

- andling & Installation

 Jobal flanges must not be out or drilled

 Refer to latest copy of the Joist product information
 details for framing details, stiffener tables, web hole
 chart, troking details, multi-by fastening details and
 handling/srection details

 Damaged Joists 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 lengths—3.5 Inches
 For flat roofs provide proper drainage to prevent

Manufacturer Info

Nascor by Kott

Kott Lumber Compan 14 Anderson Bivd, Ontario Canada L4A 7X4 905-642-4400



Wind

0 PSF 0 lb



Client: **GREENPARK**

9/7/2018 RCO

Page 1 of 1

Project: Address: Designer:

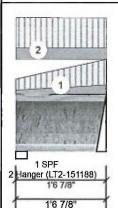
Job Name: GRANDBROOKE 11-2

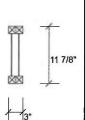
Project #:

11.875"

2-Ply - PASSED

Level: Ground Floor





Member Into	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			

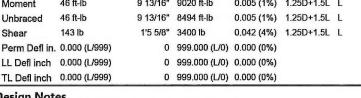
Brg Live Snow Wind Dead 79 30 0 0 2 85 32 0 0

Unfactored Reactions UNPATTERNED Ib (Uplift)

Analysis Results Analysis Location Allowed Canacity

A lalysis	Actual	Location	raiowed	Capacity	COITID.	Odse	
Moment	46 ft-lb	9 13/16"	9020 ft-lb	0.005 (1%)	1.25D+1.5L	L	
Unbraced	46 ft-lb	9 13/16"	8494 ft-lb	0.005 (1%)	1.25D+1.5L	L	
Shear	143 lb	1'5 5/8"	3400 lb	0.042 (4%)	1.25D+1.5L	L	
Perm Defi 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%)			

Bearings and Factored Reactions Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 2.375" 5% 37 / 118 156 L 1.25D+1.5L 40 / 128 168 L 1.25D+1.5L 2 -2.000" Hanger





September 13, 2018

Design Notes

Floor Live:

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.

40 PSF 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 1-6-14	(Span)1-2-3 to 2-9-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-6-14	(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

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 requirements

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 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

- and thing is installation. I lost flages must not be cut or drilled. Refer to latest copy of the I loist product information details for framing details, sufferent tables, web hole chart, bridging details, multi-ply fastering details and handling/erection details. Damaged I 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 Minkmum point load bearing length>= 3.5 inches
 T. For test roots provide proper drainage to prevent ponding.

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





Client:

Address:

GREENPARK Project:

Date:

RCO Designer:

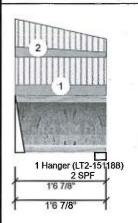
9/7/2018

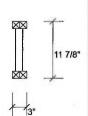
Job Name: GRANDBROOKE 11-2

Project #:

NJ 11.875" 2-Ply - PASSED

Level: Ground Floor





Page 1 of 1

Member Inforn	nation				Unfacto	red React	ions Ul	NPATTERNI	ED lb (Uplift)	
Type:	Girder		Application:	Floor (Residential)	Brg	Live		Dead	Snow	Wind
Plies:	2		Design Method:	LSD	1	85		32	0	0
Moisture Condition:	Dry		Building Code:	NBCC 2010 / OBC 2012	2	79		30	0	0
Deflection LL:	360		Load Sharing:	No	1.00					
Deflection TL:	240		Deck:	Not Checked						
Importance:	Normal		Vibration:	Not Checked	1					
General Load										
Floor Live:	40 PSF				Bearings	s and Fact	ored R	eactions		
Dead:	15 PSF	- 1			Bearing	Length	Cap.	React D/L lb	Total Ld. Cas	e Ld. Comb.
					1 - Hanger	2.000"	6%	40 / 128	168 L	1.25D+1.5L
Analysis Result	s				2-SPF	2.375"	5%	37 / 118	156 L	1.25D+1.5L
Analysis Act	ual	Location Allo	wed Capaci	ty Comb. Case					-	

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	46 ft-lb	9 1/16"	9020 ft-lb	0.005 (1%)	1.25D+1.5L	L
Unbraced	46 ft-lb	9 1/16"	8494 ft-lb	0.005 (1%)	1.25D+1.5L	L
Shear	143 lb	1 1/4"	3400 lb	0.042 (4%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		

Design Notes

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



September 13, 2018

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

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 wrift the dimensions and loads. Lumber

chemicals

Handling & Installation

landling & Installation.

Lost 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, multi-phy fastening details and handling/erection details.

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

IN THE DESIGN OF THIS COMPONENT.

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

Provide lateral support at bearing points to evoid lateral displacement and rotation
 Web differens 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





GREENPARK Client:

Project: Address: Date:

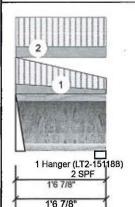
RCO Designer:

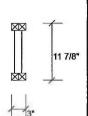
9/7/2018 Job Name: GRANDBROOKE 11-2

Project #:

2-Ply - PASSED 11.875"

Level: Ground Floor





Page 1 of 1

Unfactored Reactions UNPATTERNED Ib (Uplift) Member Information Wind Туре: Girder Application: Floor (Residential) Brg Live Dead Snow LSD Plies: 2 Design Method: 81 30 0 0 **Building Code:** NBCC 2010 / OBC 2012 Moisture Condition: Dry 2 75 28 0 0 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Vibration: Not Checked Importance: Normal General Load **Bearings and Factored Reactions** Floor Live: **40 PSF** Dead: **15 PSF** Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 6% 38 / 122 160 L 1.25D+1.5L Hanger **Analysis Results** 35 / 112 1.25D+1.5L 2-SPF 2.375" 5% 148 L

			A.11.	0 11.	A	0
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	44 ft-lb	9 1/16"	9020 ft-lb	0.005 (0%)	1.25D+1.5L	L
Unbraced	44 ft-lb	9 1/16"	8494 ft-lb	0.005 (1%)	1.25D+1.5L	L
Shear	137 lb	1 1/4"	3400 lb	0.040 (4%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.000 (L/999)	0	999,000 (L/0)	0.000 (0%)		



Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 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 1-6-14	(Span)2-9-1 to 1-2-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-6-14	(Span)3-0-0	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

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 and to wrift the dimensions and loadies. Lumber

Dry service conditions, unless noted otherwise
 Uoist not to be treated with fire relardant or corr

Handling & Installation

and ling & installation

Joist flanges must not be cut or drilled.

Refer to letest copy of the Lloist product information details for framing details, stifferer leties, wet hole chart, bridging details, multi-by fratering details and handling/erection details.

Damaged Lloists must not be used

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

IN THE DESIGN OF THIS COMPONENT.

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

5. Provide Isteral support at bearing points to avoid isteral displacement and rotation.
6. Web attimeners for point load as shown Minimum point load bearing length>= 3.5 Inches
7. For fast roofs provide proper drainage to prevent ponding

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



Page 1 of 1



GREENPARK Client:

Project:

Address:

Date:

9/7/2018 RCO

Designer: Job Name: GRANDBROOKE 11-2

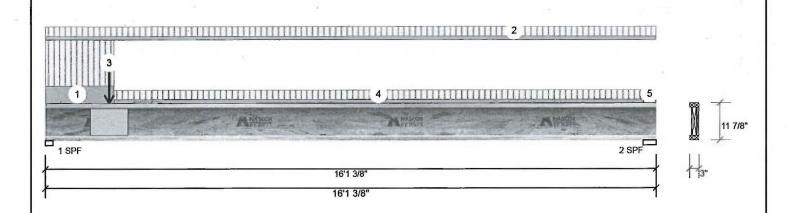
Project #:

11.875"

2-Ply - PASSED

Level: Ground Floor

Unfactored Reactions UNPATTERNED lb (Uplift)



Туре:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snov	W	Wind
Plies:	2	Design Method:	LSD	1	683	256		0	0
Moisture Condition	: Dry	Building Code:	NBCC 2010 / OBC 2012	2	262	98		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 Factored	Reactions			
Dead:	15 PSF			Bearing L	ength Ca	o. React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF 2.	.375" 47	% 320 / 1025	1344	L	1.25D+1.5L
				2 - SPF 4	.125" 15	% 123 / 393	515	L	1.25D+1.5L

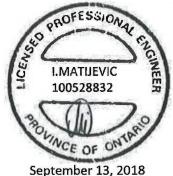
Analysis Results

Member Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2420 ft-lb	6'2 13/16"	9020 ft-lb	0.268 (27%)	1.25D+1.5L	L
Unbraced	2420 ft-lb	6'2 13/16"	2442 ft-lb	0.991 (99%)	1.25D+1.5L	L
Shear	1323 lb	1 5/8"	3400 lb	0.389 (39%)	1.25D+1.5L	L
Perm Defl in.	0.046 (L/4121)	7'6 5/16"	0.523 (L/360)	0.090 (9%)	D	Uniform
LL Defl inch	0.122 (L/1544)	7'6 5/16"	0.523 (L/360)	0.230 (23%)	L	L
TL Defl inch	0.168 (L/1123)	7'6 5/16"	0.785 (L/240)	0.210 (21%)	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 4'8" o.c.



ı	5 Bottom llange	praced at bearings.									
ĺ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
l	1	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
١	2	Tie-In	0-0-0 to 16-1-6	(Span)0-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
I	3	Point	1-8-6		Far Face	158 lb	423 lb	0 lb	0 lb	F5	
I	4	Tie-In	1-9-14 to 15-9-4	(Span)0-8-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	nru Framing Squash Block is	
ĺ	5	Tie-In	15-9-4 to 16-1-6	(Span)0-5-0	Тор	15 PSF	40 PSF	0 PSF	require	d 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.

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

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the construction of the customer and/or the contractor ensure the component suitability of the Inlanded

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

Handling & Installation

- and ling & installation
 Lioist flanges must not be cut or drilled
 Refer to latest copy of the Lioist product information
 details for framing details, suffiner tables, web hote
 chart, bridging details, multi-ply fastening details and
 handling-erection details
 Damaged Lioist 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.
 Who stiffence for point load as shown Minimum point load bearing length = 3.5 inches
 For flat roots provide proper drainage to prevent ponding.

Manufacturer Info Nascor by Kott

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



Page 1 of 1



Client:

GREENPARK

Project: Address: Date:

Designer: **RCO**

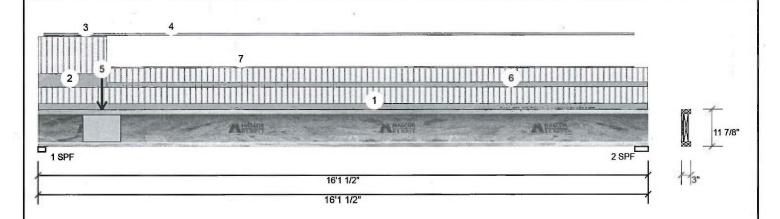
9/7/2018 Job Name: GRANDBROOKE 11-2

Project #:

11.875" NJ

2-Ply - PASSED

Level: Ground Floor



Member Info	rmation			Unfacto	red Reac	tions U	NPATTERNI	ED lb (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Live		Dead	Snov	٧	Wind
Plies:	2	Design Method:	LSD	1	792		344		0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2012	2	470		223	- 0	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 i	Reactions			
Dead:	15 PSF			Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	2.375"	57%	430 / 1187	1618	L	1.25D+1.5L
				2-SPF	4.250"	29%	279 / 705	984	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
Moment	4051 ft-lb	7'4 3/16"	9020 ft-lb	0.449 (45%)	1.25D+1.5L	L	
Unbraced	4051 ft-lb	7'4 3/16"	4075 ft-lb	0.994 (99%)	1.25D+1.5L	L	
Shear	1593 lb	1 5/8"	3400 lb	0.468 (47%)	1.25D+1.5L	L	
Perm Defl in.	0.090 (L/2090)	7'9 11/16"	0.523 (L/360)	0.170 (17%)	D	Uniform	
LL Defl inch	0.192 (L/979)	7'9 3/16"	0.523 (L/360)	0.370 (37%)	L	L	
TL Defl inch	0.282 (L/667)	7'9 3/8"	0.785 (L/240)	0.360 (36%)	D+L	L	
							۳

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 3'7" 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 16-1-6	(Span)1-5-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF
2	Tie-In	0-0-0 to 1-9-14	(Span)3-3-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF
3	Part. Uniform	0-1-15 to 1-9-14		Тор	2 PLF	0 PLF	0 PLF	0 PLF
4	Part. Uniform	0-2-0 to 15-9-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF Pass-Thru Framing Squash Block is
5	Point	1-8-6		Near Face	124 lb	329 lb	0 lb	reguled at all point loads over bearings
6	Tie-In	1-9-14 to 16-1-6	(Span)1-2-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF
7	Part. Uniform	1-9-14 to 15-9-0		Тор	2 PLF	0 PLF	0 PLF	Refer to Multiple Member Connection Detail for ply to ply nailing or bolting
								- require ments

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 wait the dimensions and loads.

Lumber

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

Handling & Installation

andling & Installation

I Joist flanges must not be cut or drilled

Refer to latast copy of the I Joist product information detaits for framing detaits, stiffener tables, web hole chart, bridging detaits, multi-ply fastering details and handling/erection details

Damaged I Joist must not be used

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

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.

Kott Lumber Company 14 Anderson Blvd, Ontario Canada L4A 7X4



905-642-4400

Second Floor Design Method

Deflection Joist

LL Span U

TL Span L/

LL Cant 2L/

TL Cant 2L/

LLSpan L/

TL Span L/

LL Cant 2L/

TL Cent 2L/

Decking

Thickness

Fastener

Vibration

Ceiling:

Deck

Deflection Girder

D:\Users\rochsvillo\WORK FROM HOME\GREENPARK\MINNISALE

HOMES/GRANDBROOKE 11 VGRANDBROOKE 11-2/FLOOR VGRANDBROOKE 11-2/Isl

Building Code NBCC 2010 / OBC 2012

40

15

480

360

480

360

360

240

480

360

5/8"

SPF Plywood

Nailed & Glued

Gypsum 1/2"

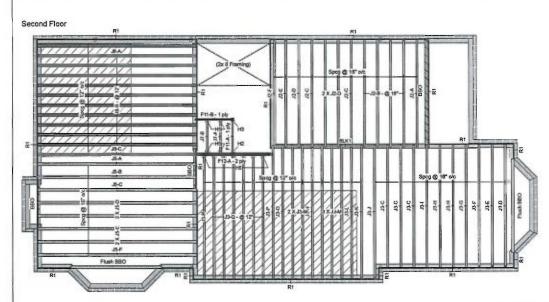
Job Path

Floor

Loads

Live

Dead



Legend 7/////

Load from Above Wall Norbord Rimboard Plus 1,125 X 11,875 NJ40U 11.875 NJ60U 11.875 NJH 11.875 Forex 2.0E-3000Fb LVL 1.75 X 11.875 1.75 X 11.875 (Dropped) 3.5 X 11 875

- 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)

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.



September 13, 2018

Second LVL/LS										NASCO	
Label	Descr	ption	Widt	De	pth :	Qty	Plies	Pcs	Length	NASLU	
F12	Forex 2.0E-3	000Fb LVL	1.7	5 11.0	375	1	2	2	8-0-0		
F11	Forex 2.0E-3	000Fb LVL	1.7	5 11.1	75			2	4-0-0	Layout Name GRANDBROOKE 11-2	
Joist (Flush)									Design Method	
Label	Descr	ption	Widt	n De	pth	Qty	Plies	Pcs	Length	LSD	
JØ	NJ40U		3.	5 11.	375			12	18-0-0	Description	
J5	NJ60U		3.	5 11.	375			8	18-0-0	MINNISALE HOMES	
J3	NJH		2.	5 11.	375			28	14-0-0	BRAMPTON, ONT.	
J2	NJH		2.	5 11.	375			12	12-0-0	Created	
J7	NJH		2.	5 11.	375			2	4-0-0	June 29, 2018	
Rim Bo										Builder	
	Descr		Widt			Qty	Plies	Pcs	Length		
R1	Plus 1. 11.875		1,12	5 11,	375			13	12	GREENPARK Sales Rep RM	
Blockin											
Label	Descr	iption	Widt	h De	pth	Qty	Plies	Pcs	Length	Designer	
BLK1	NJH		2.	5 11.	375	LinFt		Varies	8-0-0	RCO	
Hange	r									Shipping	
						Bea	am/Girde		ported	Project	
Label	Pcs	Descriptio	2	Skew	Slope	1	stenera		teners	Builder's Project	
H2	1	HUS1.81/1		Onow	Glope		30 16d		0 16d	Kott Lumber Company	
H3	1	LS90	-			-	00 ,00	+-		14 Anderson Blvd	
H5	11	LT251188	-			4	10dx1 1/2	210	dx1 1/2	Stouffville, Ontario	
NOTES:	_									Canada	
										1.4A 7X4	

- 1. 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.
 4. Install single-ply flush window header along inside face of
- Initial surgicity. Instantial minimum information in information i
- all lirst level joists which support loading from above exceeding two levels floor or roof.

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

 8. It shall be the framer's responsibility that floor joists and beams are fastened as per the hanger manufacturer's standards.

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

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

Hatch area represents ceramic tiled floor with an 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 to construction,

ARCHITECTURAL DRAWINGS:

JARDIN DESIGN GROUP INC. 64 Jardin Dr., Suite 3A, Vaughan, ON Date: June 11,2018 Project No: 18-24 Model: Grandbrooke 11





Client:

Address:

GREENPARK Project:

Date:

RCO

Designer: Job Name: GRANDBROOKE 11-2

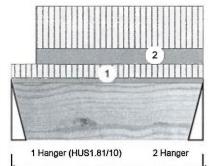
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor

9/7/2018



Wind

0

0

Snow

0

0

Page 1 of 1

3'3 5/8'

3'3 5/8"

Member	Information
Type:	Girder

Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal General Load

40 PSF 15 PSF Application: Floor (Residential) Design Method: LSD NBCC 2010 / OBC 2012 **Building Code:** Load Sharing: No

Not Checked Deck: Not Checked Vibration:

Unfactored Reactions UNPATTERNED Ib (Uplift) Brg Live Dead 136 59 168 71 2

Bearings and Factored Reactions

Hanger

Cap. React D/L lb Bearing Length Total Ld. Case Ld. Comb. 278 L 1.25D+1.5L 3.000" 74 / 204 7% Hanger 3.000" 88 / 252 340 L 1.25D+1.5L 9%

Analysis Results

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	220 ft-lb	1'7 15/16"	17130 ft-lb	0.013 (1%)	1.25D+1.5L	L
Unbraced	220 ft-lb	1'7 15/16"	13936 ft-lb	0.016 (2%)	1.25D+1.5L	L
Shear	100 lb	1'2 1/8"	5798 lb	0.017 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.001 (L/37319)	1'7 15/16"	0.098 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/26240)	1'7 15/16"	0.146 (L/240)	0.010 (1%)	D+L	L

Design Notes

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

I.MATIJEVIC 100528832 WINCE OF ONTARIO

September 13, 2018

PROFESSIONAL

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-3-10	(Span)1-2-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-5-2 to 3-3-10	(Span)3-10-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				5 PLF				

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

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

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.

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 another than the truth the diseaseling and leads.

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

chemicals

Handling & Installation

For flat roofs provide proper drainage to prevent ponding

READ ALL NOTES ON THIS PAGE AND ON THE

Manufacturer Info APA: PR-L318

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





Brg

1

2



Client: Project:

Address:

GREENPARK

Date:

Designer: **RCO**

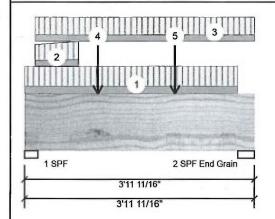
9/7/2018 Job Name: GRANDBROOKE 11-2

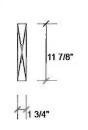
Project #

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor





Wind

0

0

Page 1 of 1

Member Info	rmation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	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		

Bearings	and	Factored	Rea	ctions

Live

410

368

Unfactored Reactions UNPATTERNED lb (Uplift)

Dead

163

148

Snow

0

0

Cap. React D/L lb Total Ld. Case Ld. Comb. Bearing Length 1 - SPF 2.750" 28% 204 / 614 818 L 1.25D+1.5L 2-SPF 3.500" 16% 185 / 552 737 L 1.25D+1.5L End Grain

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	686 ft-lb	1'11 1/4"	17130 ft-lb	0.040 (4%)	1.25D+1.5L	L
Unbraced	686 ft-lb	1'11 1/4"	12367 ft-lb	0.055 (6%)	1.25D+1.5L	L
Shear	415 lb	2'9 1/16"	5798 lb	0.071 (7%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/30447)	1'11 3/8"	0.119 (L/360)	0.010 (1%)	D	Uniform
LL Defl inch	0.004 (L/12094)	1'11 3/8"	0.119 (L/360)	0.030 (3%)	L	L
TI Deflinch	0.005 (L/8656)	1'11 3/8"	0.179 (L/240)	0.030 (3%)	D+L	L

Design Notes

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

ı		Self Weight	READ ALL NOTES ON	THIS DAGE AN	ND ON THE	5 PLF			
	5	Point	2-7-2		Near Face	32 lb	85 lb	0 lb	
	4	Point	1-3-2		Near Face	30 lb	80 lb	0 lb	
	3	Tie-In	0-2-3 to 3-11-11	(Span)3-6-4	Тор	15 PSF	40 PSF	0 PSF	
	2	Tie-In	0-2-3 to 0-11-2	(Span)3-2-2 to 3-8-0	Тор	15 PSF	40 PSF	0 PSF	
	1	Part. Uniform	0-0-0 to 3-8-3		Тор	30 PLF	80 PLF	0 PLF	
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	

ENGINEERING NOTE PAGE ENP-2. THE NOTE PAGE

IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED

LINCE OF ONTARIO September 13, 2018

I.MATIJEVIC 100528832

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

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

Notes

Lumber

Handling & Installation

LVL beams must not be cut or drilled
 Refer to manufacturer's product informating regarding installation requirements, multifastening details, beam strength values, and continued to the continued of the cut of th

IN THE DESIGN OF THIS COMPONENT.

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

0 PLF 0 PSF 0 PSF

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





Client:

Project:

Address:

GREENPARK

Date:

9/7/2018

RCO Designer:

Job Name: GRANDBROOKE 11-2

Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875"

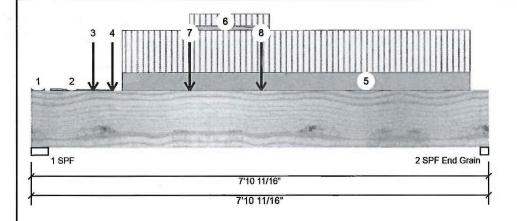
2-Ply - PASSED Level: Second Floor

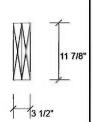
Brg

1

2

Grain





Wind

0

0

Page 1 of 2

Member Info	rmation		
Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition	on: Dry	Building Code:	NBCC 2010 / OBC 2013
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 .	

Bearings and Factored Reactions

Live

1110

1032

Unfactored Reactions UNPATTERNED Ib (Uplift)

Dead

502

473

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	30%	627 / 1665	2292	L	1.25D+1.5L
2 - SPF End	1.750"	47%	591 / 1548	2139	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4833 ft-lb	3'11 11/16"	34261 ft-lb	0.141 (14%)	1.25D+1.5L	L
Unbraced	4833 ft-lb	3'11 11/16"	31588 ft-lb	0.153 (15%)	1.25D+1.5L	L
Shear	2641 lb	1'2 5/8"	11596 lb	0.228 (23%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/6597)	3'11 11/16"	0.253 (L/360)	0.050 (5%)	D	Uniform
LL Defl inch	0.031 (L/2965)	3'11 11/16"	0.253 (L/360)	0.120 (12%)	L	L
TL Defl inch	0.044 (L/2046)	3'11 11/16"	0.379 (L/240)	0.120 (12%)	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	Tie-In	2-8-14 to 4-1-7	(Span)3-6-4	Тор	15 PSF	40 PSF	0 PSF
5	Part. Uniform	1-6-14 to 7-6-14		Near Face	106 PLF	249 PLF	0 PLF
4	Point	1-4-14		Far Face	30 lb	80 lb	0 lb
3	Point	1-0-14		Near Face	102 lb	240 lb	0 lb
2	Tie-In	0-3-15 to 1-4-14	(Span)0-4-2 to 0-1-12	Тор	15 PSF	40 PSF	0 PSF
1	Tie-In	0-0-0 to 0-2-13	(Span)0-11-11	Тор	15 PSF	40 PSF	0 PSF
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow

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 profilestion and to write the disease the structure.

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

Handling & Installation

LATIONATING CONTINUED THE CONTINUED CONTINUED

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

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.



Snow

0

0

September 13, 2018

Comments

Wind

-	0 PSF
=	0 PSF
)	Pass Thri ³ Framing Squash Block is
)	required. at all point loads over bearings
1	0 PLF Refer to Multiple Member Connection Detalf for ply to ply nailing or bolting requirements

cturer Info

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





Client:

Project:

Address:

GREENPARK

Date:

9/7/2018

RCO Designer:

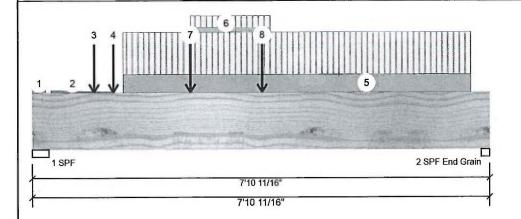
Job Name: GRANDBROOKE 11-2

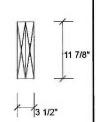
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





Page 2 of 2

l	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	7	Point	2-8-14		Far Face	32 lb	85 lb	0 lb	0 lb	J7
١	8	Point	3-11-11		Far Face	59 lb	136 lb	0 lb	0 lb	F11
l		Self Weight				10 PLF				



September 13, 2018

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.

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

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
 LVL not to be treated with fire retardant or con

chemicals

Handling & Installation

andling & 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 Beams must not be used
Design assumes top edge is laterally estrained
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