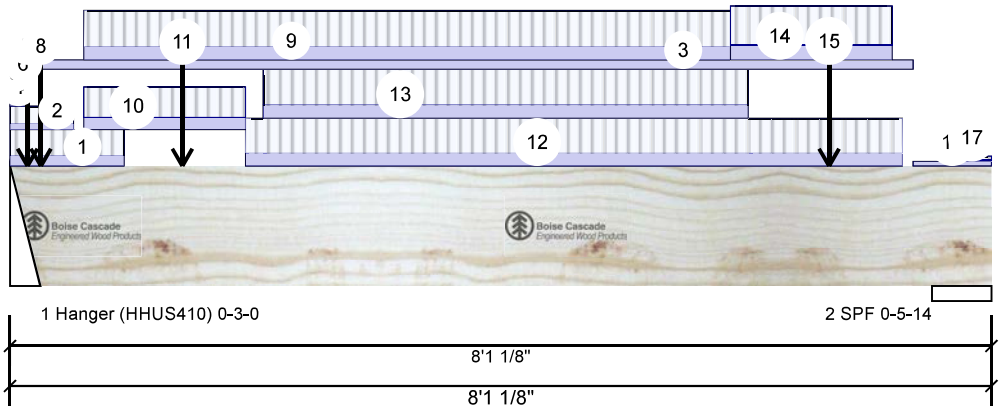
MHP 23030

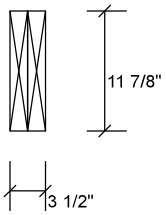
Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F7-A Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 0-11-5		Top	92 PLF	223 PLF	0 PLF	0 PLF	J6
2	Part. Uniform	0-0-0 to 0-6-5		Top	56 PLF	148 PLF	0 PLF	0 PLF	J6
3	Part. Uniform	0-0-0 to 7-5-6		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-0-0 to 0-1-12		Top	36 PLF	87 PLF	0 PLF	0 PLF	J6
5	Part. Uniform	0-0-0 to 0-1-12		Top	22 PLF	58 PLF	0 PLF	0 PLF	J6
6	Part. Uniform	0-0-0 to 0-1-12		Top	31 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
7	Point	0-1-12		Top	332 lb	806 lb	0 lb	0 lb	F11
	Bearing Length	0-5-8							
8	Point	0-3-1		Near Face	155 lb	413 lb	0 lb	0 lb	J6
9	Part. Uniform	0-7-5 to 5-11-5		Top	117 PLF	312 PLF	0 PLF	0 PLF	J6
10	Part. Uniform	0-7-5 to 1-11-5		Top	107 PLF	263 PLF	0 PLF	0 PLF	J6
11	Point	1-5-1		Near Face	145 lb	387 lb	0 lb	0 lb	J6
12	Part. Uniform	1-11-5 to 7-4-5		Top	113 PLF	301 PLF	0 PLF	0 PLF	J6
13	Part. Uniform	2-1-1 to 6-1-1		Near Face	116 PLF	310 PLF	0 PLF	0 PLF	
14	Part. Uniform	5-11-5 to 7-3-5		Top	127 PLF	340 PLF	0 PLF	0 PLF	J6
15	Point	6-9-1		Near Face	148 lb	394 lb	0 lb	0 lb	J6
16	Part. Uniform	7-5-6 to 8-1-2		Top	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
17	Tie-In	7-7-14 to 8-1-2	0-9-13	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

JULY 14, 2023

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Notes

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Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
1111 W. Jefferson St.
Boise, ID 83702
(800) 232-0788
www.bc.com
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

MHP 23030

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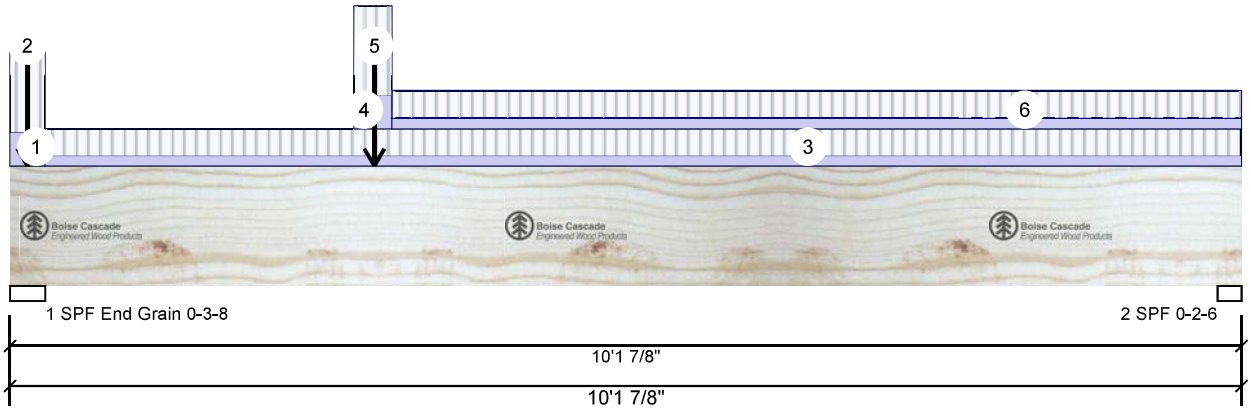
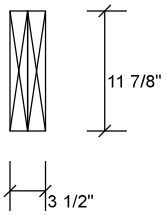
F8-A Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	682	351	0	0
2	Vertical	313	183	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	11%	439 / 1023	1461	L	1.25D+1.5L
2 - SPF	2.375"	Vert	14%	229 / 470	698	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2264 ft-lb	3'4 7/8"	35392 ft-lb	0.064 (6%)	1.25D+1.5L	L
Unbraced	2264 ft-lb	3'4 7/8"	35392 ft-lb	0.064 (6%)	1.25D+1.5L	L
Shear	847 lb	1'3 3/8"	13217 lb	0.064 (6%)	1.25D+1.5L	L
Perm Defl in.	0.009 (L/12610)	4'11 1/16"	0.326 (L/360)	0.029 (3%)	D	Uniform
LL Defl inch	0.017 (L/6919)	4'10 9/16"	0.326 (L/360)	0.052 (5%)	L	L
TL Defl inch	0.026 (L/4468)	4'10 3/4"	0.490 (L/240)	0.054 (5%)	D+L	L

JULY 14, 2023

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Girders are designed to be supported on the bottom edge only.
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6 Bottom must be laterally braced at a maximum of 7'1 13/16" o.c.
7 Lateral slenderness ratio based on full section width.

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-3-8	1-10-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-1-12		Far Face	115 lb	254 lb	0 lb	0 lb	F6
3	Tie-In	0-3-8 to 10-1-14	0-6-10	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	2-10-0 to 3-1-13	1-10-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	3-0-1		Near Face	140 lb	318 lb	0 lb	0 lb	F6

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
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3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
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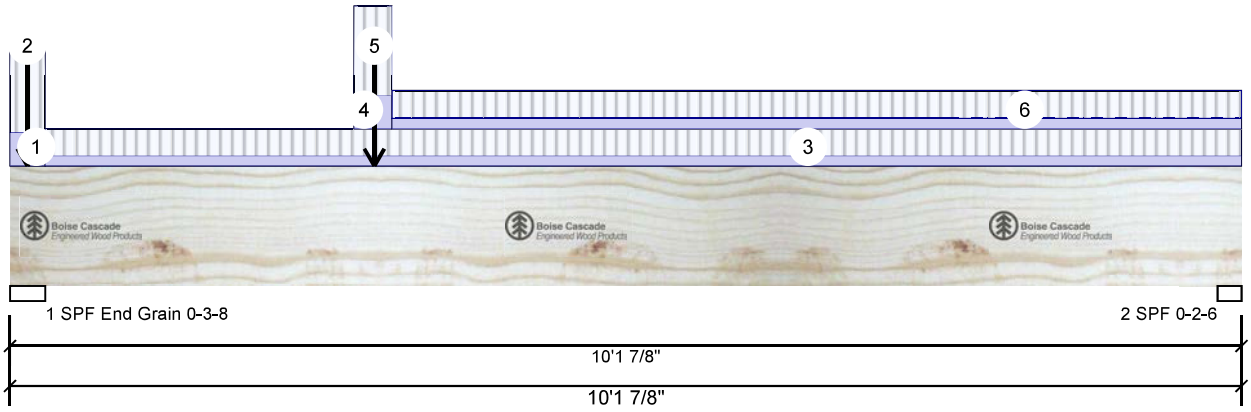

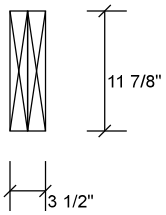

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Tie-In	3-1-13 to 10-1-14	0-6-14	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

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PROVINCE OF ONTARIO
JULY 14, 2023

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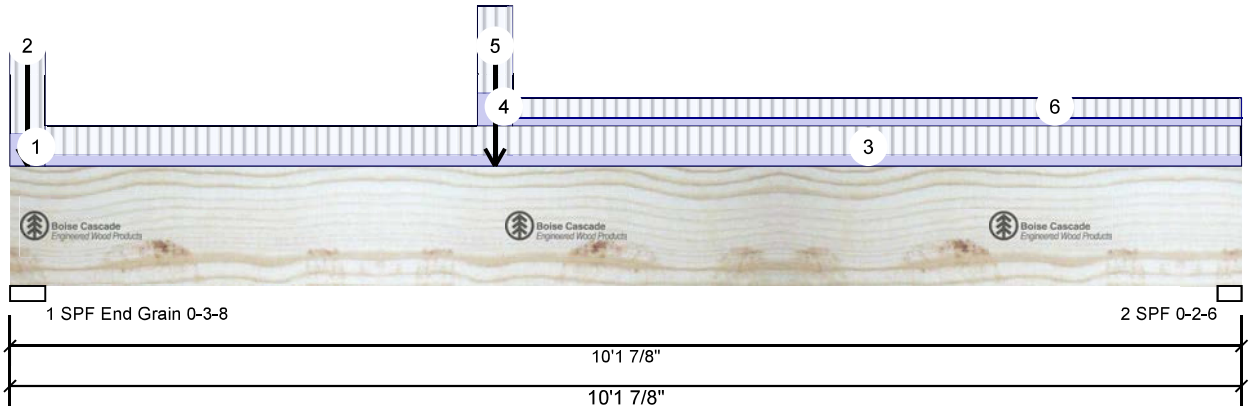
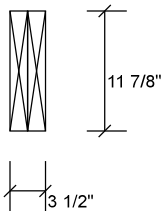
F8-B Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	614	324	0	0
2	Vertical	325	189	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	10%	405 / 921	1326	L	1.25D+1.5L
2 - SPF	2.375"	Vert	14%	237 / 488	724	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2526 ft-lb	4'	35392 ft-lb	0.071 (7%)	1.25D+1.5L	L
Unbraced	2526 ft-lb	4'	35392 ft-lb	0.071 (7%)	1.25D+1.5L	L
Shear	738 lb	1'3 3/8"	13217 lb	0.056 (6%)	1.25D+1.5L	L
Perm Defl in.	0.010 (L/12090)	4'11 3/4"	0.326 (L/360)	0.030 (3%)	D	Uniform
LL Defl inch	0.018 (L/6621)	4'11 3/8"	0.326 (L/360)	0.054 (5%)	L	L
TL Defl inch	0.027 (L/4278)	4'11 1/2"	0.490 (L/240)	0.056 (6%)	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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1	Tie-In	0-0-0 to 0-3-8	1-10-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-1-12		Near Face	110 lb	238 lb	0 lb	0 lb	F6
3	Tie-In	0-3-8 to 10-1-14	0-7-6	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	3-10-4 to 4-1-12	1-10-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	4-0-0		Far Face	138 lb	313 lb	0 lb	0 lb	F6

Continued on page 2...

Notes

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Lumber

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Handling & Installation

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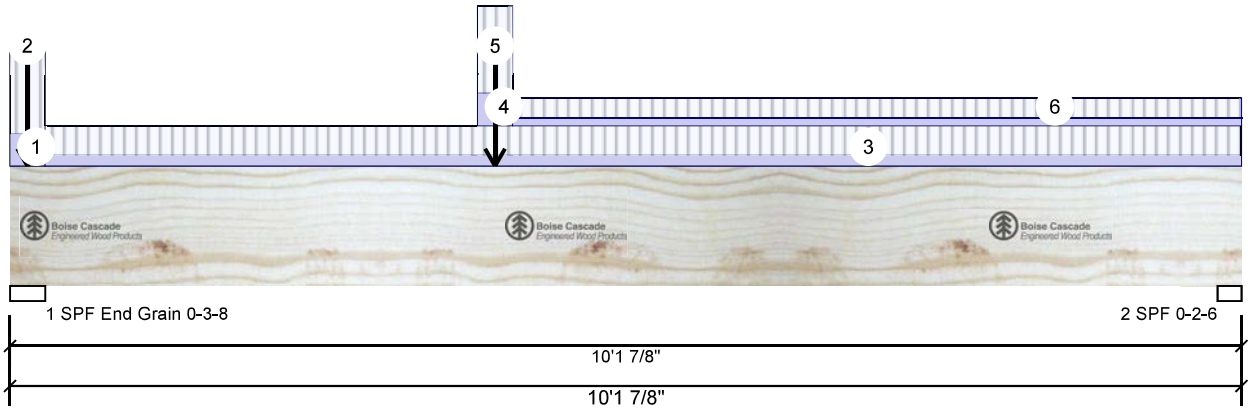

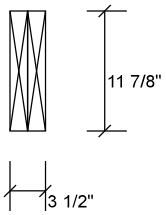

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Tie-In	4-1-12 to 10-1-14	0-5-2	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

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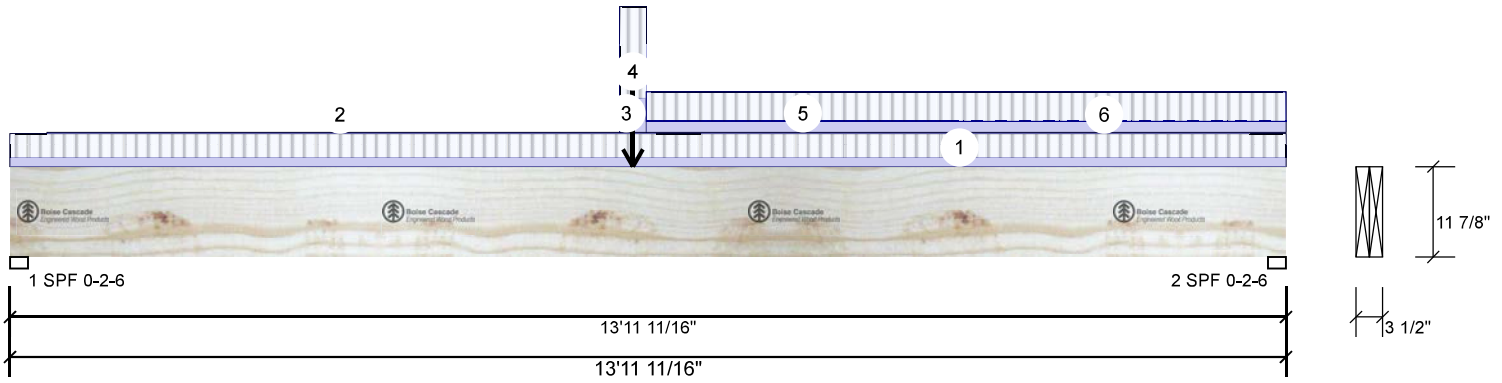

Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	346	229	0	0
2	Vertical	423	257	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	16%	287 / 520	806	L	1.25D+1.5L
2 - SPF	2.375"	Vert	19%	322 / 634	956	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4142 ft-lb	6'9 7/8"	35392 ft-lb	0.117 (12%)	1.25D+1.5L	L
Unbraced	4142 ft-lb	6'9 7/8"	35392 ft-lb	0.117 (12%)	1.25D+1.5L	L
Shear	852 lb	12'9 7/16"	13217 lb	0.064 (6%)	1.25D+1.5L	L
Perm Defl in.	0.032 (L/5083)	7' 1/8"	0.457 (L/360)	0.071 (7%)	D	Uniform
LL Defl inch	0.055 (L/3002)	7' 3/8"	0.457 (L/360)	0.120 (12%)	L	L
TL Defl inch	0.087 (L/1887)	7' 1/4"	0.685 (L/240)	0.127 (13%)	D+L	L

Design Notes

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1	Tie-In	0-0-0 to 13-11-11	0-5-12	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-4-14 to 7-0-14		Top	1 PLF	0 PLF	0 PLF	0 PLF	
3	Tie-In	6-8-2 to 6-11-10	1-10-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	6-9-14		Far Face	138 lb	314 lb	0 lb	0 lb	F6
5	Tie-In	6-11-10 to 13-11-11	0-7-2	Top	15 PSF	40 PSF	0 PSF	0 PSF	

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Lumber

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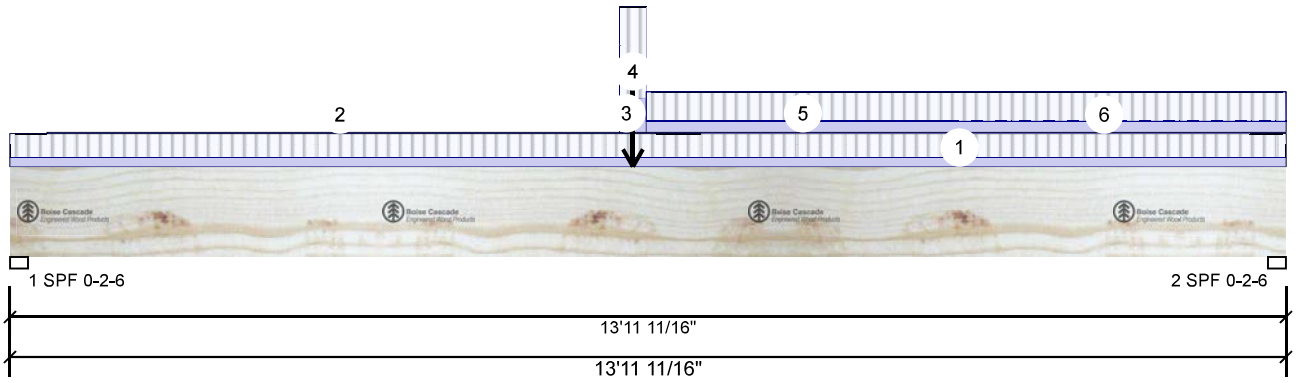
Project:
Address: ZADORRA ESTATES
OSHAWA,ON

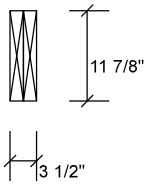
Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

MHP 23030

F9-B Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Part. Uniform	7-6-13 to 13-6-13		Top	1 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				12 PLF				

LICENSED PROFESSIONAL ENGINEER
I.MATIJEVIC
100528832
PROVINCE OF ONTARIO
JULY 14, 2023

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Notes

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Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
1111 W. Jefferson St.
Boise, ID 83702
(800) 232-0788
www.bc.com
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

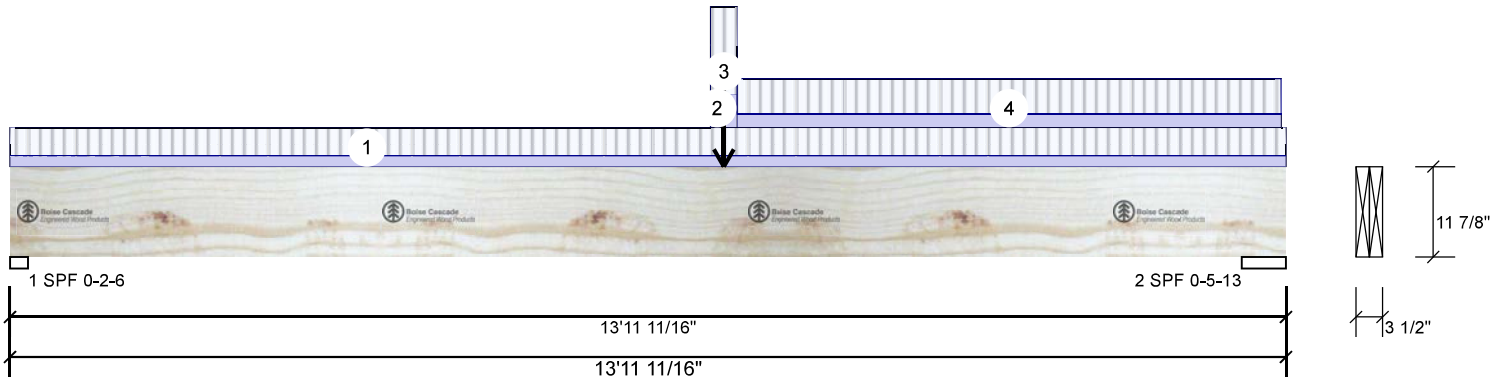
MHP 23030

Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F9-C Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor



Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	321	210	0	0
2	Vertical	478	276	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	15%	263 / 482	745	L	1.25D+1.5L
2 - SPF	5.822"	Vert	8%	344 / 716	1061	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3839 ft-lb	7'9 13/16"	35392 ft-lb	0.108 (11%)	1.25D+1.5L	L
Unbraced	3839 ft-lb	7'9 13/16"	35392 ft-lb	0.108 (11%)	1.25D+1.5L	L
Shear	902 lb	12'6"	13217 lb	0.068 (7%)	1.25D+1.5L	L
Perm Defl in.	0.029 (L/5627)	7' 9/16"	0.447 (L/360)	0.064 (6%)	D	Uniform
LL Defl inch	0.049 (L/3284)	7'1 7/16"	0.447 (L/360)	0.110 (11%)	L	L
TL Defl inch	0.078 (L/2074)	7'1 1/8"	0.671 (L/240)	0.116 (12%)	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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 must be continuously laterally braced.
6 Bottom must be laterally braced at a maximum of 7'9 13/16" o.c.
7 Lateral slenderness ratio based on full section width.

JULY 14, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-11-11	0-7-2	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	7-8-1 to 7-11-9	1-10-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	7-9-13		Near Face	122 lb	269 lb	0 lb	0 lb	F6
4	Tie-In	7-11-9 to 13-11-1	0-8-14	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
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Client: GREENPARK
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Address: ZADORRA ESTATES OSHAWA,ON

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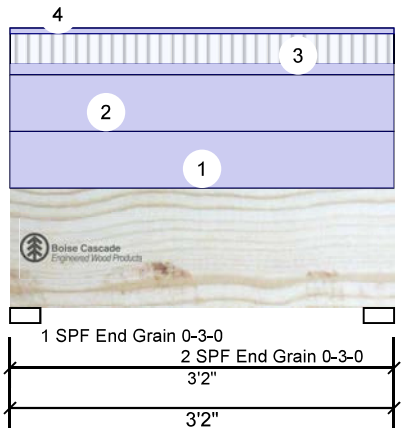
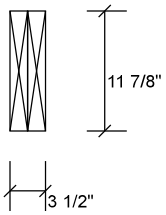
FH5 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





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Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	33	164	0	0
2	Vertical	33	164	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	4%	206 / 50	255	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	4%	206 / 50	255	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	157 ft-lb	1'7"	23005 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	157 ft-lb	1'7"	23005 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	166 lb	1'2 7/8"	8591 lb	0.019 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/202972)	1'7"	0.093 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/1003586)	1'7"	0.093 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/168827)	1'7"	0.140 (L/240)	0.001 (0%)	D+L	L

Design Notes

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-2-0		Top	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Tapered Start	0-0-0		Near Face	8 PLF	21 PLF	0 PLF	0 PLF	
	End	3-2-0			8 PLF	21 PLF	0 PLF	0 PLF	

Continued on page 2...

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
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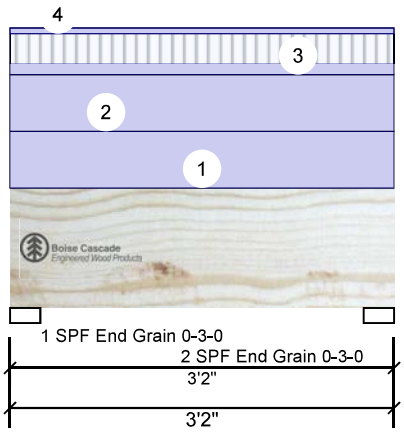
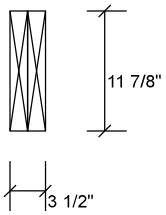
FH5 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	0-0-0 to 3-2-0		Near Face	4 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
	Self Weight				12 PLF				

I.MATIJEVIC
100528832
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO
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MHP 23030

Ground Floor

Installation Guide

(Open your phone's camera and hover over this QR code to access it)

1. All blocking to be cut from 12' joists
2. 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length
3. Ends of joists to be laterally supported
4. Packing of Steel beams and attachment by others
5. Shower and water closet flange locations are approximate only, consult architectural drawing for exact locations
6. Beams identified as "B" are dropped and supplied by others
7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls
8. Load transfer blocks to be installed under all point loads
9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements
10. Hangers and Fasteners to be installed as per manufacturer
11. Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction.
12. Multi ply beams with side loading to have all fasteners installed with the head on the side of the applied load
13. Confirmation of adequate support & anchorage of components is the responsibility of the building designer; suggested uplift connectors are as shown
14. Where beam hangs on side of 3-ply member, it is recommended that the equivalent quantity and size of nails required for the hanger attachment also be installed on opposite side of the 3-ply member

Ground Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F10	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	16-0-0
F9	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	14-0-0
F8	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	12-0-0
F7	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	10-0-0
F6	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	3	2	6	4-0-0
FH5	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	4-0-0

Joist (Flush)

Label	Description	Width	Depth	Pcs	Length
F5	AJS 140	2.5	11.875	4	16-0-0
F4	AJS 140	2.5	11.875	3	14-0-0
F3	AJS 140	2.5	11.875	1	8-0-0
F2	AJS 140	2.5	11.875	1	6-0-0
F1	AJS 140	2.5	11.875	2	4-0-0
J6	AJS 140	2.5	11.875	43	16-0-0
J5	AJS 140	2.5	11.875	7	14-0-0
J4	AJS 140	2.5	11.875	6	12-0-0
J3	AJS 140	2.5	11.875	2	10-0-0
J2	AJS 140	2.5	11.875	3	8-0-0
J1	AJS 140	2.5	11.875	1	6-0-0

Rim Board

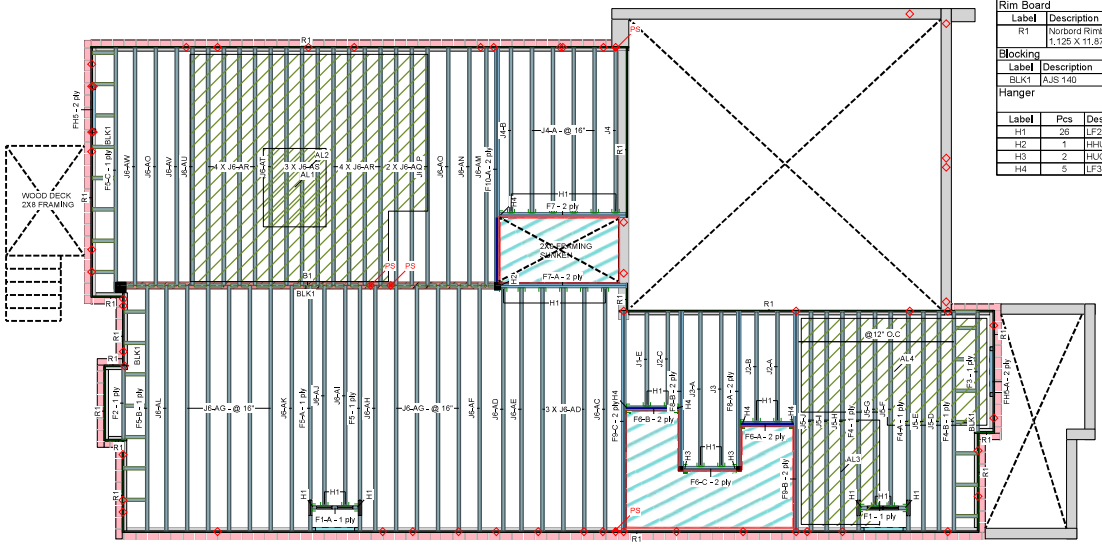
Label	Description	Width	Depth	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875	15	12-0-0

Blocking

Label	Description	Width	Depth	Qty	Pcs	Length
BLK1	AJS 140	2.5	11.875	LinFt	Varies	47-0-0

Hanger

Label	Pcs	Description	Beam/Girder fasteners	Supported Member fasteners
H1	26	LF2511	12 10dx1 1/2	1 #8x1 1/4WS
H2	1	HHUS410	30 16d	10 16d
H3	2	HUC410 (Min)	14 16d	6 10d
H4	5	LF3511	12 10d	2 #8x1 1/4WS



JOB INFORMATION

Builder
GREENPARK

Project

Shipping
ZADORRA ESTATES
OSHAWA,ON

Sales Rep
RALPH MIRIGELLO

Designer
W.C

Plotted
July 13, 2023

Layout Name
ROSE 6-1 DC

Job Path
S:\CUSTOMERS\GREENPARK\ZADORRA ESTATES\MODELS\ROSE 6\ROSE 6-1\F-ROSE 6-1\DC\ROSE 6-1 DC.ml

DESIGN CRITERIA

Ground Floor

Design Method	LSD (Canada)
Building Code	NBCC 2015 OBC 2012(2020 Update)

Floor

Loads

Live	40
Dead	15

Deflection Joist

LL Span	L/ 360
TL Span	L/ 240

Deflection Flush Girder

LL Span	L/ 360
TL Span	L/ 240

Deflection Dropped Girder

LL Span	L/ 360
TL Span	L/ 240

Deflection Header

LL Span	L/ 360
TL Span	L/ 240

Decking

Decking	OSB
Thickness	3/4"
Fastener	Nailed & Glued

CCMC References
Boise - 12472-R , 12787-R
LP - 12412-R, Roseburg - 13310-R
Forex - 14056-R

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Legend

PS	Point Load Support
	Load from Above
	Wall
	Wall Opening
	Norbord Rimboard Plus 1.125 X 11.875
	AJS 140 11.875
	Versa-Lam LVL 2.1E 3100 SP 1.75 X 11.875
	1.75 X 9.5 (Dropped)
	5.25 X 8 (Dropped)

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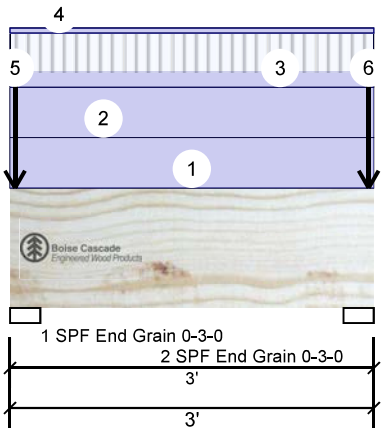

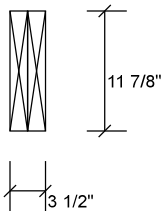

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Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	88	468	208	0
2	Vertical	88	413	113	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	11%	585 / 400	984	L	1.25D+1.5S +L
2 - SPF End Grain	3.000"	Vert	9%	516 / 131	647	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	156 ft-lb	1'6"	23005 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	156 ft-lb	1'6"	23005 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	177 lb	1'9 1/8"	8591 lb	0.021 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/230204)	1'6"	0.088 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/800767)	1'6"	0.088 (L/360)	0.000 (0%)	L+0.5S	L
TL Defl inch	0.000 (L/178802)	1'6"	0.131 (L/240)	0.001 (0%)	D+L+0.5S	L

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-0-0		Top	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Tapered Start	0-0-0		Near Face	12 PLF	31 PLF	0 PLF	0 PLF	
	End	3-0-0			12 PLF	31 PLF	0 PLF	0 PLF	

Continued on page 2...

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6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
1111 W. Jefferson St.
Boise, ID 83702
(800) 232-0788
www.bc.com
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

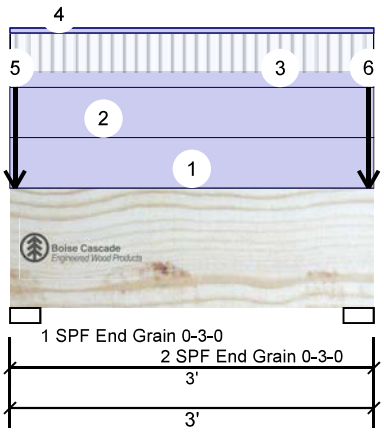
MHP 23030

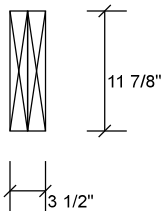
Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 DC
Project #:

FH5 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	0-0-0 to 3-0-0		Near Face	4 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
5	Point	0-0-8		Top	306 lb	41 lb	208 lb	0 lb	Header Column Header Column
	Bearing Length	0-3-8							
6	Point	2-11-8		Top	251 lb	41 lb	113 lb	0 lb	Header Column Header Column
	Bearing Length	0-3-8							
	Self Weight				12 PLF				

JULY 14, 2023

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: EWP-FLOORS. 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 application, and to verify the dimensions and loads.

Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
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Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

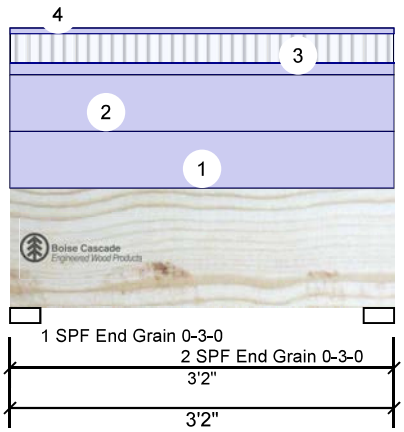
MHP 23030

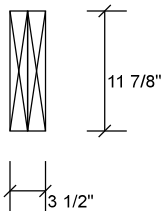
Client: GREENPARK
Project:
Address: ZADORRA ESTATES
OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 DC
Project #:

FH5-A Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	33	164	0	0
2	Vertical	33	164	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	4%	206 / 50	255	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	4%	206 / 50	255	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	157 ft-lb	1'7"	23005 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	157 ft-lb	1'7"	23005 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	166 lb	1'2 7/8"	8591 lb	0.019 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/202972)	1'7"	0.093 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/1003586)	1'7"	0.093 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/168827)	1'7"	0.140 (L/240)	0.001 (0%)	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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 must be continuously laterally braced.
6 Bottom must have sheathing attached or be continuously braced.
7 Lateral slenderness ratio based on full section width.

JULY 14, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-2-0		Top	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Tapered Start	0-0-0		Near Face	8 PLF	21 PLF	0 PLF	0 PLF	
	End	3-2-0			8 PLF	21 PLF	0 PLF	0 PLF	

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
1111 W. Jefferson St.
Boise, ID 83702
(800) 232-0788
www.bc.com
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

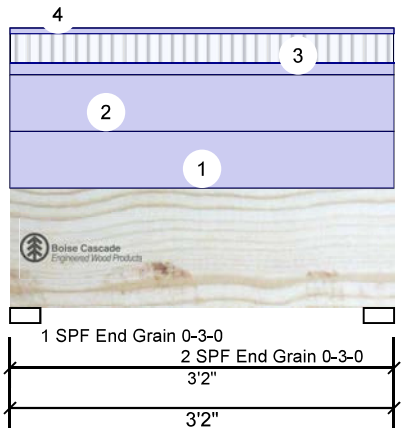
Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

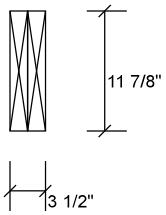
Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 DC
Project #:

MHP 23030

FH5-A Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	0-0-0 to 3-2-0		Near Face	4 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
	Self Weight				12 PLF				

I.MATIJEVIC
100528832
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO
JULY 14, 2023

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

Handling & Installation

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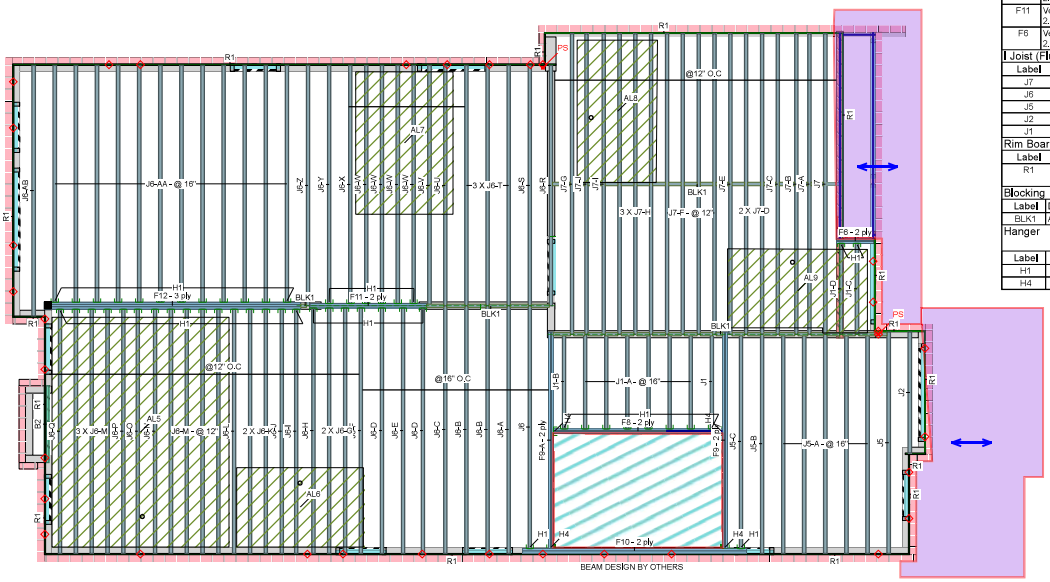
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Oct 30 2023
PER: _____
CHIEF BUILDING OFFICIAL

MHP 23030

Second Floor



Second Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F12	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	3	3	18-0-0
F10	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	16-0-0
F9	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	14-0-0
F8	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12-0-0
F11	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	8-0-0
F6	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	4-0-0

Joist (Flush)

Label	Description	Width	Depth	Pcs	Length
J7	AJS 140	2.5	11.875	17	20-0-0
J6	AJS 140	2.5	11.875	55	16-0-0
J5	AJS 140	2.5	11.875	8	14-0-0
J2	AJS 140	2.5	11.875	1	8-0-0
J1	AJS 140	2.5	11.875	10	6-0-0

Rim Board

Label	Description	Width	Depth	Pcs	Length
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875	15	12-0-0

Blocking

Label	Description	Width	Depth	Qty	Pcs	Length
BLK1	AJS 140	2.5	11.875	LinFt	Varies	39-0-0

Hanger

			Beam/Girder	Supported Member
Label	Pcs	Description	fasteners	fasteners
H1	53	LF2511	12 10d	1 #8x1 1/4WS
H4	4	LF3511	12 10d	2 #8x1 1/4WS

JOB INFORMATION

Builder
GREENPARK

Project

Shipping
ZADORRA ESTATES
OSHAWA,ON

Sales Rep
RALPH MIRIGELLO

Designer
W.C

Plotted
June 26, 2023

Layout Name
ROSE 6-1 ALL OPT

Job Path
S:\CUSTOMERS\GREENPARK\ZADORRA ESTATES\MODELS\ROSE 6\ROSE 6-1\F-ROSE 6-1\ROSE 6-1.ild

DESIGN CRITERIA

Second Floor

Design Method	LSD (Canada)
Building Code	NBCC 2015 OBC 2012(2020 Update)

Floor Loads

Live	40
Dead	15

Deflection Joist

LL Span	L/ 360
TL Span	L/ 240

Deflection Flush Girder

LL Span	L/ 360
TL Span	L/ 240

Deflection Dropped Girder

LL Span	L/ 360
TL Span	L/ 240

Deflection Header

LL Span	L/ 360
TL Span	L/ 240

Decking

Decking	OSB
Thickness	5/8"
Fastener	Nailed & Glued

CCMC References
Boise - 12472-R , 12787-R
LP - 12412-R, Roseburg - 13310-R
Forex - 14056-R

Kott Inc.
3228 Moodie Dr, Ottawa
14 Anderson Blvd, Uxbridge Ontario
613-838-2775 /
905-642-4400

1. All blocking to be cut from 12' joists
2. 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length
3. Ends of joists to be laterally supported
4. Packing of Steel beams and attachment by others
5. Shower and water closet flange locations are approximate only, consult architectural drawing for exact locations
6. Beams identified as "B" are dropped and supplied by others
7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls
8. Load transfer blocks to be installed under all point loads
9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements
10. Hangers and Fasteners to be installed as per manufacturer
11. Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction.
12. Multi ply beams with side loading to have all fasteners installed with the head on the side of the applied load
13. Confirmation of adequate support & anchorage of components is the responsibility of the building designer; suggested uplift connectors are as shown
14. Where beam hangs on side of 3-ply member, it is recommended that the plant quantity and size of nails required for the hanger attachment also be installed on opposite side of the 3-ply member

Legend

PS — Point Load Support
◇ — Load from Above
Wall
Wall Opening
Norbord Rimboard Plus 1.125 X 11.875
AJS 140 11.875
Versa-Lam LVL 2.1E 3100 SP 1.75 X 11.875
1.75 X 9.5 (Dropped)
1.75 X 11.875 (Dropped)
5.25 X 8 (Dropped)

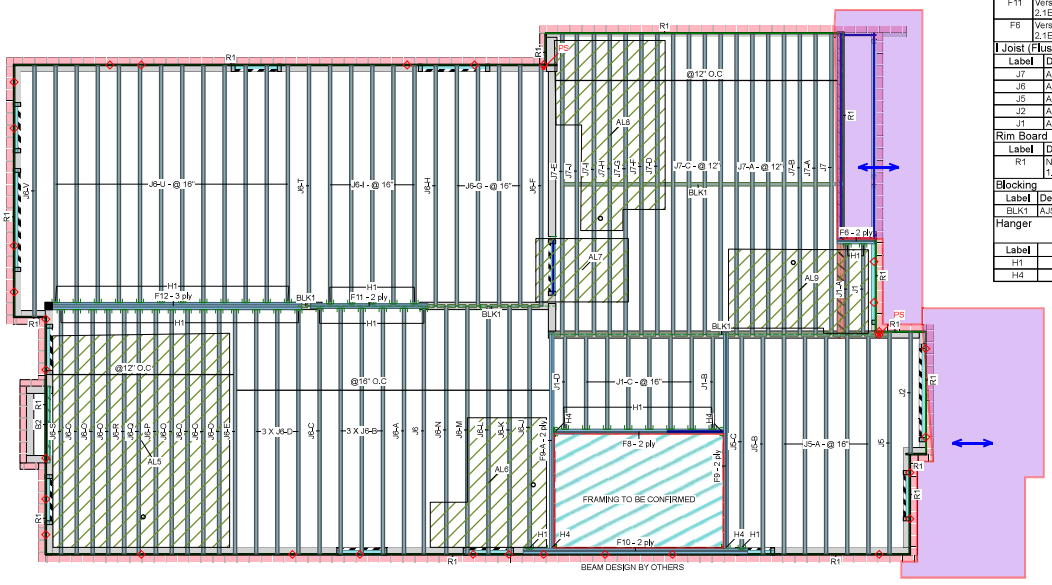
Installation Guide
(Open your phone's camera and hover over this QR code to access it)

Hatch Area represents where additional load has been applied. (e.g. 5 psf for ceramic tile)

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Oct 30 2023
PER: _____
CHIEF BUILDING OFFICIAL

MHP 23030

Second Floor



Second Floor
LVL/LSL (Flush)

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
F12	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	3	3	18-0-0
F10	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	16-0-0
F9	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	14-0-0
F8	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12-0-0
F11	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	8-0-0
F6	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	4-0-0

Joist (Flush)

Label	Description	Width	Depth	Pcs	Length
J7	AJS 140	2.5	11.875	18	20-0-0
J6	AJS 140	2.5	11.875	51	16-0-0
J5	AJS 140	2.5	11.875	8	14-0-0
J2	AJS 140	2.5	11.875	1	8-0-0
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Blocking

Label	Description	Width	Depth	Qty	Pcs	Length
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Hanger

			Beam/Girder	Supported Member
Label	Pcs	Description	fasteners	fasteners
H1	50	LF2511	12 10d	1 #8x1 1/4WS
H4	4	LF3511	12 10d	2 #8x1 1/4WS

JOB INFORMATION

Builder
GREENPARK

Project

Shipping
ZADORRA ESTATES
OSHAWA,ON

Sales Rep
RALPH MIRIGELLO

Designer
W.C

Plotted
June 02, 2023

Layout Name
ROSE 6-1 2ND 5BDRM OPT. ALL

Job Path
S:\CUSTOMERS\GREENPARK\ZADORRA ESTATES\MODELS\ROSE 6\ROSE 6-1\F-ROSE 6-1\5BDRM-OPT\ROSE 6-1 2ND 5BDRM OPT..lsl

DESIGN CRITERIA

Second Floor

Design Method	LSD (Canada)
Building Code	NBCC 2015 OBC 2012(2020 Update)

Floor Loads

Live	40
Dead	15

Deflection Joist

LL Span L/	360
TL Span L/	240

Deflection Flush Girder

LL Span L/	360
TL Span L/	240

Deflection Dropped Girder

LL Span L/	360
TL Span L/	240

Deflection Header

LL Span L/	360
TL Span L/	240

Decking

Decking	OSB
Thickness	5/8"
Fastener	Nailed & Glued

CCMC References
Boise - 12472-R , 12787-R
LP - 12412-R, Roseburg - 13310-R
Forex - 14056-R

Kott Inc.
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14 Anderson Blvd, Uxbridge Ontario
613-838-2775 /
905-642-4400

KOTT

1. All blocking to be cut from 12' joists
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Legend

PS	Point Load Support
	Load from Above
	Wall
	Wall Opening
	Norbord Rimboard Plus 1.125 X 11.875
	AJS 140 11.875
	Versa-Lam LVL 2.1E 3100 SP 1.75 X 11.875
	1.75 X 9.5 (Dropped)
	1.75 X 11.875 (Dropped)
	5.25 X 8 (Dropped)

Installation Guide
(Open your phone's camera and hover over this QR code to access it)

Hatch Area represents where additional load has been applied. (e.g. 5 psf for ceramic tile)

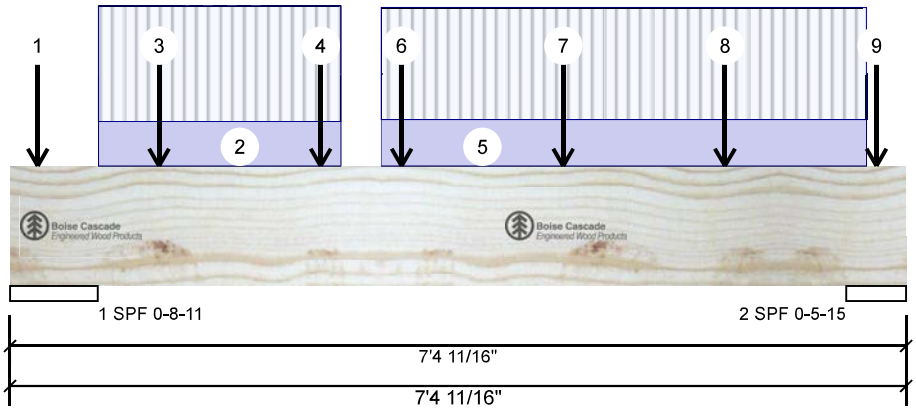
MHP 23030

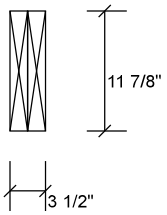
Client: GREENPARK
Project:
Address: ZADORRA ESTATES
OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F11 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	2111	862	0	0
2	Vertical	2073	855	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	8.688"	Vert	23%	1078 / 3167	4245	L	1.25D+1.5L
2 - SPF	5.938"	Vert	33%	1069 / 3109	4178	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5983 ft-lb	3'8 9/16"	35392 ft-lb	0.169 (17%)	1.25D+1.5L	L
Unbraced	5983 ft-lb	3'8 9/16"	35392 ft-lb	0.169 (17%)	1.25D+1.5L	L
Shear	3811 lb	1'8 9/16"	13217 lb	0.288 (29%)	1.25D+1.5L	L
Perm Defl in.	0.009 (L/8503)	3'9 11/16"	0.210 (L/360)	0.042 (4%)	D	Uniform
LL Defl inch	0.022 (L/3494)	3'9 5/8"	0.210 (L/360)	0.103 (10%)	L	L
TL Defl inch	0.031 (L/2477)	3'9 5/8"	0.315 (L/240)	0.097 (10%)	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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 must be continuously laterally braced.
5 Bottom must have sheathing attached or be continuously braced.
6 Lateral slenderness ratio based on full section width.

JULY 14, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-2-12		Near Face	82 lb	211 lb	0 lb	0 lb	J6
2	Part. Uniform	0-8-12 to 2-8-12		Near Face	118 PLF	306 PLF	0 PLF	0 PLF	
3	Point	1-2-12		Far Face	148 lb	395 lb	0 lb	0 lb	J6
4	Point	2-6-12		Far Face	133 lb	346 lb	0 lb	0 lb	J6
5	Part. Uniform	3-0-12 to 7-0-12		Far Face	123 PLF	297 PLF	0 PLF	0 PLF	
6	Point	3-2-12		Near Face	136 lb	357 lb	0 lb	0 lb	J6

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
1111 W. Jefferson St.
Boise, ID 83702
(800) 232-0788
www.bc.com
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

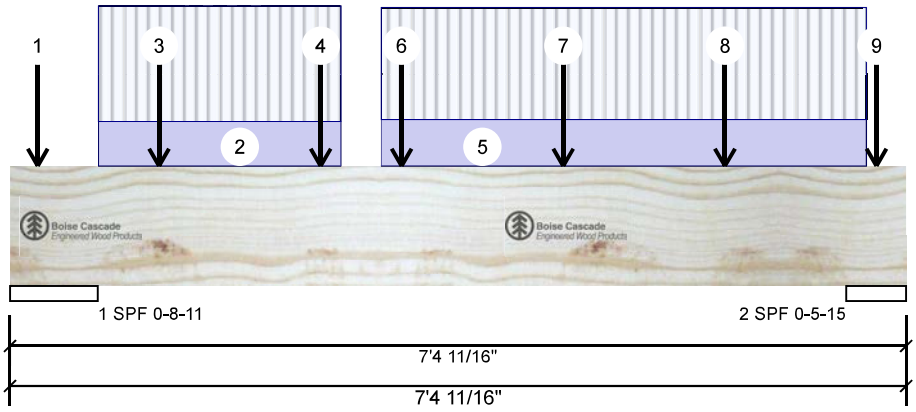
Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

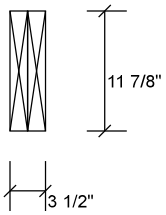
Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

MHP 23030

F11 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Point	4-6-12		Near Face	153 lb	408 lb	0 lb	0 lb	J6
8	Point	5-10-12		Near Face	148 lb	395 lb	0 lb	0 lb	J6
9	Point	7-1-12		Near Face	102 lb	272 lb	0 lb	0 lb	J6
	Self Weight				12 PLF				

JULY 14, 2023

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Notes

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
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KOTT
CSD DRAW DESIGN BUILD

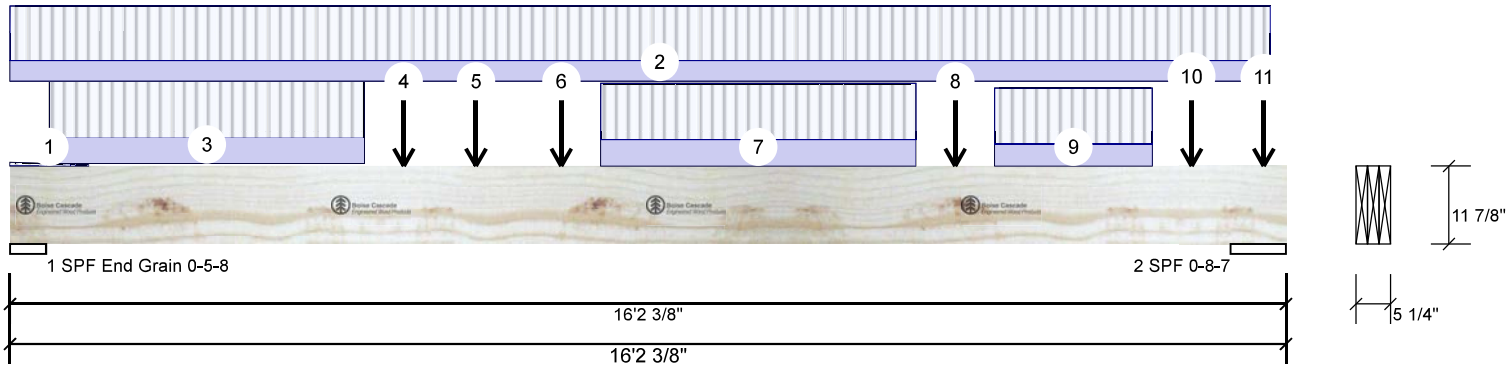
MHP 23030

Client: GREENPARK
Project:
Address: ZADORRA ESTATES
OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F12 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 3-Ply - PASSED

Level: Second Floor



Member Information

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
General Load	
Floor Live:	40 PSF
Dead:	15 PSF

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	Yes
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	4636	2092	0	0
2	Vertical	4947	2148	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.500"	Vert	32%	2615 / 6953	9568	L	1.25D+1.5L
2 - SPF	8.447"	Vert	37%	2685 / 7420	10105	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	35492 ft-lb	7'11 1/2"	55212 ft-lb	0.643 (64%)	1.25D+1.5L	L
Unbraced	35492 ft-lb	7'11 1/2"	55212 ft-lb	0.643 (64%)	1.25D+1.5L	L
Shear	9753 lb	14'6 1/16"	19825 lb	0.492 (49%)	1.25D+1.5L	L
Perm Defl in.	0.209 (L/869)	7'11 9/16"	0.505 (L/360)	0.414 (41%)	D	Uniform
LL Defl inch	0.466 (L/391)	7'11 11/16"	0.505 (L/360)	0.922 (92%)	L	L
TL Defl inch	0.675 (L/269)	7'11 11/16"	0.758 (L/240)	0.891 (89%)	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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 must be continuously laterally braced.
6 Bottom must have sheathing attached or be continuously braced.
7 Lateral slenderness ratio based on full section width.

JULY 14, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-0-0	0-4-7 to 0-1-5	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 16-0-0		Far Face	111 PLF	295 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-6-0 to 4-6-0		Near Face	142 PLF	304 PLF	0 PLF	0 PLF	
4	Point	5-0-0		Near Face	138 lb	292 lb	0 lb	0 lb	J6
5	Point	5-11-0		Near Face	150 lb	304 lb	0 lb	0 lb	J6

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

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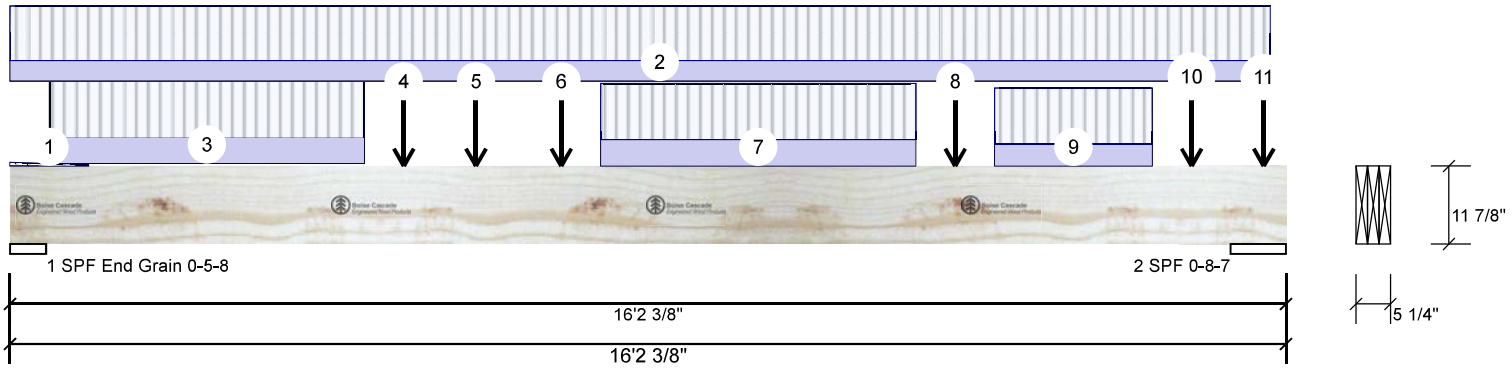
MHP 23030

Client: GREENPARK
Project:
Address: ZADORRA ESTATES
OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F12 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 3-Ply - PASSED

Level: Second Floor



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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
6	Point	7-0-0		Near Face	154 lb	317 lb	0 lb	0 lb	J6
7	Part. Uniform	7-6-0 to 11-6-0		Near Face	143 PLF	304 PLF	0 PLF	0 PLF	
8	Point	12-0-0		Near Face	123 lb	304 lb	0 lb	0 lb	J6
9	Part. Uniform	12-6-0 to 14-6-0		Near Face	118 PLF	304 PLF	0 PLF	0 PLF	
10	Point	15-0-0		Near Face	113 lb	292 lb	0 lb	0 lb	J6
11	Point	15-11-0		Near Face	119 lb	304 lb	0 lb	0 lb	J6
	Self Weight				18 PLF				

LICENSED PROFESSIONAL ENGINEER
I.MATIJEVIC
100528832
PROVINCE OF ONTARIO
JULY 14, 2023

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Lumber

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Handling & Installation

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2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
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613-838-2775 / 905-642-4400

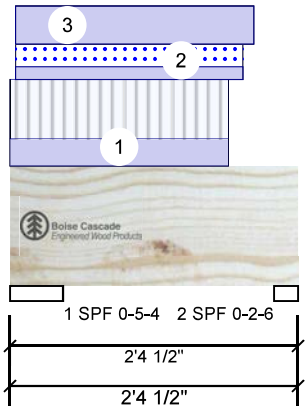
MHP 23030

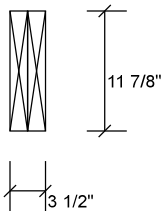
Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F6 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	156	220	58	0
2	Vertical	68	118	30	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	Vert	5%	275 / 292	567	L	1.25D+1.5L +S
2 - SPF	2.375"	Vert	6%	148 / 132	280	L	1.25D+1.5L +S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	181 ft-lb	1'3 1/4"	33622 ft-lb	0.005 (1%)	1.25D+1.5L +S	L
Unbraced	181 ft-lb	1'3 1/4"	33622 ft-lb	0.005 (1%)	1.25D+1.5L +S	L
Shear	236 lb	1'2 1/4"	12027 lb	0.020 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/358240)	1'3 1/2"	0.062 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/449853)	1'3 3/8"	0.062 (L/360)	0.001 (0%)	L+0.5S	L
TL Defl inch	0.000 (L/199435)	1'3 7/16"	0.093 (L/240)	0.001 (0%)	D+L+0.5S	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Girders are designed to be supported on the bottom edge only.
3 Multiple plies must be fastened together as per manufacturer's details.
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7 Lateral slenderness ratio based on full section width.

JULY 14, 2023

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Lumber

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

Handling & Installation

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

This design is valid until 4/17/2026

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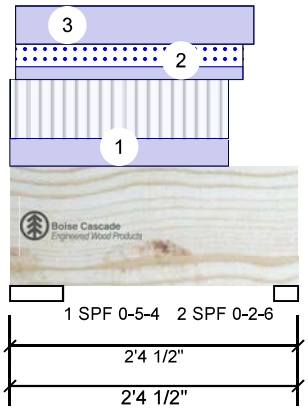
MHP 23030

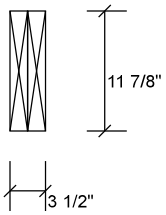
Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F6 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor





ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 1-9-10		Near Face	57 PLF	124 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-9 to 1-11-1		Top	27 PLF	0 PLF	47 PLF	0 PLF	
3	Part. Uniform	0-0-9 to 2-0-2		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				12 PLF				

JULY 14, 2023

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Lumber

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Handling & Installation

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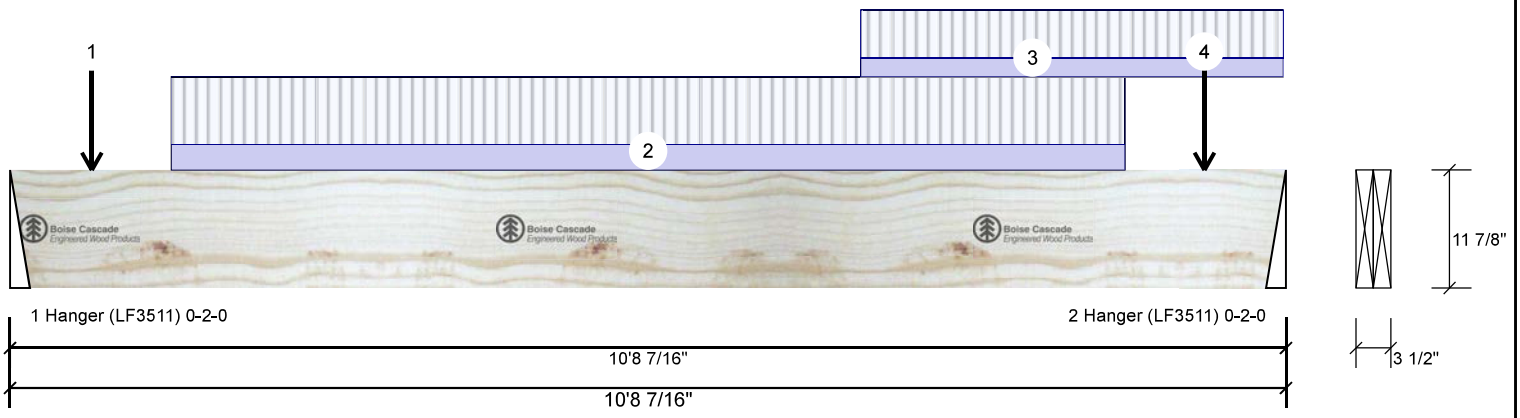
F8 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	648	306	0	0
2	Vertical	850	383	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	18%	382 / 972	1354	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	23%	478 / 1275	1753	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3880 ft-lb	5'8 13/16"	35392 ft-lb	0.110 (11%)	1.25D+1.5L	L
Unbraced	3880 ft-lb	5'8 13/16"	35392 ft-lb	0.110 (11%)	1.25D+1.5L	L
Shear	1562 lb	9'6 9/16"	13217 lb	0.118 (12%)	1.25D+1.5L	L
Perm Defl in.	0.017 (L/7402)	5'5 3/16"	0.350 (L/360)	0.049 (5%)	D	Uniform
LL Defl inch	0.037 (L/3409)	5'5 3/8"	0.350 (L/360)	0.106 (11%)	L	L
TL Defl inch	0.054 (L/2334)	5'5 5/16"	0.525 (L/240)	0.103 (10%)	D+L	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fill all hanger nailing holes.
3. Left Header: DF, Thickness: 3 1/2"
4. Right Header: DF, Thickness: 3 1/2"
5. Girders are designed to be supported on the bottom edge only.
6. Multiple plies must be fastened together as per manufacturer's details.
7. Top loads must be supported equally by all plies.
8. Top must be continuously laterally braced.
9. Bottom must have sheathing attached or be continuously braced.
10. Lateral slenderness ratio based on full section width.

LICENSED PROFESSIONAL ENGINEER
I.MATIJEVIC
100528832
PROVINCE OF ONTARIO
JULY 14, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-8-4		Far Face	48 lb	128 lb	0 lb	0 lb	J1
2	Part. Uniform	1-4-4 to 9-4-4		Far Face	44 PLF	118 PLF	0 PLF	0 PLF	
3	Part. Uniform	7-1-10 to 10-8-3		Top	32 PLF	84 PLF	0 PLF	0 PLF	

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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CSD DRAW DESIGN BUILD

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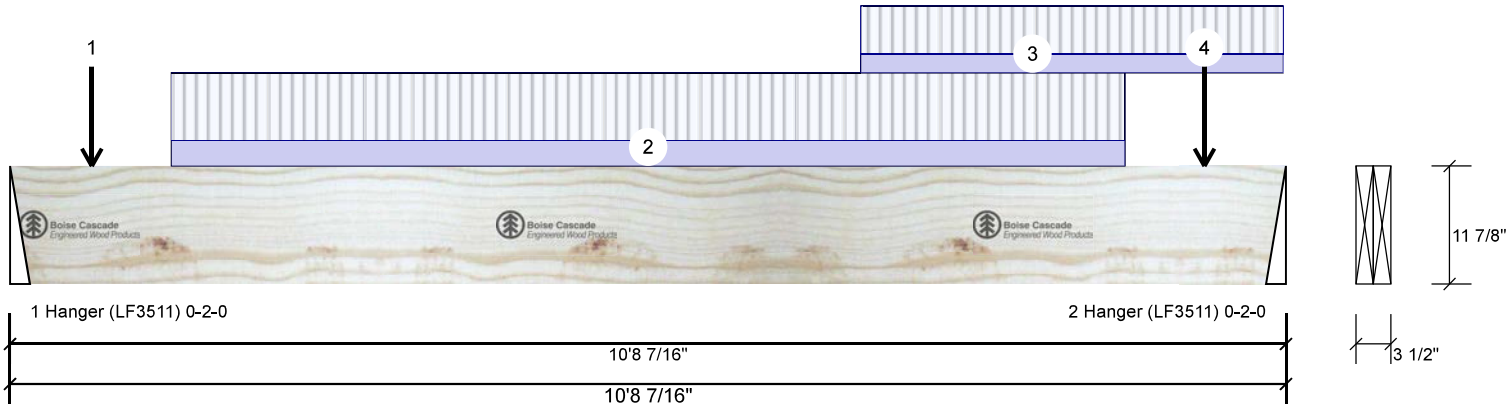

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Point	10-0-4		Far Face	48 lb	128 lb	0 lb	0 lb	J1
	Self Weight				12 PLF				

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Lumber

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Handling & Installation

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

This design is valid until 4/17/2026

Manufacturer Info

Boise Cascade Wood Products
1111 W. Jefferson St.
Boise, ID 83702
(800) 232-0788
www.bc.com
CCMC: 12472

Kott Inc.
3228 Moodie Dr, Ottawa, Ontario
613-838-2775 / 905-642-4400

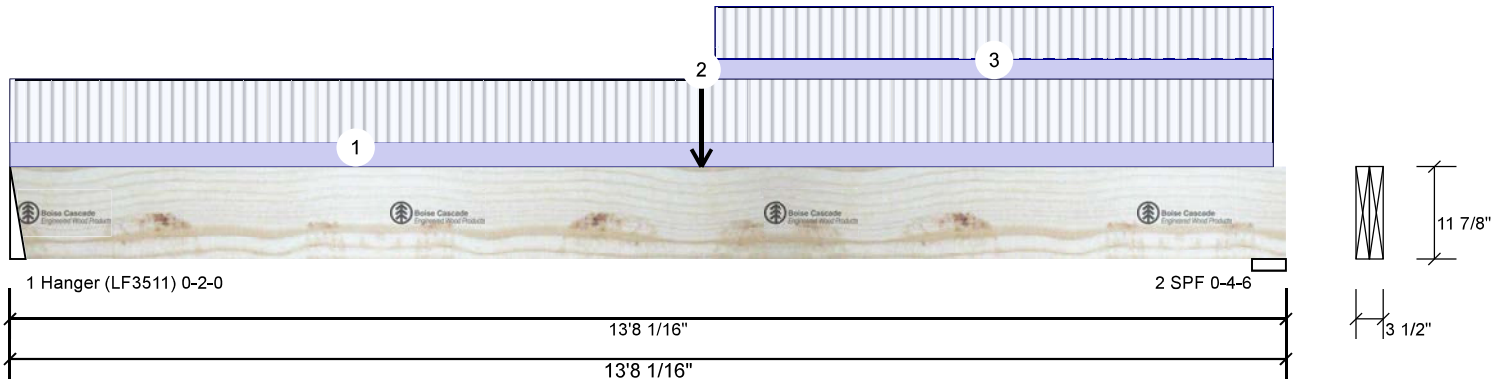
MHP 23030

Client: GREENPARK
Project:
Address: ZADORRA ESTATES OSHAWA,ON

Date: 7/13/2023
Input by: W C
Job Name: ROSE 6-1 STD
Project #:

F9 Versa-Lam LVL 2.1E 3100 SP 1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



Member Information

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

Application:	Floor (Residential)
Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	538	310	0	0
2	Vertical	683	373	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	16%	388 / 807	1195	L	1.25D+1.5L
2 - SPF	4.375"	Vert	16%	467 / 1024	1491	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7243 ft-lb	7'4 15/16"	35392 ft-lb	0.205 (20%)	1.25D+1.5L	L
Unbraced	7243 ft-lb	7'4 15/16"	35392 ft-lb	0.205 (20%)	1.25D+1.5L	L
Shear	1397 lb	12'3 13/16"	13217 lb	0.106 (11%)	1.25D+1.5L	L
Perm Defl in.	0.046 (L/3442)	6'11 1/8"	0.442 (L/360)	0.105 (10%)	D	Uniform
LL Defl inch	0.088 (L/1814)	6'11 1/2"	0.442 (L/360)	0.198 (20%)	L	L
TL Defl inch	0.134 (L/1188)	6'11 3/8"	0.663 (L/240)	0.202 (20%)	D+L	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fill all hanger nailing holes.
3. Left Header: DF, Thickness: 3 1/2"
4. Girders are designed to be supported on the bottom edge only.
5. Multiple plies must be fastened together as per manufacturer's details.
6. Top loads must be supported equally by all plies.
7. Top must be continuously laterally braced.
8. Bottom must be laterally braced at a maximum of 7'4 15/16" o.c.
9. Lateral slenderness ratio based on full section width.

LICENSED PROFESSIONAL ENGINEER
I.MATIJEVIC
100528832
PROVINCE OF ONTARIO
JULY 14, 2023

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-6-7	0-6-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	7-4-15		Far Face	383 lb	850 lb	0 lb	0 lb	F8
3	Tie-In	7-6-11 to 13-6-7	0-5-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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CSD DRAW DESIGN BUILD

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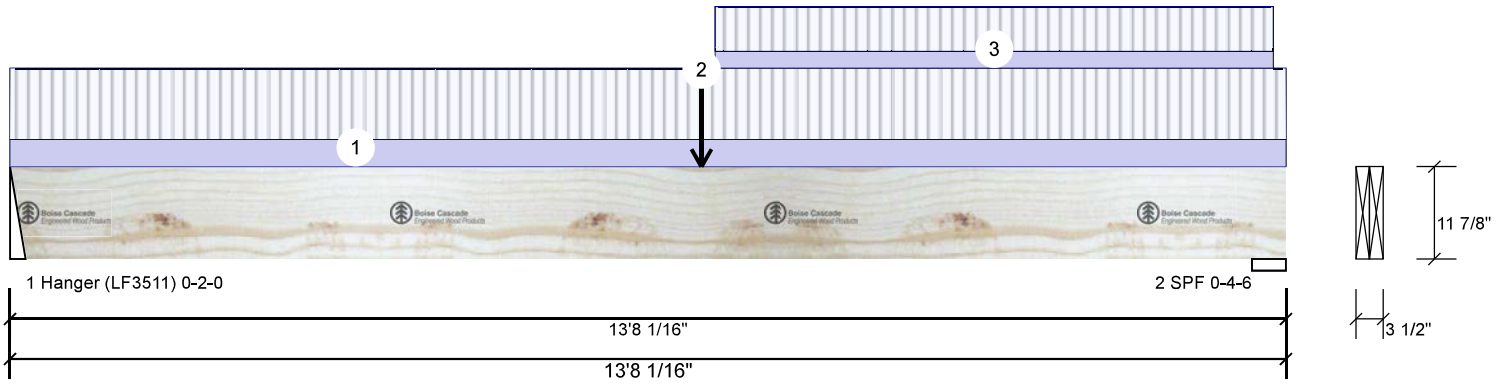

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Design Method:	LSD
Building Code:	NBCC 2015 OBC 2012(2020 Update)
Load Sharing:	No
Deck:	Not Checked
Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	492	293	0	0
2	Vertical	620	349	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	14%	366 / 738	1104	L	1.25D+1.5L
2 - SPF	4.375"	Vert	15%	437 / 930	1367	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6217 ft-lb	7'4 15/16"	35392 ft-lb	0.176 (18%)	1.25D+1.5L	L
Unbraced	6217 ft-lb	7'4 15/16"	35392 ft-lb	0.176 (18%)	1.25D+1.5L	L
Shear	1251 lb	12'3 13/16"	13217 lb	0.095 (9%)	1.25D+1.5L	L
Perm Defl in.	0.042 (L/3821)	6'10 15/16"	0.442 (L/360)	0.094 (9%)	D	Uniform
LL Defl inch	0.076 (L/2100)	6'11 5/16"	0.442 (L/360)	0.171 (17%)	L	L
TL Defl inch	0.117 (L/1355)	6'11 3/16"	0.663 (L/240)	0.177 (18%)	D+L	L

Design Notes

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	Self Weight				12 PLF				

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