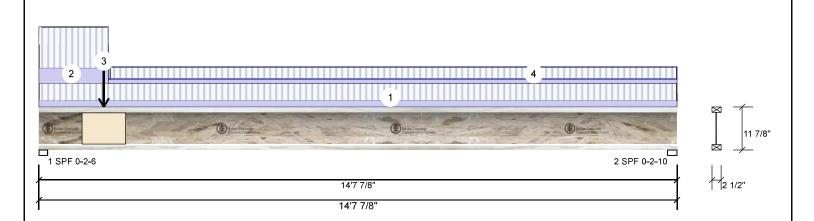
Project #

AJS 140 11 875'CHIEF DANCORIA F6-C

Level: Ground Floor

7/18/2023



Member Inforn	nation		Unfactored Reactions UNPATTERNED Ib (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	701	262	0	0
Moisture Condition: Deflection LL:	Dry 360	Building Code:	NBCC 2015 OBC 2012(2020 Update)	2	Vertical	365	137	0	0
Deflection TL:	240	Load Sharing:	No						
Importance: General Load	Normal - II	Deck: Vibration:	Not Checked Not Checked						
Floor Live:	40 PSF			Bea	rings and Fa	actored Read	tions		
Dead:	15 PSF			Bea	aring Length	Dir. Cap.	React D/L Ib	Total Ld. Case	Ld. Comb.
				1 -	SPF 2.375"	Vert 82%	328 / 1051	1379 L	1.25D+1.5L
Analusia Basult				2 -	SPF 2.625"	Vert 41%	171 / 548	719 L	1.25D+1.5L

Analysis Results

Ana l ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2804 ft-lb	6'6 1/2"	5305 ft-lb	0.529 (53%)	1.25D+1.5L	L
Unbraced	2804 ft-lb	6'6 1/2"	5305 ft-lb	0.529 (53%)	1.25D+1.5L	L
Shear	1355 lb	1 5/8"	2350 lb	0.577 (58%)	1.25D+1.5L	L
Perm Defl in.	0.073 (L/2361)	7' 13/16"	0.479 (L/360)	0.152 (15%)	D	Uniform
LL Defl inch	0.195 (L/885)	7' 13/16"	0.479 (L/360)	0.407 (41%)	L	L
TL Defl inch	0.268 (L/644)	7' 13/16"	0.718 (L/240)	0.373 (37%)	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 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.

4 Bottom flange must be laterally braced at a maximum of 13'2" o.c.



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.

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 14-7-14	0-7-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-7-2	1-7-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-5-14		Near Face	125 lb	335 lb	0 lb	0 lb	F2
4	Tie-In	1-7-2 to 14-7-14	0-5-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

Notes

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

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

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

 3. Damaged Jioists must not be used

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

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

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: 12787

Kott Inc.

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





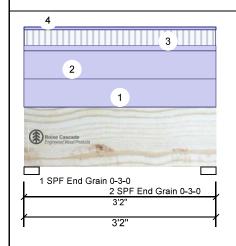


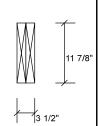
CORPORATION OF THE CITY OF OSHAWA TENUE ENG-IM0723-119-KTF-GREENPARK-ZADORRA ESTATES-VILLA 3-1 Client CREENPARK PERMIT PLANS Project Nov 04 2023

Input 🕢 🥎 🔑 Job Name: MA 312 TD& WOC Project #:

Versa-Lam LVL 2.1E 3100 SP BULD 16750 X 11 875"

2-Ply - PASSED Level: Ground Floor





Wichinger Inform	iation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015
Deflection LL:	360		OBC 2012(2020 Update)
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
General Load		Vibration:	Not Checked
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored	Reactions	UNPAT	TERNED	lb (U	plift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	35	164	0	0
2	Vertical	35	164	0	0

Analysis Results

Member Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	159 ft-lb	1'7"	23359 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	159 ft-lb	1'7"	23359 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	168 l b	1'2 7/8"	8723 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/957969)	1'7"	0.093 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/167485)	1'7"	0.140 (L/240)	0.001 (0%)	D+L	L

Bearings and Factored Reactions

Bearing	Length	Dir.	Сар.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	4%	206 / 52	258	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	4%	206 / 52	258	L	1.25D+1.5L



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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.

ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-2-0	Тор	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	22 PLF	0 PLF	0 PLF	
	End	3-2-0		8 PLF	22 PLF	0 PLF	0 PLF	

Continued on page 2...

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product 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

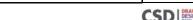
This design is valid until 4/17/2026

Manufacturer Info Boise Cascade Wood Products

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

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







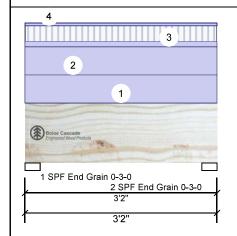
Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

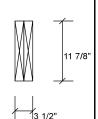
Hoput by 30355 woc

Project #:

Versa-Lam LVL 2.1E 3100 S₽ 8010167501 X 11 875"

2-Ply - PASSED Level: Ground Floor





.Continued from page 1

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

> Self Weight 12 PLF



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Notes

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Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

(800) 232-0788 www.bc.com CCMC: 12472

Kott Inc.

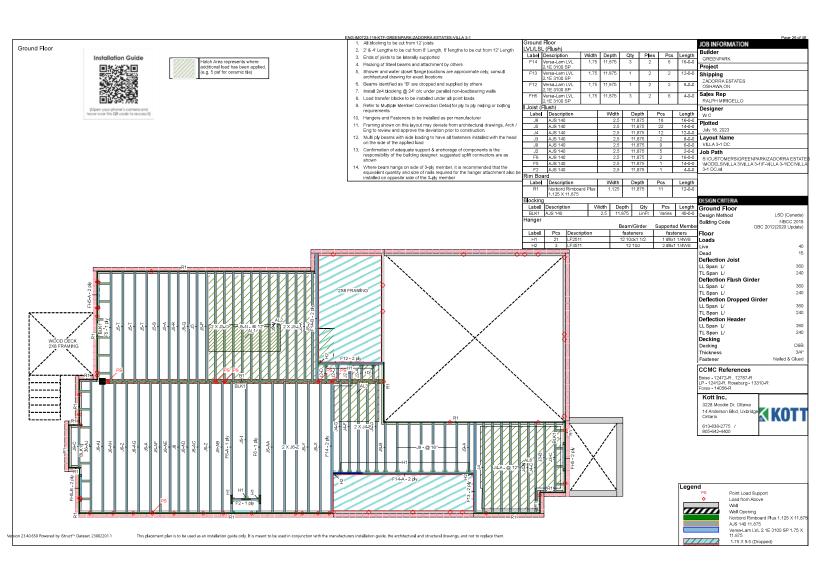
3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400







MHP 23035



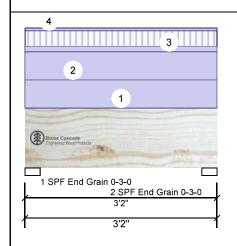


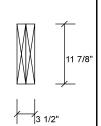
Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

Input ly Job Name: Oll 43100 Project #:

Versa-Lam LVL 2.1E 3100 S₽ 8010167501 X 11 875"

2-Ply - PASSED Level: Ground Floor





Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015
Deflection LL:	360		OBC 2012(2020 Update)
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
General Load		Vibration:	Not Checked
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	35	164	0	0
2	Vertical	35	164	0	0
l					

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	159 ft-lb	1'7"	23359 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	159 ft-lb	1'7"	23359 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	168 l b	1'2 7/8"	8723 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/957969)	1'7"	0.093 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/167485)	1'7"	0.140 (L/240)	0.001 (0%)	D+L	L

Bearings and Factored Reactions

Dearing.	, una ra	ccoica	itcut				
Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	4%	206 / 52	258	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	4%	206 / 52	258	L	1.25D+1.5L



- 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.



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I D	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-2-0	Тор	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	22 PLF	0 PLF	0 PLF	
	End	3-2-0		8 PLF	22 PLF	0 PLF	0 PLF	

Continued on page 2...

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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

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





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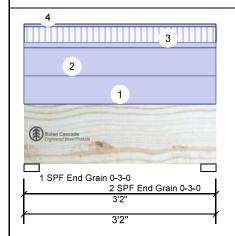
Client CREENPARK PERMIT PLANS Project Nov 04 2023

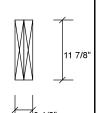
Input ly Job Name: Oll 43100

Project #:

Versa-Lam LVL 2.1E 3100 S₽ 8010167501 X 11 875"

2-Ply - PASSED Level: Ground Floor





.Continued from page 1

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

> Self Weight 12 PLF



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Notes

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Handling & Installation

Handling & Installation

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3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info 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







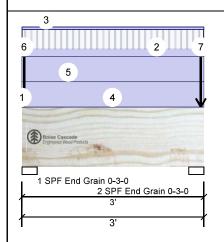
CORPORATION OF THE CITY OF OSHAWA TROLLE ENG-IN0723-119-KTF-GREENPARK-ZADORRA ESTATES-VILLA 3-1 Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

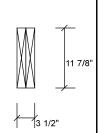


Versa-Lam LVL 2.1E 31 00 SP-== 1 750 × 11.8 75"

2-Ply - PASSED

Level: Ground Floor





Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015
Deflection LL:	360		OBC 2012(2020 Update)
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
General Load		Vibration:	Not Checked
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	88	390	130	0
2	Vertical	88	460	318	0

Analysis Results

Member Information

Ana l ysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	156 ft-lb	1'6"	23359 ft-lb	0.007 (1%)	1.25D+1.5L	L
Unbraced	156 ft-lb	1'6"	23359 ft-lb	0.007 (1%)	1.25D+1.5L	L
Shear	177 l b	1'9 1/8"	8723 l b	0.020 (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

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L I b	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	9%	487 / 131	618	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	12%	575 / 565	1139	L	1.25D+1.5S +L



- 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.



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I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Part. Uniform	0-0-0 to 0-0-0		Near Face	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
2	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		
3	Part. Uniform	0-0-0 to 3-0-0		Near Face	4 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight	
Contin	Continued on page 2									

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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







CORPORATION OF THE CITY OF OSHAWA

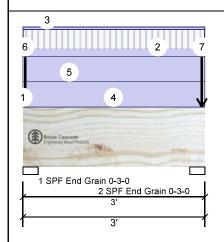
F-GREENPARK-ZADORRA ESTATES-VILLA 3-1

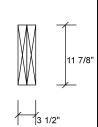
TRUGE-PARA DIA Client CREENPARK PERMIT PLANS Project Nov 04 2023

Hipput by 3035 Project #:

Versa-Lam LVL 2.1E 31 00 SP-IEF 81 17 50 11 X 11 .8 75"

2-Ply - PASSED Level: Ground Floor





I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
5	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Point	0-0-6		Тор	228 l b	41 lb	130 lb	0 l b	Header Column Header Column
	Bearing Length	0-3-8							
7	Point	2-11-6		Тор	298 l b	41 lb	318 lb	0 l b	Header Column Header Column
	Bearing Length	0-3-8							
	Self Weight				12 PLF				



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 LVL not to be treated with fire retardant or corrosive

Handling & Installation

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







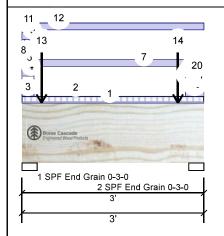
CORPORATION OF THE CITY OF OSHAWA TROLLE ENG-IN0723-119-KTF-GREENPARK-ZADORRA ESTATES-VILLA 3-1 Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

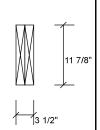
Input 🕢 🥎 🔑 Job Name: Project #:

Versa-Lam LVL 2.1E 31 00 SP-== 1 750 × 11.8 75"

2-Ply - PASSED

Level: Ground Floor





Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015
Deflection LL:	360		OBC 2012(2020 Update)
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
General Load		Vibration:	Not Checked
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	68	517	464	0
2	Vertical	68	325	23	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	203 ft-lb	1'5 11/16"	23005 ft-lb	0.009 (1%)	1.25D+1.5L	L
Unbraced	203 ft-lb	1'5 11/16"	23005 ft-lb	0.009 (1%)	1.25D+1.5L	L
Shear	207 l b	1'9 1/8"	8591 lb	0.024 (2%)	1.25D+1.5L	L
Perm Defl in	0.000 (L/156997)	1'5 13/16"	0.088 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/423218)	1'3 1/2"	0.088 (L/360)	0.001 (0%)	S+0.5L	L
TL Defl inch	0.000 (L/115003)	1'5 1/4"	0.131 (L/240)	0.002 (0%)	D+S+0.5L	L

Bearings and Factored Reactions

J-							
Bearing	Length	Dir.	Cap.	React D/L I b	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	15%	646 / 763	1410	L	1.25D+1.5S +L
2 - SPF End Grain	3.000"	Vert	7%	407 / 102	509	L	1.25D+1.5L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.
- 3 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.
- 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 have sheathing attached or be continuously braced.
- 9 Lateral slenderness ratio based on full section width.



JULY 19, 2023

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Notes

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

Handling & Installation

1. UVL 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

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

6. For flat roofs provide proper drainage to prevent ponding

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

Manufacturer Info

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





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F-GREENPARK-ZADORRA ESTATES-VILLA 3-1

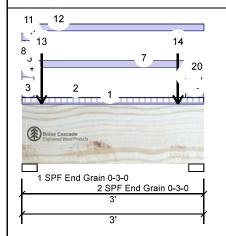
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Hopet by 3035

Project #:

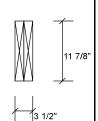
Versa-Lam LVL 2.1E 31 00 SP-== 1 750 × 11.8 75"

2-Ply - PASSED Level: Ground Floor





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.



I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tapered Start	0-0-0		Near Face	10 PLF	26 PLF	0 PLF	0 PLF	
	End	3-0-0			10 PLF	26 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	4 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
3	Part. Uniform	0-0-0 to 0-2-6		Тор	30 PLF	0 PLF	88 PLF	0 PLF	
4	Part. Uniform	0-0-0 to 0-2-6		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
5	Tapered Start	0-0-0		Тор	4 PLF	10 PLF	0 PLF	0 PLF	
	End	0-2-6			4 PLF	10 PLF	0 PLF	0 PLF	
6	Part. Uniform	0-0-0 to 0-2-6		Тор	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
7	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
8	Part. Uniform	0-0-0 to 0-2-6		Near Face	30 PLF	0 PLF	88 PLF	0 PLF	
9	Part. Uniform	0-0-0 to 0-2-6		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
10	Tapered Start	0-0-0		Near Face	4 PLF	10 PLF	0 PLF	0 PLF	
	End	0-2-6			4 PLF	10 PLF	0 PLF	0 PLF	
11	Part. Uniform	0-0-0 to 0-2-6		Near Face	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
12	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
13	Point	0-3-14		Тор	333 lb	24 l b	452 lb	0 lb	Header Column Header Column
	Bearing Length	0-3-8							
14	Point	2-6-14		Тор	134 lb	24 lb	0 lb	0 lb	Header Column Header Column
	Bearing Length	0-3-8							
15	Part. Uniform	2-8-6 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
16	Tapered Start	2-8-6		Тор	4 PLF	10 PLF	0 PLF	0 PLF	
	End	3-0-0			4 PLF	10 PLF	0 PLF	0 PLF	
17	Part. Uniform	2-8-6 to 3-0-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
18	Part. Uniform	2-8-6 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
19	Tapered Start	2-8-6		Near Face	4 PLF	10 PLF	0 PLF	0 PLF	
	End	3-0-0			4 PLF	10 PLF	0 PLF	0 PLF	
20	Part. Uniform	2-8-6 to 3-0-0		Near Face	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
	Self Weight				12 PLF				

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

Handling & Installation

Handling & Installation

1. IVI 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

This design is valid until 4/17/2026

6. For flat roofs provide proper drainage to prevent ponding

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788

Manufacturer Info

www.bc.com CCMC: 12472

Kott Inc.

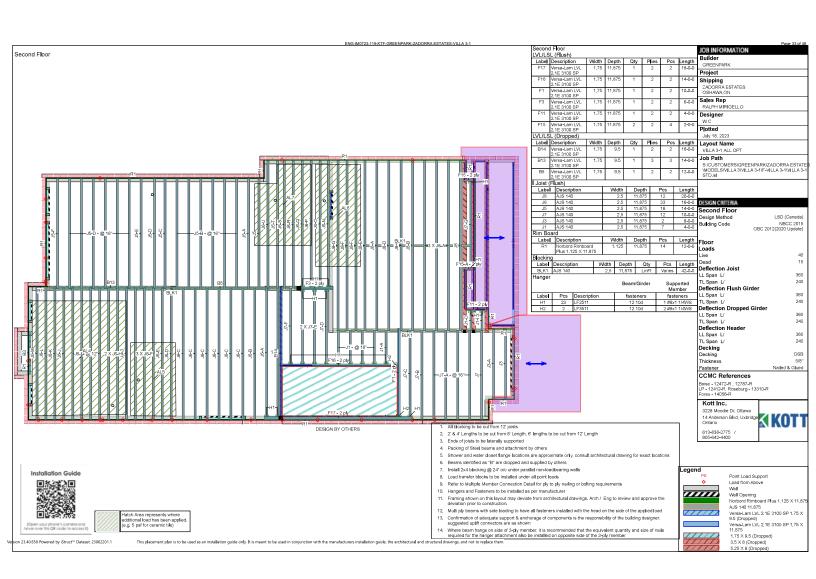
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MHP 23035



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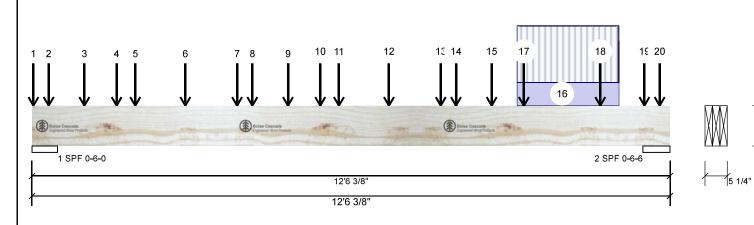
7/18/2023 mout 🕢 🧥 🥟 Job Name:

Project #

Versa-Lam LVL 2.1E 3100 SP 8011 No7-50 X 9.5 00"

3-Ply - PASSED

Level: Second Floor



Member Inform	nation			Unf	actored Rea	actions	UNP	ATTERNED II	b (Upli	ft)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	L	ive	Dead		Snow	Wind
Plies:	3	Design Method:	LSD	1	Vertical	3:	229	1444		0	0
Moisture Condition:	: Dry	Building Code:	NBCC 2015	2	Vertical	3	152	1364		0	0
Deflection LL:	360		OBC 2012(2020 Update)								
Deflection TL:	240	Load Sharing:	Yes								
Importance:	Normal - II	Deck:	Not Checked								
General Load		Vibration:	Not Checked								
Floor Live:	40 PSF			Bea	rings and F	actored	Rea	ctions			
Dead:	15 PSF			Bea	aring Length	Dir.	Сар.	React D/L I b	Total	Ld. Case	Ld. Comb.
				1 -	SPF 6.000"	Vert	34%	1805 / 4844	6649	L	1.25D+1.5L
				ے ا	CDE 6 375"	\/ort	31%	1705 / 4727	6/33	1	1 250+1 51

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	18405 ft-lb	6' 5/16"	36222 ft-lb	0.508 (51%)	1.25D+1.5L	L
Unbraced	18405 ft-lb	6' 5/16"	36222 ft-lb	0.508 (51%)	1.25D+1.5L	L
Shear	5830 lb	1'3 1/2"	15860 lb	0.368 (37%)	1.25D+1.5L	L
Perm Defl in.	0.123 (L/1136)	6'2 13/16"	0.387 (L/360)	0.317 (32%)	D	Uniform
LL Defl inch	0.278 (L/501)	6'3"	0.387 (L/360)	0.719 (72%)	L	L
TL Defl inch	0.401 (L/348)	6'2 15/16"	0.581 (L/240)	0.690 (69%)	D+L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam
- 3 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.
- 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 bearings.
- 9 Lateral slenderness ratio based on full section width.



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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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



This design is valid until 4/17/2026

CSD DESIGN

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Client CREENPARK PERMIT PLANS Project Nov 04 2023

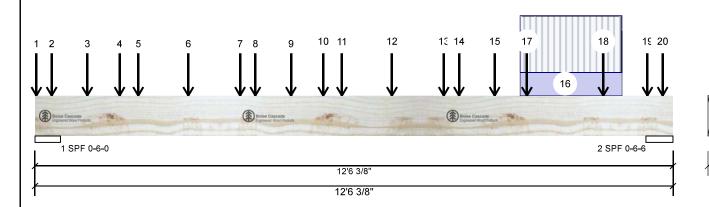
Pout by 3035

Project #:

Versa-Lam LVL 2.1E 3100 SP BULD 10750 X 9.5 00"

3-Ply - PASSED

Level: Second Floor



Continued fron	page 2								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
16	Part. Uniform	9-6-5 to 11-6-5		Тор	118 PLF	290 PLF	0 PLF	0 PLF	
17	Point	9-7-15		Тор	128 l b	343 lb	0 lb	0 lb	J5
	Bearing Length	0-3-8							
18	Point	11-1-15		Тор	121 b	322 lb	0 lb	0 l b	J5
	Bearing Length	0-3-8							
19	Point	12-0-5		Тор	57 lb	139 l b	0 lb	0 lb	J6
	Bearing Length	0-3-8							
20	Point	12-3-15		Тор	57 l b	151 l b	0 l b	0 lb	J5
	Bearing Length	0-3-8							
	Self Weight				14 PLF				



JULY 19, 2023

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Notes

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

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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Kott Inc.

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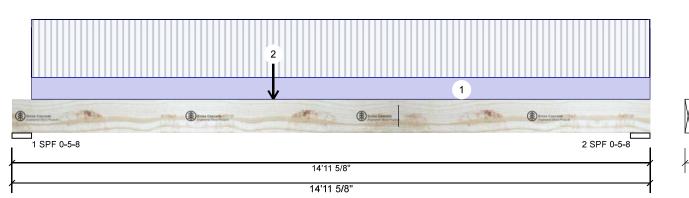
7/18/2023 input 🙌 🧥 Job Name:

Project #

Versa-Lam LVL 2.1E 3100 SP 8011 No7-50 X 9.5 00"

2-Ply - PASSED

Level: Second Floor





N	И	em	ber	Inf	fο	rm	ati	on
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Type:	Giraer
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
General Load	

40 PSF

15 PSF

Application: Floor (Residential) Design Method: LSD

Building Code: NBCC 2015 OBC 2012(2020 Update)

Load Sharing: Deck: Not Checked

Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	846	435	0	0
2	Vertical	683	359	0	0
1					

Bearings and Factored Reactions

Bearing Leng	th Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF 5.500	" Vert	15%	544 / 1269	1813	L	1.25D+1.5L
2 - SPF 5.500	" Vert	12%	449 / 1025	1474	L	1.25D+1.5L

Analysis Results

Floor Live:

Dead:

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	8909 ft-lb	6'1 9/16"	23220 ft-lb	0.384 (38%)	1.25D+1.5L	L
Unbraced	8909 ft-lb	6'1 9/16"	21693 ft-lb	0.411 (41%)	1.25D+1.5L	L
Shear	1745 l b	1'3"	10574 lb	0.165 (17%)	1.25D+1.5L	L
Perm Defl in.	0.124 (L/1374)	7'2 7/16"	0.472 (L/360)	0.262 (26%)	D	Uniform
LL Defl inch	0.247 (L/689)	7'2 3/16"	0.472 (L/360)	0.522 (52%)	L	L
TL Defl inch	0.371 (L/459)	7'2 1/4"	0.709 (L/240)	0.523 (52%)	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 laterally braced at a maximum of 8'10 1/16" o.c.
- 6 Bottom must be laterally braced at bearings.
- 7 Lateral slenderness ratio based on full section width.



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ı	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Part. Uniform	0-5-8 to 14-11-10		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
	2	Point	6-1-9		Тор	435 lb	949 l b	0 lb	0 lb	F16
		Bearing Length	0-3-8							
ı		Self Weight				9 PLF				

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info 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

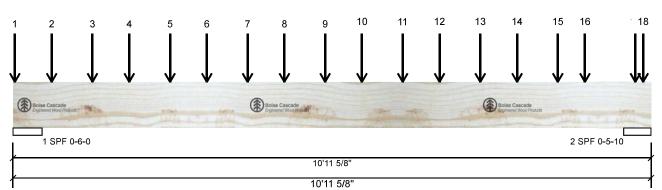




Versa-Lam LVL 2.1E 3100 SPIEF BUILDING 50164X 9.500"

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 15 PSF Dead:

Application: Floor (Residential) Design Method: LSD

Building Code: NBCC 2015 OBC 2012(2020 Update)

Load Sharing:

Not Checked Deck: Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	2831	1117	0	0
2	Vertical	2732	1092	1	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	Vert	44%	1396 / 4247	5643	L	1.25D+1.5L
2 - SPF	5.639"	Vert	45%	1365 / 4099	5464	L	1.25D+1.5L +S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13502 ft-lb	5'4 3/8"	23220 ft-lb	0.581 (58%)	1.25D+1.5L	L
Unbraced	13502 ft-lb	5'4 3/8"	23220 ft-lb	0.581 (58%)	1.25D+1.5L	L
Shear	4880 lb	1'3 1/2"	10574 lb	0.462 (46%)	1.25D+1.5L	L
Perm Defl in.	0.094 (L/1290)	5'5 15/16"	0.337 (L/360)	0.279 (28%)	D	Uniform
LL Defl inch	0.240 (L/507)	5'5 15/16"	0.337 (L/360)	0.710 (71%)	L+0.5S	L
TL Defl inch	0.334 (L/364)	5'5 15/16"	0.506 (L/240)	0.660 (66%)	D+L+0.5S	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 3 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.
- 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 bearings.
- 9 Lateral slenderness ratio based on full section width.



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Notes

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

Handling & Installation

1. UVL 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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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CSD DESIGN



Client CREENPARK PERMIT PLANS Project Nov 04 2023

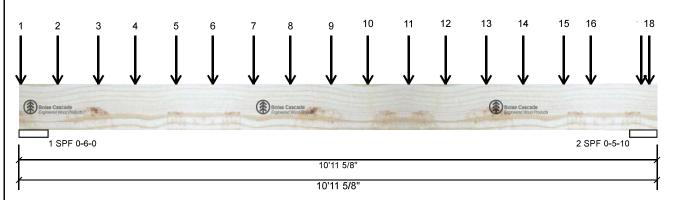
Hout by 3035

Project #:

Versa-Lam LVL 2.1E 3<mark>100 SP ■ 804 10 1 2.50</mark>0" **B5**

2-Ply - PASSED

Level: Second Floor



	9 1/2"
3 1	/2"

Continued from	page 2									
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
16	Point	9-10-0		Тор	106 lb	260 lb	0 l b	0 l b	J5	
	Bearing Length	0-3-8								
17	Point	10-8-6		Тор	53 lb	142 l b	0 l b	0 l b	J6	
	Bearing Length	0-3-8								
18	Point	10-10-0		Тор	53 lb	117 l b	1 lb	0 lb	J6	
	Bearing Length	0-3-8								
	Self Weight				9 PLF					



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

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

Handling & Installation

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

For flat roofs provide proper drainage to prevent ponding

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







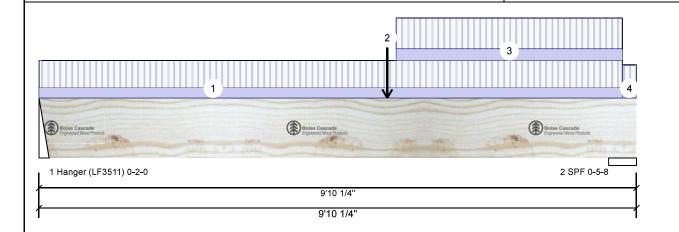
CORPORATION OF THE CITY OF OSHAWA
TO THE ENGTIMO 723-119-K F-GREENPARK-ZADORRA ESTATES-VILLA 3-1 Client: GREENPARK PERMIT PLANS Project Nov 04 2023

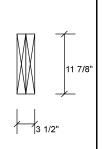
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Versa-Lam LVL 2.1E 3 100 SP == 84.0750 16 X 11.8 75"

2-Ply - PASSED

Level: Second Floor





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

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

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

Unfactored Reactions UNPATTERNED Ib (Uplift)									
Brg	Direction	Live	Dead	Snow	Wind				
1	Vertical	366	225	0	0				
2	Vertical	558	317	0	0				

Cap. React D/L lb

281 / 549

396 / 837

11%

10%

Total Ld. Case

831 L

1232 L

Bearings and Factored Reactions

Dir.

Vert

Vert

Bearing Length

2 - SPF 5.500"

Hanger

2.000"

Analysis Results Analysis Actual Location Allowed Capacity Comb. Case

Moment	3627 ft-lb	5'8 15/16"	35392 ft-lb	0.102 (10%)	1.25D+1.5L	L
Unbraced	3627 ft-lb	5'8 15/16"	35392 ft-lb	0.102 (10%)	1.25D+1.5L	L
Shear	1088 lb	8'4 7/8"	13217 l b	0.082 (8%)	1.25D+1.5L	L
Perm Defl in.	0.012 (L/9128)	5' 3/16"	0.312 (L/360)	0.039 (4%)	D	Uniform
LL Defl inch	0.022 (L/5190)	5' 5/8"	0.312 (L/360)	0.069 (7%)	L	L
TL Defl inch	0.034 (L/3309)	5' 7/16"	0.468 (L/240)	0.073 (7%)	D+L	L

I.MATIJEVIC WCE OF

JULY 19, 2023

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.

Design Notes

- 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 5'8 15/16" o.c.
- 9 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 9-7-8	0-7-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	5-8-15		Far Face	293 lb	572 lb	0 lb	0 l b	F16
3	Tie-In	5-10-11 to 9-7-8	0-8-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	9-7-8 to 9-10-4	0-6-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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

Handling & Installation

Handling & Installation

1. IVI 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

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

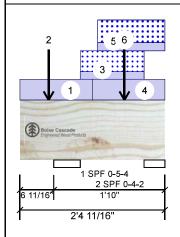


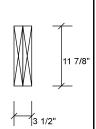


Project #:

Versa-Lam LVL 2.1E \$100 SPFBULLIN75014X 11.B75"

2-Ply - PASSED Level: Second Floor





Mem	ber l	Info	rma	ti	or
_					

Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015
Deflection LL:	360		OBC 2012(2020 Update)
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
General Load		Vibration:	Not Checked
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	68	108	26	0
2	Vertical	27	69	53	0
1					

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L I b	Total	Ld. Case	Ld. Comb.
1 - SPF	5.250"	Vert	3%	136 / 83	218	L_	1.25D+1.5L
2 - SPF	4.125"	Vert	3%	86 / 110	196	_L	1.25D+1.5S +l

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-18 ft-lb	9 5/16"	25836 ft-lb	0.001 (0%)	1.25D+1.5L	L_
Pos Moment	48 ft-lb	1'8 1/8"	29375 ft-lb	0.002 (0%)	1.25D+1.5L +S	_L
Unbraced	48 ft-lb	1'8 1/8"	29375 ft-lb	0.002 (0%)	1.25D+1.5L +S	_L
Shear	111 lb	- (5 3/16")	11367 lb	0.010 (1%)	1.25D+1.5L	LL
Perm Defl in.	0.000 (L/1761780)	1'6 1/8"	0.044 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/1567672)	1'6 1/4"	0.044 (L/360)	0.000 (0%)	S+0.5L	_L
TL Defl inch	0.000 (L/829546)	1'6 3/16"	0.067 (L/240)	0.000 (0%)	D+S+0.5L	_L
LL Cant	-0.000 (2L/1991205)	Lt Cant	0.200 (2L/360)	0.000 (0%)	S+0.5L	_L
TL Cant	-0.000 (2L/2204115)	Lt Cant	0.300 (2L/240)	0.000 (0%)	D+S+0.5L	_L



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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.

Notes

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

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

Handling & Installation

Handling & Installation

1. IVI 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

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

Manufacturer Info

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







CORPORATION OF THE CITY OF OSHAWA

F-GREENPARK-ZADORRA ESTATES-VILLA 3-1

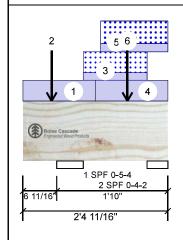
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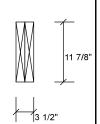
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Project #:

Versa-Lam LVL 2.1E 3100 SP-BULAN765014X 11.875"

2-Ply - PASSED Level: Second Floor





I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 1-2-5		Тор	35 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Point	0-5-11		Near Face	20 lb	52 l b	0 lb	0 l b	J1
3	Part. Uniform	0-11-15 to 2-0-9		Тор	13 PLF	0 PLF	35 PLF	0 PLF	
4	Part. Uniform	1-2-5 to 2-4-11		Тор	35 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
5	Part. Uniform	1-3-6 to 2-4-11		Тор	14 PLF	0 PLF	38 PLF	0 PLF	
6	Point	1-8-11		Near Face	16 lb	43 l b	0 lb	0 l b	J1
	Self Weight				12 PLF				



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

Handling & Installation

- Handling & Installation

 1. IVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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Kott Inc.

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

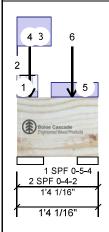


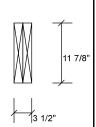


Project #:

Versa-Lam LVL 2.1E 8100 SP BULD 10 11. B75"

2-Ply - PASSED Level: Second Floor





Member Infor	mation		Unfactored Reactions UNPATTERNED lb (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	Vertical	45	315	622	0	
Moisture Conditio	n: Dry 360	Building Code:	NBCC 2015 OBC 2012(2020 Update)	2	Vertical	110	75	0	0	
Deflection TL: Importance: General Load	240 Normal - II	Load Sharing: Deck: Vibration:	No Not Checked Not Checked							
Floor Live:	40 PSF			Bear	ings and F	actored R	actions			
Dead:	15 PSF			1	ring Length		p. React D/L lb	Total Ld. Case	Ld. Comb.	
				1-8	SPF 5.250"	Vert 1	2% 394 / 978	1372 L	1.25D+1.5S +L	
Analysis Resu	lts			2 - 3	SPF 4.125"	Vert 1:	2% 94 / 165	259 L	1.25D+1.5L	
Analysis A	otual Lago	tion Allowed Conce	ity Comb Coco	1						

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	34 ft-lb	10 15/16"	28314 ft-lb	0.001 (0%)	1.25D+1.5L	L
Unbraced	34 ft-lb	10 15/16"	28314 ft-lb	0.001 (0%)	1.25D+1.5L	L
Shear	196 lb	1/16"	10574 l b	0.019 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/3013574)	9 15/16"	0.023 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/1654356)	10 15/16"	0.023 (L/360)	0.000 (0%)	L+0.5S	L
TL Defl inch	0.000 (L/1080872)	10 15/16"	0.034 (L/240)	0.000 (0%)	D+L+0.5S	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.125.
- 2 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.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must have sheathing attached or be continuously braced.
- 8 Lateral slenderness ratio based on full section width.



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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info 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

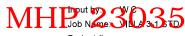




CORPORATION OF THE CITY OF OSHAWA

F-GREENPARK-ZADORRA ESTATES-VILLA 3-1

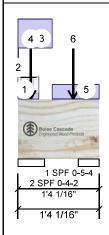
TRUGE-PARA DIA Client GREENPARK OF PERMIT PLANS Project Nov 04 2023

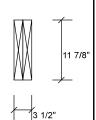


Project #:

Versa-Lam LVL 2.1E 3100 SP-BUL4N7/501/LX 11.875"

2-Ply - PASSED Level: Second Floor





I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-4-2	1-1-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 0-0-2		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	0-0-0 to 0-6-12		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Point	0-2-9		Тор	239 lb	0 l b	622 l b	0 l b	F18
	Bearing Length	0-5-8							
5	Part. Uniform	0-6-12 to 1-4-1		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Point	0-10-15		Near Face	53 lb	140 l b	0 lb	0 lb	J7
	Self Weight				12 PLF				



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

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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







CORPORATION OF THE CITY OF OSHAWA
TRUE ENGINE TO THE CITY OSHAWA
TRUE Client: CREENPARK OF PERMIT PLANS Project Nov 04 2023

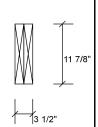
Input ly 🗥 Job Name: Oll 31310 Project #:

Versa-Lam LVL 2.1E 3100 SP BUILD 750 X 11.875"

2-Plv - PASSED

Level: Second Floor





Member Infor	mation	Unfactored Reactions UNPATTERNED lb (Uplift)									
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	L	₋ive	Dead		Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical		30	20		0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2015	2	Vertical		111	49		0	0
Deflection LL:	360		OBC 2012(2020 Update)								
Deflection TL:	240	Load Sharing:	No								
Importance:	Normal - II	Deck:	Not Checked								
General Load		Vibration:	Not Checked								
Floor Live:	40 PSF			Bea	rings and F	actored	l React	tions			
Dead:	15 PSF			Bea	aring Length	Dir.	Cap. I	React D/L I b	Total	Ld. Case	Ld. Comb.
				1 -	SPF 5.250"	Vert	1%	25 / 45	70	L	1.25D+1.5L
				2 -	SPF 4.125"	Vert	3%	61 / 166	227	L	1.25D+1.5L

Analysis Results

Ana l ysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	32 ft-lb	10 15/16"	35392 ft-lb	0.001 (0%)	1.25D+1.5L	L
Unbraced	32 ft-lb	10 15/16"	35392 ft-lb	0.001 (0%)	1.25D+1.5L	L
Shear	222 lb	1/16"	13217 l b	0.017 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/4029645)	10 15/16"	0.023 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/1642623)	10 15/16"	0.023 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/1166939)	10 15/16"	0.034 (L/240)	0.000 (0%)	D+L	L

PROFESSIONA I.MATIJEVIC 100528832 JULY 19, 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.

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.

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-10-15		Far Face	53 lb	141 l b	0 lb	0 l b	J7
	Self Weight				12 PLF				

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

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788

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Kott Inc.

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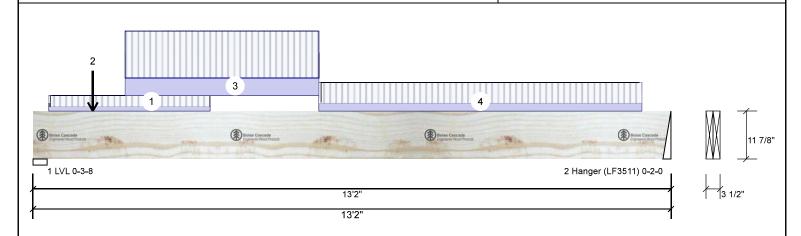
Page 35 of 36

7/18/2023

Input ly Job Name: Old 31310 Project #:

Versa-Lam LVL 2.1E 8100 SP-BUL4N75014X 11.875"

2-Ply - PASSED Level: Second Floor



Member Inforn	nation		Unfactored Reactions UNPATTERNED lb (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	Vertical	949	435	0	0	
Moisture Condition:	Dry	Building Code:			Vertical	572	293	0	0	
Deflection LL:	360		OBC 2012(2020 Update)							
Deflection TL:	240	Load Sharing:	No							
Importance:	Normal - II	Deck:	Not Checked							
General Load		Vibration:	Not Checked							
Floor Live:	40 PSF			Bearings and Factored Reactions						
Dead:	15 PSF			Bear	ring Length	Dir. Cap	React D/L lb	Total Ld. Case	Ld. Comb.	
				1 - L	VL 3.500"	Vert 15%	543 / 1424	1967 L	1.25D+1.5L	
				2-	2.000"	Vert 16%	366 / 859	1225 L	1.25D+1.5L	
Analysis Result	S			Hanger						

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	5166 ft-lb	5'5 3/4"	35392 ft-lb	0.146 (15%)	1.25D+1.5L	L
Unbraced	5166 ft-lb	5'5 3/4"	35392 ft-lb	0.146 (15%)	1.25D+1.5L	L
Shear	1959 lb	1'3 3/8"	13217 l b	0.148 (15%)	1.25D+1.5L	L
Perm Defl in.	0.034 (L/4569)	6'5 3/8"	0.428 (L/360)	0.079 (8%)	D	Uniform
LL Defl inch	0.071 (L/2174)	6'4 5/8"	0.428 (L/360)	0.166 (17%)	L	L
TL Defl inch	0.105 (L/1473)	6'4 7/8"	0.642 (L/240)	0.163 (16%)	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 Right 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 have sheathing attached or be continuously braced.
- 9 Lateral slenderness ratio based on full section width.



JULY 19, 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.

ĺ	I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Part. Uniform	0-3-14 to 3-7-14		Тор	15 PLF	40 PLF	0 PLF	0 PLF	
	2	Point	1-2-13		Far Face	87 l b	231 l b	0 lb	0 lb	J7
	3	Part. Uniform	1-10-13 to 5-10-13		Far Face	62 PLF	166 PLF	0 PLF	0 PLF	
	4	Part. Uniform	5-10-13 to 12-6-13		Far Face	28 PLF	74 PLF	0 PLF	0 PLF	
		Self Weight				12 PLF				

Notes

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

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product 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

Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

Manufacturer Info

(800) 232-0788 www.bc.com CCMC: 12472

Kott Inc.

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



7/18/2023

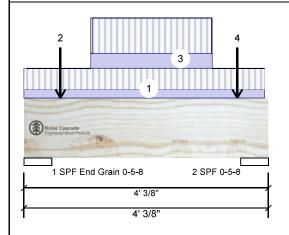
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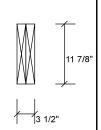
Project #:

Versa-Lam LVL 2.1E 3 100 SPIEF BULD 750 LOX 11.8 75"

2-Ply - PASSED

Level: Second Floor





Unfactored Reactions UNPATTERNED lb (Uplift) Bra Direction Live

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	866	374	0	0
2	Vertical	899	400	0	0

Analysis Results

Ana l ysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	1161 ft-lb	2' 1/4"	35392 ft-lb	0.033 (3%)	1.25D+1.5L	L
Unbraced	1161 ft-lb	2' 1/4"	35392 ft-lb	0.033 (3%)	1.25D+1.5L	L
Shear	1669 l b	1'5 3/8"	13217 l b	0.126 (13%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/74972)	2' 1/4"	0.108 (L/360)	0.005 (0%)	D	Uniform
LL Defl inch	0.001 (L/32464)	2' 1/4"	0.108 (L/360)	0.011 (1%)	L	L
TL Defl inch	0.002 (L/22655)	2' 1/4"	0.162 (L/240)	0.011 (1%)	D+L	L

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap. I	React D/L I b	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.500"	Vert	9%	468 / 1298	1766	L	1.25D+1.5L
2 - SPF	5.500"	Vert	16%	500 / 1349	1848	L	1.25D+1.5L



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ı	o Lateral Spende	illess latio based oil	ruii section widin.							
	I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Part. Uniform	0-0-0 to 3-11-10		Near Face	63 PLF	167 PLF	0 PLF	0 PLF	
	2	Point	0-7-3		Far Face	117 l b	278 l b	0 l b	0 lb	J6
	3	Part. Uniform	1-1-3 to 3-1-3		Far Face	115 PLF	273 PLF	0 PLF	0 PLF	
	4	Point	3-6-3		Far Face	129 l b	278 l b	0 l b	0 lb	J6
		Self Weight				12 PLF				

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