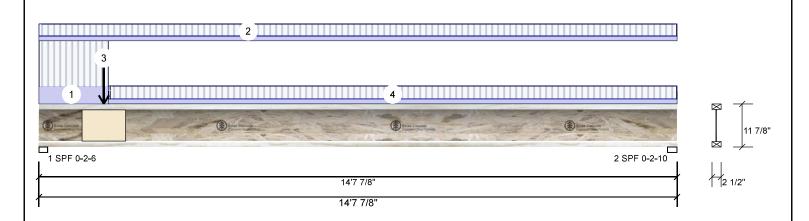
Project #

11 875'the DAR QUI **AJS 140** F6-B

Level: Ground Floor

7/18/2023



Member Inforn	nation		Unfactored Reactions UNPATTERNED lb (Uplift)						
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	633	237	0	0
Moisture Condition:	: Dry	Building Code:	NBCC 2015	2	Vertical	292	110	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			Bear	rings and Fa	actored Rea	ctions		
Dead:	15 PSF			Bea	aring Length	Dir. Cap.	React D/L Ib	Total Ld. Case	Ld. Comb.
				1 -	SPF 2.375"	Vert 74%	296 / 949	1245 L	1.25D+1.5L
A la				2 -	SPF 2.625"	Vert 33%	137 / 438	575 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2312 ft-lb	6'3 11/16"	5305 ft-lb	0.436 (44%)	1.25D+1.5L	L
Unbraced	2312 ft-lb	6'3 11/16"	5305 ft-lb	0.436 (44%)	1.25D+1.5L	L
Shear	1224 <b>l</b> b	1 5/8"	2350 lb	0.521 (52%)	1.25D+1.5L	L
Perm Defl in.	0.060 (L/2859)	7' 1/8"	0.479 (L/360)	0.126 (13%)	D	Uniform
LL Defl inch	0.161 (L/1071)	7' 1/8"	0.479 (L/360)	0.336 (34%)	L	L
TL Defl inch	0.221 (L/779)	7' 1/8"	0.718 (L/240)	0.308 (31%)	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.

<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-7-2	1-7-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 14-7-14	0-5-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-5-14		Far Face	127 <b>l</b> b	340 lb	0 lb	0 <b>l</b> b	F2
4	Tie-In	1-7-2 to 14-7-14	0-5-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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
 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

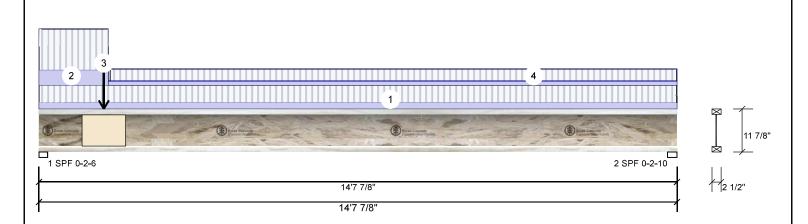


Project #

**AJS 140** 11 875'EHEF DANS CAL F6-C

Level: Ground Floor

7/18/2023



Member Inforn	nation		Unfactored Reactions UNPATTERNED lb (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:	,	Building Code:	NBCC 2015 OBC 2012(2020 Update)	2	Vertical	365	137	0	0
Deflection LL:	360		` ' '						
Deflection TL:	240	Load Sharing:	No						
Importance:	Normal - II	Deck:	Not Checked						
General Load		Vibration:	Not Checked						
Floor Live:	40 PSF			Bea	rings and Fa	actored Read	ctions		
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
A I D I .				2 -	SPF 2.625"	Vert 41%	171 / 548	719 L	1.25D+1.5L

### Analysis Results

Ana <b>l</b> 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.

ID	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 <b>l</b> b	0 <b>l</b> b	F2
4	Tie-In	1-7-2 to 14-7-14	0-5-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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
 IJoist not to be treated with fire retardant or corrosive

### Handling & Installation

- Handling & Installation

  1. Julist flanges must not be cut or drilled

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

  3. Damaged IJoists must not be used

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

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length ≥ 3,5 inches
 For flat roofs provide proper drainage to prevent ponding

# Manufacturer Info

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





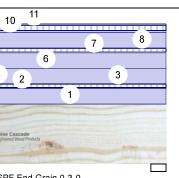
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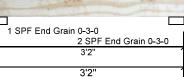
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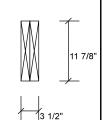
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Versa-Lam LVL 2.1E 3100 SP BULD 16750 X 11 875"

2-Ply - PASSED Level: Ground Floor







Member Inform	Member Information								
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								

Ana <b>l</b> ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	275 ft-lb	1'7"	23005 ft-lb	0.012 (1%)	1.25D+1.5L	L
Unbraced	275 ft-lb	1'7"	23005 ft-lb	0.012 (1%)	1.25D+1.5L	L
Shear	259 lb	1'11 1/8"	8591 lb	0.030 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/110438)	1'7"	0.093 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch	0.000 (L/726735)	1'7"	0.093 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/95869)	1'7"	0.140 (L/240)	0.003 (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.

Unfa	actored R	eactions UNPAT	TERNED <b>l</b> b	(Uplift)
Bra	Direction	Live	Dead	Sno

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	46	302	0	0
2	Vertical	46	302	0	0
1					

# **Bearings and Factored Reactions**

Bearing Len	gth Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF 3.00 End Grain	0" Vert	6%	378 / 69	447	L	1.25D+1.5L
2 - SPF 3.00 End Grain	0" Vert	6%	378 / 69	447	L	1.25D+1.5L



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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		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Tapered Start	0-0-0		Тор	3 PLF	8 PLF	0 PLF	0 PLF	
	End	3-2-0			3 PLF	8 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 3-2-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight

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 information regarding installation requirements, multi-pty 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.

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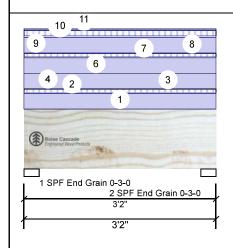


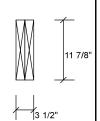
CORPORATION OF THE CITY OF OSHAWA
TRUCK ENGRIPSIA:

TRUCK ENGRIPSI Client CREENPARK PERMIT PLANS Project Nov 04 2023

7/18/2023 Hopet by 3 103 15 woc Project #:

2-Ply - PASSED Level: Ground Floor Versa-Lam LVL 2.1E 3100 SP BULD 10750 X 11 875" FH5





Continued from page 1												
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments			
4	Part. Uniform	0-0-0 to 3-2-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight			
6	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight			
7	Tapered Start	0-0-0		Near Face	3 PLF	8 PLF	0 PLF	0 PLF				
	End	3-2-0			3 PLF	8 PLF	0 PLF	0 PLF				
8	Part. Uniform	0-0-0 to 3-2-0		Near Face	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight			
9	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight			
10	Tapered Start	0-0-0		Near Face	5 PLF	13 PLF	0 PLF	0 PLF				
	End	3-2-0			5 PLF	13 PLF	0 PLF	0 PLF				
11	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							



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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-pty 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.

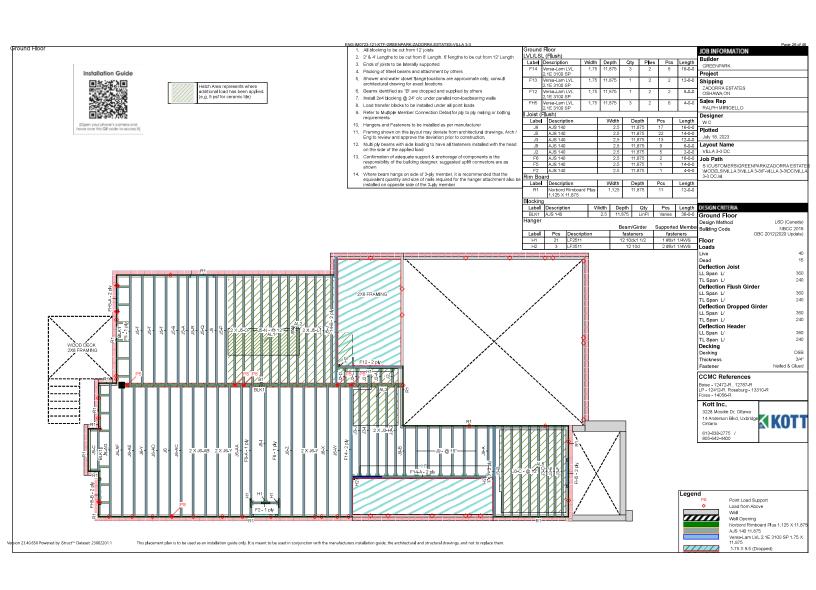
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# MHP 23035



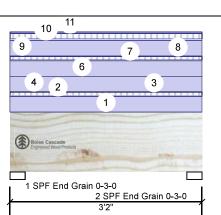


CORPORATION OF THE CITY OF OSHAWA ENDITING ENGLINO 723-121-K-TF-GREENPARK-ZADORRA ESTATES-VILLA 3-3 Client: GREENPARK PERMIT PLANS Project Nov 04 2023

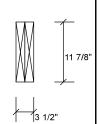
Input ly 🗥 🧨 Job Name: Project #:

Versa-Lam LVL 2.1E 3100 SP BULD 10750 X 11 875"

2-Ply - PASSED Level: Ground Floor



3'2'



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

	•					
	1	Vertical	46	302	0	0
	2	Vertical	46	302	0	0
l						

# Analysis Results

Member Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	275 ft-lb	1'7"	23005 ft-lb	0.012 (1%)	1.25D+1.5L	L
Unbraced	275 ft-lb	1'7"	23005 ft-lb	0.012 (1%)	1.25D+1.5L	L
Shear	259 lb	1'11 1/8"	8591 lb	0.030 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/110438)	1'7"	0.093 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch	0.000 (L/726735)	1'7"	0.093 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/95869)	1'7"	0.140 (L/240)	0.003 (0%)	D+L	L

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap. Re	eact D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	6%	378 / 69	447	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	6%	378 / 69	447	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.



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.

<b>I</b> 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	Tapered Start	0-0-0		Тор	3 PLF	8 PLF	0 PLF	0 PLF	
	End	3-2-0			3 PLF	8 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 3-2-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight

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





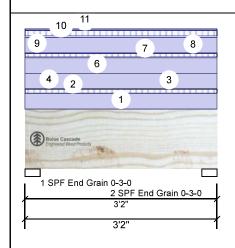
Client CREENPARK PERMIT PLANS Project Nov 04 2023

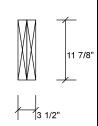
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Project #:

Versa-Lam LVL 2.1E 3100 SP BULL 10750¼ X 11 875" FH5

2-Ply - PASSED Level: Ground Floor





Continued fr	Continued from page 1												
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments				
4	Part. Uniform	0-0-0 to 3-2-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight				
6	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight				
7	Tapered Start	0-0-0		Near Face	3 PLF	8 PLF	0 PLF	0 PLF					
	End	3-2-0			3 PLF	8 PLF	0 PLF	0 PLF					
8	Part. Uniform	0-0-0 to 3-2-0		Near Face	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight				
9	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight				
10	Tapered Start	0-0-0		Near Face	5 PLF	13 PLF	0 PLF	0 PLF					
	End	3-2-0			5 PLF	13 PLF	0 PLF	0 PLF					
11	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								



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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. 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

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







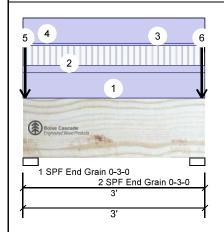
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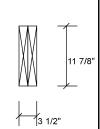
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Versa-Lam LVL 2.1E 3100 SP BUILD 16750 X 11.875"

2-Plv - 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		

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

Unfactored Reactions UNPATTERNED Ib (Uplift)

### **Bearings and Factored Reactions** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.000" 487 / 131 618 L 1.25D+1.5L End Grain 2 - SPF 3.000" 575 / 565 1.25D+1.5S Vert 12% 1139 L End Grain

### Analysis Results

Member Information

Analysis	Actual	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 <b>l</b> b	1'9 1/8"	8723 lb	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

# **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.



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	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 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

Continued on page 2...

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

- 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 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

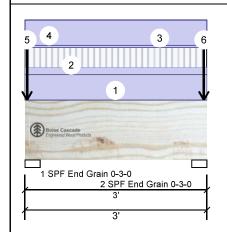
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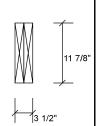
Project #:

Versa-Lam LVL 2.1E 3100 SP BULD 16750 X 11.375"

2-Ply - PASSED

Level: Ground Floor





Continued fro	m page 1								
ID	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	Point	0-0-6		Тор	228 lb	41 lb	130 lb	0 <b>l</b> b	Header Column Header Column
	Bearing Length	0-3-8							
6	Point	2-11-6		Тор	298 lb	41 lb	318 lb	0 lb	Header Column Header Column
	Bearing Length	0-3-8							
	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 ENDITING ENGLINO 723-121-K-TF-GREENPARK-ZADORRA ESTATES-VILLA 3-3 Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

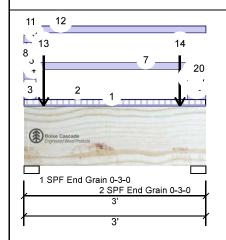
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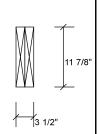
Project #:

Versa-Lam LVL 2.1E 3100cSPBULD16750X X 11.875"

2-Plv - 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 <b>l</b> 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**

Bearing	Length	Dir.	Cap. R	React D/L <b>I</b> 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.



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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

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

Boise Cascade Wood Products

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







Client GREENPARK OF PERMIT PLANS Project Nov 04 2023

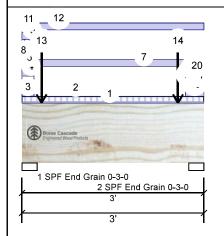
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Project #:

Versa-Lam LVL 2.1E 3100 SP BULL 16750 X 11 B75"

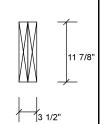
2-Ply - PASSED

Level: Ground Floor





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<b>I</b> 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 <b>l</b> b	452 lb	0 lb	Header Column Header Column
	Bearing Length	0-3-8							
14	Point	2-6-14		Тор	134 lb	24 <b>l</b> b	0  b	0 <b>l</b> b	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

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

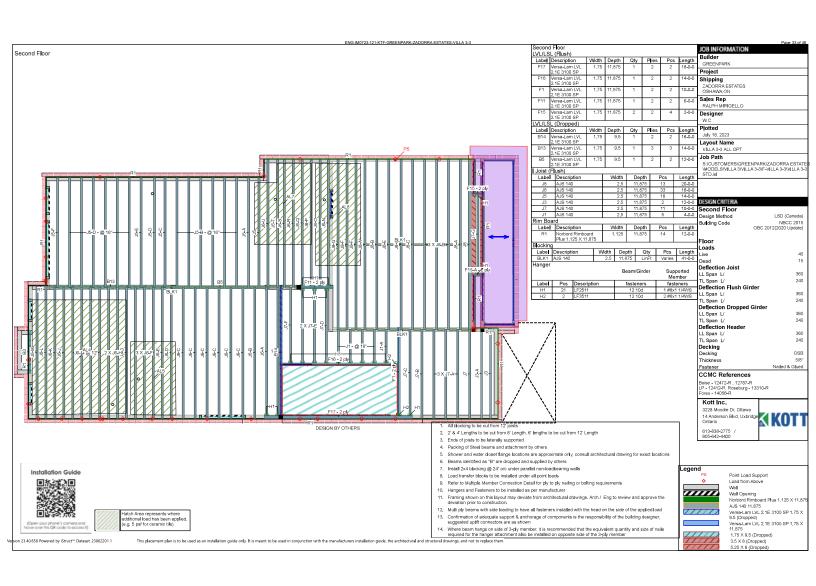
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# MHP 23035



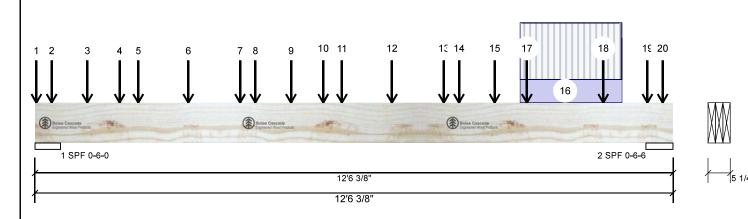
Project #

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

3-Ply - PASSED

Level: Second Floor

7/18/2023



# **Unfactored Reactions UNPATTERNED lb (Uplift)**

Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	3	Design Method:	LSD	1	Vertical	3229	1444	0	0
Moisture Condition	: Dry	Building Code:	NBCC 2015	2	Vertical	3152	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 Fact	tored Reaction	ons		

### 15 PSF Dead:

Bearing	Length	Dir.	Cap. F	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	Vert	34%	1805 / 4844	6649	L	1.25D+1.5L
2 - SPF	6.375"	Vert	31%	1705 / 4727	6433	L	1.25D+1.5L

### Analysis Results

Member Information

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 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

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 CREENPARK PERMIT PLANS Project Nov 04 2023

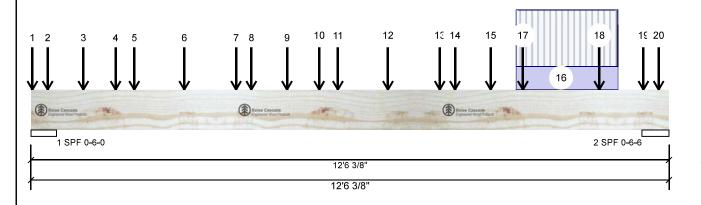
Pout by 30355

Project #:

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

3-Ply - PASSED

Level: Second Floor



.Continued t	from page 2								
<b>I</b> D	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 <b>l</b> b	343 lb	0 lb	0 lb	J5
	Bearing Length	0-3-8							
18	Point	11-1-15		Тор	121 <b>l</b> b	322 lb	0 lb	0 lb	J5
	Bearing Length	0-3-8							
19	Point	12-0-5		Тор	57 <b>l</b> b	139 <b>l</b> b	0 lb	0 lb	J6
	Bearing Length	0-3-8							
20	Point	12-3-15		Тор	57 <b>l</b> b	151 <b>l</b> b	0 lb	0 lb	J5
	Bearing Length	0-3-8							
	Self Weight				14 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

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





Page 25 of 34

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CORPORATION OF THE CITY OF OSTAWA F-GREENPARK-ZADORRA ESTATES-VILLA 3-3 Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

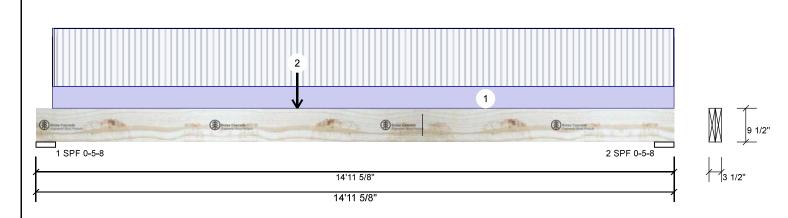
7/18/2023 Input ly 🗥 🧨 Job Name:

Project #

Versa-Lam LVL 2.1E 3100 S₽ **□ 110750** X 9.500"

2-Ply - PASSED

Level: Second Floor



Member Infor	mation			Unfa	actored Rea	actions l	JNP	ATTERNED <b>I</b> I	b (Uplii	ft)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Li	ve	Dead		Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical	8	49	436		0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015	2	Vertical	6	83	359		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			Bear	rings and Fa	actored	Rea	ctions			
Dead:	15 PSF			Bea	aring Length	Dir.	Cap.	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
				1 -	SPF 5.500"	Vert	15%	545 / 1274	1819	L	1.25D+1.5L
				2 -	SPF 5.500"	Vert	12%	449 / 1025	1474	L	1.25D+1.5L

### Analysis Results

Analysis	Actual	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 lb	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



JULY 19, 2023

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7 Edicial deliaciness falls based on fall session within												
	<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	,	
	1	Part. Uniform	0-4-10 to 14-11-10		Тор	15 PLF	40 PLF	0 PLF	0 PLF			
	2	Point	6-1-9		Тор	435 lb	949 lb	0 <b>l</b> b	0 lb	F16		
		Bearing Length	0-3-8									
		Self Weight				9 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 www.bc.com CCMC: 12472

# Kott Inc.

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





CORPORATION OF THE CITY OF OSHAWA

TEN LE ENG-IM0723-121-K

F-GREENPARK-ZADORRA ESTATES-VILLA 3-3 Client: GREENPARK PERMIT PLANS Project Nov 04 2023

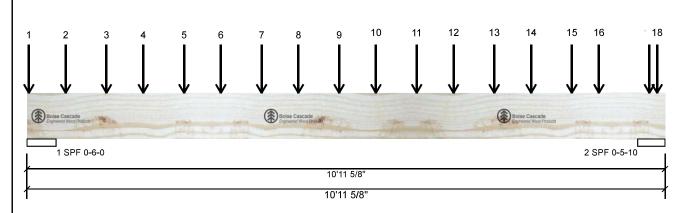
7/18/2023 input ly Job Name:

Project #

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

2-Ply - PASSED

Level: Second Floor





### **Member Information**

Type.	Giraei
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal -

General Load 40 PSF Floor Live: 15 PSF Dead:

Ш

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	1102	28	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%	1378 / 4126	5503	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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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

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

Client CREENPARK PERMIT PLANS Project Nov 04 2023

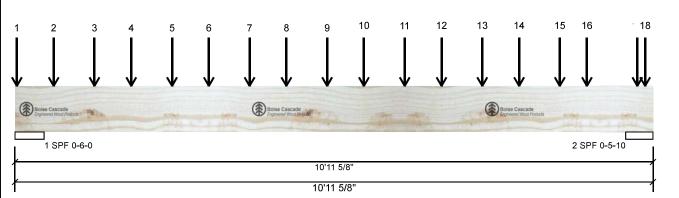
Hopet by 3035

Project #:

Versa-Lam LVL 2.1E 3100 SPIEF BUILDING 9.500" **B5** 

2-Ply - PASSED

Level: Second Floor





ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
16	Point	9-10-0		Тор	106 lb	260 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	J5
	Bearing Length	0-3-8							
17	Point	10-8-6		Тор	53 lb	142 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	J6
	Bearing Length	0-3-8							
18	Point	10-10-0		Тор	63 lb	117 <b>l</b> b	28 lb	0 lb	J6
	Bearing Length	0-3-8							
	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. 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

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







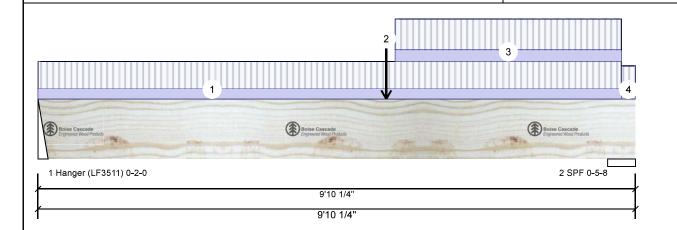
CORPORATION OF THE CITY OF OSHAWA
TO STATE ENG-IM0723-121-K F-GREENPARK-ZADORRA ESTATES-VILLA 3-3 Client: GREENPARK PERMIT PLANS Project Nov 04 2023

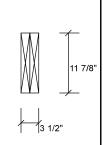
input by. Job Name: Project #

Versa-Lam LVL 2.1E 3 100 SP == 84.0750 | 11.875 |

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 Floor Live: 40 PSF 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 lb (Uplift)** Brg Direction Live Dead Snow Wind 225 Vertical 366 0 1 0 2 Vertical 558 317 n 0

### **Bearings and Factored Reactions** Bearing Length Dir. Cap. React D/L lb Total Ld. Case 2.000" Vert 11% 281 / 549 831 L Hanger 2 - SPF 5.500" Vert 10% 396 / 837 1232 L

### Actual Location Allowed Capacity Case Analysis Comb. 3627 ft-lb Moment 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 1088 lb 0.082 (8%) 1.25D+1.5L L 8'4 7/8" 13217 lb Shear 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

# **Design Notes**

Analysis Results

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.

5' 7/16" 0.468 (L/240) 0.073 (7%) D+L

2 Fill all hanger nailing holes.

TL Defl inch 0.034 (L/3309)

- 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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<b>I</b> D	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 <b>l</b> b	0 lb	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

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

Damaged Beams must not be used

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

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

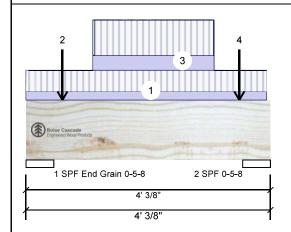
www.bc.com CCMC: 12472

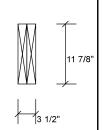
3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400



2-Ply - PASSED

Level: Second 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	UNPAT	TERNED	lb	(Upl	ift)

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

# Analysis Results

Analysis	Actual	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 <b>l</b> b	1'5 3/8"	13217 <b>l</b> 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**

•	Jean9.	carings and ractorea reactions												
	Bearing	Length	Dir.	Cap. F	React D/L <b>I</b> 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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### **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.

ID	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 <b>l</b> b	278 lb	0 lb	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 <b>l</b> b	278 <b>l</b> b	0 lb	0 lb	J6
	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. 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

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

Boise Cascade Wood Products

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



This design is valid until 4/17/2026



Kott Inc.

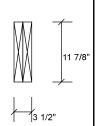
Project #:

Versa-Lam LVL 2.1E **8100 SP-BULLING-501ALX 11.**875"

2-Ply - PASSED Level: Second Floor

7/18/2023





Member Infor	mation			Unfactored Reactions UNPATTERNED lb (Uplift)								
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Li	ve	Dead	ę	Snow	Wind	
Plies:	2	Design Method:	LSD	1	Vertical		96	95		0	0	
Moisture Conditio	n: Dry	Building Code:	NBCC 2015	2	Vertical		63	57		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	Read	tions				
Dead:	15 PSF			Be	aring Length	Dir.	Сар.	React D/L Ib	Total L	_d. Case	Ld. Comb.	
				1 -	SPF 5.250"	Vert	2%	118 / 144	263 L	-	1.25D+1.5L	
A I						Vert	2%	71 / 95	166 L	=	1.25D+1.5L	

### Analysis Results

Ana <b>l</b> ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	45 ft-lb	8 1/2"	35392 ft-lb	0.001 (0%)	1.25D+1.5L	L
Unbraced	45 ft-lb	8 1/2"	35392 ft-lb	0.001 (0%)	1.25D+1.5L	L
Shear	109 lb	1'5 1/8"	13217 <b>l</b> b	0.008 (1%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/2182647)	8 1/2"	0.022 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/1167915)	8 1/2"	0.022 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/760812)	8 1/2"	0.033 (L/240)	0.000 (0%)	D+L	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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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 0-5-4	1-10-14	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	Part. Uniform	0-6-12 to 1-3-14		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	

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

PROFESSION

I.MATIJEVIC 100528832

JULY 19, 2023

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





Client CREENPARK PERMIT PLANS Project Nov 04 2023

Pout by 30355

Project #:

Versa-Lam LVL 2.1E 8100 SP BULL 10750 LX 11.875"

2-Ply - PASSED Level: Second Floor



11 7/8'

.Continued from page 1

ID Load Type Location Trib Width Side Wind Comments Live Snow Dead 5 0-8-8 Near Face 47 **l**b 126 lb 0 lb 0 lb J7 Point Self Weight 12 PLF



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 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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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

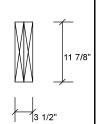
Project #:

Versa-Lam LVL 2.1E 3100 SP BULL N. 7.50 LLX 11.875"

2-Plv - PASSED

Level: Second Floor





Member Inforr	mation			Unfactored Reactions UNPATTERNED lb (Uplift)								
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	L	₋ive	Dead	S	Snow	Wind	
Plies:	2	Design Method:	LSD	1	Vertical		63	53		0	0	
Moisture Condition	: Dry	Building Code:	NBCC 2015	2	Vertical		64	60		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 Fa	actorec	l Read	ctions				
Dead:	15 PSF			Bea	aring Length	Dir.	Cap.	React D/L Ib	Total L	.d. Case	Ld. Comb.	
				1 -	SPF 5.250"	Vert	1%	66 / 95	161 L		1.25D+1.5L	
Analysis Basyle				2 -	SPF 4.129"	Vert	2%	75 / 95	171 L		1.25D+1.5L	

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	47 ft-lb	8 1/2"	35392 ft-lb	0.001 (0%)	1.25D+1.5L	L
Unbraced	47 ft-lb	8 1/2"	35392 ft-lb	0.001 (0%)	1.25D+1.5L	L
Shear	106 <b>l</b> b	1'5 1/8"	13217 lb	0.008 (1%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/1980402)	8 1/2"	0.022 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/1163214)	8 1/2"	0.022 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/732797)	8 1/2"	0.033 (L/240)	0.000 (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.



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 Tri	rib Width Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-5-2 to 0-9-7	Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Point	0-8-8	Far Fa	ace 47 lb	127 <b>l</b> b	0 lb	0 lb	J7
3	Part. Uniform 0	-9-7 to 1-3-14	Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	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 www.bc.com CCMC: 12472

Kott Inc.

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





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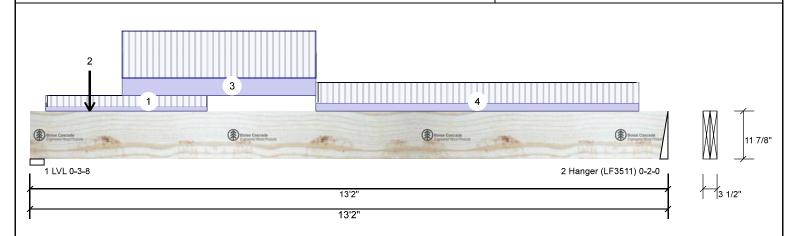
isDesign

CORPORATION OF THE CITY OF OSHAWA ENGLINO 723-121-K-F-GREENPARK-ZADORRA ESTATES-VILLA 3-3 Client: GREENPARK OF PERMIT PLANS Project Nov 04 2023

Input 🕢 🥎 🔑 Job Name: Old 33 TD Project #:

2-Ply - PASSED Level: Second Floor

7/18/2023



Member Infori	mation			Unfactored Reactions UNPATTERNED lb (Uplift)								
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Liv	<del>-</del>	Dead		Snow	Wind	
Plies:	2	Design Method:	LSD	1 1	Vertical	94	9	435		0	0	
Moisture Condition	: Dry	Building Code:	NBCC 2015	2	Vertical	57	2	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			Beari	ngs and Fa	actored F	leac	ctions				
Dead:	15 PSF			Beari	ing Length	Dir. C	ар.	React D/L Ib	Total I	_d. Case	Ld. Comb.	
				1 - L\	/L 3.500"	Vert	15%	543 / 1424	1967 l	_	1.25D+1.5L	
Analysis Result	nalysis Results					Vert	16%	366 / 859	1225 l	-	1.25D+1.5L	

Analysis	Actua <b>l</b>	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 <b>l</b> b	1'3 3/8"	13217 <b>l</b> 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.

3 Lateral sier	idelliess latio based	on full section width.							
<b>I</b> 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 <b>l</b> b	231 <b>l</b> b	0 <b>l</b> b	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	

### Notes

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Dry service conditions, unless noted otherwise
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Handling & Installation

Handling & Installation

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12 PLF

6. For flat roofs provide proper drainage to prevent ponding Manufacturer Info Boise Cascade Wood Products

Boise, ID 83702 (800) 232-0788

1111 W. Jefferson St. www.bc.com CCMC: 12472

PROFESSION

I.MATIJEVIC 100528832

NCE OF ON

READ ALL NOTES ON THIS PAGE AND ON THE

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTES: EWP-FLOORS. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA

JULY 19, 2023

### Kott Inc.

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



CSD DESIGN

This design is valid until 4/17/2026

Self Weight