



Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA 7-1 2 3

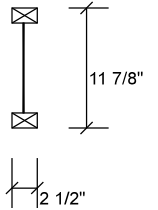
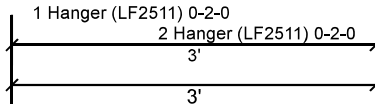
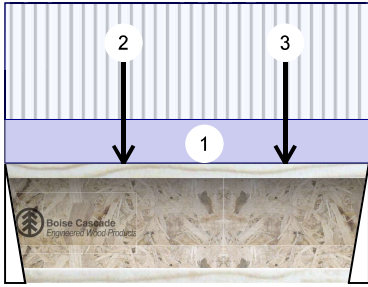
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MHP 23037

F15-B AJS 140 11.875" - PASSED



Level: Ground Floor



Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	299	112	0	0
2	Vertical	339	127	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	37%	140 / 449	589	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	41%	159 / 508	667	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	486 ft-lb	11 3/4"	5305 ft-lb	0.092 (9%)	1.25D+1.5L	L
Unbraced	486 ft-lb	11 3/4"	5305 ft-lb	0.092 (9%)	1.25D+1.5L	L
Shear	661 lb	2'10 3/4"	2350 lb	0.281 (28%)	1.25D+1.5L	L
Perm Defl in. (L/19520)	0.002	1'2 3/16"	0.093 (L/360)	0.018 (2%)	D	Uniform
LL Defl inch	0.005 (L/7330)	1'2 3/16"	0.093 (L/360)	0.049 (5%)	L	L
TL Defl inch	0.006 (L/5329)	1'2 3/16"	0.140 (L/240)	0.045 (5%)	D+L	L

Design Notes

- 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.
- Fill all hanger nailing holes.
- Left Header: SPF, Thickness: 2 1/2"
- Right Header: SPF, Thickness: 2 1/2"
- Girders are designed to be supported on the bottom edge only.
- If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.
- If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.



JULY 21, 2023

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 3-0-0	0-9-3	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-11-12		Near Face	109 lb	290 lb	0 lb	0 lb	J5
3	Point	2-3-12		Near Face	96 lb	256 lb	0 lb	0 lb	J5

Notes

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

Lumber

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

Handling & Installation

- Joist flanges must not be cut or drilled
- Refer to latest copy of the Joist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details
- Damaged Joists must not be used
- Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
- Web stiffeners for point load as shown Minimum point load bearing 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



This design is valid until 2026-05-29



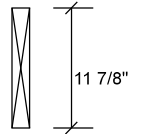
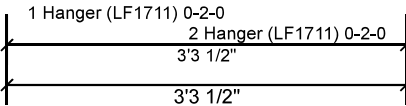
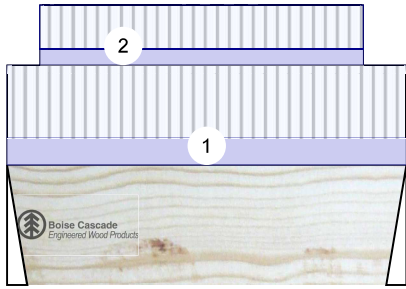
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F5 Versa-Lam LVL 2.1E 3100 SP 1-750" X 11-875" - PASSED

CORRECTED TRUE COPY
OF PERMIT PLANS
Nov 11 2023
PER: *C. Manno*
CHIEF BUILDING OFFICIAL



Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	296	121	0	0
2	Vertical	291	119	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	16%	151 / 444	595	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	15%	149 / 436	585	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	455 ft-lb	1'7 3/4"	17696 ft-lb	0.026 (3%)	1.25D+1.5L	L
Unbraced	455 ft-lb	1'7 3/4"	17696 ft-lb	0.026 (3%)	1.25D+1.5L	L
Shear	314 lb	2'1 5/8"	6608 lb	0.047 (5%)	1.25D+1.5L	L
Perm Defl in. (L/103998)	0.000	1'7 3/4"	0.103 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch (L/42231)	0.001	1'7 3/4"	0.103 (L/360)	0.009 (1%)	L	L
TL Defl inch (L/30035)	0.001	1'7 3/4"	0.154 (L/240)	0.008 (1%)	D+L	L

Design Notes

- 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.
- Fill all hanger nailing holes.
- Left Header: DF, Thickness: 3 1/2"
- Right Header: DF, Thickness: 3 1/2"
- Girders are designed to be supported on the bottom edge only.
- Top must be continuously laterally braced.
- Bottom must have sheathing attached or be continuously braced.



JULY 21, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-3-8		Top	45 PLF	120 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-3-4 to 2-11-4		Far Face	27 PLF	72 PLF	0 PLF	0 PLF	
	Self Weight				6 PLF				

Notes

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

Lumber

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

chemicals

Handling & Installation

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

- For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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F6 Versa-Lam LVL 2.1E 3100 SP

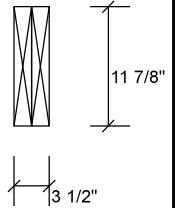
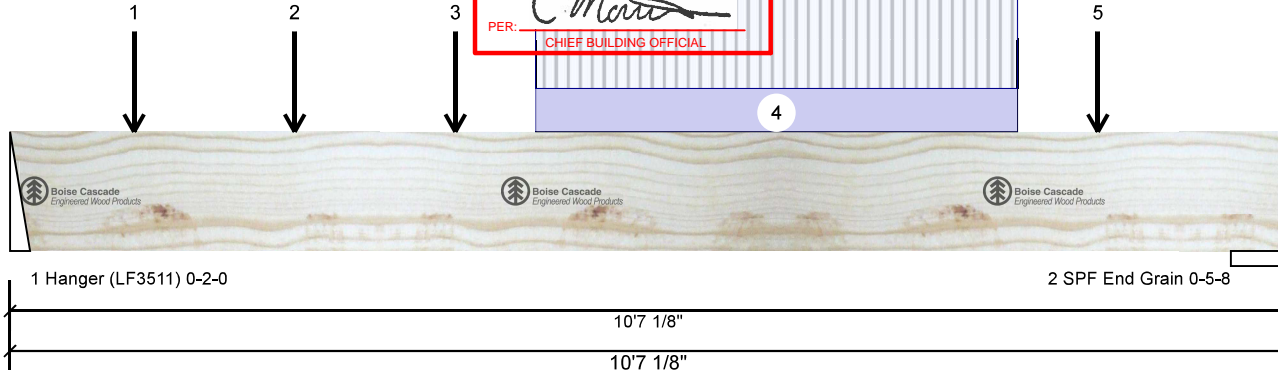
1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER: *C. Morris*
CHIEF BUILDING OFFICIAL

**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1066	464	0	0
2	Vertical	781	358	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	28%	580 / 1598	2178	L	1.25D+1.5L
2 - SPF End Grain	5.500"	Vert	8%	447 / 1172	1619	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5086 ft-lb	4'8 9/16"	35392 ft-lb	0.144 (14%)	1.25D+1.5L	L
Unbraced	5086 ft-lb	4'8 9/16"	35392 ft-lb	0.144 (14%)	1.25D+1.5L	L
Shear	2176 lb	1'1 7/8"	13217 lb	0.165 (16%)	1.25D+1.5L	L
Perm Defl in.	0.020 (L/6136)	5' 11/16"	0.336 (L/360)	0.059 (6%)	D	Uniform
LL Defl inch	0.045 (L/2678)	5' 9/16"	0.336 (L/360)	0.134 (13%)	L	L
TL Defl inch	0.065 (L/1864)	5' 5/8"	0.505 (L/240)	0.129 (13%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top 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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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	1-0-6		Far Face	129 lb	340 lb	0 lb	0 lb	J3
2	Point	2-4-6		Far Face	138 lb	362 lb	0 lb	0 lb	J3
3	Point	3-8-6		Far Face	116 lb	306 lb	0 lb	0 lb	J3
4	Part. Uniform	4-4-6 to 8-4-6		Far Face	64 PLF	172 PLF	0 PLF	0 PLF	

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2026-05-29

Manufacturer Info

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MHP 23037

F6 Versa-Lam LVL 2.1E 3100 SP

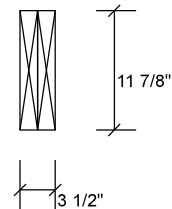
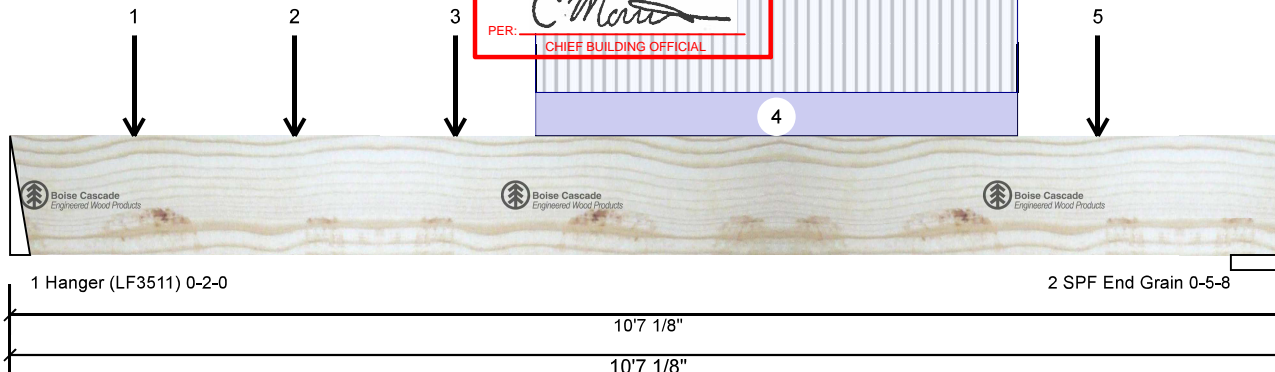
1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor

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Nov 11 2023

PER: *C. Morro*
CHIEF BUILDING OFFICIAL



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Point	9-0-6		Far Face	57 lb	151 lb	0 lb	0 lb	J4
	Self Weight				12 PLF				



JULY 21, 2023

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Lumber

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

chemicals

Handling & Installation

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MHP 23037

F6-A Versa-Lam LVL 2.1E 3100 SP

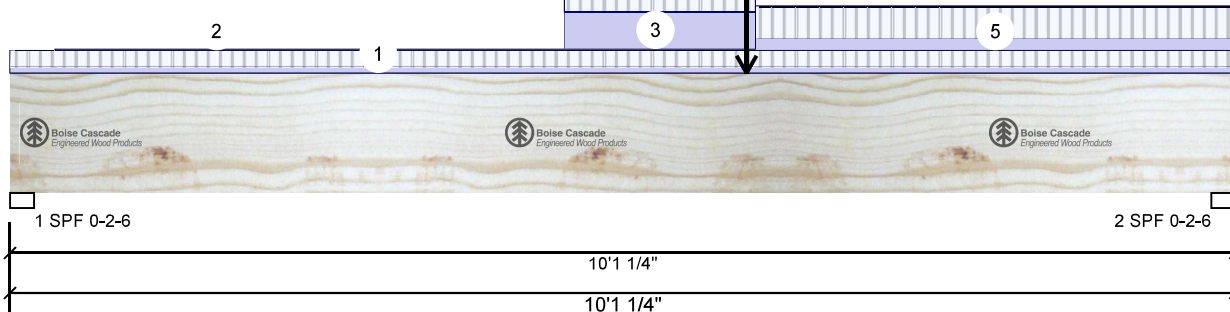
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Level: Ground Floor

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PER: *C. Morris*
CHIEF BUILDING OFFICIAL



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	246	160	0	0
2	Vertical	371	206	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	11%	199 / 369	568	L	1.25D+1.5L
2 - SPF	2.375"	Vert	16%	258 / 556	814	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2489 ft-lb	6' 7/8"	35392 ft-lb	0.070 (7%)	1.25D+1.5L	L
Unbraced	2489 ft-lb	6' 7/8"	35392 ft-lb	0.070 (7%)	1.25D+1.5L	L
Shear	729 lb	8'11"	13217 lb	0.055 (6%)	1.25D+1.5L	L
Perm Defl in. (L/12643)	0.009	5'2 13/16"	0.328 (L/360)	0.028 (3%)	D	Uniform
LL Defl inch	0.017 (L/6872)	5'3 5/8"	0.328 (L/360)	0.052 (5%)	L	L
TL Defl inch	0.027 (L/4452)	5'3 5/16"	0.492 (L/240)	0.054 (5%)	D+L	L



Design Notes

- 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.
- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top must be continuously laterally braced.
- Bottom must be laterally braced at a maximum of 6' 7/8" o.c.
- 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 10-1-4	0-3-9	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-4-7 to 5-6-0		Top	1 PLF	0 PLF	0 PLF	0 PLF	
3	Tie-In	4-6-14 to 6-1-12	1-9-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	6-0-14		Far Face	119 lb	291 lb	0 lb	0 lb	F5
5	Tie-In	6-1-12 to 10-1-4	0-7-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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Lumber

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

Handling & Installation

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

- For flat roofs provide proper drainage to prevent ponding

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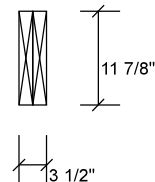
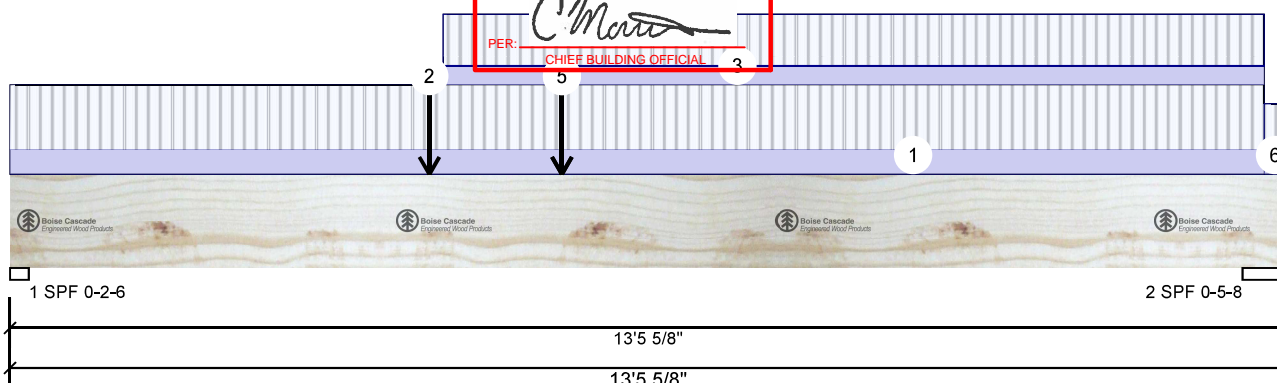
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F7-A Versa-Lam LVL 2.1E 3100 SP**1.750" X 11.875" 2-Ply - PASSED**

Level: Ground Floor

**TRUE COPY
OF PERMIT PLANS****Nov 11 2023**PER: 
CHIEF BUILDING OFFICIAL**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1022	505	0	0
2	Vertical	732	377	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	42%	631 / 1533	2164	L	1.25D+1.5L
2 - SPF	5.500"	Vert	13%	472 / 1098	1569	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8565 ft-lb	4'5 1/8"	35392 ft-lb	0.242 (24%)	1.25D+1.5L	L
Unbraced	8565 ft-lb	4'5 1/8"	35392 ft-lb	0.242 (24%)	1.25D+1.5L	L
Shear	2091 lb	1'2 1/4"	13217 lb	0.158 (16%)	1.25D+1.5L	L
Perm Defl in.	0.051 (L/3038)	6'3"	0.431 (L/360)	0.119 (12%)	D	Uniform
LL Defl inch	0.105 (L/1472)	6'2 5/8"	0.431 (L/360)	0.245 (24%)	L	
TL Defl inch	0.157 (L/992)	6'2 3/4"	0.647 (L/240)	0.242 (24%)	D+L	L

Design Notes

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



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USED IN THE DESIGN OF THIS COMPONENT.**

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-2-14	0-8-15	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	4-5-2		Near Face	464 lb	1066 lb	0 lb	0 lb	F6
3	Tie-In	4-6-14 to 13-2-14	0-7-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	5-9-14		Top	6 lb	16 lb	0 lb	0 lb	
	Bearing Length	0-3-8							

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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

This design is valid until 2026-05-29

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





Client: GREENPARK GROUP
 Project: ZADORRA ESTATES
 Address:

Date: 2023-07-17
 Input by: K T
 Job Name: VILLA 7-1 2 3
 Project #: VILLA-1 2 3

MHP 23037

F7-A Versa-Lam LVL 2.1E 3100 SP

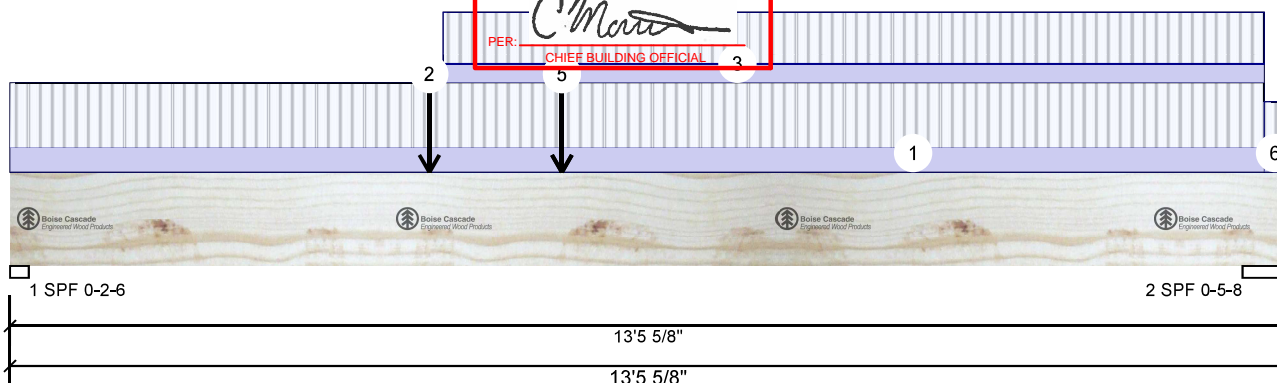
1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor

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Nov 11 2023

PER: *C. Morris*
 CHIEF BUILDING OFFICIAL



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Point	5-9-14		Top	26 lb	68 lb	0 lb	0 lb	
	Bearing Length	0-3-8							
6	Tie-In	13-2-14 to 13-5-10	0-7-1	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				



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Lumber

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chemicals

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Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA-173

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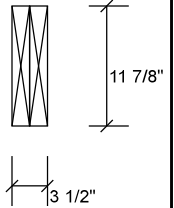
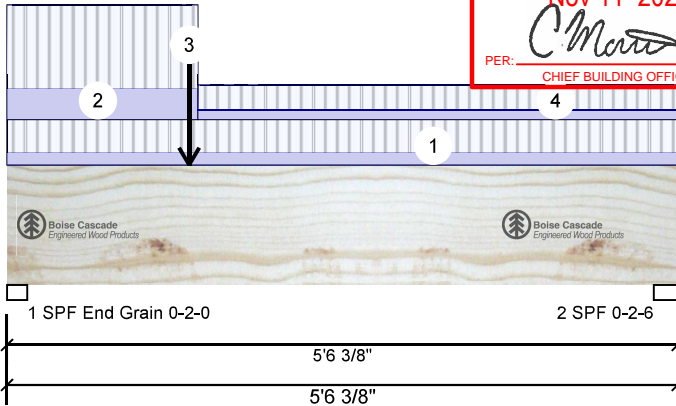
F9-A Versa-Lam LVL 2.1E 3100 SP**1.750" X 11.875" 2-Ply - PASSED**

Level: Ground Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER: *C. Manno*
CHIEF BUILDING OFFICIAL

**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	424	199	0	0
2	Vertical	227	121	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	2.000"	Vert	12%	249 / 636	884	L	1.25D+1.5L
2 - SPF	2.375"	Vert	10%	151 / 341	492	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	999 ft-lb	1'6"	35392 ft-lb	0.028 (3%)	1.25D+1.5L	L
Unbraced	999 ft-lb	1'6"	35392 ft-lb	0.028 (3%)	1.25D+1.5L	L
Shear	654 lb	1'1 7/8"	13217 lb	0.049 (5%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/58058)	2'6 15/16"	0.176 (L/360)	0.006 (1%)	D	Uniform
LL Defl inch	0.002 (L/28324)	2'6 1/2"	0.176 (L/360)	0.013 (1%)	L	L
TL Defl inch	0.003 (L/19038)	2'6 5/8"	0.265 (L/240)	0.013 (1%)	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must be laterally braced at a maximum of 4' 3/8" o.c.
- 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	Tie-In	0-0-0 to 5-6-6	0-8-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-6-14	1-9-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-6-0		Near Face	121 lb	296 lb	0 lb	0 lb	F5
4	Tie-In	1-6-14 to 5-6-6	0-6-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
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 2026-05-29

Manufacturer Info

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(800) 232-0788
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CCMC: 12472

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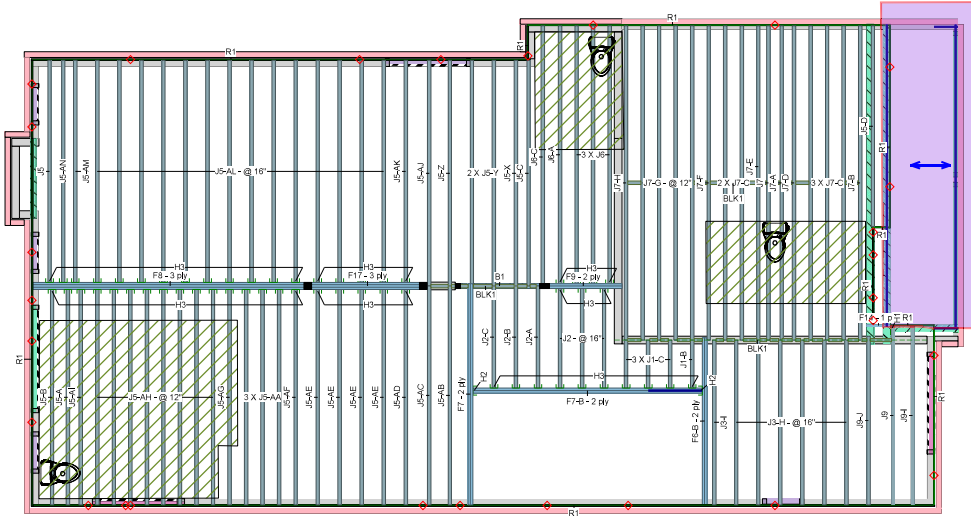
MHP 23037

CORPORATION OF THE CITY OF OSHAWA
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OF PERMIT PLANS
Nov 11 2023
PER: *C. Marro*
CHIEF BUILDING OFFICIAL

Second Floor

ENG-300723-152-KTF - GREENPARK - ZADORA ESTATES - VILLA 7-1 2-3

Page 28 of 38



Second Floor

LV/L/LSL

Label	Description	Width	Depth	Qty	Piles	Pcs	Length
F8	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	3	3	18-0-0
F7	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	14-0-0
F6	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12-0-0
F17	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	3	3	8-0-0
B1	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	8-0-0
F9	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	6-0-0
F14	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	2-0-0

Joist

Label	Description	Width	Depth	Qty	Piles	Pcs	Length
J7	AJS 140	2.5	11.875			16	20-0-0
J6	AJS 140	2.5	11.875			5	16-0-0
J5	AJS 140	2.5	11.875			48	14-0-0
J9	AJS 140	2.5	11.875			3	12-0-0
J3	AJS 140	2.5	11.875			7	10-0-0
J2	AJS 140	2.5	11.875			6	8-0-0
J1	AJS 140	2.5	11.875			4	4-0-0

Rim Board

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

Blocking

Label	Description	Width	Depth	Qty	Piles	Pcs	Length
BLK1	AJS 140	2.5	11.875			Varies	27-0-0

Hanger

Label	Pcs	Description	Beam/Girder	Supported Member
H1	1	Unknown Hanger	fasteners	fasteners
H2	2	LF3511	12 10d	2 #8x1 1/4WS
H3	56	LF2511	12 10d	1 #8x1 1/4WS

Custom

Label	Description	Width	Depth	Qty	Piles	Pcs	Length
						0	

JOB INFORMATION

Builder GREENPARK GROUP
Project VILLA 7-1 2-3
Shipping
Sales Rep Ralph Mirigello
Designer KT
Plotted July 21, 2023
Layout Name VILLA 7-1 2-3

Job Path Y:\KUL\CUSTOMERS\GREENPARK\ZADORA ESTATES\MODELS\VILLA 7-1\VILLA 7-1

DESIGN CRITERIA

Design Method NSC 2015
Building Code CBC 2012 (2020 Update)

Floor

Live	40
Dead	15

Deflection Joist

LL Span / L	360
TL Span / L	240
LL Cant. 2/L	240
TL Cant. 2/L	240

Deflection Flush Girder

LL Span / L	360
TL Span / L	240
LL Cant. 2/L	240
TL Cant. 2/L	240

Deflection Dropped Girder

LL Span / L	480
TL Span / L	240
LL Cant. 2/L	480
TL Cant. 2/L	480

Deflection Header

LL Span / L	480
TL Span / L	240
LL Cant. 2/L	480
TL Cant. 2/L	240

Decking

Thickness	5/8"
Fastener	Nailed & Glued
Vibration	Curium 10"

References

Boise - 12472-R, 12787-R / LP - 12412-R
Roseburg - 13310-R / West Fraser - 12904-R
Global - 13543-R / Lamo - ESL 1232

Legend

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

Installation Guide



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

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

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

Kott Inc.

3228 Moodie Dr. Ottawa
14 Anderson Blvd, Unbridge
Ontario

613-938-2775 / 905-642-4400

References

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Roseburg - 13310-R / West Fraser - 12904-R
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Legend

PS	Point Load Support
Load from Above	
Wall Opening	
Hardwood Rimboard Plus 1.125 X 11.875	
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Versa-Lam LVL 2.1E 3100 SP 1.75 X 11.875	
Versa-Lam LVL 2.1E 3100 SP 1.75 X 11.875 (Dropped)	



Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA 7-1 2 3

Page 25 of 42

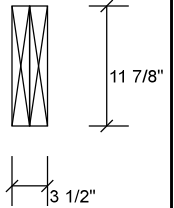
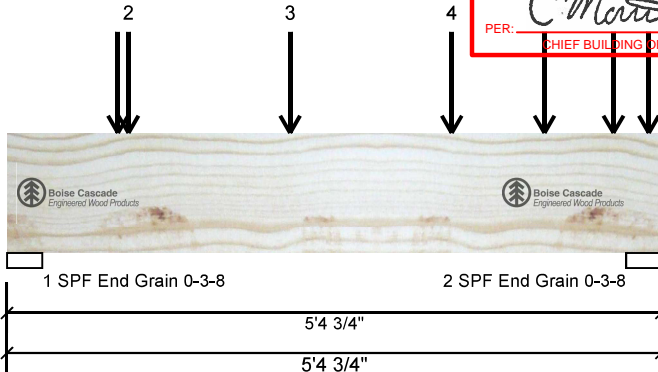
B1 Versa-Lam LVL 2.1E 3100 SP

1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER:
CHIEF BUILDING OFFICIAL**Member Information**

Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1373	651	0	0
2	Vertical	1320	552	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	25%	813 / 2060	2873	L	1.25D+1.5L
2 - SPF End Grain	3.500"	Vert	21%	690 / 1980	2670	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2926 ft-lb	2'4"	35392 ft-lb	0.083 (8%)	1.25D+1.5L	L
Unbraced	2926 ft-lb	2'4"	35392 ft-lb	0.083 (8%)	1.25D+1.5L	L
Shear	2111 lb	1'3 3/8"	13217 lb	0.160 (16%)	1.25D+1.5L	L
Perm Defl in. (L/21347)	0.003	2'7 3/16"	0.165 (L/360)	0.017 (2%)	D	Uniform
LL Defl inch	0.006 (L/9290)	2'7 3/8"	0.123 (L/480)	0.052 (5%)	L	L
TL Defl inch	0.009 (L/6473)	2'7 5/16"	0.247 (L/240)	0.037 (4%)	D+L	L

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 3.5.
- 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.



JULY 21, 2023

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chemicals

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www.bc.com
CCMC: 12472

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



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Project: ZADORRA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA 7-1 2 3

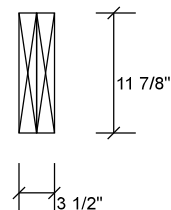
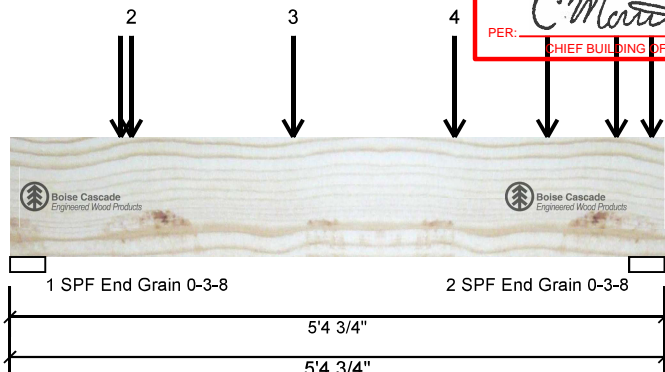
B1 Versa-Lam LVL 2.1E 3100 SP**1.750" X 11.875" 2-Ply - PASSED**

Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER: *C. Morris*
CHIEF BUILDING OFFICIAL



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-11-0		Top	380 lb	691 lb	0 lb	0 lb	F7
	Bearing Length	0-3-8							
2	Point	1-0-0		Top	134 lb	358 lb	0 lb	0 lb	J5
	Bearing Length	0-3-8							
3	Point	2-4-0		Top	198 lb	528 lb	0 lb	0 lb	J2 J5
	Bearing Length	0-3-8							
4	Point	3-8-0		Top	167 lb	446 lb	0 lb	0 lb	J2 J5
	Bearing Length	0-3-8							
5	Point	4-5-3		Top	82 lb	218 lb	0 lb	0 lb	J5
	Bearing Length	0-3-8							
6	Point	5-0-0		Top	60 lb	160 lb	0 lb	0 lb	J2
	Bearing Length	0-3-8							
7	Point	5-3-8		Top	118 lb	292 lb	0 lb	0 lb	J6
	Bearing Length	0-3-8							
	Self Weight				12 PLF				



JULY 21, 2023

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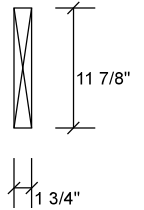
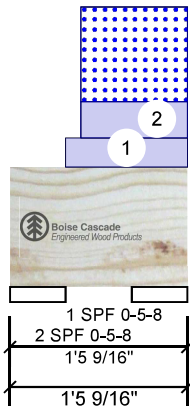


Client: GREENPARK GROUP
Project: ZADORRA ESTATES
Address:

Date: 2023-07-21
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA-1 2 3

Page 1 of 1

F14 Versa-Lam LVL 2.1E 3100 SP 1-750" X 11-875" - PASSED Level: Second Floor



Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	0	44	45	0
2	Vertical	0	133	184	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	Vert	2%	55 / 68	123	L	1.25D+1.5S
2 - SPF	5.500"	Vert	7%	166 / 276	442	L	1.25D+1.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	31 ft-lb	9 1/16"	17696 ft-lb	0.002 (0%)	1.25D+1.5S	L
Unbraced	31 ft-lb	9 1/16"	17696 ft-lb	0.002 (0%)	1.25D+1.5S	L
Shear	191 lb	1'5 3/8"	6608 lb	0.029 (3%)	1.25D+1.5S	L
Perm Defl in.	0.000 (L/1237892)	8 15/16"	0.022 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/949665)	9 1/16"	0.022 (L/360)	0.000 (0%)	S	L
TL Defl inch	0.000 (L/537511)	9"	0.034 (L/240)	0.000 (0%)	D+S	L



Design Notes

- 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.
- Girders are designed to be supported on the bottom edge only.
- Top must be continuously laterally braced.
- Bottom must have sheathing attached or be continuously braced.

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	0-5-8 to 1-5-9		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-7-0 to 1-5-9		Top	100 PLF	0 PLF	261 PLF	0 PLF	
	Self Weight				6 PLF				

Notes

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

Lumber

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

chemicals

Handling & Installation

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

- For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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 2026-05-29



Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1,2,3
Project #: VILLA-1,2,3

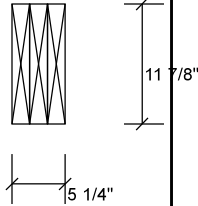
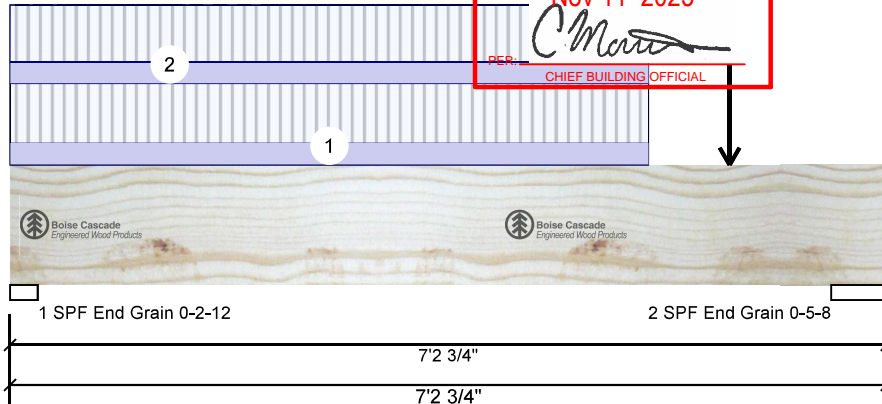
Page 35 of 42

F17 Versa-Lam LVL 2.1E 3100 SP

1-750" X 11-8 7/8" 3-Ply - PASSED Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER: 
CHIEF BUILDING OFFICIAL**Member Information**

Type:	Girder	Application:	Floor (Residential)
Plies:	3	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection LL:	360	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1848	755	0	0
2	Vertical	1651	686	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	2.750"	Vert	25%	944 / 2772	3716	L	1.25D+1.5L
2 - SPF End Grain	5.500"	Vert	11%	858 / 2477	3334	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5899 ft-lb	3'6"	55212 ft-lb	0.107 (11%)	1.25D+1.5L	L
Unbraced	5899 ft-lb	3'6"	55212 ft-lb	0.107 (11%)	1.25D+1.5L	L
Shear	4353 lb	5'9 3/8"	19825 lb	0.220 (22%)	1.25D+1.5L	L
Perm Defl in. (L/12391)	0.006	3'6 1/16"	0.222 (L/360)	0.029 (3%)	D	Uniform
LL Defl inch	0.016 (L/5064)	3'6 1/16"	0.222 (L/360)	0.071 (7%)	L	L
TL Defl inch	0.022 (L/3595)	3'6 1/16"	0.333 (L/240)	0.067 (7%)	D+L	L

Design Notes

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



JULY 21, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 5-3-3		Far Face	101 PLF	268 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 5-3-3		Near Face	97 PLF	260 PLF	0 PLF	0 PLF	
3	Point	5-11-3		Far Face	137 lb	365 lb	0 lb	0 lb	J5
4	Point	5-11-3		Near Face	133 lb	353 lb	0 lb	0 lb	J5
	Self Weight				18 PLF				

Notes

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Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2026-05-29

Manufacturer Info

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

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





Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA 7-1 2 3

Page 36 of 42

F6-B Versa-Lam LVL 2.1E 3100 SP

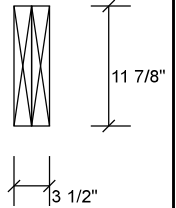
1.750" x 11.875" 2-Ply - PASSED

Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER: *C. Manno*
CHIEF BUILDING OFFICIAL



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	348	216	0	0
2	Vertical	742	397	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.375"	Vert	8%	270 / 522	792	L	1.25D+1.5L
2 - SPF	4.375"	Vert	17%	496 / 1113	1609	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4333 ft-lb	6'10 15/16"	35392 ft-lb	0.122 (12%)	1.25D+1.5L	L
Unbraced	4333 ft-lb	6'10 15/16"	35392 ft-lb	0.122 (12%)	1.25D+1.5L	L
Shear	1539 lb	8'9"	13217 lb	0.116 (12%)	1.25D+1.5L	L
Perm Defl in.	0.014 (L/8232)	5'5 7/16"	0.317 (L/360)	0.044 (4%)	D	Uniform
LL Defl inch	0.026 (L/4439)	5'6 1/4"	0.317 (L/360)	0.081 (8%)	L	L
TL Defl inch	0.040 (L/2884)	5'5 15/16"	0.475 (L/240)	0.083 (8%)	D+L	L



Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must be laterally braced at a maximum of 6'10 15/16" o.c.
- 7 Lateral slenderness ratio based on full section width.

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ENGINEERING NOTES: EWP-FLOORS. THE NOTE
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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 9-11-10	0-3-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	6-10-15		Far Face	433 lb	930 lb	0 lb	0 lb	F7
3	Tie-In	7-0-11 to 9-11-10	0-4-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

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 2026-05-29

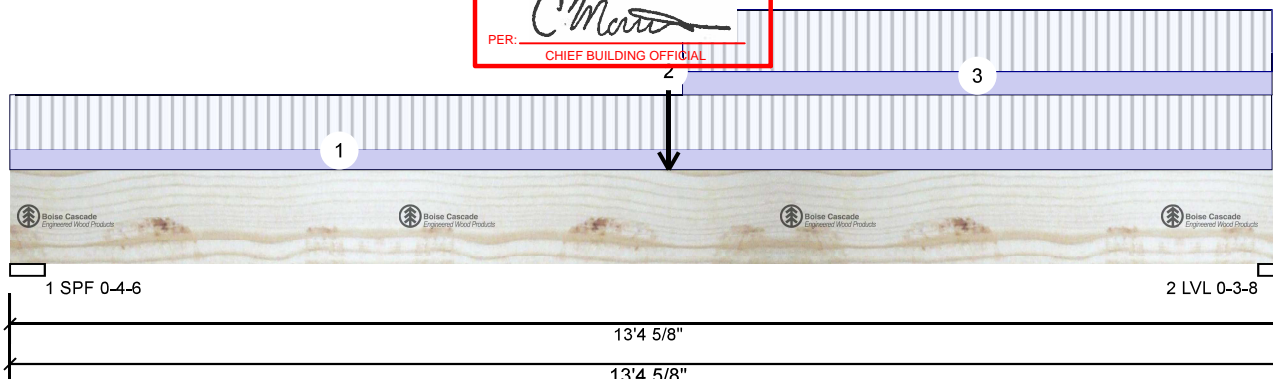


Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1 2 3
Project #: VILLA-1 2 3

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

Level: Second Floor

**TRUE COPY
OF PERMIT PLANS****Nov 11 2023**PER: 
CHIEF BUILDING OFFICIAL**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	582	338	0	0
2	Vertical	691	380	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.375"	Vert	14%	422 / 873	1295	L	1.25D+1.5L
2 - LVL	3.500"	Vert	11%	475 / 1037	1512	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7033 ft-lb	6'10 15/16"	35392 ft-lb	0.199 (20%)	1.25D+1.5L	L
Unbraced	7033 ft-lb	6'10 15/16"	35392 ft-lb	0.199 (20%)	1.25D+1.5L	L
Shear	1389 lb	12'1 1/4"	13217 lb	0.105 (11%)	1.25D+1.5L	L
Perm Defl in.	0.044 (L/3535)	6'9 7/8"	0.429 (L/360)	0.102 (10%)	D	Uniform
LL Defl inch	0.081 (L/1910)	6'10 1/8"	0.429 (L/360)	0.188 (19%)	L	
TL Defl inch	0.124 (L/1240)	6'10 1/16"	0.643 (L/240)	0.194 (19%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be continuously laterally braced.
- 6 Bottom must be laterally braced at a maximum of 6'10 15/16" o.c.
- 7 Lateral slenderness ratio based on full section width.



JULY 21, 2023

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ENGINEERING NOTES: EWP-FLOORS. THE NOTE
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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 13-2-14	0-7-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	6-10-15		Near Face	370 lb	767 lb	0 lb	0 lb	F7
3	Tie-In	7-0-11 to 13-2-14	0-8-8	Top	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 PLF				

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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

This design is valid until 2026-05-29

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






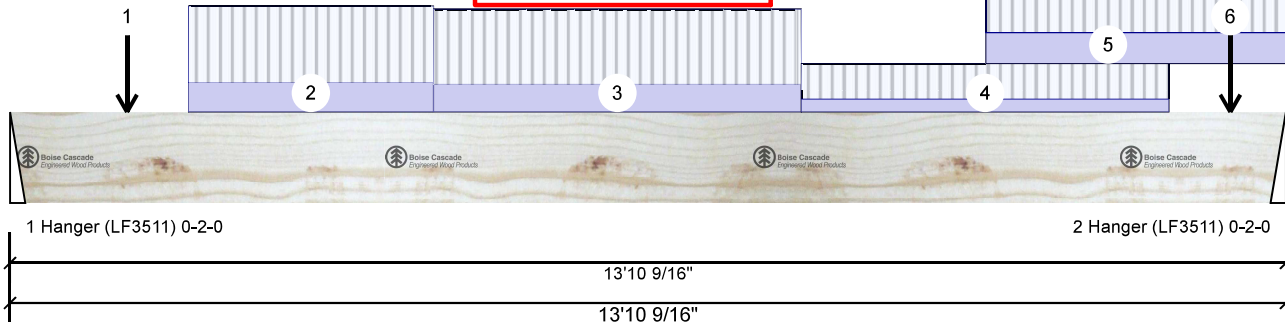
Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1,2,3
Project #: VILLA-1-13

Page 38 of 42

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

Level: Second Floor

**TRUE COPY
OF PERMIT PLANS****Nov 11 2023**PER: 
CHIEF BUILDING OFFICIAL**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	767	370	0	0
2	Vertical	930	433	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.000"	Vert	21%	462 / 1150	1612	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	25%	541 / 1395	1937	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5720 ft-lb	6'9 5/8"	35392 ft-lb	0.162 (16%)	1.25D+1.5L	L
Unbraced	5720 ft-lb	6'9 5/8"	35392 ft-lb	0.162 (16%)	1.25D+1.5L	L
Shear	1636 lb	12'8 11/16"	13217 lb	0.124 (12%)	1.25D+1.5L	L
Perm Defl in.	0.043 (L/3803)	6'11 3/16"	0.456 (L/360)	0.095 (9%)	D	Uniform
LL Defl inch	0.091 (L/1808)	6'11 1/8"	0.456 (L/360)	0.199 (20%)	L	
TL Defl inch	0.134 (L/1225)	6'11 1/8"	0.684 (L/240)	0.196 (20%)	D+L	L

Design Notes

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



JULY 21, 2023

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	1-3-4		Far Face	64 lb	171 lb	0 lb	0 lb	J2
2	Part. Uniform	1-11-4 to 4-7-4		Far Face	47 PLF	124 PLF	0 PLF	0 PLF	
3	Part. Uniform	4-7-4 to 8-7-4		Far Face	45 PLF	121 PLF	0 PLF	0 PLF	

Continued on page 2...

Notes

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Lumber

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

chemicals**Handling & Installation**

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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CCMC: 12472

This design is valid until 2026-05-29

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Client: GREENPARK GROUP
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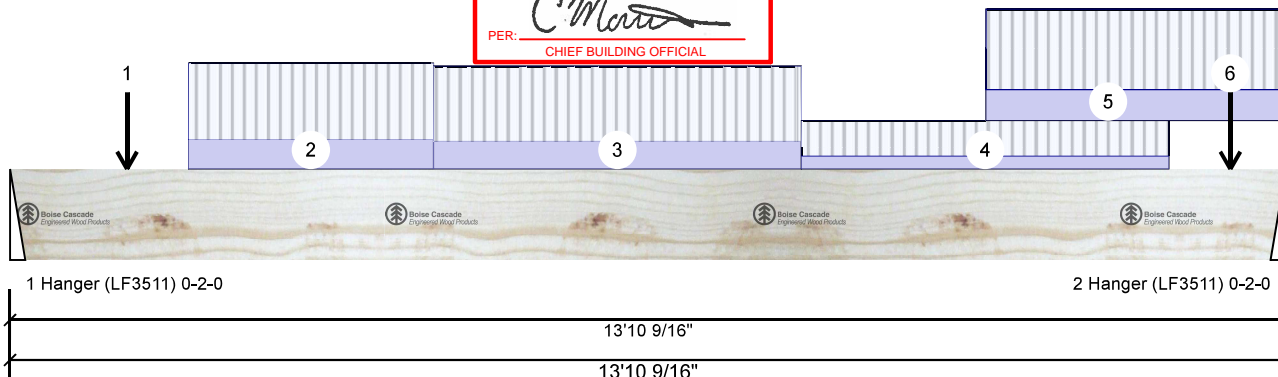
F7-B Versa-Lam LVL 2.1E 3100 SP

1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor



MHP 23037



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	8-7-4 to 12-7-4		Far Face	21 PLF	57 PLF	0 PLF	0 PLF	
5	Part. Uniform	10-7-6 to 13-10-9		Top	50 PLF	130 PLF	0 PLF	0 PLF	
6	Point	13-3-4		Far Face	22 lb	59 lb	0 lb	0 lb	J1
	Self Weight				12 PLF				



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Notes

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Lumber

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

chemicals**Handling & Installation**

1. LVL beams must not be cut or drilled
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3228 Moodie Dr, Ottawa, Ontario
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This design is valid until 2026-05-29



Client: GREENPARK GROUP
Project: ZADORA ESTATES
Address:

Date: 2023-07-17
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Job Name: VILLA 7-1 2 3
Project #: VILLA-1 2 3

Page 40 of 42

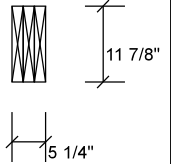
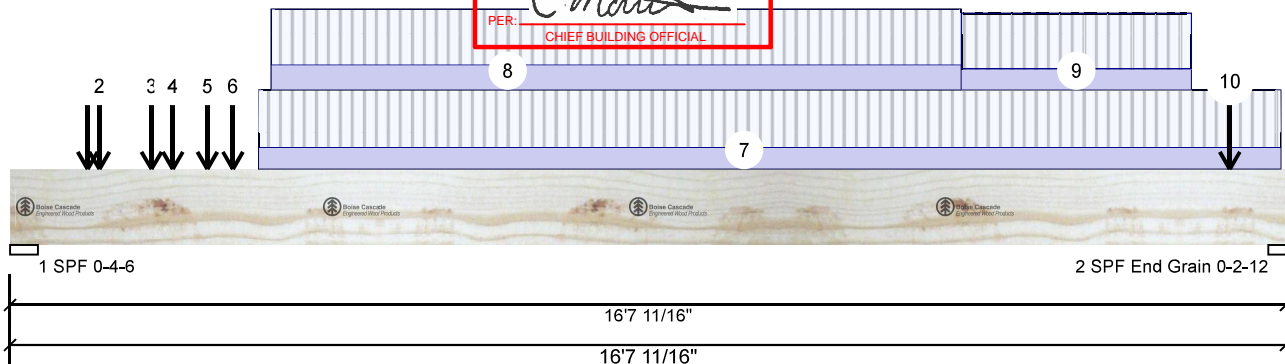
F8 Versa-Lam LVL 2.1E 3100 SP

1.750" X 11.875" 3-Ply - PASSED

Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER:
CHIEF BUILDING OFFICIAL

Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	3	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 OBC 2012(2020 Update)
Deflection LL:	360	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II	Vibration:	Not Checked
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	4103	1829	0	0
2	Vertical	4263	1828	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	4.375"	Vert	60%	2286 / 6154	8440	L	1.25D+1.5L
2 - SPF	2.750"	Vert	58%	2286 / 6394	8680	L	1.25D+1.5L
End Grain							

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	34926 ft-lb	8'4 9/16"	55212 ft-lb	0.633 (63%)	1.25D+1.5L	L
Unbraced	34926 ft-lb	8'4 9/16"	55212 ft-lb	0.633 (63%)	1.25D+1.5L	L
Shear	8948 lb	1'4 1/4"	19825 lb	0.451 (45%)	1.25D+1.5L	L
Perm Defl in.	0.231 (L/842)	8'4 9/16"	0.539 (L/360)	0.428 (43%)	D	Uniform
LL Defl inch	0.524 (L/370)	8'4 11/16"	0.539 (L/360)	0.972 (97%)	L	L
TL Defl inch	0.755 (L/257)	8'4 5/8"	0.809 (L/240)	0.933 (93%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
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- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top must be continuously laterally braced.
- 5 Bottom must have sheathing attached or be continuously braced.
- 6 Lateral slenderness ratio based on full section width.



JULY 21, 2023

READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTES: EWP-FLOORS. THE NOTE
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USED IN THE DESIGN OF THIS COMPONENT.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	1-0-2		Far Face	94 lb	251 lb	0 lb	0 lb	J5
2	Point	1-2-0		Near Face	128 lb	278 lb	0 lb	0 lb	J5
3	Point	1-10-2		Far Face	77 lb	207 lb	0 lb	0 lb	J5
4	Point	2-1-8		Near Face	102 lb	223 lb	0 lb	0 lb	J5
5	Point	2-6-14		Far Face	102 lb	273 lb	0 lb	0 lb	J5
6	Point	2-10-14		Near Face	104 lb	229 lb	0 lb	0 lb	J5

Continued on page 2...

Notes

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Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

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 2026-05-29



Client: GREENPARK GROUP
Project: ZADORRA ESTATES
Address:

Date: 2023-07-17
Input by: K T
Job Name: VILLA 7-1,2,3
Project #: VILLA-1,2,3

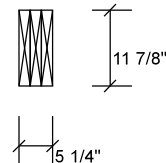
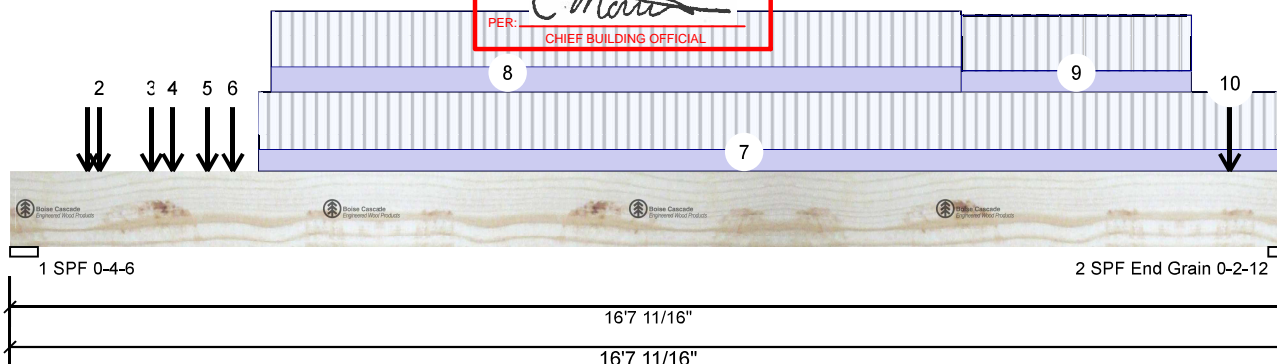
F8 Versa-Lam LVL 2.1E 3100 SP

1.750" X 11.875" 3-Ply - PASSED

Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER: *C. Morin*
CHIEF BUILDING OFFICIAL

...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
7	Part. Uniform	3-2-14 to 16-6-14		Far Face	99 PLF	265 PLF	0 PLF	0 PLF	
8	Part. Uniform	3-4-14 to 12-4-14		Near Face	115 PLF	256 PLF	0 PLF	0 PLF	
9	Part. Uniform	12-4-14 to 15-4-14		Near Face	96 PLF	256 PLF	0 PLF	0 PLF	
10	Point	15-10-14		Near Face	112 lb	299 lb	0 lb	0 lb	J5
	Self Weight				18 PLF				



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Page 42 of 42

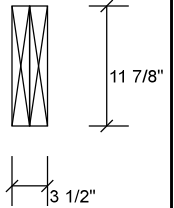
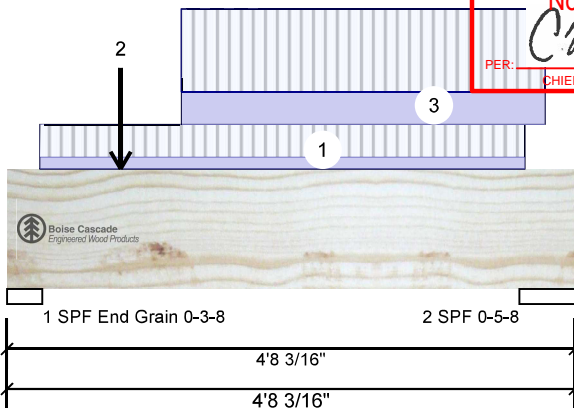
F9 Versa-Lam LVL 2.1E 3100 SP

1.750" X 11.875" 2-Ply - PASSED

Level: Second Floor

TRUE COPY
OF PERMIT PLANS

Nov 11 2023

PER:
CHIEF BUILDING OFFICIAL**Member Information**

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	808	342	0	0
2	Vertical	914	385	0	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	13%	428 / 1212	1640	L	1.25D+1.5L
2 - SPF	5.500"	Vert	16%	481 / 1371	1852	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1784 ft-lb	2'3 1/8"	35392 ft-lb	0.050 (5%)	1.25D+1.5L	L
Unbraced	1784 ft-lb	2'3 1/8"	35392 ft-lb	0.050 (5%)	1.25D+1.5L	L
Shear	2235 lb	1'3 3/8"	13217 lb	0.169 (17%)	1.25D+1.5L	L
Perm Defl in. (L/41804)	0.001	2'3 1/16"	0.135 (L/360)	0.009 (1%)	D	Uniform
LL Defl inch (L/17457)	0.003	2'3 1/16"	0.135 (L/360)	0.021 (2%)	L	L
TL Defl inch (L/12315)	0.004	2'3 1/16"	0.203 (L/240)	0.019 (2%)	D+L	L

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ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-3-4 to 4-3-4		Near Face	45 PLF	121 PLF	0 PLF	0 PLF	
2	Point	0-11-4		Far Face	126 lb	314 lb	0 lb	0 lb	J6
3	Part. Uniform	1-5-4 to 4-5-4		Far Face	122 PLF	308 PLF	0 PLF	0 PLF	
	Self Weight				12 PLF				

Notes

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