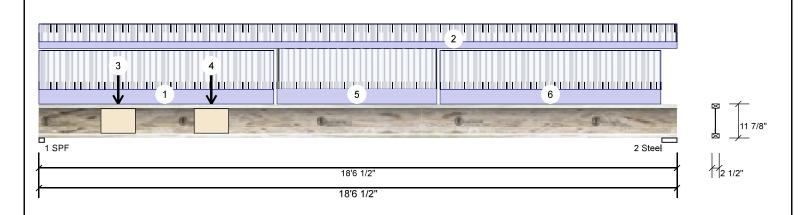
11<mark>.875" - PASSED</mark>





Member Info	rmation			Unf	actored Rea	actions	UNPA	ATTERNED II	b (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	l	_ive	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical		533	199	0	0
Moisture Condition	on: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical		455	170	0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bea	rings and F	actored	d Reac	tions		
Dead:	15 PSF			Ве	aring Length	Dir.	Сар.	React D/L Ib	Total Ld. Case	Ld. Comb.
				1 -	SPF 1.875"	Vert	66%	249 / 799	1048 L	1.25D+1.5L
				 2-	Steel 5.250"	Vert	47%	213 / 682	895 L	1.25D+1.5L

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	4214 ft-lb	8'8 5/8"	5305 ft-lb	0.794 (79%)	1.25D+1.5L	L
Unbraced	4214 ft-lb	8'8 5/8"	5305 ft-lb	0.794 (79%)	1.25D+1.5L	L
Shear	1039 l b	1 1/8"	2350 lb	0.442 (44%)	1.25D+1.5L	L
Perm Defl in.	0.164 (L/1319)	9' 3/16"	0.602 (L/360)	0.273 (27%)	D	Uniform
LL Defl inch	0.439 (L/494)	9' 1/16"	0.602 (L/360)	0.729 (73%)	L	L
TL Defl inch	0.604 (L/359)	9' 1/16"	0.904 (L/240)	0.668 (67%)	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 13'6 3/8" 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.

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 6-9-14	0-9-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 18-6-8	0-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	2-3-10		Far Face	28 lb	76 l b	0 lb	0 lb	F9
4	Point	5-0-2		Far Face	15 l b	41 lb	0 lb	0 lb	F9
5	Tie-In	6-11-0 to 11-6-12	0-10-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	11-7-14 to 18-0-14	0-9-14	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 11/3/2024

Manufacturer Info

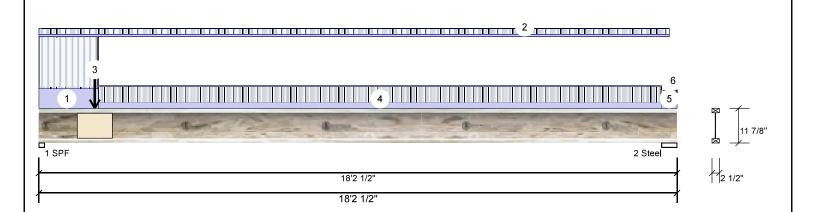
Boise Cascade Wood Products 1111 W. Jefferson St.

Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.







Member Infor	mation		Unfactored Reactions UNPATTERNED lb (Uplift)							
Type:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical		583	218	0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical		246	92	0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bea	rings and F	actore	d Reac	tions		
Dead:	15 PSF			Ве	aring Length	Dir.	Cap.	React D/L I b	Total Ld. Case	Ld. Comb.
				1 -	SPF 1.875"	Vert	73%	273 / 874	1147 L	1.25D+1.5L
Amalosia Dassel				_ 2 -	Steel 5.250"	Vert	25%	115 / 369	484 L	1.25D+1.5L

Analysis Results

Ana l ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2401 ft-lb	7'7 5/16"	5305 ft-lb	0.453 (45%)	1.25D+1.5L	L
Unbraced	2401 ft-lb	7'7 5/16"	5305 ft-lb	0.453 (45%)	1.25D+1.5L	L
Shear	1135 lb	1 1/8"	2350 lb	0.483 (48%)	1.25D+1.5L	L
Perm Defl in.	0.092 (L/2310)	8'6 15/16"	0.591 (L/360)	0.156 (16%)	D	Uniform
LL Defl inch	0.246 (L/866)	8'6 15/16"	0.591 (L/360)	0.416 (42%)	L	L
TL Defl inch	0.338 (L/630)	8'6 15/16"	0.887 (L/240)	0.381 (38%)	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 16'7 3/8" o.c.



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I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-8-6	1-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-11-14	0-1-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-7-2		Far Face	128 l b	342 lb	0 l b	0 lb	F10
4	Tie-In	1-8-6 to 17-9-4	0-5-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	17-9-4 to 18-2-8	0-4-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	17-11-14 to 18-2-8	0-1-14	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 11/3/2024

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



CSD DESIGN



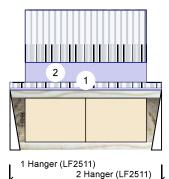
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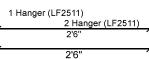
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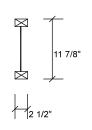
Job Name: VILLA 11-2-SNK

11<mark>.875" - PASSED</mark>









Member Information									
Туре:	Girder	Application:	Floor (Residential)						
Plies:	1	Design Method:	LSD						
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012						
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal - II	Vibration:	Not Checked						
General Load									
Elear Live:	40 DSE								

Wind Brg Direction Live Dead Snow Vertical 342 128 0 1 0 2 Vertica 342 128 0 0

Unfactored Reactions UNPATTERNED lb (Uplift)

Floor Live: 40 PSF 15 PSF Dead:

Bearings	and	Factored	Reactions

Bearing	Length	Dir.	Сар.	React D/L I b	Total	Ld. Case	Ld. Comb.
1 -	2.000"	Vert	42%	160 / 513	673	L	1.25D+1.5L
Hanger							
2 -	2.000"	Vert	42%	160 / 513	673	L	1.25D+1.5L
Hanger							

Analysis Results

Design Notes

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	425 ft-lb	1'3"	5305 ft-lb	0.080 (8%)	1.25D+1.5L	L
Unbraced	425 ft-lb	1'3"	5305 ft-lb	0.080 (8%)	1.25D+1.5L	L
Shear	667 l b	2'4 3/4"	2350 lb	0.284 (28%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/19303)	1'3"	0.076 (L/360)	0.019 (2%)	D	Uniform
LL Defl inch	0.004 (L/7246)	1'3"	0.076 (L/360)	0.050 (5%)	L	L
TI Deflinch	0.005 (L/5268)	1'3"	0.115 (L/240)	0.046 (5%)	D+L	L



IULY 21, 2023

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 Girders are designed to be supported on the bottom edge only.
- 4 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.
- 5 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.

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

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 2-6-0	0-9-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-3-0 to 2-3-0		Far Face	113 PLF	301 PLF	0 PLF	0 PLF	

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

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

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

 3. Damaged Jioists must not be used

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

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

This design is valid until 11/3/2024

Manufacturer Info

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

(800) 232-0788 www.bc.com CCMC: 12787





Client: Project:

Address:

OSHAWA

Input by: RΟ

Job Name: VILLA 11-2-SNK

F10 B

875" - PASSED



1

2

Hanger

Hanger

2.000"

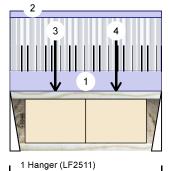
Vert

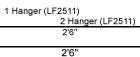
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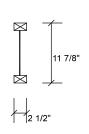
Vertical

Vertica









0

0

Wind

1.25D+1.5L

0

0

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

Unta	actored	Reactions UNPA	I LEKNED ID	(Uplift)
Bra	Direction	Live	Dead	Snow

35%

262

262

Bearings	s and Fa	ctore	d Reacti	ons			
Bearing	Length	Dir.	Cap. R	eact D/L I b	Total	Ld. Case	Ld. Comb.
1 -	2.000"	Vert	35%	162 / 393	555	L	1.25D+1.5L

170 / 393

563 L

130

136

Analysis Results

l	Ana l ysis	Actua l	Location	Allowed	Capacity	Comb.	Case
l	Moment	351 ft-lb	1'3 15/16"	5305 ft-lb	0.066 (7%)	1.25D+1.5L	L
l	Unbraced	351 ft-lb	1'3 15/16"	5305 ft-lb	0.066 (7%)	1.25D+1.5L	L
l	Shear	556 lb	2'4 3/4"	2350 lb	0.237 (24%)	1.25D+1.5L	L
l	Perm Defl in.	0.001 (L/18519)	1'4 1/8"	0.076 (L/360)	0.019 (2%)	D	Uniform
l	LL Defl inch	0.003 (L/9417)	1'3"	0.076 (L/360)	0.038 (4%)	L	L
ı	TL DefLinch	0.004 (L/6245)	1'3 3/8"	0.115 (L/240)	0.038 (4%)	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.
- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.
- 5 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.



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I	I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 2-6-0	0-9-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Part. Uniform	0-0-0 to 2-6-0		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
	3	Point	0-9-0		Near Face	105 lb	221 l b	0 lb	0 l b	J4
ı	4	Point	1-9-0		Near Face	120 l b	221 lb	0 lb	0 lb	J4

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.

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 cut or drilled

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

 3. Damaged Lioists 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

This design is valid until 11/3/2024

Manufacturer Info

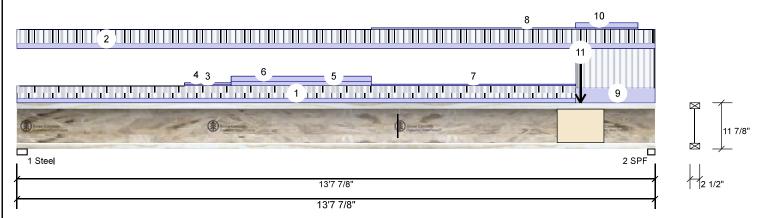
Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702

(800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.







Member Infor	mation			Unfactored Reactions UNPATTERNED lb (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead		Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical		282	140		0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical		538	278		0	0
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bea	rings and F	actored	d Reac	tions			
Dead:	15 PSF			Ве	aring Length	Dir.	Сар.	React D/L Ib	Total	Ld. Case	Ld. Comb.
				1 -	Steel 2.625"	Vert	34%	175 / 422	598	L	1.25D+1.5L
				- 2 -	SPF 1.875"	Vert	73%	347 / 808	1155	L	1.25D+1.5L

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	2296 ft-lb	7'7 3/8"	5305 ft-lb	0.433 (43%)	1.25D+1.5L	L
Unbraced	2296 ft-lb	7'7 3/8"	5305 ft-lb	0.433 (43%)	1.25D+1.5L	L
Shear	1141 lb	13'6 3/4"	2350 lb	0.486 (49%)	1.25D+1.5L	L
Perm Defl in.	0.069 (L/2318)	7'1 3/16"	0.447 (L/360)	0.155 (16%)	D	Uniform
LL Defl inch	0.127 (L/1266)	7'1 3/4"	0.447 (L/360)	0.284 (28%)	L	L
TL Defl inch	0.196 (L/819)	7'1 1/2"	0.670 (L/240)	0.293 (29%)	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 12' 3/4" 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 11-11-8	0-5-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-7-14	0-5-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	3-7-0 to 4-7-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	3-7-0 to 4-7-0		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
5	Part. Uniform	4-7-0 to 7-7-0		Тор	6 PLF	0 PLF	0 PLF	0 PLF	
6	Part. Uniform	4-7-0 to 7-7-0		Тор	7 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	7-7-0 to 11-11-8		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
Continued on p	page 2								

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 IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily 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

This design is valid until 11/3/2024

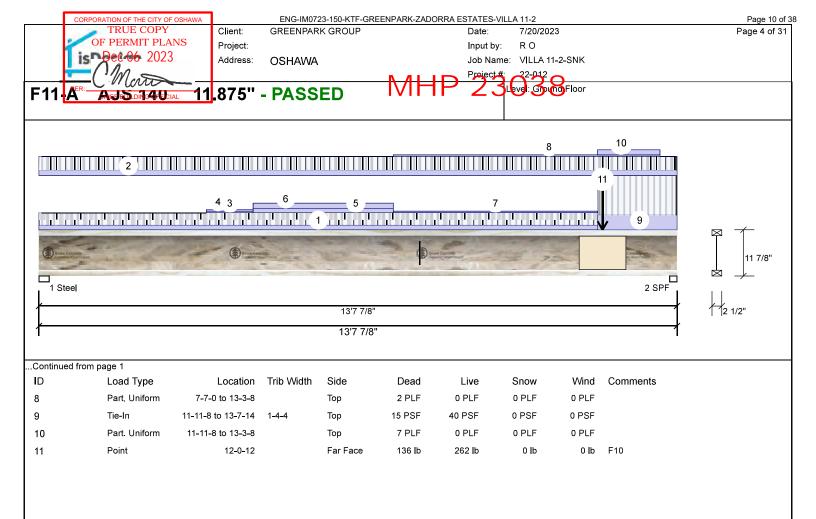
Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787









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Notes

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

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be out or drilled

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

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This design is valid until 11/3/2024

Manufacturer Info

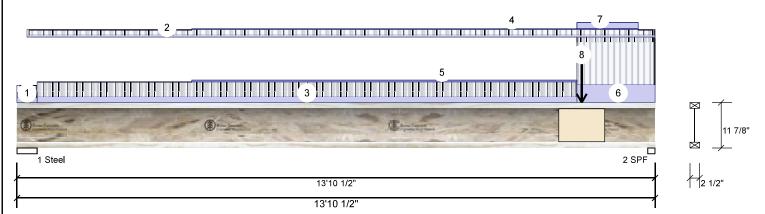
Boise Cascade Wood Products 1111 W. Jefferson St.

Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.







Member Infori	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)							
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	9	Dead		Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	195	5	88		0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	451	1	221		0	0
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II	Vibration:	Not Checked								
General Load											
Floor Live:	40 PSF			Bea	rings and Fa	actored R	eac	tions			
Dead:	15 PSF			Ве	aring Length	Dir. C	ар.	React D/L I b	Total	Ld. Case	Ld. Comb.
				1 -	Steel 5.250"	Vert 2	21%	111 / 293	404	L	1.25D+1.5L
				_ 2 -	SPF 1.875"	Vert 6	80%	277 / 676	953	L	1.25D+1.5L

Analysis Results

Ana l ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1624 ft-lb	8'6 3/16"	5305 ft-lb	0.306 (31%)	1.25D+1.5L	L
Unbraced	1624 ft-lb	8'6 3/16"	5305 ft-lb	0.306 (31%)	1.25D+1.5L	L
Shear	942 l b	13'9 3/8"	2350 lb	0.401 (40%)	1.25D+1.5L	L
Perm Defl in	0.045 (L/3546)	7'6 1/8"	0.447 (L/360)	0.102 (10%)	D	Uniform
LL Defl inch	0.093 (L/1734)	7'5 11/16"	0.447 (L/360)	0.208 (21%)	L	L
TL Defl inch	0.138 (L/1165)	7'5 13/16"	0.670 (L/240)	0.206 (21%)	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 12'3 3/8" 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 0-5-4	0-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-2-10 to 13-10-8	0-1-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-5-4 to 12-2-2	0-5-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Part. Uniform	3-9-10 to 13-6-2		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
5	Part. Uniform	3-9-10 to 12-2-2		Тор	2 PLF	0 PLF	0 PLF	0 PLF	
6	Tie-In	12-2-2 to 13-10-8	1-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
7	Part. Uniform	12-2-2 to 13-6-2		Тор	7 PLF	0 PLF	0 PLF	0 PLF	
8	Point	12-3-6		Near Face	130 lb	262 lb	0 lb	0 lb	F10

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 IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily 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.

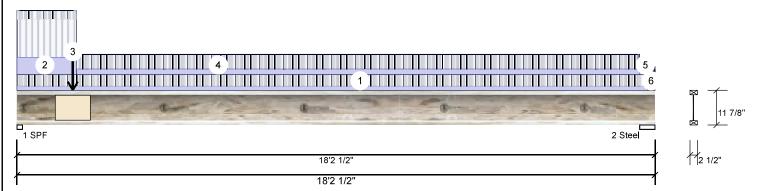
Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

(800) 232-0788 www.bc.com CCMC: 12787

Manufacturer Info 3228 Moodie Dr, Ottawa, Ontario Boise Cascade Wood Products 613-838-2775 / 905-642-4400 1111 W. Jefferson St. Boise, ID 83702





Member Infori	mation			Unfactored Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind	
Plies:	1	Design Method:	LSD	1	Vertical	646	242	0	0	
Moisture Condition	ı: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	308	116	0	0	
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load				-						
Floor Live:	40 PSF			Bea	rings and Fa	actored Re	actions			
Dead:	15 PSF			Ве	aring Length	Dir. Ca	p. React D/L l b	Total Ld. Case	Ld. Comb.	
				1 -	SPF 1.875"	Vert 80	% 303 / 969	1272 L	1.25D+1.5L	
		L		 2-	Steel 5.250"	Vert 32	% 144 / 462	607 L	1.25D+1.5L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2940 ft-lb	7'11 1/16"	5305 ft-lb	0.554 (55%)	1.25D+1.5L	L
Unbraced	2940 ft-lb	7'11 1/16"	5305 ft-lb	0.554 (55%)	1.25D+1.5L	L
Shear	1259 l b	1 1/8"	2350 lb	0.536 (54%)	1.25D+1.5L	L
Perm Defl in	0.113 (L/1890)	8'7 7/8"	0.591 (L/360)	0.191 (19%)	D	Uniform
LL Defl inch	0.301 (L/708)	8'7 7/8"	0.591 (L/360)	0.508 (51%)	L	L
TL Defl inch	0.413 (L/515)	8'7 7/8"	0.887 (L/240)	0.466 (47%)	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 16'7 3/8" o.c.



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

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 17-11-14	0-4-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-8-6	1-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-7-2		Near Face	128 l b	342 lb	0 l b	0 l b	F10
4	Tie-In	1-8-6 to 17-9-4	0-5-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Tie-In	17-9-4 to 18-2-8	0-2-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	17-11-14 to 18-2-8	0-4-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	

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.

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 IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily 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

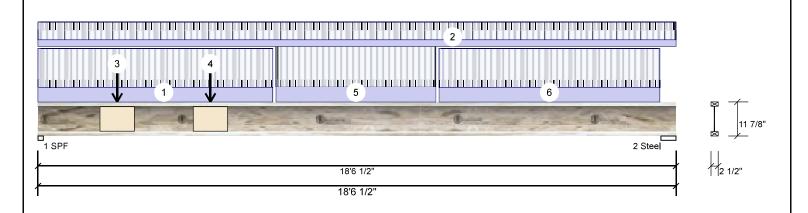
(800) 232-0788 www.bc.com CCMC: 12787

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



Address: **OSHAWA** .875" - PASSED





Member Inforr	nation			Unf	actored Rea	actions	UNP	ATTERNED I I	o (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical		533	199	0	0
Moisture Condition	: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical		455	170	0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bea	rings and F	actore	d Read	tions		
Dead:	15 PSF			Be	aring Length	Dir.	Cap.	React D/L Ib	Total Ld. Case	Ld. Comb.
				1 -	SPF 1.875"	Vert	66%	249 / 799	1048 L	1.25D+1.5L
Analysis Basyle				2 -	Steel 5.250"	Vert	47%	213 / 682	895 L	1.25D+1.5L

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	4214 ft-lb	8'8 5/8"	5305 ft-lb	0.794 (79%)	1.25D+1.5L	L
Unbraced	4214 ft-lb	8'8 5/8"	5305 ft-lb	0.794 (79%)	1.25D+1.5L	L
Shear	1039 l b	1 1/8"	2350 lb	0.442 (44%)	1.25D+1.5L	L
Perm Defl in.	0.164 (L/1319)	9' 3/16"	0.602 (L/360)	0.273 (27%)	D	Uniform
LL Defl inch	0.439 (L/494)	9' 1/16"	0.602 (L/360)	0.729 (73%)	L	L
TL Defl inch	0.604 (L/359)	9' 1/16"	0.904 (L/240)	0.668 (67%)	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 13'6 3/8" 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 6-9-14	0-9-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 18-6-8	0-4-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	2-3-10		Far Face	28 lb	76 l b	0 lb	0 l b	F9
4	Point	5-0-2		Far Face	15 lb	41 l b	0 lb	0 l b	F9
5	Tie-In	6-11-0 to 11-6-12	0-10-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
6	Tie-In	11-7-14 to 18-0-14	0-9-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
ı									

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.

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 11/3/2024

Manufacturer Info

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

(800) 232-0788 www.bc.com CCMC: 12787

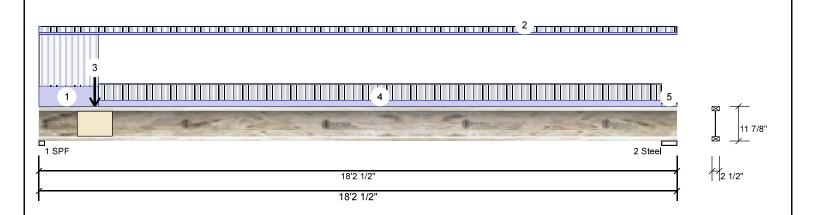
Kott Inc.





.875" - PASSED





Member Infori	mation			Unf	actored Rea	actions U	NP	ATTERNED II	o (Upl	ift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Э	Dead		Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	583	3	218		0	0
Moisture Condition	ı: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	24:	3	91		0	0
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II	Vibration:	Not Checked								
General Load				-							
Floor Live:	40 PSF			Bea	rings and Fa	actored R	lead	ctions			
Dead:	15 PSF			Be	aring Length	Dir. C	ар.	React D/L Ib	Total	Ld. Case	Ld. Comb.
				1 -	SPF 1.875"	Vert 7	73%	273 / 874	1147	L	1.25D+1.5L
		L		2 -	Steel 5.250"	Vert 2	25%	114 / 365	479	L	1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2401 ft-lb	7'7 5/16"	5305 ft-lb	0.453 (45%)	1.25D+1.5L	L
Unbraced	2401 ft-lb	7'7 5/16"	5305 ft-lb	0.453 (45%)	1.25D+1.5L	L
Shear	1135 lb	1 1/8"	2350 lb	0.483 (48%)	1.25D+1.5L	L
Perm Defl in.	0.092 (L/2310)	8'6 15/16"	0.591 (L/360)	0.156 (16%)	D	Uniform
LL Defl inch	0.246 (L/866)	8'6 15/16"	0.591 (L/360)	0.416 (42%)	L	L
TL Defl inch	0.338 (L/630)	8'6 15/16"	0.887 (L/240)	0.381 (38%)	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 16'7 3/8" 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.

L	+ Dolloin hange	must be laterally brai	ceu at a maximum	01 10 7 3/0 0.0	•					
ſ	I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Tie-In	0-0-0 to 1-8-6	1-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	2	Tie-In	0-0-0 to 18-2-8	0-1-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	3	Point	1-7-2		Far Face	128 l b	342 l b	0 l b	0 l b	F10
	4	Tie-In	1-8-6 to 17-9-4	0-5-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	5	Tie-In	17-9-4 to 18-2-8	0-2-4	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 IJoist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-rily 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

This design is valid until 11/3/2024

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.



OF PERMIT PLANS Address:

Client: Project:

OSHAWA

Input by: RΟ

Job Name: VILLA 11-2-SNK

Versa⊪Lan⊩Ly∟ 2.

is Dec 06 2023

TRUE COPY

E 3100 SP

PASSED

Brg

2

Direction

Vertical

Vertica

Bearing Length

2 - SPF 1.875"

Hanger

End Grain 3.000"



Unfactored Reactions UNPATTERNED lb (Uplift)

Live

65

53

Bearings and Factored Reactions

Dir.

Vert

Vert



1'7 5/8'

Member Information

Snow

Total Ld. Case

135 L

109 L

0

n

Wind

Ld. Comb.

1.25D+1.5L

1.25D+1.5L

0

0

Type:	Girder
Plies:	1
Moisture Condition:	Dry

Deflection LL: 360 Deflection TL: 240 Importance: Normal - II

General Load 40 PSF Floor Live: 15 PSF Dead:

Application: Floor (Residential)

Design Method: LSD **Building Code:** NBCC 2015 / OBC 2012

Load Sharing: No Deck: Not Checked

Vibration: Not Checked

Analysis Res	sults					
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	79 ft-lb	9 1/2"	17696 ft-lb	0.004 (0%)	1.25D+1.5L	L
Unbraced	79 ft-lb	9 1/2"	17696 ft-lb	0.004 (0%)	1.25D+1.5L	L
Shear	133 lb	1'2 7/8"	7232 lb	0.018 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/966597)	9 9/16"	0.045 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/397559)	9 9/16"	0.045 (L/360)	0.001 (0%)	L	L
TL Defl inch	0.000 (L/281698)	9 9/16"	0.068 (L/240)	0.001 (0%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.
- 5 Bottom must have sheathing attached or be continuously braced.

I D	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-9-8	Near Face	44 lb	118 l b	0 l b	0 l b	J2
	Self Weight			6 PLF				

I.MATIJEV 100528832

Cap. React D/L lb

2%

3%

Dead

29

24

37 / 98

30 / 79

IULY 21, 2023

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Notes

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

Handling & Installation

- Handling & Installation

 1. 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

- This design is valid until 11/3/2024

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





TRUE COPY OF PERMIT PLANS Project: is Dec 06 2023

Client: GREENPARK GROUP

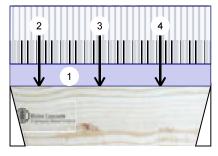
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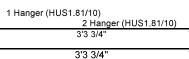
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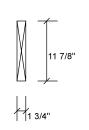
Address: Job Name: VILLA 11-2-SNK **OSHAWA** 22-012

E 3100 SP Versa Laur Lv∟2.′

Project # Level: Ground Floor







0

0

Wind

0

0

Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
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		

Unf	actored Reac	tions UNPAT	TERNED Ib (Uplift)
Brg	Direction	Live	Dead	Sno
l 1	Vertical	583	254	

541

Bearings	Bearings and Factored Reactions										
Dooring	Lanath	D:-		Dood D/Llb	Total	Id Cooo	1 d C a	n h			

233

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	810 ft-lb	1'5 3/4"	17696 ft-lb	0.046 (5%)	1.25D+1.5L	L
Unbraced	810 ft-lb	1'5 3/4"	17696 ft-lb	0.046 (5%)	1.25D+1.5L	L
Shear	677 l b	1'2 7/8"	7232 l b	0.094 (9%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/58451)	1'7 5/8"	0.098 (L/360)	0.006 (1%)	D	Uniform
LL Defl inch	0.001 (L/25451)	1'7 5/8"	0.098 (L/360)	0.014 (1%)	L	L
TL Defl inch	0.002 (L/17731)	1'7 5/8"	0.147 (L/240)	0.014 (1%)	D+L	L

Vertica

2

Bearing	Length	Dir.	Cap. R	eact D/L I b	Total	Ld. Case	Ld. Comb.
1 -	3.000"	Vert	19%	318 / 874	1192	L	1.25D+1.5L
Hanger							
_	3.000"	Vert	17%	292 / 811	1103	L	1.25D+1.5L
Hanger							



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.

100528832

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

3 Dolloill I	nust have sheathing atta	crica or be continuou	Siy biacca.						
I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-3-12		Тор	79 PLF	210 PLF	0 PLF	0 PLF	
2	Point	0-5-12		Far Face	64 lb	131 lb	0 lb	0 lb	J2
3	Point	1-5-12		Far Face	72 l b	152 b	0 b	0 l b	J2
4	Point	2-5-12		Far Face	70 l b	145 lb	0 lb	0 lb	J2
	Self Weight				6 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





is Dec 06 2023 Address:

Versa Laun L∨∟ 2.′

OSHAWA

E 3100 SP

22-012 Level: Gound Floor

Brg

1

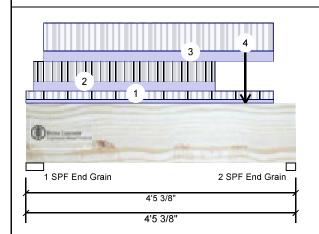
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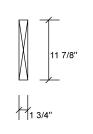
Grain

Direction

Vertical

Vertica





Snow

0

n

Wind

0

0

Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
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 Ib (Uplift)

Live

1028

886

Bearings and Factored Reactions									
Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.		
1 - SPF End Grain	3.500"	Vert	28%	538 / 1542	2080	L	1.25D+1.5L		
2 - SPF End	1.875"	Vert	45%	463 / 1329	1792	L	1.25D+1.5L		

Dead

430

371

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	2087 ft-lb	2'3 3/8"	17696 ft-lb	0.118 (12%)	1.25D+1.5L	L
Unbraced	2087 ft-lb	2'3 3/8"	17696 ft-lb	0.118 (12%)	1.25D+1.5L	L
Shear	1665 lb	3'3 5/8"	7232 lb	0.230 (23%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/17710)	2'3 7/16"	0.138 (L/360)	0.020 (2%)	D	Uniform
LL Defl inch	0.007 (L/7373)	2'3 7/16"	0.138 (L/360)	0.049 (5%)	L	L
TL Defl inch	0.010 (L/5206)	2'3 7/16"	0.206 (L/240)	0.046 (5%)	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 Top must be continuously laterally braced.
- 4 Bottom must have sheathing attached or be continuously braced.

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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.

1 Dottom mast 1	iavo onoaining allaonoe	or be contained	ory bracea.						
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-1-0	1-10-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-1-7 to 3-1-7		Far Face	80 PLF	175 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-3-8 to 4-1-0		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
4	Point	3-7-7		Far Face	78 l b	172 l b	0 lb	0 l b	J3
	Self Weight				6 PLF				

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

1. UVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-rily 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

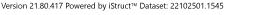
Manufacturer Info

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: GREENPARK GROUP

OSHAWA

Input by: RΟ

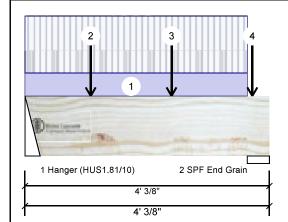
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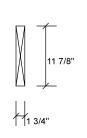
F15-B E 3100 SP Versamiamiy∟2.1

22-012 Project # Level: Ground Floor

Brg

Vertical





Snow

0

Wind

0

Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
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		

Unfa	actored	Reactions	UNPAT	TERNED II	(Uplift)
Brg	Direction	n L	.ive	Dead	Sno

169

2	Vertical	287	217	0	0

76

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	346 ft-lb	2'5"	17696 ft-lb	0.020 (2%)	1.25D+1.5L	L
Unbraced	346 ft-lb	2'5"	17696 ft-lb	0.020 (2%)	1.25D+1.5L	L
Shear	309 lb	1'2 7/8"	7232 lb	0.043 (4%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/118614)	1'11 11/16"	0.118 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch	0.001 (L/51699)	1'11 11/16"	0.118 (L/360)	0.007 (1%)	L	L
TL Defl inch	0.001 (L/36006)	1'11 11/16"	0.177 (L/240)	0.007 (1%)	D+L	L

Bearings and Factored Reactions

Bearing Length	Dir.	Cap. F	React D/L I b	Total	Ld. Case	Ld. Comb.
1 - 3.000" Hanger	Vert	5%	95 / 253	348	L	1.25D+1.5L
2 - SPF 4.375" End Grain	Vert	8%	271 / 431	702	L	1.25D+1.5L



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

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.
- 5 Bottom must have sheathing attached or be continuously braced.

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-8-0		Тор	6 PLF	15 PLF	0 PLF	0 PLF	
2	Point	1-1-0		Near Face	46 lb	122 lb	0 lb	0 l b	J1
3	Point	2-5-0		Near Face	49 lb	130 lb	0 b	0 l b	J1
4	Point	3-9-0		Near Face	152 lb	149 l b	0 b	0 l b	J1
	Self Weight				6 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

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





TRUE COPY OF PERMIT PLANS is Dec 06 2023 F16-E 3100 SP Versa Laur Lv∟2.

Client: Project:

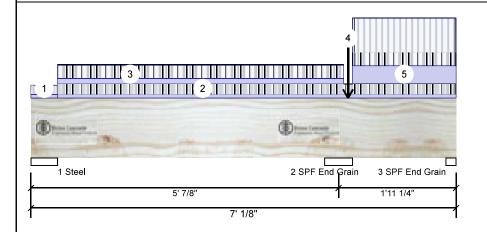
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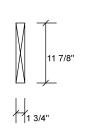
Job Name: VILLA 11-2-SNK

Address:

OSHAWA

22-012 Level: Gound Floor





Application: Floor (Residential) Type: Plies: Design Method: LSD Moisture Condition: Dry Building Code: NBCC 2015 / OBC 2012 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

Member Information

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	81	44	0	0
2	Vertical	403	192	0	0
3	Vertical	50	19	0	0

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-195 ft-lb	5' 7/8"	17696 ft-lb	0.011 (1%)	1.25D+1.5L	LL
Unbraced	-195 ft-lb	5' 7/8"	10044 ft-lb	0.019 (2%)	1.25D+1.5L	LL
Pos Moment	159 ft-lb	2'3 7/16"	17696 ft-lb	0.009 (1%)	1.25D+1.5L	L_
Unbraced	159 ft-lb	2'3 7/16"	17696 ft-lb	0.009 (1%)	1.25D+1.5L	L_
Shear	147 lb	3'10 1/4"	7232 lb	0.020 (2%)	1.25D+1.5L	LL
Perm Defl in.	0.000 (L/202254)	2'6 1/8"	0.157 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.001 (L/98285)	2'6 1/2"	0.157 (L/360)	0.004 (0%)	L	L_
TL Defl inch	0.001 (L/66146)	2'6 3/8"	0.235 (L/240)	0.004 (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 Tie-down connection required at bearing 3 for uplift 35 lb (Combination 0.9D+1.5L, Load Case L_).
- 4 Top must be continuously laterally braced.
- 5 Bottom must be laterally braced at bearings.

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - Steel	5.250"	Vert	2%	54 / 123	178	L_	1.25D+1.5L
2 - SPF End Grain	5.500"	Vert	7%	242 / 610	852	LL	1.25D+1.5L
3 - SPF : End Grain	2.000"	Vert	4%	22 / 137 159	(-35)	_L	1.25D+1.5L (0.9D+1.5L)



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

Notes

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

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-rily fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

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

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

Manufacturer Info

Kott Inc.

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





Job Name: VILLA 11-2-SNK

F16-A Versa Laun, Lv ∟ 2.′

is Dec 06 2023

TRUE COPY

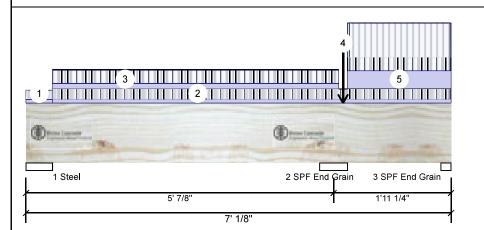
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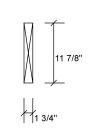
E 3100 SP

OSHAWA

Address:

22-012 Project# TPASSED J Level: Ground Floor





I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-5-4	0-4-11	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-5-4 to 7-0-2	0-5-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	0-5-4 to 5-1-14	0-6-15	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Point	5-2-12		Near Face	76 lb	169 lb	0 lb	0 lb	F15
5	Tie-In	5-3-10 to 7-0-2	1-11-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				6 PLF				



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Handling & Installation

Handling & Installation

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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

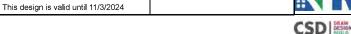
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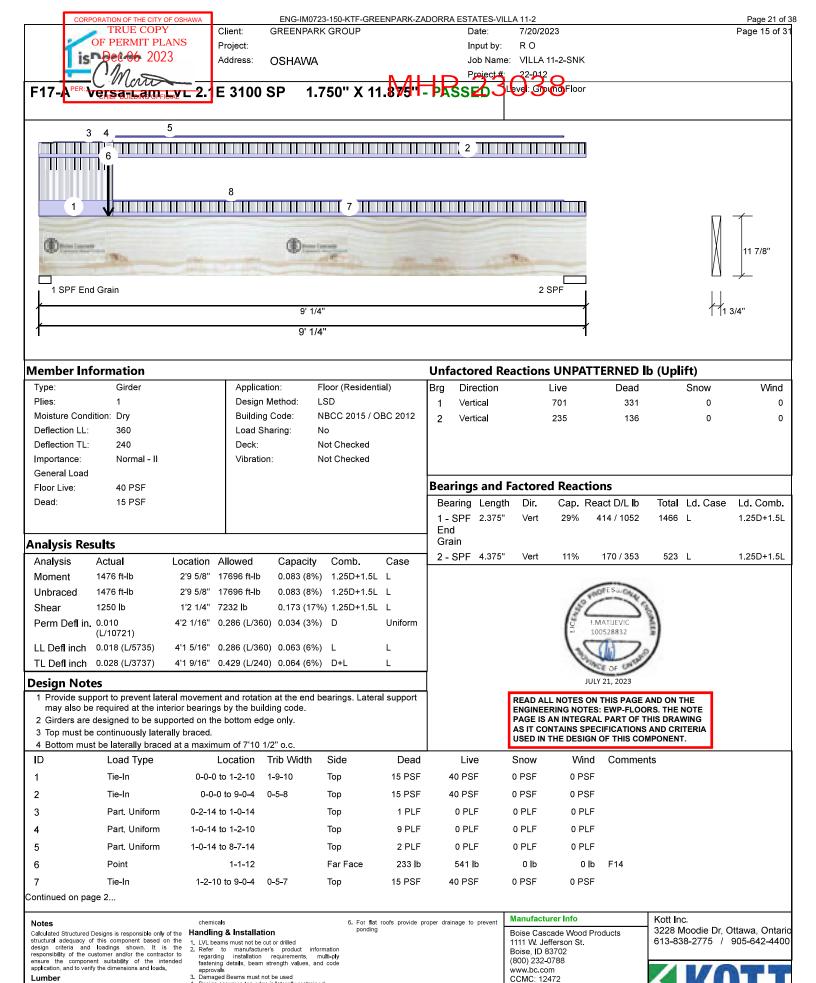
Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788

www.bc.com CCMC: 12472

Kott Inc.





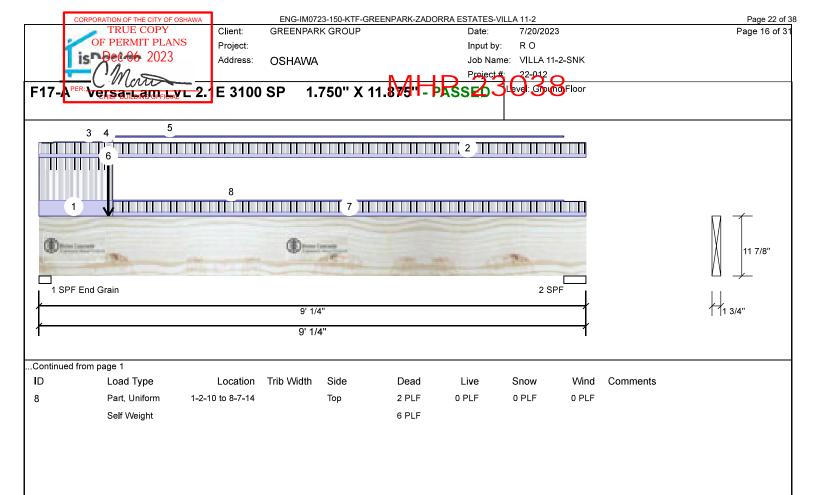


This design is valid until 11/3/2024

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

Damaged Beams must not be used

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





READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING 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.

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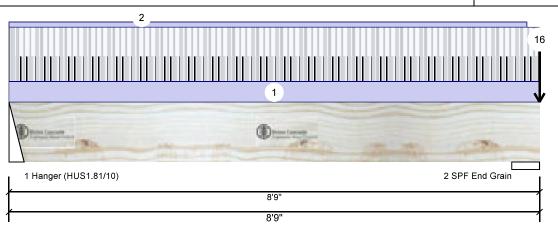
Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St.

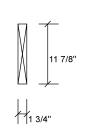
Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

Kott Inc.

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







Member Information

Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Co	ondition: Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection L	.L: 360	Load Sharing:	No
Deflection T	L: 240	Deck:	Not Checked
Importance:	: Normal - II	Vibration:	Not Checked
General Loa	ad		
Floor Live:	40 PSF		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	45	47	0	0
2	Vertical	90	152	132	0

Analysis Results

Dead:

Ana l ysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	246 ft-lb	4'3 1/4"	16280 ft-lb	0.015 (2%)	1.25D+1.5L	L
Unbraced	246 ft-lb	4'3 1/4"	16280 ft-lb	0.015 (2%)	1.25D+1.5L	L
Shear	97 lb	1'2 7/8"	6653 lb	0.015 (1%)	1.25D+1.5L	L
Perm Defl in.	0.002 (L/45048)	4'3 5/16"	0.272 (L/360)	0.008 (1%)	D	Uniform
LL Defl inch	0.002 (L/46220)	4'3 5/16"	0.272 (L/360)	0.008 (1%)	L+0.5S	L
TL Defl inch	0.004 (L/22813)	4'3 5/16"	0.408 (L/240)	0.011 (1%)	D+L+0.5S	L

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	2%	58 / 68	126	L	1.25D+1.5L
2 - SPF End Grain	5.500"	Vert	4%	190 / 288	477	L	1.25D+1.5S +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 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be continuously laterally braced.

15 PSF

5 Bottom must be laterally braced at bearings.



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.

IE) Lo	oad Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Ti	ie-In	0-0-0 to 8-9-0	0-3-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Pa	art. Uniform	0-0-0 to 8-6-8		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
3	Po	oint	8-9-0		Тор	15 lb	39 lb	0 l b	0 l b	
	Ве	earing Length	0-5-8							
4	Po	oint	8-9-0		Тор	29 lb	0 l b	75 l b	0 l b	

Continued on page 2...

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.

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

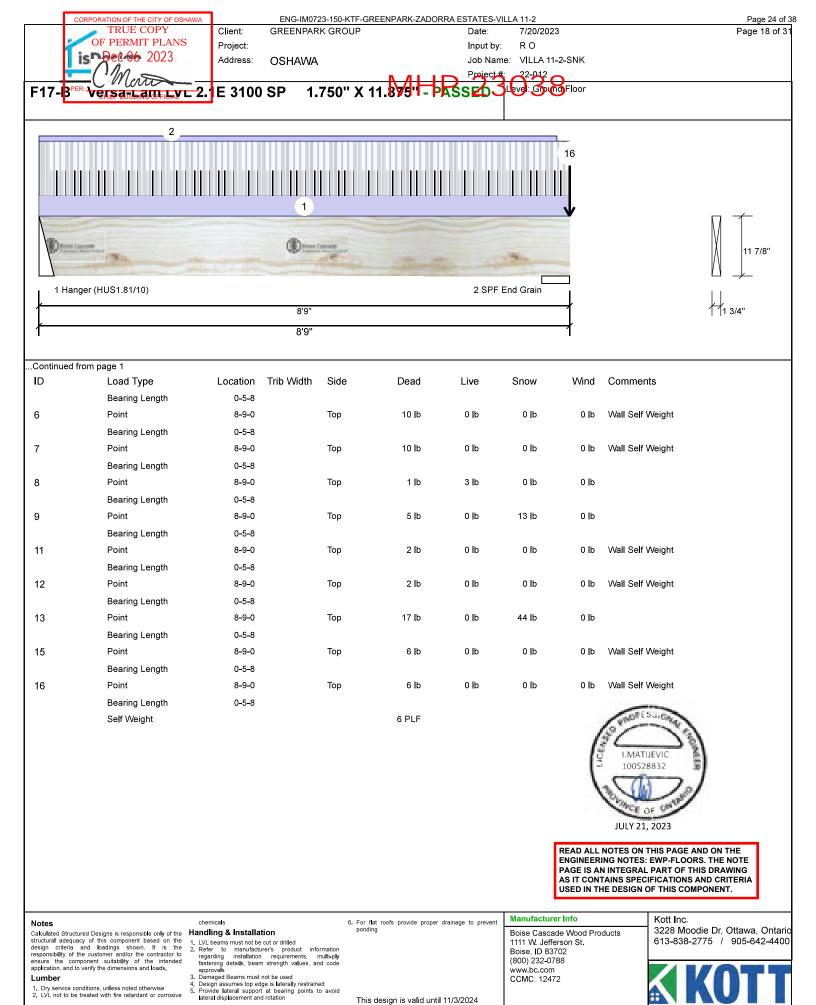
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Kott Inc.

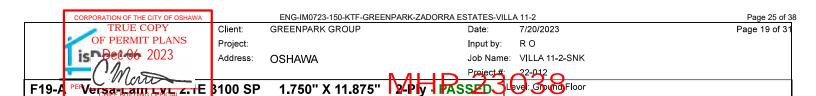
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CSD DESIG



CSD DESIGN



Brg

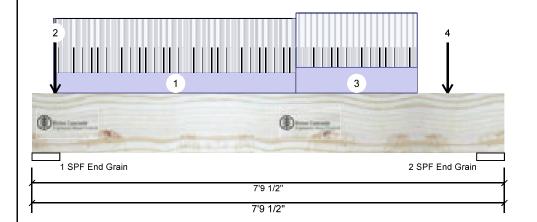
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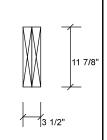
2

Direction

Vertical

Vertica





Snow

0

n

Wind

0

0

Member Inform	Member Information											
Туре:	Girder	Application:	Floor (Residential)									
Plies:	2	Design Method:	LSD									
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012									
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 Ib (Uplift)

Live

522

459

	Bearings and Factored Reactions												
ſ	Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.					
	1 - SPF End Grain	5.500"	Vert	5%	353 / 784	1136	L	1.25D+1.5L					
	2 - SPF End Grain	5.500"	Vert	4%	313 / 688	1001	L	1.25D+1.5L					

I.MATUEVIC 100528832

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.

Dead

282

250

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1754 ft-lb	3'11 1/8"	35392 ft-lb	0.050 (5%)	1.25D+1.5L	L
Unbraced	1754 ft-lb	3'11 1/8"	35392 ft-lb	0.050 (5%)	1.25D+1.5L	L
Shear	1254 lb	6'4 1/8"	14464 lb	0.087 (9%)	1.25D+1.5L	L
Perm Defl in.	0.004 (L/22808)	3'11 1/8"	0.233 (L/360)	0.016 (2%)	D	Uniform
LL Defl inch	0.007 (L/11499)	3'10 11/16"	0.233 (L/360)	0.031 (3%)	L	L
TL Defl inch	0.011 (L/7645)	3'10 7/8"	0.350 (L/240)	0.031 (3%)	D+L	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-4-4 to 4-4-4		Near Face	51 PLF	135 PLF	0 PLF	0 PLF	
2	Point	0-4-10		Far Face	47 l b	45 lb	0 lb	0 l b	F17
3	Part. Uniform	4-4-4 to 6-4-4		Near Face	64 PLF	135 PLF	0 PLF	0 PLF	
4	Point	6-10-4		Near Face	61 lb	126 b	0 lb	0 l b	J2
	Self Weight				12 PI F				

Self Weight

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. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products

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

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





Member Infor	mation			Unf	actored Rea	ections	UNP	ATTERNED I	b (Upli	ft)
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead		Sno
Plies:	3	Design Method:	LSD	1	Vertical		1206	3330		536
Moisture Conditio	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical		640	417		
Deflection LL:	360	Load Sharing:	Yes							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load				<u> </u>						
Floor Live:	40 PSF			Bea	rings and F	actore	d Read	ctions		
Dead:	15 PSF			Bea	aring Length	Dir.	Сар.	React D/L Ib	Total	Ld.
				1 -	SPF 3.000"	Vert	98%	4162 / 9253	13415	L

ngs and Factored Reactions ng Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 3.000" Vert 4162 / 9253 13415 L 1.25D+1.5S +L End Grain 522 / 959 2 - Steel 5.250" Vert 5% 1481 L 1.25D+1.5L

Snow

5365

n

Wind

0

0

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	6537 ft-lb	10'9 7/8"	46930 ft-lb	0.139 (14%)	1.25D+1.5L	L
Unbraced	6537 ft-lb	10'9 7/8"	46930 ft-lb	0.139 (14%)	1.25D+1.5L	L
Shear	1407 l b	14'10 1/2"	18441 l b	0.076 (8%)	1.25D+1.5L	L
Perm Defl in.	0.048 (L/3971)	8'4 7/16"	0.525 (L/360)	0.091 (9%)	D	Uniform
LL Defl inch	0.075 (L/2518)	8'6 1/16"	0.525 (L/360)	0.143 (14%)	L+0.5S	L
TL Defl inch	0.123 (L/1541)	8'5 3/8"	0.787 (L/240)	0.156 (16%)	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 3.
- 2 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must be laterally braced at a maximum of 6'4 1/8" o.c.
- 8 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	Tie-In	0-0-0 to 15-10-6	0-2-13	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 6-3-4	0-6-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-2-12		Тор	4 l b	11 lb	0 lb	0 lb	J1
	Bearing Length	0-5-8							

Continued on page 2...

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

1. UVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

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

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

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

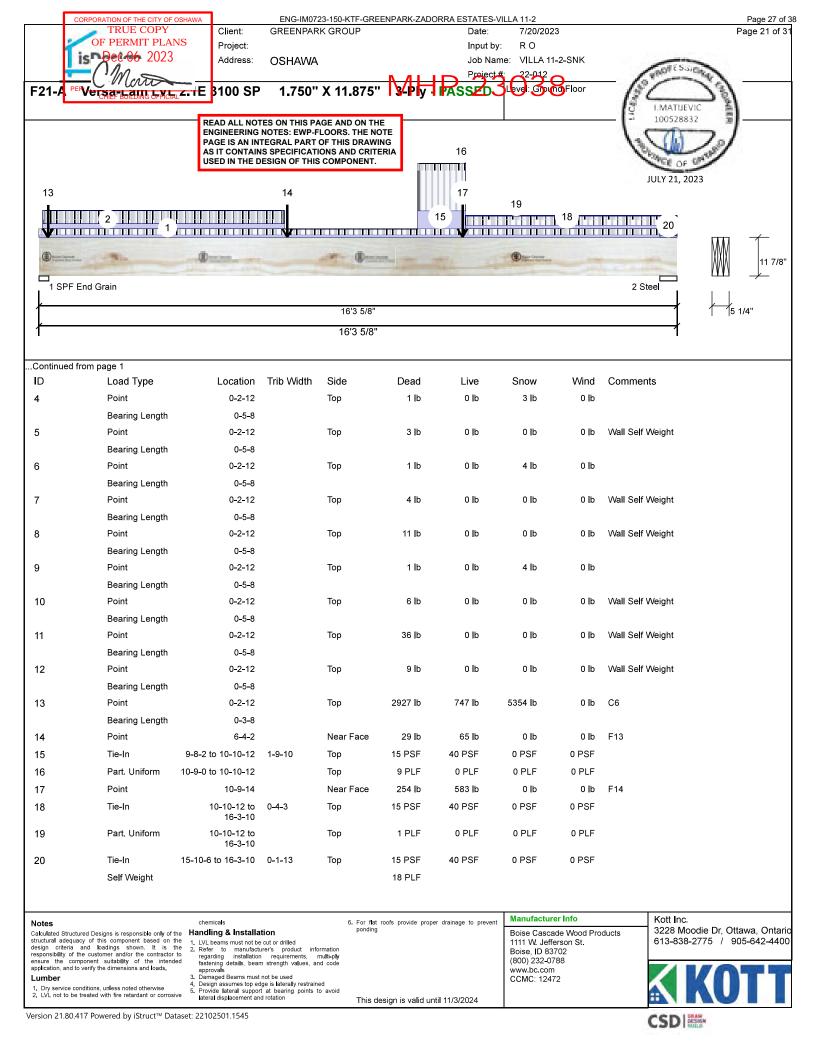


This design is valid until 11/3/2024

Manufacturer Info







TRUE COPY OF PERMIT PLANS is Dec 06 2023 Address:

Client: Project:

OSHAWA

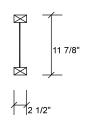
Input by: RΟ

Job Name: VILLA 11-2-SNK

875" - PASSED







Member Inform	ation
Туре:	Girder
Plies:	1
Majatura Candition:	Day

Moisture Condition: Drv Deflection LL: 360 Deflection TL: 240 Importance: Normal - II

General Load Floor Live:

40 PSF 15 PSF Application: Floor (Residential)

Design Method: Building Code:

Load Sharing:

Deck:

No

Vibration: Not Checked

Not Checked

NBCC 2015 / OBC 2012

LSD

Unfactored Reactions UNPATTERNED lb (Uplift)

Direction	Live	Dead	Snow	Wind
Vertical	40	15	0	0
Vertical	41	15	0	0
	Vertical	Vertical 40	Vertical 40 15	Vertical 40 15 0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap. R	eact D/L I b	Total	Ld. Case	Ld. Comb.
1 - SPF	1.875"	Vert	5%	19 / 60	79	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	5%	19 / 61	80	L	1.25D+1.5L

Analysis Results

Dead:

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	22 ft-lb	8 7/8"	5305 ft-lb	0.004 (0%)	1.25D+1.5L	L
Unbraced	22 ft-lb	8 7/8"	5305 ft-lb	0.004 (0%)	1.25D+1.5L	L
Shear	69 lb	1 1/8"	2350 lb	0.029 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/235895)	8 7/8"	0.043 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/88461)	8 7/8"	0.043 (L/360)	0.004 (0%)	L	L
TL Defl inch	0.000 (L/64335)	8 7/8"	0.065 (L/240)	0.004 (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 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum
- ${\bf 5}$ 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.

I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0 0 0 to 1 5 14	1_4_4	Ton	15 DSE	40 DSE	N DSE	U DSE	

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.

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

This design is valid until 11/3/2024

Manufacturer Info

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

(800) 232-0788 www.bc.com CCMC: 12787





TRUE COPY OF PERMIT PLANS is Dec 06 2023 Address:

Client: Project:

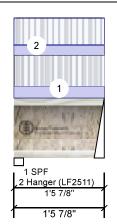
OSHAWA

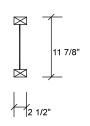
Input by: RΟ

Job Name: VILLA 11-2-SNK

т1.<mark>8</mark>75" - PASSED







Member Infor	mation			Unfa	ctored Rea	actions UN	PATTERNED I	b (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	75	28	0	0
Moisture Conditio	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	76	28	0	0
Deflection LL:	360	Load Sharing:	No	-					
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal - II	Vibration:	Not Checked						
General Load				<u> </u>					
Floor Live:	40 PSF			Beari	ings and F	actored Rea	actions		
Dead:	15 PSF			Bea	ring Length	Dir. Cap	. React D/L lb	Total Ld. Case	Ld. Comb.
				1 - 5	SPF 1.875"	Vert 99	6 35 / 112	147 L	1.25D+1.5L
Analysis Resul	ts			2 - Han	2.000" ger	Vert 99	6 36 / 114	149 L	1.25D+1.5L

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	42 ft-lb	8 7/8"	5305 ft-lb	0.008 (1%)	1.25D+1.5L	L
Unbraced	42 ft-lb	8 7/8"	5305 ft-lb	0.008 (1%)	1.25D+1.5L	L
Shear	129 lb	1'4 5/8"	2350 lb	0.055 (5%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/126329)	8 7/8"	0.043 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch	0.000 (L/47373)	8 7/8"	0.043 (L/360)	0.008 (1%)	L	L
TL Defl inch	0.000 (L/34453)	8 7/8"	0.065 (L/240)	0.007 (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 Fill all hanger nailing holes.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum
- 5 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.



JULY 21, 2023

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I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-14	1-4-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-5-14	1-2-2	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 out or drilled

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

 3. Damaged Juoists 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 11/3/2024

Manufacturer Info

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

(800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.





Job Name: VILLA 11-2-SNK

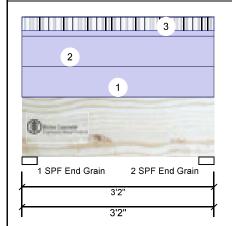
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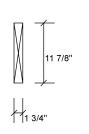
Project: Address:

OSHAWA

1.750" X 11.87 PASSED

22-012 Level: Gound Floor





\\/ind

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

Unfactored Reactions UNPATTERNED lb (Uplift) Livo

lnia	Direction	LIVE	Deau	SHOW	VVIIIU
1	Vertical	29	147	0	0
2	Vertical	29	147	0	0

Doad

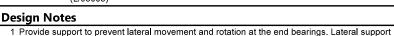
Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	139 ft-lb	1'7"	11502 ft-lb	0.012 (1%)	1.25D+1.5L	L
Unbraced	139 ft-lb	1'7"	11502 ft-lb	0.012 (1%)	1.25D+1.5L	L
Shear	141 l b	1'11 1/8"	4701 lb	0.030 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/113409)	1'7"	0.093 (L/360)	0.003 (0%)	D	Uniform
LL Defl inch	0.000 (L/585425)	1'7"	0.093 (L/360)	0.001 (0%)	L	L
TL Defl inch	0.000 (L/95005)	1'7"	0.140 (L/240)	0.003 (0%)	D+L	L

Bearings and Factored Reactions

Bra Direction

Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	5%	184 / 43	227	L	1.25D+1.5L
2 - SPF End Grain	3.000"	Vert	5%	184 / 43	227	L	1.25D+1.5L



- 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 Top must be continuously laterally braced.

4 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 3-2-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 3-2-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Tapered Start	0-0-0		Near Face	7 PLF	18 PLF	0 PLF	0 PLF	
	End	3-2-0			7 PLF	18 PLF	0 PLF	0 PLF	
	Self Weight				6 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

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





TRUE COPY OF PERMIT PLANS Project: is Dec 06 2023

Client: GREENPARK GROUP Date: 7/20/2023

Input by: RΟ

Address: Job Name: VILLA 11-2-SNK **OSHAWA**

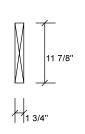
Versa Lam Ly∟ 2.1

E 3100 SP

Project#







Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
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		

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	53	25	0	0
2	Vertical	59	28	0	0

Unfactored Reactions UNPATTERNED lb (Uplift)

Bearings and Factored Reactions Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 31 / 80 1.25D+1.5L 3.000" Vert 2% 111 L Hanger 2 - SPF 4.375" Vert 1% 35 / 88 123 L 1.25D+1.5L End Grain

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	73 ft-lb	10 3/8"	17696 ft-lb	0.004 (0%)	1.25D+1.5L	L
Unbraced	73 ft-lb	10 3/8"	17696 ft-lb	0.004 (0%)	1.25D+1.5L	L
Shear	120 lb	5 1/8"	7232 l b	0.017 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/1045259)	10 3/8"	0.043 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/431896)	10 3/8"	0.043 (L/360)	0.001 (0%)	L	L
TL Defl inch	0.000 (L/305616)	10 3/8"	0.065 (L/240)	0.001 (0%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes

ID	Load Type	Location	Trib Width	Side	Dead	Live	Sr							
5 Bottom	5 Bottom must have sheathing attached or be continuously braced.													
4 Top mu	4 Top must be continuously laterally braced.													
3 Girders		AS												
	•			3 Girders are designed to be supported on the bottom edge only.										



JULY 21, 2023

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

ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Point	0-10-6	Near Face	42 lb	112 l b	0 l b	0 l b	J1	
	Self Weight			6 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

3228 Moodie Dr, Ottawa, Ontario

613-838-2775 / 905-642-4400





PASSED.

Brg

1

2

Direction

Vertical

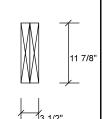
Vertica

1.750" X 11.875"

5 6 78 3 . 1 SPF End Grain 2 SPF End Grain 4'3 1/2'

4'3 1/2"

Versa-Lani LyL z. IE



Wind

0

0

Snow

0

n

Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
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		

B100 SP

Unfactored Reactions UNPATTERNED lb (Uplift)

Live

1321

1279

Level: Second Floor

Bearings and Factored Reactions Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 5.500" Vert 11% 664 / 1981 2646 L 1.25D+1.5L End Grain 2 - SPF 2.000" 664 / 1919 2583 L 1.25D+1.5L Vert 30% End Grain

> .MATIJEVIC 100528832

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Dead

531

532

Analysis Results

F18-A

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2378 ft-lb	1'11 1/2"	35392 ft-lb	0.067 (7%)	1.25D+1.5L	L
Unbraced	2378 ft-lb	1'11 1/2"	35392 ft-lb	0.067 (7%)	1.25D+1.5L	L
Shear	2580 lb	3'1 5/8"	14464 l b	0.178 (18%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/33582)	2'3 11/16"	0.126 (L/360)	0.011 (1%)	D	Uniform
LL Defl inch	0.003 (L/13693)	2'3 9/16"	0.126 (L/360)	0.026 (3%)	L	L
TL Defl inch	0.005 (L/9727)	2'3 5/8"	0.190 (L/240)	0.025 (2%)	D+L	L

Design Notes

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

	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	1	Point	0-4-8		Far Face	104 lb	278 l b	0 l b	0 lb	J5
	2	Point	0-11-8		Near Face	132 l b	353 lb	0 l b	0 lb	J6
	3	Point	1-8-8		Far Face	137 l b	365 lb	0 l b	0 lb	J5
	4	Point	1-11-8		Near Face	130 lb	346 lb	0 l b	0 lb	J6
	5	Point	2-8-8		Far Face	134 lb	313 l b	0 l b	0 l b	J5

Continued on page 2...

Notes

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

Handling & Installation

1. UVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used

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

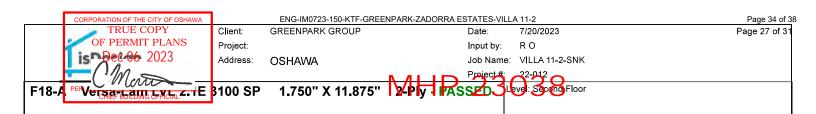
6. For flat roofs provide proper drainage to prevent ponding

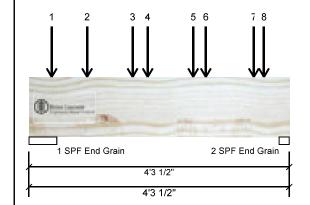
Manufacturer Info

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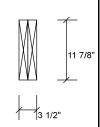
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Self Weight



ŀ	Continued from p	age 1								
l	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	6	Point	2-11-0		Near Face	127 l b	338 lb	0 lb	0 l b	J6
l	7	Point	3-8-8		Far Face	147 l b	338 lb	0 lb	0 lb	J5
ı	8	Point	3-10-8		Near Face	101 lb	269 lb	0 lb	0 lb	J6

12 PLF



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Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products 1111 W. Jefferson St.

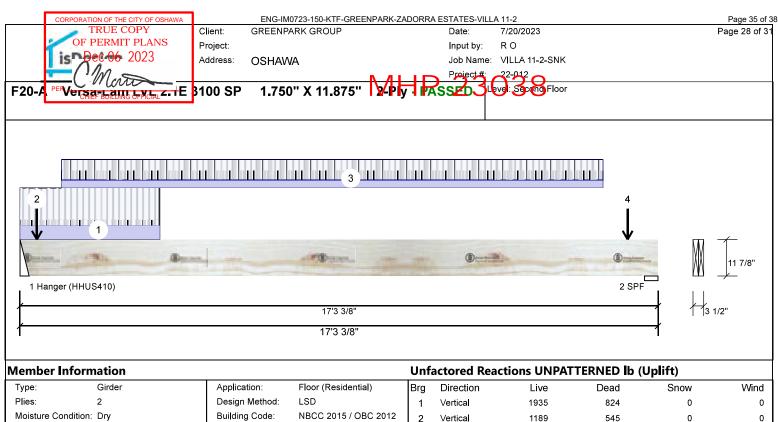
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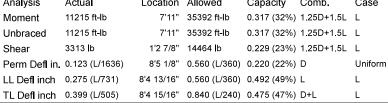
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Member Infor	mation			Unf	actored Rea	action	s UNPA	ATTERNED II	o (Uplift)	
Type:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead	Snow	Wind
Plies:	2	Design Method:	LSD	1	Vertical		1935	824	0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	1 2	Vertical		1189	545	0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II	Vibration:	Not Checked							
General Load										
Floor Live:	40 PSF			Bea	rings and F	actore	d Read	ctions		
Dead:	15 PSF			Bea	aring Length	Dir.	Cap.	React D/L Ib	Total Ld. Case	Ld. Comb.
				1 -	3.000"	Vert	31%	1029 / 2902	3932 L	1.25D+1.5L
				_ Hai	nger					
Analysis Resul	ts			2 -	SPF 4.375"	Vert	26%	681 / 1784	2465 L	1.25D+1.5L
Analysis Ad	tua l Loca	ation Allowed Capac	ity Comb. Case							



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 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must have sheathing attached or be continuously braced.
- 8 Lateral slenderness ratio based on full section width.



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I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 3-9-8		Тор	90 PLF	240 PLF	0 PLF	0 PLF	
2	Point	0-5-8		Far Face	50 l b	133 l b	0 lb	0 lb	J2
3	Part. Uniform	1-1-8 to 15-9-8		Far Face	49 PLF	132 PLF	0 PLF	0 PLF	
4	Point	16-5-8		Far Face	54 l b	145 l b	0 lb	0 lb	J2
	Self Weight				12 PLF				

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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

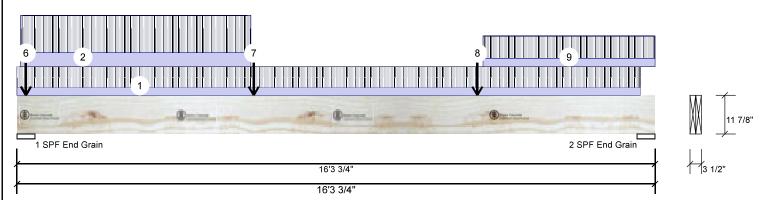
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Member Inform	nation		
Туре:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - 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	747	2927	5354	0
2	Vertical	1592	768	0	0

Bearings and Factored Reactions

Bearing Lengt	h Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF 5.500' End Grain	Vert	79%	3659 / 8778	12437	L	1.25D+1.5S +L
2 - SPF 5.500' End Grain	Vert	16%	959 / 2388	3348	L	1.25D+1.5L

Analysis Results

Analysis	Actua l	Location	Allowed	Capacity	Comb.	Case
Moment	13291 ft-lb	11'9 1/4"	31853 ft-lb	0.417 (42%)	1.25D+1.5L	L
Unbraced	13291 ft-lb	11'9 1/4"	31853 ft-lb	0.417 (42%)	1.25D+1.5L	L
Shear	3283 lb	14'10 3/8"	13017 l b	0.252 (25%)	1.25D+1.5L	L
Perm Defl in.	0.107 (L/1743)	8'9 9/16"	0.517 (L/360)	0.207 (21%)	D	Uniform
LL Defl inch	0.218 (L/855)	8'10 11/16"	0.517 (L/360)	0.421 (42%)	L+0.5S	L
TL Defl inch	0.325 (L/574)	8'10 3/8"	0.776 (L/240)	0.418 (42%)	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 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously laterally braced.
- 7 Bottom must be laterally braced at a maximum of 6' 5/8" o.c.

8 Lateral slenderness ratio based on full section width.



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I D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 15-11-4	0-3-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 5-11-12	0-6-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-2-12		Тор	4 l b	0 lb	11 lb	0 lb	
	Bearing Length	0-5-8							

Continued on page 2...

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

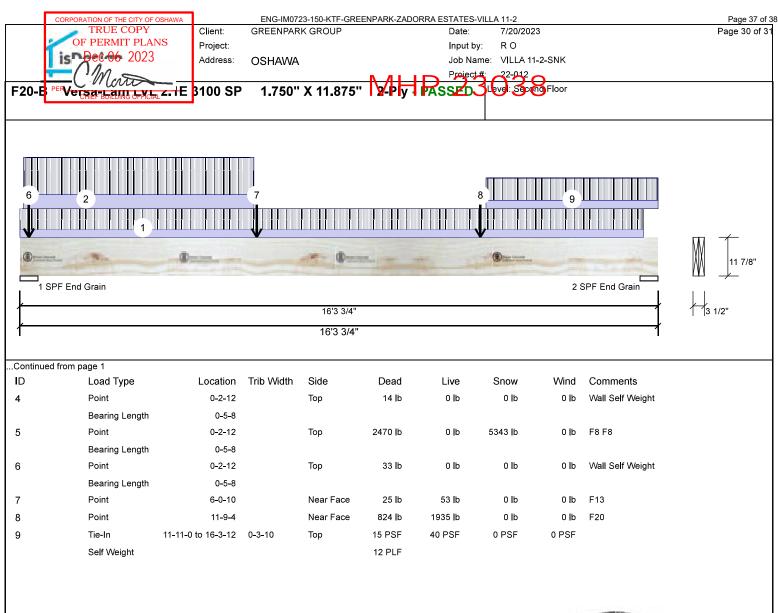
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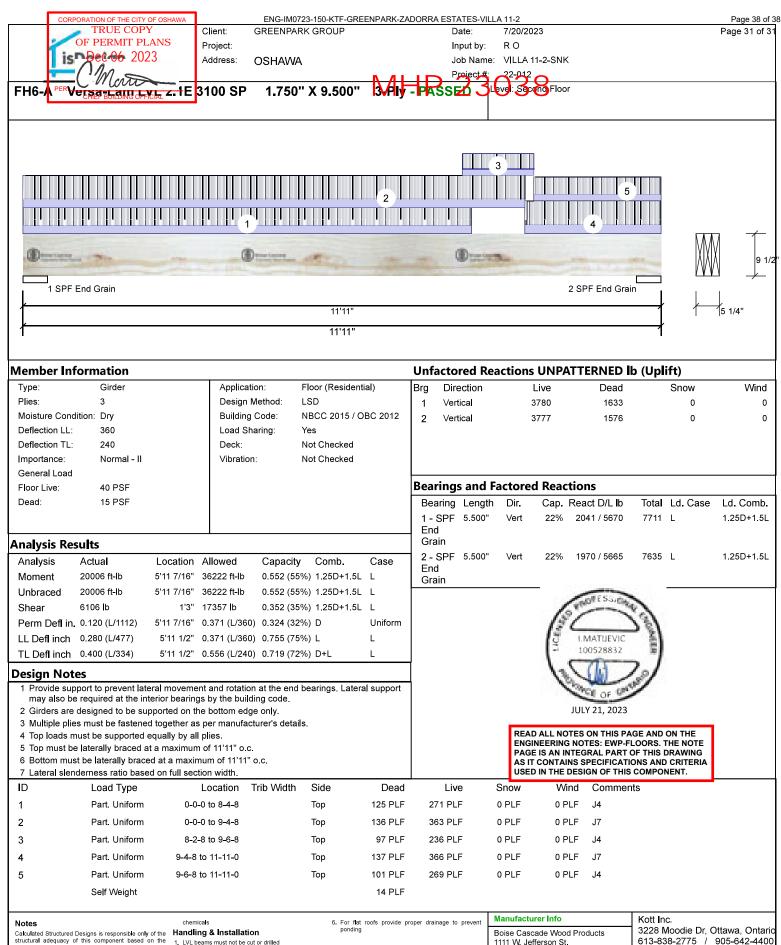
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