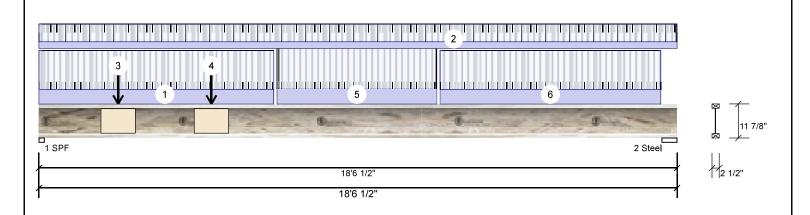
11<mark>.875" - PASSED</mark>





Member Infor	mation			Unf	actored Rea	actions	UNPA	ATTERNED II	b (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	1	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical		533	199	0	0
Moisture Conditio	n: 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.	Cap.	React D/L Ib	Total Ld. Cas	se Ld. Comb.
				1 -	SPF 1.875"	Vert	66%	249 / 799	1048 L	1.25D+1.5L
A I '- D I				2 -	Steel 5.250"	Vert	47%	213 / 682	895 L	1.25D+1.5L

### Analysis Results

Analysis	Actual	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 <b>l</b> 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.

	<b>I</b> 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 <b>l</b> b	76 <b>l</b> b	0 <b>l</b> b	0 lb	F9
	4	Point	5-0-2		Far Face	15 <b>l</b> b	41 <b>l</b> b	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.

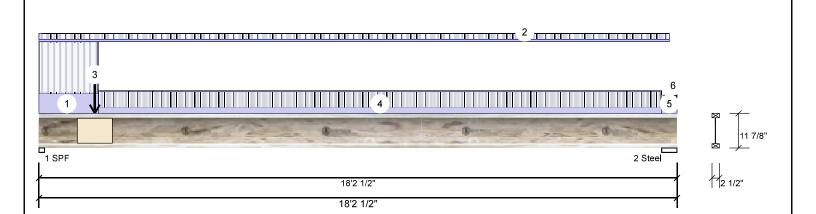
Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

# Kott Inc.



.875" - PASSED

Level: Ground Floor



Member Infor	mation			Unf	actored Rea	actions (	UNP	ATTERNED II	o (Upli	ift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Li	ive	Dead		Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	5	83	218		0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	2	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	actored	Read	ctions			
Dead:	15 PSF			Ве	aring Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
				1 -	SPF 1.875"	Vert	73%	273 / 874	1147	L	1.25D+1.5L
				<del> </del> 2-	Steel 5.250"	Vert	25%	115 / 369	484	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.



JULY 21, 2023

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<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 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 lb	342 lb	0 lb	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 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

# Kott Inc.

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







Client: Project: Address:

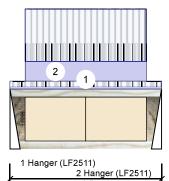
**OSHAWA** 

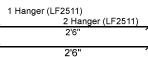
RΟ Input by:

Job Name: VILLA 11-1-SNK

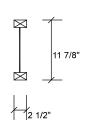
11<mark>.875" - PASSED</mark>







15 PSF



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		

	Unfactored Reactions UNPATTERNED Ib (Uplift)										
	Brg	Direction	Live	Dead	Snow	Wind					
	1	Vertical	342	128	0	0					
2	2	Vertical	342	128	0	0					
	1										

### Analysis Results Case Location Allowed Capacity Comb. Analysis Actual 425 ft-lb Moment 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 0.284 (28%) 1.25D+1.5L L 667 lb 2'4 3/4" 2350 lb Shear Perm Defl in. 0.001 1'3" 0.076 (L/360) 0.019 (2%) D Uniform (L/19303) LL Defl inch 0.004 (L/7246) 1'3" 0.076 (L/360) 0.050 (5%) L

### **Bearings and Factored Reactions** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 160 / 513 1 \_ 2.000" Vert 42% 673 L 1.25D+1.5L

Hanger 2 -2.000" Vert 42% 160 / 513 673 L 1.25D+1.5L Hanger

**Design Notes** 

Dead:

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.

1'3" 0.115 (L/240) 0.046 (5%) D+L

2 Fill all hanger nailing holes.

TL Defl inch 0.005 (L/5268)

- 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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<b>I</b> 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 DI F	301 PLF	0 PLF	0 PLF	

L

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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

  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

1111 W. Jefferson St.

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

Boise Cascade Wood Products

Manufacturer Info

# Kott Inc.

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







Client: Project:

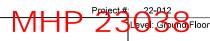
**OSHAWA** 

Input by: RΟ

Job Name: VILLA 11-1-SNK

F10 B

.875" - PASSED



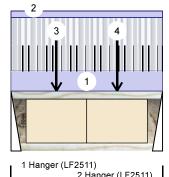
Hanger

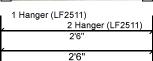
Hanger

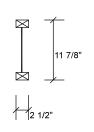
2.000"

Vert

2 -







Wind 0 0

1.25D+1.5L

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	262	130	0	0
12	2	Vertical	262	136	0	0
	Beari	ngs and F	actored Rea	ctions		
	Bear	ing Length	Dir. Cap	. React D/L lb	Total Ld. Ca	ase Ld. Comb.
	1 -	2.000"	Vert 35%	162 / 393	555 L	1.25D+1.5L

35%

Unfactored Reactions UNPATTERNED Ib (Uplift)

# Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	351 ft-lb	1'3 15/16"	5305 ft-lb	0.066 (7%)	1.25D+1.5L	L
Unbraced	351 ft-lb	1'3 15/16"	5305 ft-lb	0.066 (7%)	1.25D+1.5L	L
Shear	556 lb	2'4 3/4"	2350 lb	0.237 (24%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/18519)	1'4 1/8"	0.076 (L/360)	0.019 (2%)	D	Uniform
LL Defl inch	0.003 (L/9417)	1'3"	0.076 (L/360)	0.038 (4%)	L	L
TL Defl inch	0.004 (L/6245)	1'3 3/8"	0.115 (L/240)	0.038 (4%)	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 2' o.c.
- 5 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.



170 / 393

563 L

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ID	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 lb	0 lb	0 <b>l</b> b	J4
4	Point	1-9-0		Near Face	120 lb	221 lb	0 lb	0 <b>l</b> b	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 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 Inform	nation			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 Condition:	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			Bear	ings and Fa	actored Read	ctions			
Dead:	15 PSF			Bea	aring Length	Dir. Cap.	React D/L Ib	Total Ld. Case	Ld. Comb.	
				1 - 3	Steel 2.625"	Vert 34%	175 / 422	598 L	1.25D+1.5L	
Amalania Danula				2 -	SPF 1.875"	Vert 73%	347 / 808	1155 L	1.25D+1.5L	

### Analysis Results

Analysis	Actual	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.



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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	age 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
 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

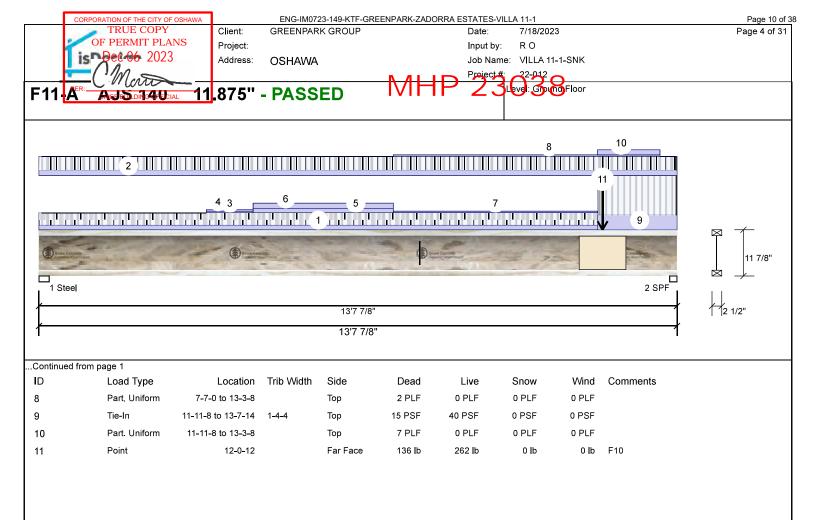
Boise Cascade Wood Products 1111 W. Jefferson St.

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

### Kott Inc.









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

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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

  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.

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 For flat roofs provide proper drainage to prevent populing.

This design is valid until 11/3/2024

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

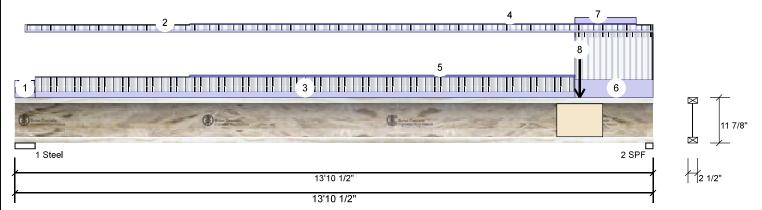
Boise, ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

Kott Inc.

CSD DESIGN







Member Infori	mation			Unf	actored Rea	actions	UNP	ATTERNED II	b (Upli	ft)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	L	ive	Dead		Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	1	195	88		0	0
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	Vertical	2	<b>I</b> 51	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	Read	tions			
Dead:	15 PSF			Ве	aring Length	Dir.	Сар.	React D/L Ib	Total	Ld. Case	Ld. Comb.
				1 -	Steel 5.250"	Vert	21%	111 / 293	404	L	1.25D+1.5L
				<del> </del> 2-	SPF 1.875"	Vert	60%	277 / 676	953	L	1.25D+1.5L

### Analysis Results

Ana <b>l</b> 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 <b>l</b> 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.



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

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<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 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 <b>l</b> b	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

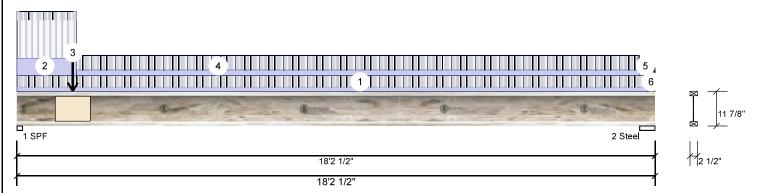
# READ ALL NOTES ON THIS PAGE AND ON THE USED IN THE DESIGN OF THIS COMPONENT.

Manufacturer Info 3228 Moodie Dr, Ottawa, Ontario Boise Cascade Wood Products 613-838-2775 / 905-642-4400 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788

www.bc.com CCMC: 12787







Member Infor	mation			Unf	actored Rea	actions	UNPA	TTERNED II	b (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction		Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical		646	242	0	0
Moisture Conditio	n: 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 F	actore	d Reac	tions		
Dead:	15 PSF			Ве	aring Length	Dir.	Cap.	React D/L <b>I</b> b	Total Ld. Case	Ld. Comb.
				1 -	SPF 1.875"	Vert	80%	303 / 969	1272 L	1.25D+1.5L
A				<del> </del> 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 <b>l</b> 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.

<b>I</b> 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 <b>l</b> b	342 lb	0 lb	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	0-2-0	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

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.

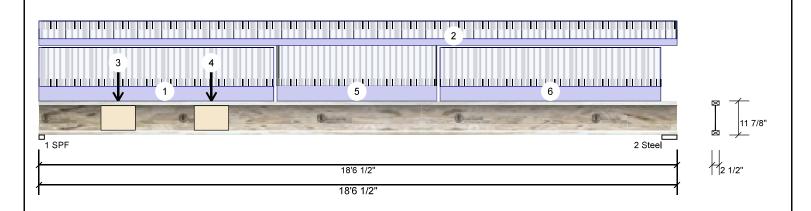




Address: **OSHAWA**  Job Name: VILLA 11-1-SNK

.875" - PASSED





Member Infor	mation			Unf	actored Rea	actions	UNPA	ATTERNED <b>i</b> i	b (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	n: 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 Reac	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
Amalosia Dassel		-		2 -	Steel 5.250"	Vert	47%	213 / 682	895 L	1.25D+1.5L

### Analysis Results

Ana <b>l</b> ysis	Actual	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 lb	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 <b>l</b> b	0 lb	0 lb	F9
4	Point	5-0-2		Far Face	15 <b>l</b> 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	

### 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.

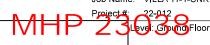
Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12787

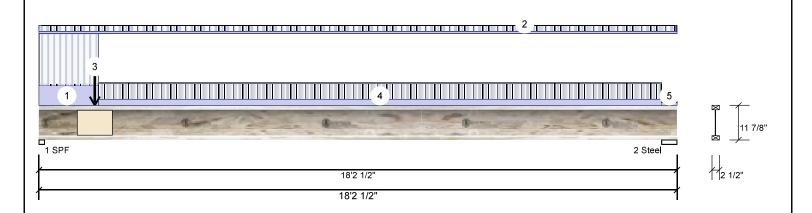
# Kott Inc.





.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**

Ana <b>l</b> 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.



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.

4	Bottom flange must be laterally	praced	at a	maximum or	10 /	3/8	O.C.

ID	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 <b>l</b> b	342 <b>l</b> b	0 <b>l</b> 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	0-2-4	Top	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.





TRUE COPY OF PERMIT PLANS is Dec 06 2023 Address: F13-B <del>Versa Lam Ly ∟ 2</del>.

Client: Project:

**OSHAWA** 

Input by: Job Name: VILLA 11-1-SNK

E 3100 SP

22-012 Project # 1.750" X 11.875" - PASSED JLEVE GO OF Floor



Member	Information
Type:	Girder
Plies:	1

Moisture Deflection Deflection Importa General

Floor Liv

Dead:

1'7 5/8'

	Girder	Application:	Floor (Residential)
	1	Design Method:	LSD
e Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
ion LL:	360	Load Sharing:	No
ion TL:	240	Deck:	Not Checked
ance:	Normal - II	Vibration:	Not Checked
al Load			
ive:	40 PSF		

	actored F	Reactions UNPA	TTERNED IL	(Uplift)
Brg	Direction	Live	Dead	Sn

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	65	29	0	0
2	Vertical	53	24	0	0

# Analysis Results

Analysis	Actua <b>l</b>	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

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap. Re	eact D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	2%	37 / 98	135	L	1.25D+1.5L
2 - SPF End Grain	1.875"	Vert	3%	30 / 79	109	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.

15 PSF

5 Bottom must have sheathing attached or be continuously braced.

ID	Load Type	Location Trib	Width Side	Dead	Live	Snow	Wind	Comments
1	Point	0-9-8	Near Face	44 lb	118 <b> </b> b	0 lb	0 lb	J2
	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. 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 Project: is Dec 06 2023 Address:

Client: GREENPARK GROUP

**OSHAWA** 

Date: RΟ Input by:

Job Name: VILLA 11-1-SNK

<del>Versa⊪Lam, Lv ∟</del> 2. E 3100 SP

22-012 Level: Gound Floor

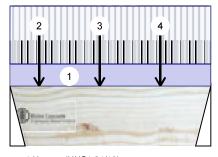
Brg

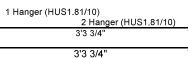
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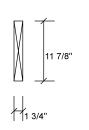
Direction

Vertical

Vertical







Wind

0

0

Snow

0

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

**Unfactored Reactions UNPATTERNED lb (Uplift)** 

Live

583

541

### 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 677 lb 0.094 (9%) 1.25D+1.5L L Shear 1'2 7/8" 7232 lb Perm Defl in. 0.001 1'7 5/8" 0.098 (L/360) 0.006 (1%) D Uniform (L/58451) 0.001 1'7 5/8" 0.098 (L/360) 0.014 (1%) L LL Defl inch (L/25451) TL Defl inch 0.002 1'7 5/8" 0.147 (L/240) 0.014 (1%) D+L (L/17731)

### **Bearings and Factored Reactions** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 318 / 874 3.000" Vert 19% 1192 L 1.25D+1.5L Hanger

2 -3.000" Vert 17% 292 / 811 1103 L 1.25D+1.5L Hanger

Dead

254

233



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

o Bottom must have sheathing attached of be continuously braced.									
ID	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 <b>l</b> b	0 lb	0 <b>l</b> b	J2
3	Point	1-5-12		Far Face	72 <b> </b> b	152 <b>l</b> b	0 lb	0 <b>l</b> b	J2
4	Point	2-5-12		Far Face	70 <b>l</b> b	145 <b>l</b> b	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 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

# Manufacturer Info

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

613-838-2775 / 905-642-4400

3228 Moodie Dr. Ottawa, Ontario



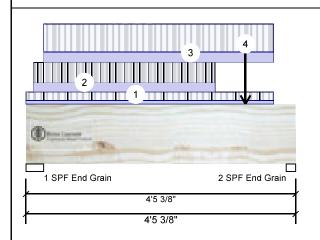


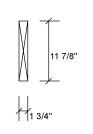
is Dec 06 2023 Address:

Job Name: VILLA 11-1-SNK **OSHAWA** 

<del>Versa Lagn Lv ∟</del> 2.′ E 3100 SP

22-012 Level: Gound Floor





Wind

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 Ro	eactions UNPAT	TERNED <b>l</b> b	(Uplift)
Brg	Direction	Live	Dead	Sno

1	Vertical	1028	430	0	0
2	2 Vertical 886		371	0	0

### Analysis Results

Member Information

Analysis	Actua <b>l</b>	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 <b>l</b> b	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

# **Bearings and Factored Reactions**

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



- 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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1 Bottom mao	t navo onoatimig attaon	ou or be continued	ory bracea.						
<b>I</b> D	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 <b>l</b> b	172 <b>l</b> b	0 lb	0 lb	J3
	Self Weight				6 PLF				

Grain

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





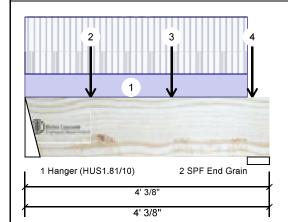
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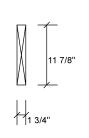
Client: GREENPARK GROUP

RΟ Input by:

Job Name: VILLA 11-1-SNK Address: **OSHAWA** 

22-012 Level: Gound Floor E 3100 SP





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									
Floor Live:	40 PSF								
Dead:	15 PSF								

Unfactored Reactions UNPATTERNED lb (Uplift)												
Brg	Direction	Live	Dead	Snow	Wind							
1	Vertical	169	76	0	0							
2	Vertical	287	217	0	0							
		Brg Direction 1 Vertical	Brg Direction Live 1 Vertical 169	Brg Direction Live Dead 1 Vertical 169 76	Brg Direction Live Dead Snow 1 Vertical 169 76 0							

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

# **Bearings and Factored Reactions**

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

(L/36006) **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.

1'11 11/16" 0.177 (L/240) 0.007 (1%) D+L



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- 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.

TL Defl inch 0.001

5 Bottor	m must have sheathing attach	ed or be continuou	sly braced.
ID	Load Time	Lagation	Trib \\/idi

<b>I</b> 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 <b>l</b> b	0 lb	0 lb	J1
3	Point	2-5-0	Near Face	49 lb	130 lb	0 lb	0 lb	J1
4	Point	3-9-0	Near Face	152 lb	149 lb	0 lb	0 lb	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. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products

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

# Kott Inc.

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





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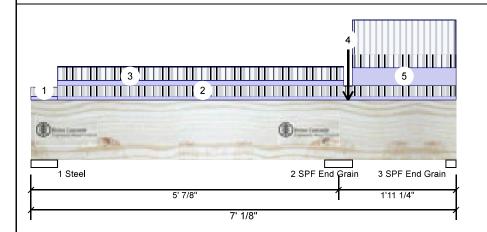
Client: Project: Address:

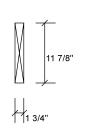
**OSHAWA** 

Job Name: VILLA 11-1-SNK 22-012

E 3100 SP

Level: Ground Floor





### Member Information

Type:	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 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	Actual	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 <b>l</b> b	3'10 1/4"	7232 <b>l</b> b	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_

# **Bearings and Factored Reactions**

Bearing Length	Dir.	Cap.	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - Steel 5.250"	Vert	2%	54 / 123	178	L_	1.25D+1.5L
2 - SPF 5.500" End Grain	Vert	7%	242 / 610	852	LL	1.25D+1.5L
3 - SPF 2.000" End Grain	Vert	4%	22 / 137 15	59 (-35)	_L	1.25D+1.5L (0.9D+1.5L)

I.MATIJEV 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 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.

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.

IULY 21, 2023

### 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-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





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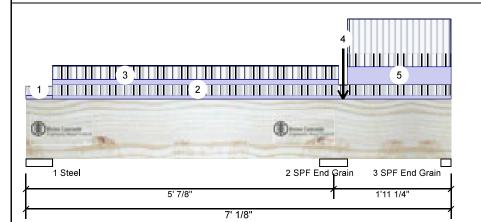
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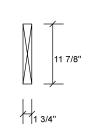
F16-A

Address: **OSHAWA** 

E 3100 SP

Job Name: VILLA 11-1-SNK <del>22-012</del> Project# - PASSEDS Level: Ground Floor





ID	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 <b>l</b> b	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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### Notes

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 LVL not to be treated with fire retardant or corrosive

# Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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

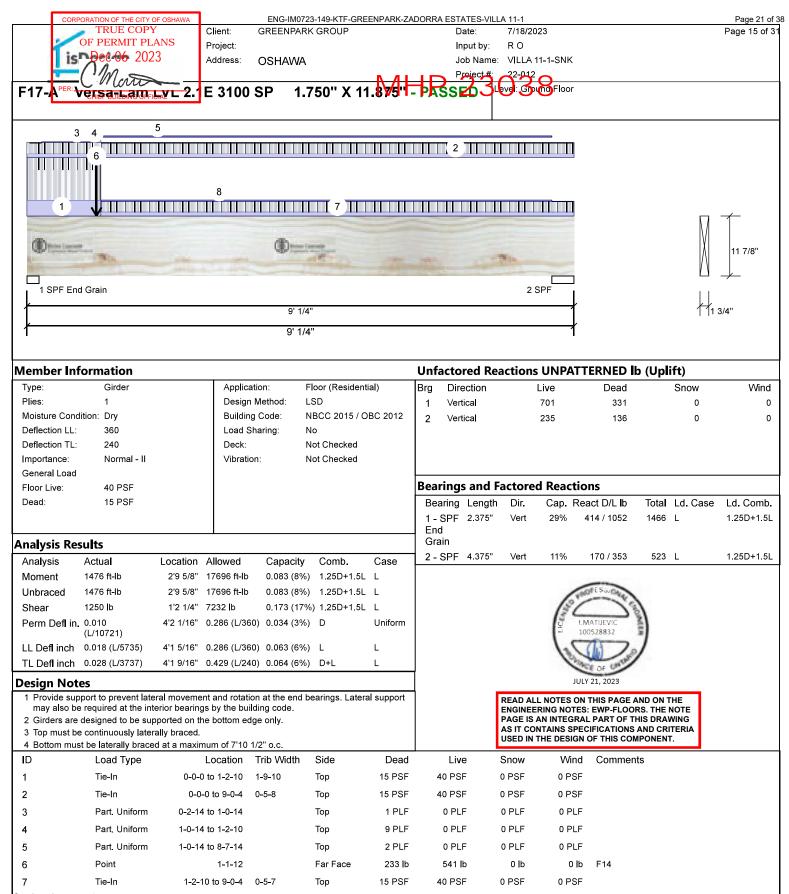
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Continued on page 2...

### Notes

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

Handling & Installation

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

Damaged Beams must not be used

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

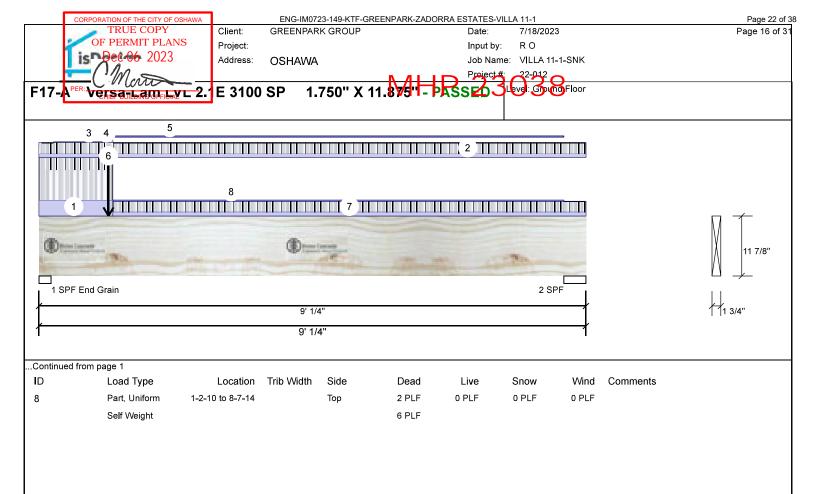
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Kott Inc. 3228 Moodie Dr. Ottawa, Ontario

613-838-2775 / 905-642-4400









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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 information regarding installation requirements, multi-pty fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products

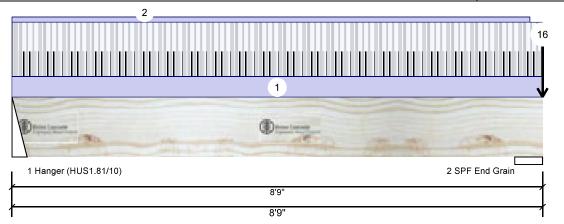
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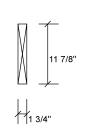
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# **Member Information** Type:

Application: Floor (Residential) 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

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

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

# Analysis Results

Dead:

Analysis	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 <b>l</b> b	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 (1/22813)	4'3 5/16"	0.408 (L/240)	0.011 (1%)	D+L+0.5S	L

# **Bearings and Factored Reactions**

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



- 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.

<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 8-9-0	0-3-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 8-6-8		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
3	Point	8-9-0		Тор	15 <b>l</b> b	39 lb	0 <b>l</b> b	0 <b>l</b> b	
	Bearing Length	0-5-8							
4	Point	8-9-0		Тор	29 lb	0 <b>l</b> b	75 <b>l</b> b	0 <b>l</b> 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

Manufacturer Info

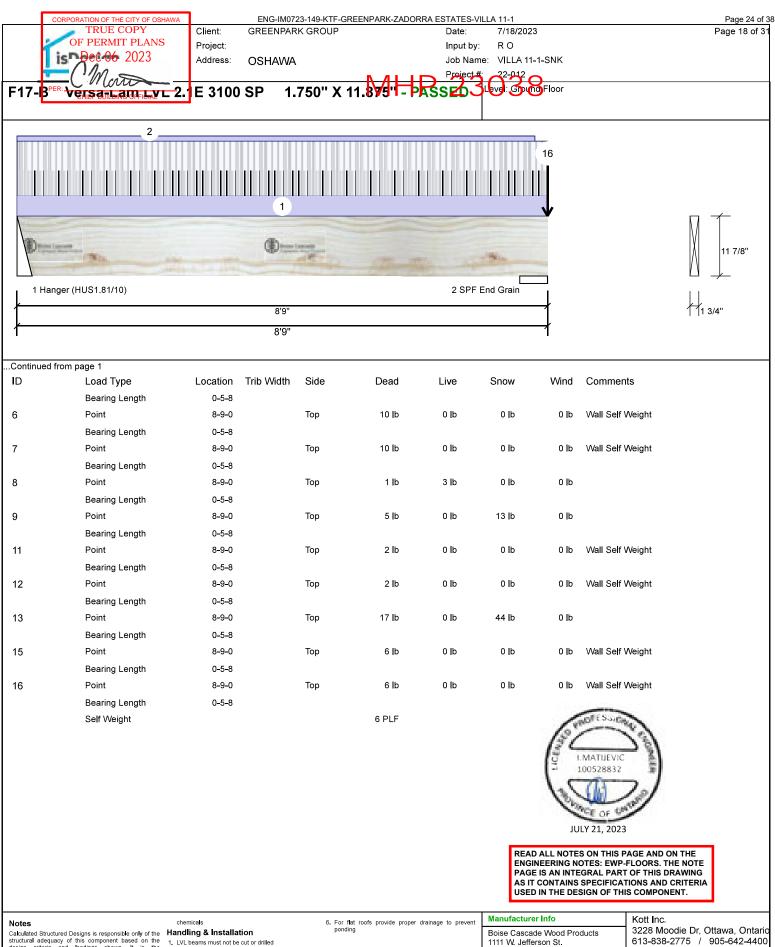
Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

Kott Inc.

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







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

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

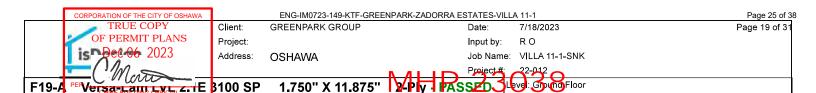
Damaged Beams must not be used

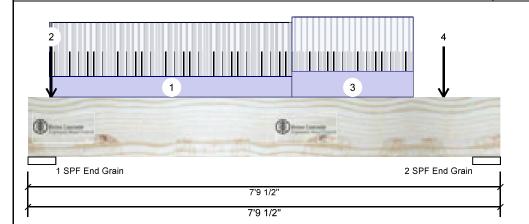
Dariga Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

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



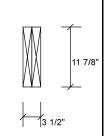






**B100 SP** 

Versa-Lani LyL z. IE



Snow

0

n

Wind

1.25D+1.5L

0

0

Type:	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		

1	Vertical	522	282
2	Vertical	459	250

Vert

Direction

Grain

End Grain

2 - SPF 5.500"

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Live

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

313 / 688

1001 L

Dead

### Analysis Results

Member Information

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 <b>l</b> b	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.

Self Weight

- 5 Bottom must have sheathing attached or be continuously braced.
- 6 Lateral slenderness ratio based on full section width.

<b>I</b> D	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 <b>l</b> b	45 lb	0 lb	0 lb	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 <b>l</b> b	126 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	J2

### Notes

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

12 PLF

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

www.bc.com CCMC: 12472

Manufacturer Info



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.

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



N	Member Inform	nation		
	Туре:	Girder	Application:	Floor (Residential)
	Plies:	3	Design Method:	LSD
	Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
	Deflection LL:	360	Load Sharing:	Yes
	Deflection TL:	240	Deck:	Not Checked
	Importance:	Normal - II	Vibration:	Not Checked
	General Load			
	Floor Live:	40 PSF		
	Dead:	15 PSF		
1				

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1206	3330	5365	0
2	Vertical	640	417	0	0

# Analysis Results

Analysis	Actua <b>l</b>	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 <b>l</b> b	14'10 1/2"	18441 <b>l</b> 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

# **Bearings and Factored Reactions**

Bearing Length	Dir.	Cap. I	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF 3.000" End Grain	Vert	98%	4162 / 9253	13415	L	1.25D+1.5S +L
2 - Steel 5.250"	Vert	5%	522 / 959	1481	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 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 clanderness ratio based on full section width

o Lateral Sjender	mess ratio pased on	iuli section width.							
<b>I</b> D	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 <b>l</b> b	11 lb	0 lb	0 lb	J1

Continued on page 2...

Bearing Length

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

0-5-8

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

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

6. For flat roofs provide proper drainage to prevent ponding

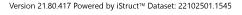
Manufacturer Info

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

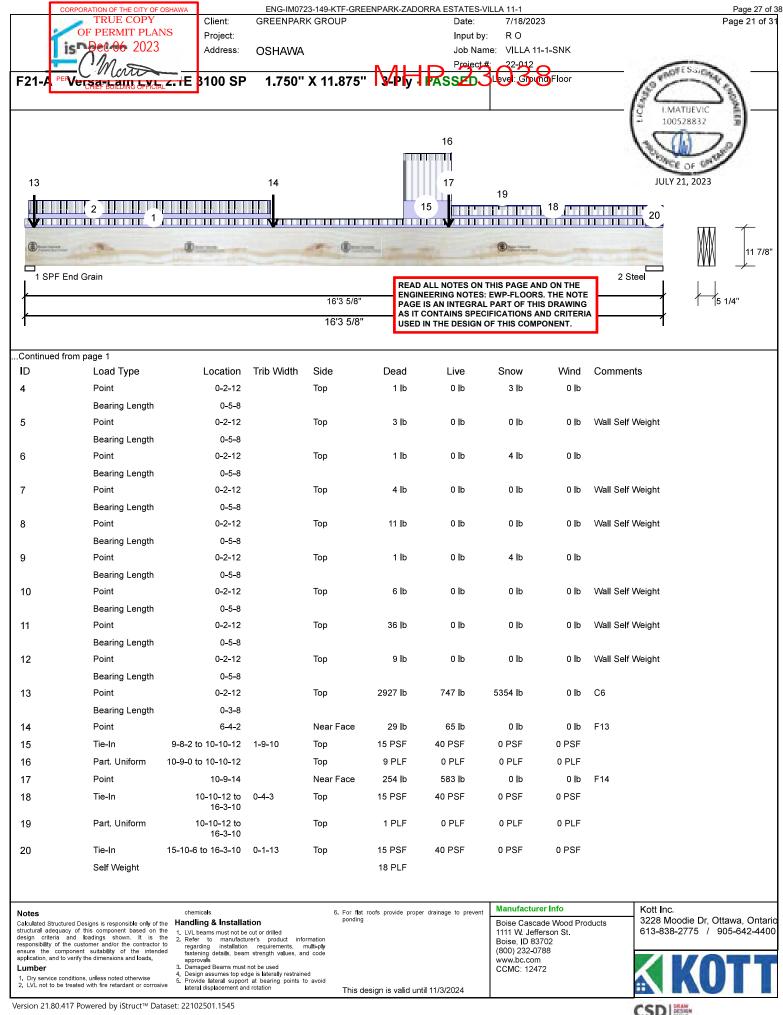
3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400











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Client: GREENPARK GROUP Project:

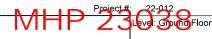
Address:

Input by: **OSHAWA** 

2012

RΟ Job Name: VILLA 11-1-SNK

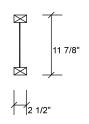
875" - PASSED





Member Information

Analysis Results



Туре:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal II	\/ibration:	Not Chacked

**Unfactored Reactions UNPATTERNED lb (Uplift)** Wind Brg Direction Live Dead Snow Vertical 40 15 0 1 0 2 Vertical 41 15 n 0

### Importance: Normal - II Vibration: Not Checked General Load Floor Live: 40 PSF Dead: 15 PSF

Bearings	Bearings and Factored Reactions										
Bearing	Length	Dir.	Cap.	React D/L <b>I</b> 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				

### Case Location Allowed Capacity Analysis Actual Comb. 8 7/8" 5305 ft-lb Moment 22 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 69 lb 0.029 (3%) 1.25D+1.5L L 1 1/8" 2350 lb Shear Perm Defl in 0.000 8 7/8" 0.043 (L/360) 0.002 (0%) D Uniform (L/235895) 0.000 8 7/8" 0.043 (L/360) 0.004 (0%) L LL Defl inch (L/88461) TL Defl inch 0.000 8 7/8" 0.065 (L/240) 0.004 (0%) D+L

# (L/64335) **Design Notes**

# LMATUEVIC 100528832

JULY 21, 2023

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.

- 2 Fill all hanger nailing holes.
- 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.

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 1-5-14	1-4-4	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 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.





TRUE COPY OF PERMIT PLANS is Dec 06 2023 Address:

Client: Project:

**OSHAWA** 

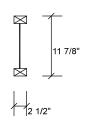
Date: Input by: RΟ

Job Name: VILLA 11-1-SNK

875" - PASSED







0

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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					
	Type: Plies: Moisture Condition: Deflection LL: Deflection TL:	Plies: 1 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240	Type: Girder Application: Plies: 1 Design Method: Moisture Condition: Dry Building Code: Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck:					

### Wind Brg Direction Live Dead Snow 75 0 Vertical 28 28 0 2 Vertica 76

**Unfactored Reactions UNPATTERNED lb (Uplift)** 

# General Load Floor Live: 40 PSF 15 PSF Dead:

Bearings	and I	Factored	Rea	ctions	
				D D // . II.	_

Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	1.875"	Vert	9%	35 / 112	147	L	1.25D+1.5L
2 -	2.000"	Vert	9%	36 / 114	149	L	1.25D+1.5L
Hanger							

# Analysis Results

Analysis	Actua <b>l</b>	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.

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<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 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. 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

### Kott Inc.



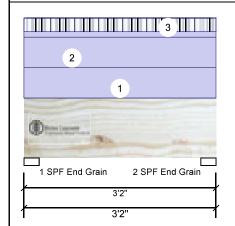


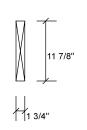
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Address: **OSHAWA** 

- PASSED







0

Wind

0

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									
Floor Live:	40 PSF								
Dead:	15 PSF								

	ctored Re	eactions UNPA	TTERNED <b>i</b> b (	Uplift)
Brg	Direction	Live	Dead	Snow

29

D	Positings and Eastered Deagtions							
2	Vertical	29	147	0	0			
0	\/articol	20	4.47	0				

147

### **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 <b>l</b> 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

Vertical

Dearing.	, una ra	ccoica	itcut				
Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	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



- 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



4 00110	ii iiiusi iiave silealiiiily allaci	ned of be continuou	siy biaceu.							
<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Part. Uniform	0-0-0 to 3-2-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
2	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		ENGIN PAGE	EERING NO	ON THIS PAGE AND ( TES: EWP-FLOORS. T RAL PART OF THIS D	HE RA

N THE RAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Boise Cascade Wood Products

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

Kott Inc.

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





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Client: GREENPARK GROUP Date:

Vertica

Input by: RΟ

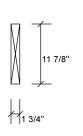
Address: Job Name: VILLA 11-1-SNK **OSHAWA** 

E 3100 SP





Member Information



0

Wind 0

0

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

Brg	Direction	Live	Dead	Snow	
1	Vertical	53	25	0	

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

59

Bearings	s and Fa	actore	d Read	tions			
Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	2%	31 / 80	111	L	1.25D+1.5L
2 - SPF End Grain	4.375"	Vert	1%	35 / 88	123	L	1.25D+1.5L

28

### **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 <b>l</b> 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.

may also no requirement at the interior nearings by the national ground.	1
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.	



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<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-10-6		Near Face	42 <b>l</b> b	112 <b>l</b> b	0 <b> </b> b	0 lb	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. 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.

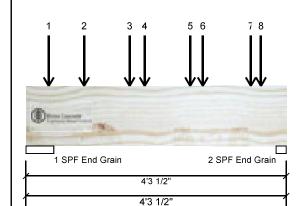
3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400



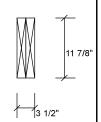


I X/P IV I PASSED

1.750" X 11.875"



Versa Land OF MALZ IE



Wind

0

0

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** 

Direction

Vertical

Vertica

2

Grain

**Unfactored Reactions UNPATTERNED Ib (Uplift)** 

Live

1321

1279

Level: Second Floor

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

Dead

531

532

Snow

0

0

### **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 <b>l</b> 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



JULY 21, 2023

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o Lateral Sieride	inces ratio based on fall set	Stion Width.							
<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	0-4-8		Far Face	104 <b>l</b> b	278 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	J5
2	Point	0-11-8		Near Face	132 lb	353 lb	0 <b>l</b> b	0 <b>l</b> b	J6
3	Point	1-8-8		Far Face	137 lb	365 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	J5
4	Point	1-11-8		Near Face	130 lb	346 lb	0 <b>l</b> b	0 <b>l</b> b	J6
5	Point	2-8-8		Far Face	134 lb	313 <b>l</b> b	0 <b>l</b> b	0 lb	J5

Continued on page 2...

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

# Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

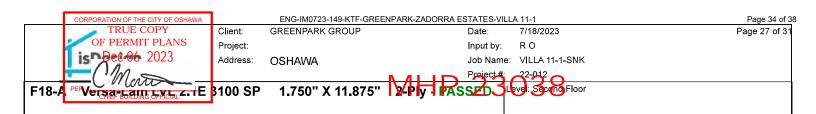
Manufacturer Info

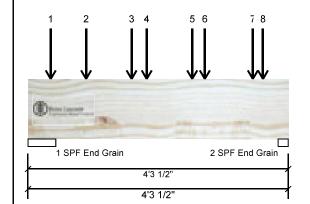
Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788 www.bc.com CCMC: 12472

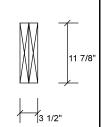
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Continued	from page 1							
ID	Load Type	Location Trib W	idth Side	Dead	Live	Snow	Wind	Comments
6	Point	2-11-0	Near Face	127 <b>l</b> b	338 lb	0 <b>l</b> b	0 <b>l</b> b	J6
7	Point	3-8-8	Far Face	147 <b>l</b> b	338 lb	0 lb	0 <b>l</b> b	J5
8	Point	3-10-8	Near Face	101 <b>l</b> b	269 lb	0 <b>l</b> b	0 <b>l</b> b	J6
	Self Weight			12 PLF				



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### Notes

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# Handling & Installation

Handling & Installation

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6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

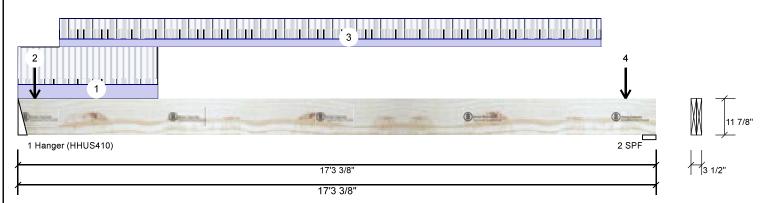
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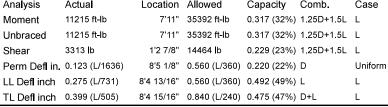
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Member Infor	mation				Unf	actored	Reac	tions	UNPA	ATTERNED II	(Uplift)		
Туре:	Girder		Application:	Floor (Residential)	Brg	Directio	n	L	ive	Dead	Sno	w	Wind
Plies:	2		Design Method:	LSD	1	Vertical		1	935	824		0	0
Moisture Conditio	n: Dry		Building Code:	NBCC 2015 / OBC 2012	2	Vertical		1	189	545		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				Bea	rings an	ıd Fac	ctored	l Read	tions			
Dead:	15 PSF				Bea	aring Ler	ngth	Dir.	Сар.	React D/L Ib	Total Ld.	Case	Ld. Comb.
					1 - Ha	3.00 nger	00"	Vert	31%	1029 / 2902	3932 L		1.25D+1.5L
Analysis Resul	ts				2 -	SPF 4.3	75"	Vert	26%	681 / 1784	2465 L		1.25D+1.5L
,	ctual L	ocation All	owed Capac	ty 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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ID	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 lb	133 <b>l</b> b	0 lb	0 <b>l</b> b	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 lb	145 <b>l</b> b	0 lb	0 lb	J2
	Self Weight				12 PLF				

### Notes

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

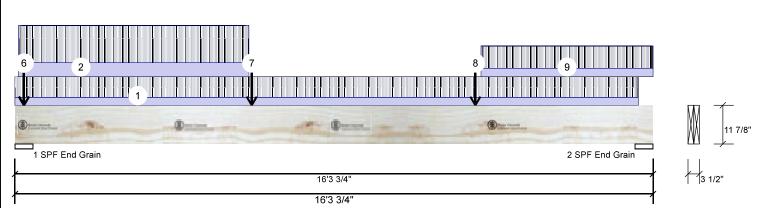
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613-838-2775 / 905-642-4400







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		

### Analysis Results

Analysis	Actual	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 <b>l</b> 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.

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	747	2927	5354	0
2	Vertical	1592	768	0	0

# **Bearings and Factored Reactions**

Bearing Length	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



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ID	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 <b>l</b> b	0 <b>l</b> b	11 lb	0 <b>l</b> b	
	Bearing Length	0-5-8							

# Continued on page 2...

Notes	
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design criteria and loadings shown. It is the	
responsibility of the customer and/or the contractor to	
ensure the component suitability of the intended	d
application, and to verify the dimensions and loads.	

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

# Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

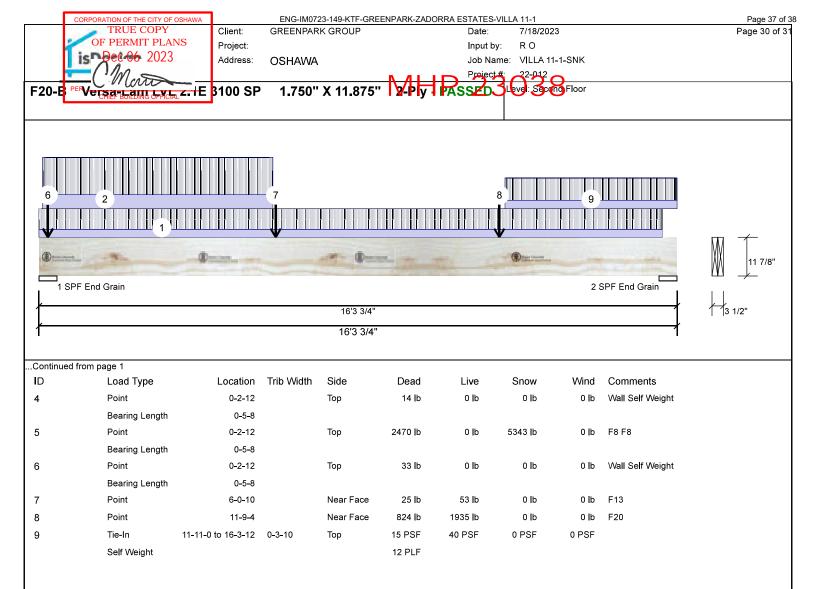
This design is valid until 11/3/2024

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

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









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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

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613-838-2775 / 905-642-4400

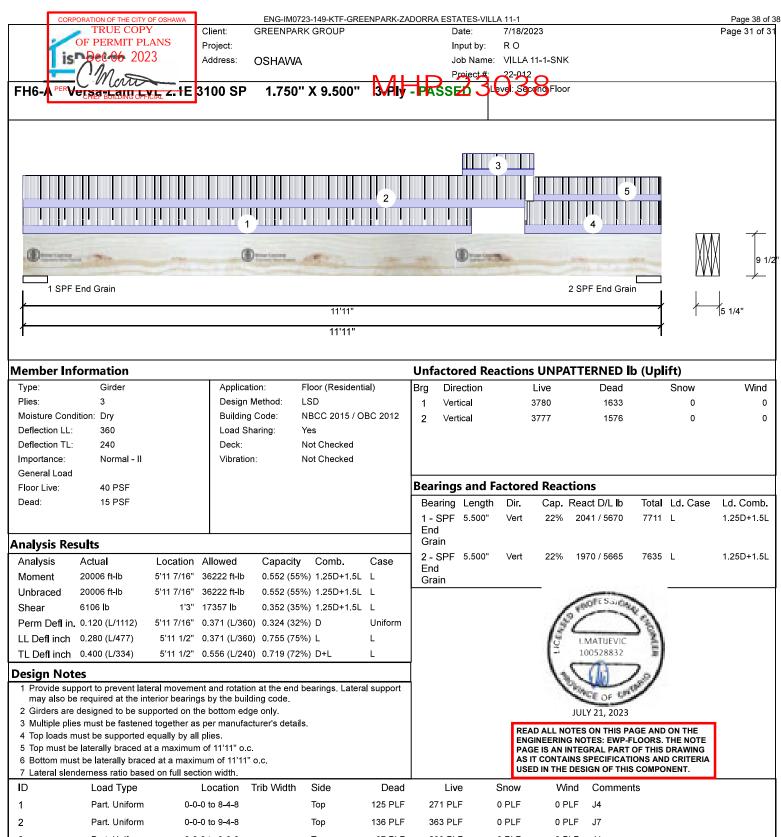
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This design is valid until 11/3/2024



Kott Inc.



<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Part. Uniform	0-0-0 to 8-4-8		Тор	125 PLF	271 PLF	0 PLF	0 PLF	J4	
2	Part. Uniform	0-0-0 to 9-4-8		Тор	136 PLF	363 PLF	0 PLF	0 PLF	J7	
3	Part. Uniform	8-2-8 to 9-6-8		Тор	97 PLF	236 PLF	0 PLF	0 PLF	J4	
4	Part. Uniform	9-4-8 to 11-11-0		Тор	137 PLF	366 PLF	0 PLF	0 PLF	J7	
5	Part. Uniform	9-6-8 to 11-11-0		Тор	101 PLF	269 PLF	0 PLF	0 PLF	J4	
	Self Weight				14 PLF					

### Notes

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

Handling & Installation

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

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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3228 Moodie Dr. Ottawa, Ontario

613-838-2775 / 905-642-4400

This design is valid until 11/3/2024



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