isDesign

Client: Project: Address:

**GREENPARK** 

ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA OSHAWA ON

Date: 5/19/2023 WC Input by:

Job Name: CAROL 12-2 STD

Project #

**F1 AJS 140** 

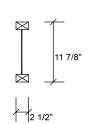
11.875" - PASSED

TRUE COPY OF PERMIT PLANS Nov 16 2023

Level: Ground Floor



1'5 3/8'



Member Infor	rmation			Unfa	ctored Rea	actions UNF	PATTERNED I	b (Uplift)	
Туре:	Girder	Application:	Floor (Residential)	Brg	Direction	Live	Dead	Snow	Wind
Plies:	1	Design Method:	LSD	1	Vertical	44	17	0	0
Moisture Conditio	on: Dry	Building Code:	NBCC 2015	2	Vertical	46	17	0	0
Deflection LL:	360		OBC 2012(2020 Update)						
Deflection TL:	240	Load Sharing:	No						
Importance:	Normal - II	Deck:	Not Checked						
General Load		Vibration:	Not Checked						
Floor Live:	40 PSF			Beari	ings and Fa	actored Rea	actions		
Dead:	15 PSF			Bear	ring Length	Dir. Cap	. React D/L <b>l</b> b	Total Ld. Case	Ld. Comb.
				1 -	2.000"	Vert 5%	6 21 / 66	87 L	1.25D+1.5L
				_ Hang	ger				
Analysis Resu	lts			2 - S	SPF 2.375"	Vert 5%	6 22 / 69	91 L	1.25D+1.5L

### Analysis Actual Location Allowed Capacity Comb. Case Moment 22 ft-lb 8 1/2" 5305 ft-lb 0.004 (0%) 1.25D+1.5L L Unbraced 22 ft-lb 8 1/2" 5305 ft-lb 0.004 (0%) 1.25D+1.5L L 0.032 (3%) 1.25D+1.5L L 74 lb 1 1/4" 2350 lb Shear Perm Defl in 0.000 8 1/2" 0.040 (L/360) 0.002 (0%) D Uniform (L/220659) 0.000 8 1/2" 0.040 (L/360) 0.004 (0%) L LL Defl inch (L/82747) TL Defl inch 0.000 8 1/2" 0.060 (L/240) 0.004 (0%) D+L (L/60180)



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

<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-5-6	1-6-12	Ton	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 4/17/2026

# Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St.

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

# Kott Inc.





Page 2 of 27

isDesign

Project: Address:

Client: **GREENPARK** 

OSHAWA ON

Date: 5/19/2023 Input by: W C

Job Name: CAROL 12-2 STD

Project #

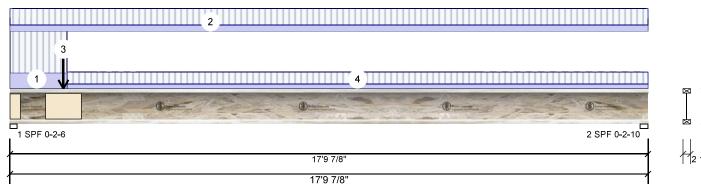
**AJS 140** 11.875" - PASSED F13

TRUE COPY OF PERMIT PLANS Nov 16 2023

ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Level: Ground Floor



### Member Information

Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
General Load	

40 PSF 15 PSF

Application: Floor (Residential) Design Method: LSD **Building Code: NBCC 2015** OBC 2012(2020 Update)

Load Sharing: Not Checked Deck:

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	885	332	0	0
2	Vertical	447	168	0	0

### Vibration: Not Checked

l	Bearings	s and F	actore					
I	Bearing	Length	Dir.	Cap. F	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
I	1 - SPF	2.375"	Vert	76%	416 / 1326	1742	L	1.25D+1.5L
1	2 - SPF	2.625"	Vert	51%	210 / 671	881	L	1.25D+1.5L

### Analysis Results

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4144 ft-lb	8'1 1/4"	5305 ft-lb	0.781 (78%)	1.25D+1.5L	L
Unbraced	4144 ft-lb	8'1 1/4"	5305 ft-lb	0.781 (78%)	1.25D+1.5L	L
Shear	1717 <b>l</b> b	1 5/8"	2350 lb	0.731 (73%)	1.25D+1.5L	L
Perm Defl in.	0.155 (L/1356)	8'7 13/16"	0.584 (L/360)	0.266 (27%)	D	Uniform
LL Defl inch	0.413 (L/509)	8'7 13/16"	0.584 (L/360)	0.707 (71%)	L	L
TL Defl inch	0.569 (L/370)	8'7 13/16"	0.877 (L/240)	0.649 (65%)	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 16'4" o.c.



READ ALL NOTES ON THIS PAGE AND ON THE

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

5 Web stiffene	rs required at Bearing 1.							
<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-7-3	1-8-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-9-14	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-5-15		Far Face	164 lb	435 lb	0 lb	0 <b>l</b> b	F2
4	Tie-In	1-7-3 to 17-9-14	0-5-13	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

This design is valid until 4/17/2026

# Manufacturer Info

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

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

### Kott Inc.





Page 3 of 27



Client: Project: Address:

**GREENPARK** 

OSHAWA ON

Date: 5/19/2023 W C Input by: ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Job Name: CAROL 12-2 STD

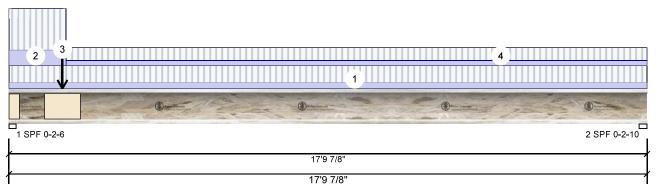
Project #

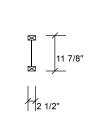
**AJS 140** F13-A

11.875" - PASSED<sup>OF PERMIT PLANS</sup> Nov 16 2023

Level: Ground Floor

TRUE COPY





### Member Information

### Type: Plies: Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal - II General Load

40 PSF 15 PSF

Application: Floor (Residential) Design Method: LSD **Building Code: NBCC 2015** OBC 2012(2020 Update) Load Sharing:

Not Checked Not Checked

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

l	Brg	Direction	Live	Dead	Snow	Wind
	1	Vertical	888	334	0	0
	2	Vertical	467	175	0	0

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Сар.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	77%	417 / 1333	1750	L	1.25D+1.5L
2 - SPF	2.625"	Vert	53%	219 / 700	919	L	1.25D+1.5L

### Analysis Results

Floor Live:

Dead:

_						
Analysis	Actua <b>l</b>	Location	Allowed	Capacity	Comb.	Case
N 4 4	4004 ft lb	010 4/401	5005 # III	0.000 (040()	4.050.4.51	
Moment	4291 ft-lb	8/2/1/16	5305 ft-lb	0.809 (81%)	1.25D+1.5L	L
Unbraced	4291 ft-lb	8'2 1/16"	5305 ft-lb	0.809 (81%)	1.25D+1.5L	L
Shear	1725 lb	1 5/8"	2350 lb	0.734 (73%)	1.25D+1.5L	L
Onour				, ,		_
Perm Defl in.	0.161 (L/1311)	8'8 1/16"	0.584 (L/360)	0.275 (27%)	D	Uniform
LL Defl inch	0.428 (L/492)	8'8 1/16"	0.584 (L/360)	0.732 (73%)	L	L
TL Defl inch	0.588 (L/358)	8'8 1/16"	0.877 (L/240)	0.671 (67%)	D+L	L

Deck:

Vibration:

# **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 16'4" o.c.
- 5 Web stiffeners required at Bearing 1.



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 17-9-14	0-8-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 1-7-3	1-8-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	1-5-15		Near Face	158 lb	420 <b>l</b> b	0 lb	0 <b>l</b> b	F2
4	Tie-In	1-7-3 to 17-9-14	0-6-5	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 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

Boise. ID 83702 (800) 232-0788

Manufacturer Info

Boise Cascade Wood Products 1111 W. Jefferson St. www.bc.com CCMC: 12787

### Kott Inc.

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





Page 4 of 27

isDesign

Project: Address:

Client: **GREENPARK** 

OSHAWA ON

Input by: ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Date: 5/19/2023 WC

Job Name: CAROL 12-2 STD

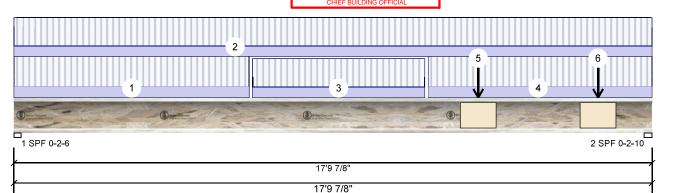
Project #

**AJS 140** F13-B

11.875" - PASSED<sup>OF PERMIT PLANS</sup> Nov 16 2023

TRUE COPY

Level: Ground Floor



### Member Information

Type:	Giraer
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II

General Load Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential)

Design Method: LSD Building Code: **NBCC 2015** OBC 2012(2020 Update)

Load Sharing: Deck:

Not Checked Vibration: Not Checked

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	497	186	0	0
2	Vertical	552	206	0	0
1					

### **Bearings and Factored Reactions**

Bearing Length	Dir.	Cap.	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF 2.375"	Vert	58%	233 / 746	979	L	1.25D+1.5L
2 - SPF 2.625"	Vert	63%	258 / 828	1086	L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4316 ft-lb	9'1 15/16"	5305 ft-lb	0.814 (81%)	1.25D+1.5L	L
Unbraced	4316 ft-lb	9'1 15/16"	5305 ft-lb	0.814 (81%)	1.25D+1.5L	L
Shear	1069 <b>l</b> b	17'8"	2350 lb	0.455 (45%)	1.25D+1.5L	L
Perm Defl in.	0.159 (L/1323)	8'11 11/16"	0.584 (L/360)	0.272 (27%)	D	Uniform
LL Defl inch	0.425 (L/495)	8'11 3/4"	0.584 (L/360)	0.727 (73%)	L	L
TL Defl inch	0.584 (L/360)	8'11 3/4"	0.877 (L/240)	0.666 (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 12'11 5/8" 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 6-6-14	0-8-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-9-14	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	6-8-0 to 11-5-12	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
4	Tie-In	11-6-14 to 17-9-14	0-8-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
5	Point	12-11-10		Far Face	15 lb	41 lb	0 lb	0 lb	F1
6	Point	16-3-13		Far Face	15 lb	41 lb	0 lb	0 <b>l</b> b	F1

### 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

# 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





Page 5 of 27

isDesign

Client: Project: Address:

**GREENPARK** 

OSHAWA ON

Date: 5/19/2023 Input by: WC ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Job Name: CAROL 12-2 STD

Project #

**AJS 140** 

11.875" - PASSED

TRUE COPY OF PERMIT PLANS Nov 16 2023

Level: Ground Floor



11 7/8"

2 Hanger (LF2511) 0-2-0 1'3 3/16' 1'3 3/16'

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

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	43	16	0	0
2	Vertical	41	15	0	0

# Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	17 ft-lb	7 3/4"	5305 ft-lb	0.003 (0%)	1.25D+1.5L	L
Unbraced	17 ft-lb	7 3/4"	5305 ft-lb	0.003 (0%)	1.25D+1.5L	L
Shear	67 <b>l</b> b	1 5/8"	2350 lb	0.029 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/246418)	7 13/16"	0.034 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/92407)	7 13/16"	0.034 (L/360)	0.004 (0%)	L	L
TL Defl inch	0.000 (L/67205)	7 13/16"	0.051 (L/240)	0.004 (0%)	D+L	L

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap. R	eact D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	5%	20 / 65	85	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	5%	19 / 62	81	L	1.25D+1.5L

### **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Right Header: SPF, Thickness: 2 1/2"

15 PSF

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

15	PROFESSIONA	2
LICEN	I.MATIJEVIC 100528832	JINEER
12/2	OVINCE OF ONT	
`	IUI Y 24 2023	

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-3-3	1-8-1	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 4/17/2026

# Manufacturer Info

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

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

# Kott Inc.





Page 6 of 27

isDesign

**AJS 140** 

Client: Project: Address:

**GREENPARK** 

Date: 5/19/2023 Input by: WC ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Level: Ground Floor

Job Name: CAROL 12-2 STD

Project #

TRUE COPY 11.875" - PASSED

OSHAWA ON

OF PERMIT PLANS Nov 16 2023



11 7/8"

Туре:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II

General Load Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential)

> Design Method: LSD Building Code: **NBCC 2015** OBC 2012(2020 Update)

Load Sharing:

Not Checked Deck: Vibration: Not Checked

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	49	18	0	0
2	Vertical	41	15	0	0

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap. Read	t D/L <b>l</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	6%	23 / 73	96	L	1.25D+1.5L
2 - Hanger	2.000"	Vert	5%	19 / 62	81	L	1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	17 ft-lb	7 3/4"	5305 ft-lb	0.003 (0%)	1.25D+1.5L	L
Unbraced	17 ft-lb	7 3/4"	5305 ft-lb	0.003 (0%)	1.25D+1.5L	L
Shear	71 lb	1 5/8"	2350 lb	0.030 (3%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/245617)	7 3/4"	0.034 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/92106)	7 3/4"	0.034 (L/360)	0.004 (0%)	L	L
TL Defl inch	0.000 (L/66986)	7 3/4"	0.051 (L/240)	0.004 (0%)	D+L	L

### **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Right Header: SPF, Thickness: 2 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum 2' o.c.
- 6 If sheathing is not attached to the bottom flange, bottom flange must be laterally braced at maximum 2' o.c.

1	PROFESSIONA	2
LICER	I.MATIJEVIC 100528832	GINEER
12/2	DVINCE OF ONTE	
	JULY 24, 2023	

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 1-3-3	1-8-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-2-6	0-8-11	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

  1. Lioist 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-rily 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.

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

  6. Web stifferers for point load as shown Minimum point load bearing length> 5. For flat roofs provide proper drainage to prevent pointing.

  7. For flat roofs provide proper drainage to prevent pointing.

  7. Expression of the provide lateral support at bearing points to avoid lateral support at bearing points to avoid lateral support at bearing points of lateral support at bearing points at lateral support at bearing p

# Manufacturer Info

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

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

### Kott Inc.





Page 7 of 27



Client: Project: Address:

**GREENPARK** 

ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA OSHAWA ON TRUE COPY

Date: 5/19/2023 Input by: WC

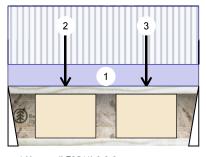
Job Name: CAROL 12-2 STD

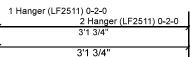
Level: Ground Floor

Project #

F2 **AJS 140** 11.875" - PASSED

OF PERMIT PLANS Nov 16 2023





11 7/8"

# Member Information

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

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	420	158	0	0
2	Vertical	435	164	0	0

### Analysis Results

Analysis	Actua <b>l</b>	Location	Allowed	Capacity	Comb.	Case
Moment	672 ft-lb	1'1 3/16"	5305 ft-lb	0.127 (13%)	1.25D+1.5L	L
Unbraced	672 ft-lb	1'1 3/16"	5305 ft-lb	0.127 (13%)	1.25D+1.5L	L
Shear	851 lb	3' 1/2"	2350 lb	0.362 (36%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/13938)	1'5 3/4"	0.098 (L/360)	0.026 (3%)	D	Uniform
LL Defl inch	0.007 (L/5239)	1'5 3/4"	0.098 (L/360)	0.069 (7%)	L	L
TL Defl inch	0.009 (L/3808)	1'5 3/4"	0.147 (L/240)	0.063 (6%)	D+L	L

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap. Re	act D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 -	2.000"	Vert	51%	197 / 630	827	L	1.25D+1.5L
Hanger							
2 -	2.000"	Vert	53%	204 / 653	857	L	1.25D+1.5L
Hanger							

# **Design Notes**

- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: SPF, Thickness: 2 1/2"
- 4 Right Header: SPF, Thickness: 2 1/2"
- 5 Girders are designed to be supported on the bottom edge only.
- 6 If sheathing is not attached to the top flange, top flange must be laterally braced at maximum
- 2' o.c.
- 7 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 3-1-12	0-9-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	0-11-6		Far Face	145 lb	386 lb	0 <b>l</b> b	0 <b>l</b> b	J4
3	Point	2-3-6		Far Face	140 lb	372 lb	0 lb	0 lb	J4

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 4/17/2026

# Manufacturer Info

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

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

Kott Inc.





Page 8 of 27

isDesign

Client: Address:

**GREENPARK** Project:

ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA OSHAWA ON

5/19/2023 W C Input by:

Job Name: CAROL 12-2 STD

Project #

Date:

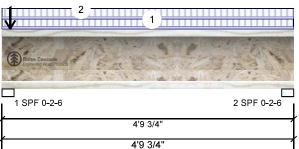
F3 **AJS 140** 

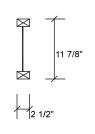
11.875" - PASSED

TRUE COPY OF PERMIT PLANS Nov 16 2023

Level: Ground Floor







Ld. Comb.

1.25D+1.5S +L

1 25D+1 5L

# Member Information Type:

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

General Load Floor Live: 40 PSF Dead: 15 PSF Application: Floor (Residential)

Design Method: LSD Building Code: **NBCC 2015** OBC 2012(2020 Update)

Load Sharing:

Not Checked Deck: Vibration: Not Checked

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

**Bearings and Factored Reactions** 

Dir.

Vert

Vert

Bearing Length

1 - SPF 2.375"

2 - SPF 2.375"

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	171	361	25	0
2	Vertical	124	47	0	0
i					

Cap. React D/L lb

451 / 208

59 / 186

48%

16%

Total Ld. Case

659 L

245 L

### Analysis Results

Case Analysis Actual Location Allowed Capacity Comb. 2'4 3/4" 4934 ft-lb 1.25D+1.5L L Moment 264 ft-lb 0.054 (5%) Unbraced 264 ft-lb 2'4 3/4" 4934 ft-lb 0.054 (5%) 1.25D+1.5L L 0.123 (12%) 1.25D+1.5L L 269 lb 1 5/8" 2186 lb Shear Perm Defl in. 0.001 2'4 9/16" 0.151 (L/360) 0.009 (1%) D Uniform (L/39826) 0.004 2'4 7/8" 0.151 (L/360) 0.023 (2%) L+0.5S LL Defl inch (L/15460) TL Defl inch 0.005 2'4 13/16" 0.227 (L/240) 0.022 (2%) D+L+0.5S (L/11137)

# I.MATUEVIC 100528832 NCE OF OF

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

# **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 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 bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 4-9-12	0-7-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Tie-In	0-0-0 to 4-9-12	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
3	Part. Uniform	0-0-0 to 0-1-2		Тор	20 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
4	Tapered Start	0-0-0		Тор	2 PLF	5 PLF	0 PLF	0 PLF		
	End	0-1-2			2 PLF	5 PLF	0 PLF	0 PLF		

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
 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

This design is valid until 4/17/2026

### Manufacturer Info

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

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

### Kott Inc.





Page 9 of 27



Client: Project: Address:

**GREENPARK** 

Input by: WC ZADORRA ESTATES
OSHAWA ON TRUE COPY

Job Name: CAROL 12-2 STD

5/19/2023

Level: Ground Floor

Project #:

Date:

F3 **AJS 140** 

11 } **1** 

11.875" - PASSED

TRUE COPY OF PERMIT PLANS Nov 16 2023

11 7/8"

6 —	
2	1
Bolse Cascade Entrend Weal Project	
1 SPF 0-2-6	2 SPF 0-2-6
4'9 3	3/4"
4'93	3/4"

### ..Continued from page 1

oomanaoa no	pago i								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Part. Uniform	0-0-0 to 0-1-2		Тор	1 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
6	Part. Uniform	0-0-0 to 0-1-2		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
7	Part. Uniform	0-0-0 to 0-4-6		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
8	Tapered Start	0-0-0		Тор	4 PLF	10 PLF	0 PLF	0 PLF	
	End	0-4-6			4 PLF	10 PLF	0 PLF	0 PLF	
9	Part. Uniform	0-0-0 to 0-4-6		Тор	2 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
10	Part. Uniform	0-0-0 to 0-4-6		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
11	Point	0-1-10		Тор	263 lb	43 lb	25 lb	0 lb	B4
	Bearing Length	0-1-8							



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

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

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

### Handling & Installation

- Handling & Installation

  1. Moist flanges must not be out or drilled

  2. Refer to latest copy of the Lioist product information details for framing details, stifferent ables, web hole chart, bridging details, multi-jay 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 ponding

# Manufacturer Info

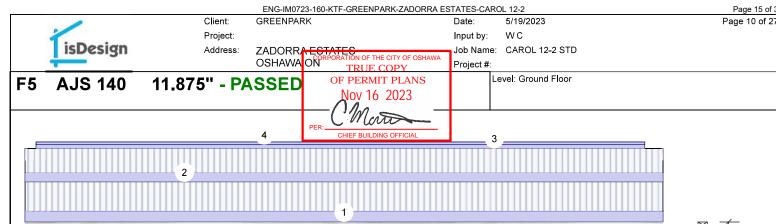
Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702

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

# Kott Inc.

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





14'3 7/8' 14'3 7/8'

Member Information **Unfactored Reactions UNPATTERNED lb (Uplift)** Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: 1 Design Method: LSD 205 Vertical 418 0 1 0 Moisture Condition: Dry Building Code: **NBCC 2015** 2 Vertical 417 204 0 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF Dead: 15 PSF Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.625" Vert 51% 257 / 627 884 L 1.25D+1.5L

2 - SPF 2.375"

Vert

52%

### Analysis Results

. 1 SPF 0-2-10

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3042 ft-lb	7'2 1/16"	5305 ft-lb	0.573 (57%)	1.25D+1.5L	L
Unbraced	3042 ft-lb	7'2 1/16"	5305 ft-lb	0.573 (57%)	1.25D+1.5L	L
Shear	866 lb	1 7/8"	2350 lb	0.369 (37%)	1.25D+1.5L	L
Perm Defl in.	0.091 (L/1845)	7'2 1/16"	0.468 (L/360)	0.195 (20%)	D	Uniform
LL Defl inch	0.184 (L/913)	7'2 1/16"	0.468 (L/360)	0.394 (39%)	L	L
TL Defl inch	0.276 (L/611)	7'2 1/16"	0.702 (L/240)	0.393 (39%)	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 bearings.



255 / 625

880

1.25D+1.5L

2 SPF 0-2-6

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 14-3-14	0-9-8	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 14-3-14	0-8-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-3-0 to 13-10-15		Тор	4 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-3-0 to 13-10-15		Тор	3 PLF	0 PLF	0 PLF	0 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
 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

This design is valid until 4/17/2026

# Manufacturer Info

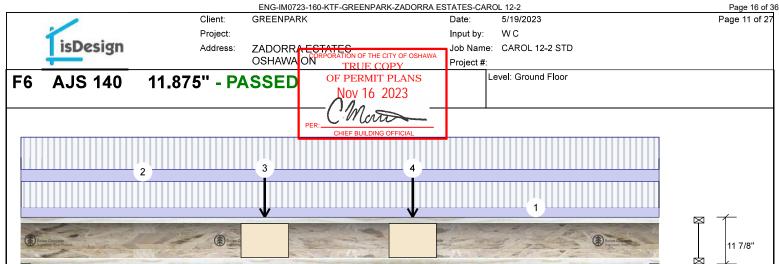
Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702

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

### Kott Inc.







### Member Information Unfactored Reactions UNPATTERNED Ib (Uplift) Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: 1 Design Method: LSD Vertical 433 163 0 1 0 Moisture Condition: Dry Building Code: **NBCC 2015** 2 Vertical 433 163 0 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Not Checked Deck: Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF Dead: 15 PSF Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.375" Vert 51% 204 / 650 854 L 1.25D+1.5L 2 - SPF 2.375" Vert 51% 204 / 649 853 1.25D+1.5L

13'5 3/4' 13'5 3/4'

### Analysis Results

. 1 SPF 0-2-6

Analysis	Actua <b>l</b>	Location	Allowed	Capacity	Comb.	Case
Moment	2918 ft-lb	6'8 7/8"	5305 ft-lb	0.550 (55%)	1.25D+1.5L	L
Unbraced	2918 ft-lb	6'8 7/8"	5305 ft-lb	0.550 (55%)	1.25D+1.5L	L
Shear	838 lb	1 5/8"	2350 lb	0.357 (36%)	1.25D+1.5L	L
Perm Defl in.	0.064 (L/2471)	6'8 7/8"	0.440 (L/360)	0.146 (15%)	D	Uniform
LL Defl inch	0.170 (L/931)	6'8 7/8"	0.440 (L/360)	0.387 (39%)	L	L
TL Defl inch	0.234 (L/676)	6'8 7/8"	0.660 (L/240)	0.355 (35%)	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 5'2 7/16" o.c.



2 SPF 0-2-6

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 13-5-12	0-7-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 13-5-12	0-9-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	5-1-13		Near Face	17 <b>l</b> b	44 lb	0 <b>l</b> b	0 <b>l</b> b	F1
4	Point	8-3-5		Near Face	17 <b>l</b> b	44 lb	0 lb	0 lb	F1

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

This design is valid until 4/17/2026

# Manufacturer Info

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

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

# Kott Inc.







**GREENPARK** 

OSHAWA ON

5/19/2023 Date:

WС Input by:

Job Name: CAROL 12-2 STD

Project #

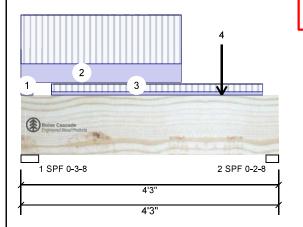
Versa-Lam LVL 2.1E 3100 SP

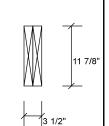
TRUE COPY 1.750" K 11.875"RM2"PIVANPASSED Nov 16 2023

ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Level: Ground Floor





### Member Information **Unfactored Reactions UNPATTERNED lb (Uplift)** Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: 2 Design Method: LSD 308 Vertical 751 0 1 0 Moisture Condition: Dry Building Code: **NBCC 2015** 2 Vertica 635 263 n 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.500" Vert 20% 384 / 1126 1511 L 1.25D+1.5L 1.25D+1.5L

2 - SPF 2.500"

Vert

24%

### Analysis Results

Analysis	Actua <b>l</b>	Location	Allowed	Capacity	Comb.	Case
Moment	1323 ft-lb	2'1 15/16"	35392 ft-lb	0.037 (4%)	1.25D+1.5L	L
Unbraced	1323 ft-lb	2'1 15/16"	35392 ft-lb	0.037 (4%)	1.25D+1.5L	L
Shear	1777 lb	3' 5/8"	13217 <b>l</b> b	0.134 (13%)	1.25D+1.5L	L
Perm Defl in.	0.001 (L/59116)	2'2 1/8"	0.129 (L/360)	0.006 (1%)	D	Uniform
LL Defl inch	0.002 (L/24166)	2'2 1/8"	0.129 (L/360)	0.015 (1%)	L	L
TL Defl inch	0.003 (L/17154)	2'2 1/8"	0.194 (L/240)	0.014 (1%)	D+L	L

# I.MATUEVIC 100528832 NCE OF OF

328 / 952

1280 L

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

### **Design Notes**

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

<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-2-6	1-5-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 2-7-12		Near Face	114 PLF	304 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-6-0 to 3-11-14		Тор	19 PLF	50 PLF	0 PLF	0 PLF	
4	Point	3-3-12		Near Face	148 <b>l</b> b	396 lb	0 lb	0 <b>l</b> b	J3
	Self Weight				12 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

LVL beams must not be cut or drilled
Refer to manufacturer's product information
regarding installation requirements, multi-rity
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

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

Manufacturer Info

www.bc.com CCMC: 12472

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





isDesign

Client: Project: Address: **GREENPARK** 

OSHAWA ON

5/19/2023 Date:

WС Input by: Job Name: CAROL 12-2 STD

Project #

Versa-Lam LVL 2.1E 3100 SP

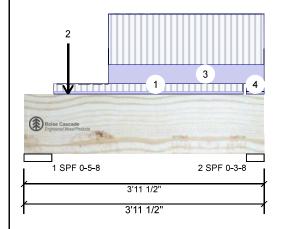
TRUE COPY 1.750" K 11.875"RM2"PIVANPASSED

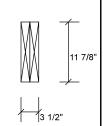
ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Level: Ground Floor







### Member Information **Unfactored Reactions UNPATTERNED lb (Uplift)** Application: Floor (Residential) Wind Type: Brg Direction Live Dead Snow Plies: 2 Design Method: LSD 703 288 Vertical 0 1 0 Moisture Condition: Dry Building Code: **NBCC 2015** 2 Vertical 724 295 n 0 OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: Deflection TL: 240 Deck: Not Checked Importance: Normal - II Vibration: Not Checked General Load **Bearings and Factored Reactions** Floor Live: 40 PSF 15 PSF Dead: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 5.500" Vert 12% 360 / 1054 1414 L 1.25D+1.5L 2 - SPF 3.500" Vert 19% 368 / 1087 1455 L 1.25D+1.5L

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1049 ft-lb	2'1 1/8"	35392 ft-lb	0.030 (3%)	1.25D+1.5L	L
Unbraced	1049 ft-lb	2'1 1/8"	35392 ft-lb	0.030 (3%)	1.25D+1.5L	L
Shear	1941 <b>l</b> b	1'5 3/8"	13217 <b>l</b> b	0.147 (15%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/84878)	2' 7/8"	0.111 (L/360)	0.004 (0%)	D	Uniform
LL Defl inch	0.001 (L/34561)	2' 7/8"	0.111 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.002 (L/24560)	2' 7/8"	0.167 (L/240)	0.010 (1%)	D+L	L

### **Design Notes**

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

ı	/ Lateral siende	erness ratio based on	full section width.								
	<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
	1	Part. Uniform	0-5-15 to 3-7-6		Тор	19 PLF	50 PLF	0 PLF	0 PLF		
	2	Point	0-8-11		Near Face	143 lb	383 lb	0 <b>l</b> b	0 <b>l</b> b	J4	
	3	Part. Uniform	1-4-11 to 3-11-8		Near Face	128 PLF	341 PLF	0 PLF	0 PLF		
	4	Tie-In	3-8-0 to 3-11-8	1-1-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
ı		Self Weight				12 PLF					

### Notes

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

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

Manufacturer Info

I.MATUEVIC 100528832

NCE OF OF

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





Page 1 of 2



Client: Project: Address: **GREENPARK** 

ZADORRA ESTATES

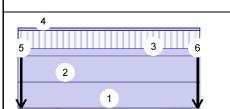
7/21/2023 Input by: WC

Job Name: CAROL 12-2 DC Project #:

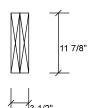
Versa-Lam LVL 2.1E 3100 SP

TRUE COPY 1.750 X 14F875'MIT 21PNS- PASSED Level: Ground Floor

Nov 16 2023







	Memb	er Info	rmation
--	------	---------	---------

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

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	121	494	341	0
2	Vertical	72	448	257	0

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	151 ft-lb	1'6"	23359 ft-lb	0.006 (1%)	1.25D+1.5L	L
Unbraced	151 ft-lb	1'6"	23359 ft-lb	0.006 (1%)	1.25D+1.5L	L
Shear	170 <b>l</b> b	1'2 7/8"	8723 lb	0.019 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/232359)	1'6"	0.088 (L/360)	0.002 (0%)	D	Uniform
LL Defl inch	0.000 (L/886563)	1'6"	0.088 (L/360)	0.000 (0%)	L+0.5S	L
TL Defl inch	0.000 (L/184106)	1'6"	0.131 (L/240)	0.001 (0%)	D+L+0.5S	L

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap. F	React D/L <b>I</b> b	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	12%	618 / 633	1250	L	1.25D+1.5S +L
2 - SPF End Grain	3.000"	Vert	10%	560 / 458	1018	L	1.25D+1.5S +L



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

7 Lateral slenderness ratio based on full section width.



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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
3	Tapered Start	0-0-0		Near Face	11 PLF	28 PLF	0 PLF	0 PLF		
	End	3-0-0			11 PLF	28 PLF	0 PLF	0 PLF		
l										

Continued on page 2...

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

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

# Handling & Installation

- Handling & Installation

  1. UVI beams must not be cut or drilled

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

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

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

This design is valid until 4/17/2026

Manufacturer Info Boise Cascade Wood Products

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



Page 2 of 2



Client: Project: Address:

**GREENPARK** 

OSHAWA ON

ZADORRA ESTATES

CROPPORATION OF THE CITY OF OSHAWA

7/21/2023 Input by:

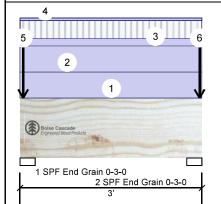
Job Name: CAROL 12-2 DC

Project #:

Versa-Lam LVL 2.1E 3100 SP

TRUE COPY 1.750 X 14F875'MIT 21PNS- PASSED Level: Ground Floor

Nov 16 2023



11 7/8"

•••	.commuca nom pe	age i								
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	4	Part. Uniform	0-0-0 to 3-0-0		Near Face	4 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
	5	Point	0-0-10		Тор	334 lb	79 <b>l</b> b	341 lb	0 <b>l</b> b	Header Column Header Column F1
		Bearing Length	0-3-8							
	6	Point	2-11-9		Тор	288 <b>l</b> b	30 lb	257 lb	0 <b>l</b> b	Header Column Header Column
		Bearing Length	0-3-8							
		Self Weight				12 PLF				



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.

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

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

# Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

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

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





2

Vertica

Page 14 of 27

isDesign

Project: Address:

Client: **GREENPARK** 

ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

Date: 5/19/2023 WС Input by:

Job Name: CAROL 12-2 STD

Project #:

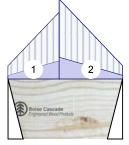
Versa-Lam LVL 2.1E 3100 SP F10

1 750 PX 44 875 AN PAS Nov 16 2023

TRUE COPY

SED

Level: Second Floor



1 Hanger (SUR/L1.81/9 (Min)) 0-3-0 (SUR/L1.81/9 (Min)) 0-3-0 1'10 11/16'

15 PSF

0

n

Wind

0

0

Member Information

1'10 11/16"

Hander

Application: Floor (Residential) Type: Plies: Design Method: LSD Moisture Condition: Dry Building Code: **NBCC 2015** OBC 2012(2020 Update) Deflection LL: 360 Load Sharing: 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 Vertical 13 10 1

13

**Bearings and Factored Reactions** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1 -3.000" Vert 1% 13 / 19 32 L 1.25D+1.5L Hanger 2 -3.000" Vert 1% 13 / 19 32 L 1.25D+1.5L Hanger

PROFESSION

I.MATUEVIC 100528832

10

### Analysis Results

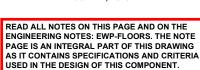
Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	12 ft-lb	11 5/16"	17696 ft-lb	0.001 (0%)	1.25D+1.5L	L
Unbraced	12 ft-lb	11 5/16"	17696 ft-lb	0.001 (0%)	1.25D+1.5L	L
Shear	7 lb	7 13/16"	6608 lb	0.001 (0%)	0.9D+1.5L	L
Perm Defl in.	0.000 (L/3750237)	11 5/16"	0.051 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/2640195)	11 5/16"	0.051 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/1549403)	11 5/16"	0.076 (L/240)	0.000 (0%)	D+L	L

### **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"
- 4 Right Header: DF, Thickness: 3 1/2"
- 5 Girders are designed to be supported on the bottom edge only.

6 Top m	ust be continuously laterally	y braced.					
7 Botton	n must have sheathing atta	ched or be continuou	sly braced.				
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 0-10-2	0-1-4 to 0-6-5	Тор	15 PSF	40 PSF	0 PSF



IULY 24, 2023

<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-10-2	0-1-4 to 0-6-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-10-2 to 1-10-11	0-7-9 to 0-1-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				6 PLF				

Notes

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

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

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

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

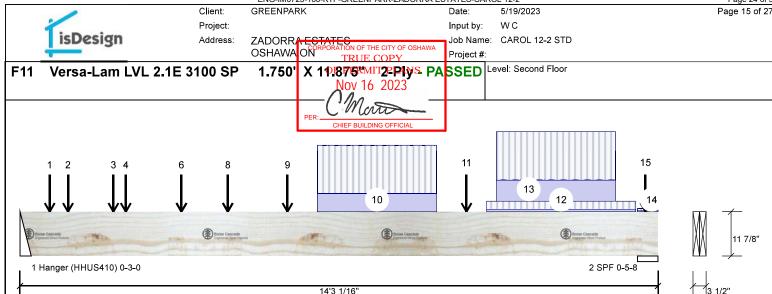
3228 Moodie Dr, Ottawa, Ontario 613-838-2775 / 905-642-4400



This design is valid until 4/17/2026

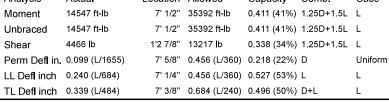
www.bc.com CCMC: 12472

Manufacturer Info



Member Info	rmation				Unfa	actored R	eactio	ns UNP	ATTERNED <b>i</b> i	o (Uplift)	
Туре:	Girder		Application:	Floor (Residential)	Brg	Direction		Live	Dead	Snow	Wind
Plies:	2		Design Method:	LSD	1	Vertical		2085	861	0 (-10)	0
Moisture Condition	on: Dry		Building Code:	NBCC 2015	2	Vertical		2143	922	0 (-3)	0
Deflection LL:	360			OBC 2012(2020 Update)							
Deflection TL:	240		Load Sharing:	No							
Importance:	Normal - II		Deck:	Not Checked							
General Load			Vibration:	Not Checked							
Floor Live:	40 PSF				Bear	rings and	Factor	ed Read	ctions		
Dead:	15 PSF				Bea	aring Lengt	h Dir.	Cap.	React D/L Ib	Total Ld. Case	e Ld. Comb.
					1 -	3.000'	Vert	37%	1076 / 3127	4203 L	1.25D+1.5L
					_ Har	nger					
Analysis Resu	lts				2 -	SPF 5.500'	Vert	37%	1153 / 3215	4368 L	1.25D+1.5L
Analysis A	\ctua <b>l</b>	Location Al	lowed Capac	ity Comb. Case							
Na	4 F 4 7 64 11-	71.4.011.05	2000 ft lb 0 444 /	440/) 4 0ED (4 EL   1	1						

14'3 1/16'



# **Design Notes**

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



PROFESSION

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	Point	0-8-0		Far Face	31 <b>l</b> b	31 lb	0 <b>l</b> b	0 lb	F8
2	Point	1-0-14		Near Face	141 <b>l</b> b	403 lb	0 <b>l</b> b	0 lb	J4
3	Point	2-1-1		Far Face	10 <b>l</b> b	13 lb	0 <b>l</b> b	0 lb	F10
4	Point	2-4-6		Near Face	139 <b>l</b> b	395 lb	0 <b>l</b> b	0 lb	J4

Continued on page 2...

Notes
-------

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

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

### Manufacturer Info

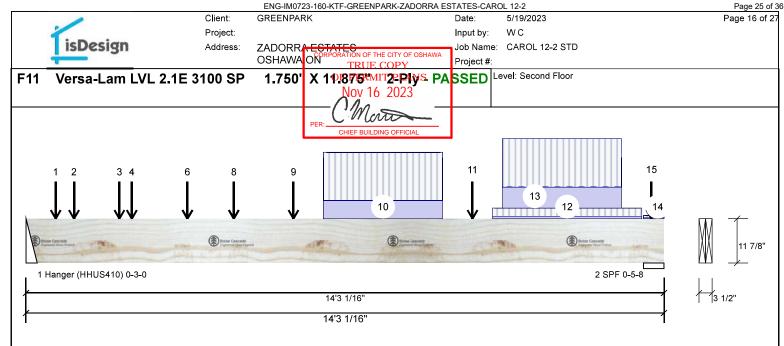
Boise Cascade Wood Products 1111 W. Jefferson St. Boise, ID 83702 (800) 232-0788

www.bc.com CCMC: 12472

### Kott Inc.







Continued from	n page 1								
<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Point	3-7-5		Near Face	118 lb	356 lb	0 <b>l</b> b	0 <b>l</b> b	J9
6	Point	3-7-5		Near Face	0 <b>l</b> b	0 lb	-11 lb	0 <b>l</b> b	J9
7	Point	4-7-12		Near Face	129 lb	365 lb	0 lb	0 <b>l</b> b	J4
8	Point	4-7-12		Near Face	0 <b>l</b> b	0 lb	-2 lb	0 <b>l</b> b	J4
9	Point	5-11-12		Near Face	155 lb	413 <b>l</b> b	0 lb	0 <b>l</b> b	J3
10	Part. Uniform	6-7-12 to 9-3-12		Near Face	111 PLF	297 PLF	0 PLF	0 PLF	
11	Point	9-11-12		Near Face	156 lb	395 lb	0 lb	0 <b>l</b> b	J3
12	Part. Uniform	10-5-2 to 13-9-2		Тор	15 PLF	50 PLF	0 PLF	0 PLF	
13	Part. Uniform	10-7-12 to 13-3-12		Near Face	129 PLF	297 PLF	0 PLF	0 PLF	
14	Tie-In	13-9-9 to 14-3-1	0-4-7	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
15	Point	13-11-12		Near Face	43 lb	100 <b>l</b> b	0 lb	0 lb	J3
	Self Weight				12 PLF				



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.

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

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

# Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

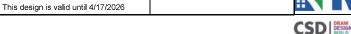
Manufacturer Info

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

www.bc.com CCMC: 12472

Kott Inc.







Project: Address:

Client: **GREENPARK** 

ZADORRA EST/

Date: Input by:

Project #

5/19/2023 WС

Job Name: CAROL 12-2 STD

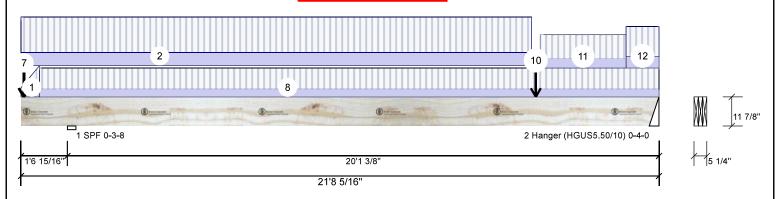
DRATION OF THE CITY OF OSHAWA OSHAWA ON TRUE COPY

Versa-Lam LVL 2.1E 3100 SP

1.750 X 1018755 MIT3PPIVS PASSED

Level: Second Floor





Floor (Residential)

OBC 2012(2020 Update)

**NBCC 2015** 

LSD

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	887	687	112 (-2)	0
2	Vertical	2054	1003	0 (-16)	0

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

Application:

Design Method:

Building Code:

Load Sharing:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-554 ft-lb	1'6 15/16"	35887 ft-lb	0.015 (2%)	1.25D+1.5S +L	L_
Unbraced	-554 ft-lb	1'6 15/16"	34581 ft-lb	0.016 (2%)	1.25D+1.5S +L	L_
Pos Moment	16195 ft-lb	17'6 1/16"	55212 ft-lb	0.293 (29%)	1.25D+1.5L	_L
Unbraced	16195 ft-lb	17'6 1/16"	55212 ft-lb	0.293 (29%)	1.25D+1.5L	_L
Shear	4235 lb	20'4 7/16"	19825 <b>l</b> b	0.214 (21%)	1.25D+1.5L	_L
Perm Defl in.	0.155 (L/1525)	12'4 3/16"	0.657 (L/360)	0.236 (24%)	D	Uniform
LL Defl inch	0.303 (L/780)	12'5 3/4"	0.657 (L/360)	0.462 (46%)	L	_L
TL Defl inch	0.458 (L/516)	12'5 1/4"	0.985 (L/240)	0.465 (47%)	D+L	_L
LL Cant	-0.068 (2L/553)	Lt Cant	0.200 (2L/360)	0.342 (34%)	L	_L
TL Cant	-0.103	Lt Cant	0.300	0.343 (34%)	D+L	_L

Member Information

Moisture Condition: Dry

Deflection LL:

Deflection TL:

3

360

240

Type: Plies:

ı	Analysis	Actual	Location	Allowed	Сарасну	Comb.	Case
	Neg Moment	-554 ft-lb	1'6 15/16"	35887 ft-lb	0.015 (2%)	1.25D+1.5S +L	L_
	Unbraced	-554 ft-lb	1'6 15/16"	34581 ft-lb	0.016 (2%)	1.25D+1.5S +L	L_
	Pos Moment	16195 ft-lb	17'6 1/16"	55212 ft-lb	0.293 (29%)	1.25D+1.5L	_L
	Unbraced	16195 ft-lb	17'6 1/16"	55212 ft-lb	0.293 (29%)	1.25D+1.5L	_L
	Shear	4235 lb	20'4 7/16"	19825 <b>l</b> b	0.214 (21%)	1.25D+1.5L	_L
	Perm Defl in.	0.155 (L/1525)	12'4 3/16"	0.657 (L/360)	0.236 (24%)	D	Uniform
	LL Defl inch	0.303 (L/780)	12'5 3/4"	0.657 (L/360)	0.462 (46%)	L	_L
	TL Defl inch	0.458 (L/516)	12'5 1/4"	0.985 (L/240)	0.465 (47%)	D+L	_L
	LL Cant	-0.068 (2L/553)	Lt Cant	0.200 (2L/360)	0.342 (34%)	L	_L
	TL Cant	-0.103 (2L/368)	Lt Cant	0.300 (2L/240)	0.343 (34%)	D+L	_L

# **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Right Header: DF, Thickness: 3 1/2"
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must be laterally braced at a maximum of 17'6 1/16" o.c.
- 9 Lateral slenderness ratio based on full section width.

# **Bearings and Factored Reactions**

Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	20%	859 / 1442	2300	LL	1.25D+1.5L +S
2 - Hanger	4.000"	Vert	19%	1254 / 3084	4338	_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.

### Notes

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

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

# Handling & Installation

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

Manufacturer Info 6. For flat roofs provide proper drainage to prevent ponding Boise Cascade Wood Products 1111 W. Jefferson St. Boise. ID 83702 (800) 232-0788

www.bc.com CCMC: 12472

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







**GREENPARK** 

Date: 5/19/2023

Input by: WC Job Name: CAROL 12-2 STD

Project #:

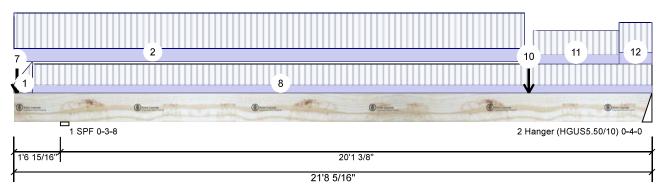
Versa-Lam LVL 2.1E 3100 SP

OSHAWA ON 1.750

ZADORRA ESTATES

CROPPORATION OF THE CITY OF OSHAWA TRUE COPY X 1018715 MIT3 PIVS PASSED Level: Second Floor

Nov 16 2023





ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 0-7-9	0-1-7 to 0-5-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-4-5	0-7-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	0-1-1		Тор	14 <b>l</b> b	0 <b>l</b> b	22 <b>l</b> b	0 <b>l</b> b	Header Column
	Bearing Length	0-5-8							
4	Point	0-1-1		Тор	17 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	Wall Self Weight
	Bearing Length	0-5-8							
5	Point	0-1-1		Тор	8 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	0 <b>l</b> b	Wall Self Weight
	Bearing Length	0-5-8							
6	Point	0-1-4		Тор	31 <b>l</b> b	0 <b>l</b> b	82 <b>l</b> b	0 <b>l</b> b	Header Column
	Bearing Length	0-5-8							
7	Point	0-1-4		Тор	53 lb	0 lb	0 lb	0 <b>l</b> b	Wall Self Weight
	Bearing Length	0-5-8							
8	Tie-In	0-7-9 to 21-8-5	0-4-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
9	Point	17-6-1		Near Face	861 lb	2085 lb	0 <b>l</b> b	0 <b>l</b> b	F11
10	Point	17-6-1		Near Face	0 <b>l</b> b	0 <b>l</b> b	-10 <b>l</b> b	0 <b>l</b> b	F11
11	Tie-In	17-7-13 to 20-6-14	0-5-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
12	Tie-In	20-6-14 to 21-8-5	0-6-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				18 PLF				



JULY 24, 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.

### Notes

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

### Lumber

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

Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

# Manufacturer Info

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

Kott Inc.







**GREENPARK** 

OSHAWA ON

Date: 5/19/2023

WС Input by:

Job Name: CAROL 12-2 STD

Project #:

Versa-Lam LVL 2.1E 3100 SP

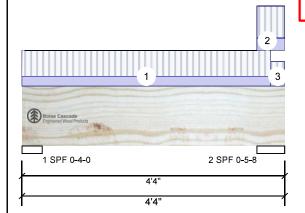
1.750" X 11.875"RM2-PIIINSPASSED Nov 16 2023

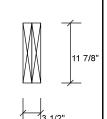
ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

TRUE COPY

Level: Second Floor





Λ	4	en	۱b	er	Ir	١f	OI	rm	ıa	ti	0	n

Туре:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II

General Load 40 PSF Floor Live: 15 PSF Dead:

Application: Floor (Residential)

OBC 2012(2020 Update)

Design Method: LSD Building Code: **NBCC 2015** 

Load Sharing:

Deck: Not Checked Vibration: Not Checked

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	22	33	0	0
2	Vertical	28	37	0	0

# **Bearings and Factored Reactions**

Bearing Len	gth Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF 4.00	0" Vert	1%	41 / 33	74	L	1.25D+1.5L
2 - SPF 5.50	0" Vert	1%	46 / 43	89	L	1.25D+1.5L

### Analysis Results

Analysis	Actua <b>l</b>	Location	Allowed	Capacity	Comb.	Case
Moment	59 ft-lb	2'1 1/4"	32915 ft-lb	0.002 (0%)	1.25D+1.5L	L
Unbraced	59 ft-lb	2'1 1/4"	32915 ft-lb	0.002 (0%)	1.25D+1.5L	L
Shear	34 lb	1'3 7/8"	8591 lb	0.004 (0%)	1.4D	Uniform
Perm Defl in.	0.000 (L/634058)	2'1 1/4"	0.122 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/956795)	2'1 1/4"	0.122 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000 (L/381345)	2'1 1/4"	0.183 (L/240)	0.001 (0%)	D+L	L

### **Design Notes**

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

/ Lateral siende							
<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow
1	Tie-In	0-0-0 to 4-1-4	0-3-2	Тор	15 PSF	40 PSF	0 PSF
2	Tie-In	3-10-8 to 4-4-0	0_3_14	Ton	15 PSF	40 PSF	0 PSF

<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-1-4	0-3-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	3-10-8 to 4-4-0	0-3-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Tie-In	4-1-4 to 4-4-0	0-2-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
	Self Weight				12 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

- 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







**GREENPARK** 

OSHAWA ON

5/19/2023 Date: Input by: ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

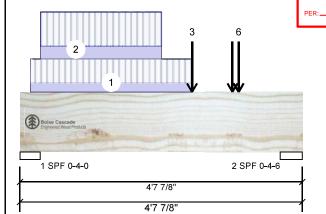
WС Job Name: CAROL 12-2 STD

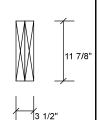
Project #

Versa-Lam LVL 2.1E 3100 SP

TRUE COPY 1.750" K 11.875" RM2 TPIVANPASSED Nov 16 2023

Level: Second Floor





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

### Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
0	

General Load Floor Live: 40 PSF 15 PSF Dead:

Application: Floor (Residential)

> Design Method: LSD Building Code: **NBCC 2015** OBC 2012(2020 Update)

Load Sharing:

Deck: Not Checked Vibration: Not Checked **Unfactored Reactions UNPATTERNED lb (Uplift)** 

**Bearings and Factored Reactions** 

Dir.

Vert

Vert

Bearing Length

1-SPF 4.000"

2 - SPF 4.375"

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	1687	704	0 (-3)	0
2	Vertical	2619	1200	0 (-13)	0

# Analysis Results

Analysis	Actua <b>l</b>	Location	Allowed	Capacity	Comb.	Case
Moment	4402 ft-lb	2'10 1/16"	35392 ft-lb	0.124 (12%)	1.25D+1.5L	L
Unbraced	4402 ft-lb	2'10 1/16"	35392 ft-lb	0.124 (12%)	1.25D+1.5L	L
Shear	6687 lb	3'3 5/8"	13217 <b>l</b> b	0.506 (51%)	1.25D+1.5L	L
Perm Defl in.	0.003 (L/16522)	2'5 3/8"	0.136 (L/360)	0.022 (2%)	D	Uniform
LL Defl inch	0.007 (L/7167)	2'5 3/16"	0.136 (L/360)	0.050 (5%)	L	L
TL Defl inch	0.010 (L/4999)	2'5 1/4"	0.204 (L/240)	0.048 (5%)	D+L	L

# **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 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.



Cap. React D/L lb

880 / 2530

1500 / 3929

40%

58%

Total Ld. Case

3410 L

5429 L

JULY 24, 2023

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments		
1	Part. Uniform	0-2-1 to 2-10-1		Far Face	105 PLF	279 PLF	0 PLF	0 PLF			
2	Part. Uniform	0-4-1 to 2-4-1		Near Face	149 PLF	396 PLF	0 PLF	0 PLF			
3	Point	2-10-1		Near Face	131 <b>l</b> b	350 lb	0 <b>l</b> b	0 lb	J8		
4	Point	3-6-1		Far Face	137 lb	366 lb	0 lb	0 lb	J3		
5	Point	3-7-4		Near Face	1003 lb	2054 lb	0 lb	0 <b> </b> b	F12		
Continued on p	Continued on page 2										

### 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

This design is valid until 4/17/2026

Manufacturer Info

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

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

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





Page 21 of 27



Client: Project: Address: **GREENPARK** 

Date: 5/19/2023

Input by: WC Job Name: CAROL 12-2 STD

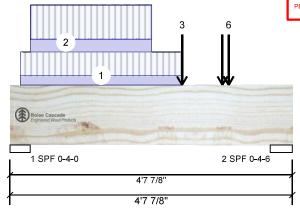
ZADORRA ESTATES Project #:

Versa-Lam LVL 2.1E 3100 SP

TRUE COPY 1.750" K 11.975" RM2" PiyANPASSED

Level: Second Floor

Nov 16 2023



11 7/8'

.Continued from page 1

ID Load Type 6 Point

Location Trib Width 3-7-4

Side Near Face

Dead 0 lb Live Snow 0 lb -16 lb Wind Comments 0 lb F12

Self Weight 12 PLF



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.

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

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

# Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/17/2026

Manufacturer Info

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

www.bc.com CCMC: 12472

Kott Inc.







**GREENPARK** 

OSHAWA ON

5/19/2023

WС Input by: Job Name: CAROL 12-2 STD

Project #:

Versa-Lam LVL 2.1E 3100 SP

1.750" X 11.875"RM2-PIIINSPASSED

Floor (Residential)

OBC 2012(2020 Update)

Case

**NBCC 2015** 

Not Checked

Not Checked

LSD

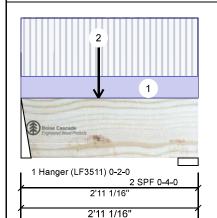
ZADORRA ESTATES

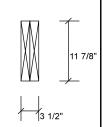
CORPORATION OF THE CITY OF OSHAWA

Level: Second Floor

Nov 16 2023

TRUE COPY





Ld. Comb.

1.25D+1.5L

1.25D+1.5L

### Application: Type: Plies: 2 Design Method: Moisture Condition: Dry Building Code: Deflection LL: 360 Load Sharing:

Deflection TL: 240 Importance: Normal - II General Load

**Member Information** 

Floor Live: 40 PSF 15 PSF Dead:

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

**Bearings and Factored Reactions** 

Dir.

Vert

Vert

Bearing Length

Hanger 2 - SPF 4.000"

2.000"

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	31	31	0	0
2	Vertical	33	33	0	0

Cap. React D/L lb

39 / 47

41 / 50

Total Ld. Case

86 L

91 L

Deck:

Vibration:

Analysis R	esu <b>l</b> ts					
Δnalveis	Actual	Location	Allowed	Canacity	Comb	

,a.y 0.0	, totaai	Loodiion	,o	Cupacity	0011101	Ouou
Moment	60 ft-lb	1'3 3/8"	35392 ft-lb	0.002 (0%)	1.25D+1.5L	L
Unbraced	60 ft-lb	1'3 3/8"	35392 ft-lb	0.002 (0%)	1.25D+1.5L	L
Shear	30 lb	1'1 7/8"	8591 <b>l</b> b	0.003 (0%)	1.4D	Uniform
Perm Defl in.	0.000 (L/1078840)	1'4 1/16"	0.085 (L/360)	0.000 (0%)	D	Uniform
LL Defl inch	0.000 (L/1031343)	1'4"	0.085 (L/360)	0.000 (0%)	L	L
TL Defl inch	0.000	1'4 1/16"	0.127 (L/240)	0.000 (0%)	D+L	L

# PROFESSION I.MATIJEVIC 100528832 VCE OF OF

1%

1%

JULY 24, 2023

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

# **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fill all hanger nailing holes.
- 3 Left Header: DF, Thickness: 3 1/2"

(L/527287)

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

Notes

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

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

# Handling & Installation

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

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





Page 23 of 27



Client: Project: Address: **GREENPARK** 

OSHAWA ON

Date: 5/19/2023 Input by:

WC

Job Name: CAROL 12-2 STD

Project #:

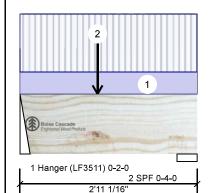
Versa-Lam LVL 2.1E 3100 SP

TRUE COPY 1.750" X 11.875"RM2-PlyNSPASSED Nov 16 2023

ZADORRA ESTATES

CROPPORATION OF THE CITY OF OSHAWA

Level: Second Floor



2'11 1/16'



<b>I</b> D	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 2-11-1	0-5-5	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Point	1-3-6		Near Face	10 <b>l</b> b	13 <b>l</b> b	0 lb	0 <b>l</b> b	F10
	Self Weight				12 PLF				



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.

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

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

# Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

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





Page 24 of 27



Client: Project: Address: **GREENPARK** 

Date: 5/19/2023 Input by: ZADORRA ESTATES

WС

Job Name: CAROL 12-2 STD

Level: Second Floor

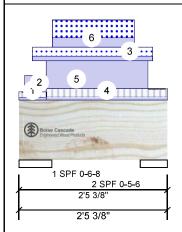
Project #:

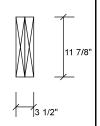
Versa-Lam LVL 2.1E 3100 SP

TRUE COPY 1.750" K 11.875" RM2 PIVANPASSED

Nov 16 2023







Wind

0 0

Туре:	Girder	Application:	Floor (Residential)	Brg Dir	rection
Plies:	2	Design Method:	LSD	1 Ve	rtical
Moisture Condition:	Dry	Building Code:	NBCC 2015	2 Ve	rtical
Deflection LL:	360		OBC 2012(2020 Update)		
Deflection TL:	240	Load Sharing:	No		
Importance:	Normal - II	Deck:	Not Checked		
General Load		Vibration:	Not Checked		
Floor Live:	40 PSF			Bearing	js and
Dead:	15 PSF			Bearing	Lengtl
				1 - SPF	6.500"
Analysis Results				_   2 - SPF	5.375"

1	Vertical	27	141	64	
2	Vertical	28	122	57	

Dead

**Unfactored Reactions UNPATTERNED lb (Uplift)** 

Live

Bearings and Factored Reactions									
Bearing	Length	Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.		
1 - SPF	6.500"	Vert	2%	176 / 104	280	L	1.25D+1.5L +S		
2 - SPF	5.375"	Vert	3%	153 / 99	251	L	1.25D+1.5L		

# A -- - I. . - : -

Member Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	98 ft-lb	1'3 3/16"	31145 ft-lb	0.003 (0%)	1.25D+1.5S +L	L
Unbraced	98 ft-lb	1'3 3/16"	31145 ft-lb	0.003 (0%)	1.25D+1.5S +L	L
Shear	68 lb	1'6 3/8"	11631 <b>l</b> b	0.006 (1%)	1.25D+1.5S +L	L
Perm Defl in.	0.000 (L/615494)	1'3 3/16"	0.053 (L/360)	0.001 (0%)	D	Uniform
LL Defl inch	0.000 (L/985102)	1'3 3/16"	0.053 (L/360)	0.000 (0%)	S+0.5L	L
TL Defl inch	0.000 (L/378811)	1'3 3/16"	0.079 (L/240)	0.001 (0%)	D+S+0.5L	L

### **Design Notes**

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



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

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

This design is valid until 4/17/2026

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





Page 25 of 27



Client: Project: Address: **GREENPARK** 

Date: 5/19/2023

Input by: WC

Job Name: CAROL 12-2 STD

Project #:

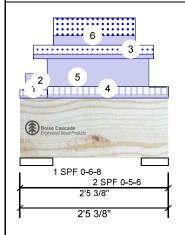
Versa-Lam LVL 2.1E 3100 SP

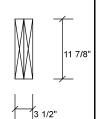
TRUE COPY 1.750" K 11.975" RM2" PiyANPASSED

ZADORRA ESTATES
OSHAWA ON TRUE COPY

Level: Second Floor







ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments	
1	Tie-In	0-0-0 to 0-5-6	0-5-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
2	Part. Uniform	0-1-2 to 0-5-6		Тор	47 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
3	Part. Uniform	0-2-11 to 2-2-7		Тор	13 PLF	0 PLF	26 PLF	0 PLF		
4	Tie-In	0-5-6 to 2-5-6	0-7-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
5	Part. Uniform	0-5-6 to 2-1-8		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
6	Part. Uniform	0-6-10 to 1-10-13		Тор	27 PLF	0 PLF	51 PLF	0 PLF		
	Self Weight				12 PLF					



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.

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

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

# Handling & Installation

Handling & Installation

1. IVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

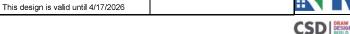
Manufacturer Info

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

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

Kott Inc.







**GREENPARK** 

OSHAWA ON

5/19/2023 WC Input by: ZADORRA ESTATES

CORPORATION OF THE CITY OF OSHAWA

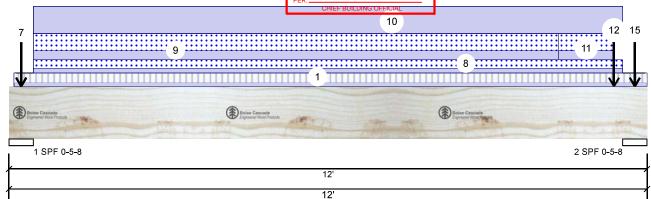
Job Name: CAROL 12-2 STD

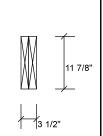
Project #:

Versa-Lam LVL 2.1E 3100 SP

TRUE COPY X 119875\*\*RM2-PIIINSPASSED

Level: Second Floor





### Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
General Load	

Floor Live: 40 PSF 15 PSF

### Application: Floor (Residential)

Design Method:	LSD
Building Code:	NBCC 2015

OBC 2012(2020 Update) Load Sharing: No

Not Checked Deck:

Vibration: Not Checked

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

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	170	943	583	0
2	Vertical	173	1403	1450	0

# **Bearings and Factored Reactions**

Bearing Ler	ngth Dir.	Cap.	React D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF 5.5	01" Vert	19%	1178 / 838	2017	L	1.25D+1.5L +S
2 - SPF 5.5	00" Vert	35%	1754 / 2349	4103	L	1.25D+1.5S +I

### Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4891 ft-lb	6'1 7/16"	31145 ft-lb	0.157 (16%)	1.25D+1.5L +S	L
Unbraced	4891 ft-lb	6'1 7/16"	31145 ft-lb	0.157 (16%)	1.25D+1.5L +S	L
Shear	1633 lb	10'6 5/8"	11631 <b>l</b> b	0.140 (14%)	1.25D+1.5L +S	L
Perm Defl in	. 0.052 (L/2599)	6' 5/16"	0.374 (L/360)	0.138 (14%)	D	Uniform
LL Defl inch	0.035 (L/3825)	6' 7/8"	0.374 (L/360)	0.094 (9%)	S+0.5L	L
TL Defl inch	0.087 (L/1548)	6' 9/16"	0.560 (L/240)	0.155 (16%)	D+S+0.5L	L

### **Design Notes**

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 3 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Multiple plies must be fastened together as per manufacturer's details.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be continuously laterally braced.
- 8 Bottom must be laterally braced at bearings.
- 9 Lateral slenderness ratio based on full section width.



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

Notes

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

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

# Handling & Installation

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

This design is valid until 4/17/2026

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





Part. Uniform 0-5-8 to 11-6-8 80 PLF 0 PLF 0 PLF 0 PLF Wall Self Weight 10 Top 27 PLF 11 Part. Uniform 10-4-1 to 11-4-9 Тор 0 PLF 51 PLF 0 PLF 12 Point 11-4-9 599 lb 0 lb 1053 lb 0 lb F16 Top Bearing Length 0-5-8 13 Point 11-9-4 Тор 6 lb 0 lb 0 lb 0 lb Wall Self Weight Bearing Length 0-5-8 Point 13 lb Wall Self Weight 14 11-9-4 Top 0 lb 0 lb 0 lb Bearing Length 0-5-8 0 lb Wall Self Weig 15 Point 11-9-4 Top Bearing Length 0-5-8 Self Weight 12 PLF

> 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.



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

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

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

Manufacturer Info

www.bc.com CCMC: 12472

# Kott Inc.

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



