

Client:

Project: Address: Ben Stout Real Estate

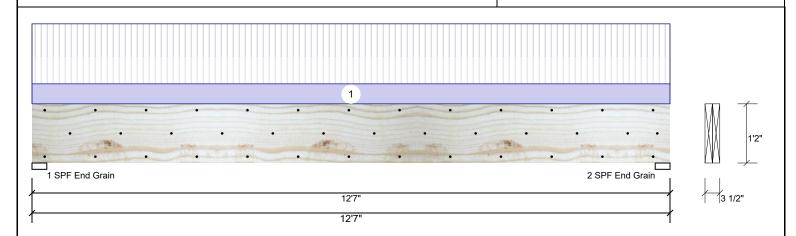
Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

Page 1 of 12

1.750" X 14.000" **Kerto-S LVL** 2-Ply - PASSED BM₁

Level: Level



Member Information										
Туре:	Girder									
Plies:	2									
Moisture Condition:	Dry									
Deflection LL:	480									
Deflection TL:	360									
Importance:	Normal									
Temperature:	Temp <= 100°F									

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Wind Brg Live Dead Snow Const 4568 1591 0 0 0 1 2 4568 1591 0 0 0

Analysis Results Comb. Analysis Actual Location Allowed Case Capacity 6'3 1/2" 26999 ft-lb Moment 17989 ft-lb 0.666 (67%) D+L Unbraced 17989 ft-lb 6'3 1/2" 18055 ft-lb 0.996 L (100%)Shear 4792 lb 11'2 1/4" 10453 lb 0.458 (46%) D+L L LL Defl inch 0.252 (L/578) 6'3 1/2" 0.303 (L/480) 0.830 (83%) L 1 TL Defl inch 0.340 (L/428) 6'3 1/2" 0.404 (L/360) 0.840 (84%) D+L

Bearings			
Bearing Length	Cap. React D/L	lb Total Ld. Case	Ld. Comb.
1 - SPF 3.500" End Grain	58% 1591 / 45	68 6159 L	D+L
2 - SPF 3.500" End Grain	58% 1591 / 45	68 6159 L	D+L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6"
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 5'4 1/2" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width

Self Weight

1 Lateral Sieria	7 Eateral sichaemess ratio basea on single pry watti.									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	242 PLF	726 PLF	0 PLF	0 PLF	0 PLF	F1

11 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-ply fastening details, beam strength values, and code
- 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

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



Client: Ben Stout Real Estate

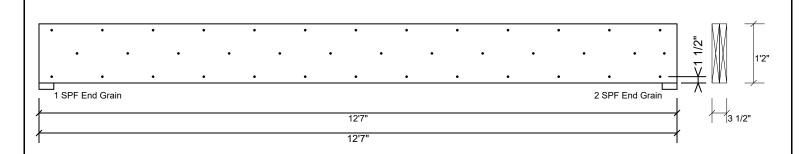
Project: Address: Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

Page 2 of 12

1.750" X 14.000" **Kerto-S LVL** 2-Ply - PASSED BM₁

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

rasterrain pries asing s	TOWS OF TOO BOX Hairs (.TEOXS) at
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

NOtes
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Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

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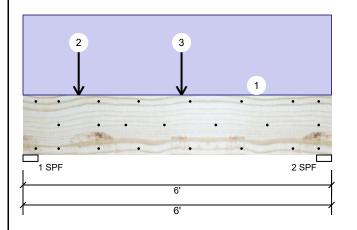
Project: Address: Ben Stout Real Estate

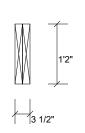
Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

1.750" X 14.000" 2-Ply - PASSED **Kerto-S LVL** BM3

Level: Level





Page 3 of 12

Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 360 Importance: Normal Temp <= 100°F Temperature:

Application: Floor Design Method: ASD

> Load Sharing: No

Deck:

Building Code:

Not Checked

IBC/IRC 2015

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	678	709	0	0	0
2	189	546	0	0	0

Bearings

Bearing Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.500"	27%	709 / 678	1387	L	D+L
2 - SPF 3.500"	14%	546 / 189	734	L	D+L

Analysis Results

Analysis Actual Location Allowed Capacity Comb. Cas Moment 1305 ft-lb 2'8 7/16" 26999 ft-lb 0.048 (5%) D+L L Unbraced 1305 ft-lb 2'8 7/16" 17623 ft-lb 0.074 (7%) D+L L Shear 1162 lb 1'4 3/4" 10453 lb 0.111 (11%) D+L L LL Defl inch 0.003 (L/21799) 2'7 3/8" 0.139 (L/480) 0.020 (2%) L L TL Defl inch 0.008 (L/8727) 2'10 1/16" 0.185 (L/360) 0.040 (4%) D+L L							
Unbraced 1305 ft-lb 2'8 7/16" 17623 ft-lb 0.074 (7%) D+L L Shear 1162 lb 1'4 3/4" 10453 lb 0.111 (11%) D+L L LL Defl inch (L/21799) 0.003 (L/2480) 0.020 (2%) L L	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Shear 1162 lb 1'4 3/4" 10453 lb 0.111 (11%) D+L L LL Defl inch (L/21799) 0.003 (L/2480) 0.020 (2%) L L	Moment	1305 ft-lb	2'8 7/16"	26999 ft-lb	0.048 (5%)	D+L	L
LL Defl inch 0.003 (L/21799) 2'7 3/8" 0.139 (L/480) 0.020 (2%) L L	Unbraced	1305 ft-lb	2'8 7/16"	17623 ft-lb	0.074 (7%)	D+L	L
(L/21799)	Shear	1162 lb	1'4 3/4"	10453 lb	0.111 (11%)	D+L	L
TL Defl inch 0.008 (L/8727) 2'10 1/16" 0.185 (L/360) 0.040 (4%) D+L L	LL Defl inch		2'7 3/8"	0.139 (L/480)	0.020 (2%)	L	L
	TL Defl inch	0.008 (L/8727)	2'10 1/16"	0.185 (L/360)	0.040 (4%)	D+L	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- es ratio hased on single ply width

o Lateral sienderness ratio based on single pry width.											
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Тор	150 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above	
2	Point	1-1-0		Far Face	238 lb	714 lb	0 lb	0 lb	0 lb	F2A	
3	Point	3-1-0		Far Face	51 lb	153 lb	0 lb	0 lb	0 lb	F7	
	Self Weight				11 PLF						

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

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Client:

Project: Address: Ben Stout Real Estate

Date: 1/7/2021 Input by:

David Landry Job Name: Lot 31 Forest Ridge J1220-5672

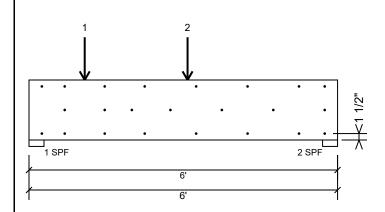
Kerto-S LVL BM3

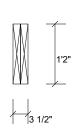
1.750" X 14.000"

2-Ply - PASSED

Level: Level

Project #:





Page 4 of 12

Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Maximum end distance not to exceed 6"

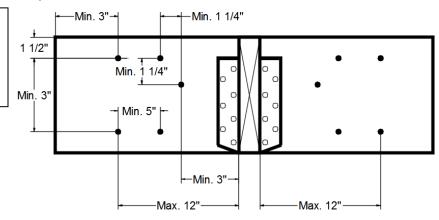
maximum cria distance not to exceed t								
Capacity	0.0 %	٦						
Load	0.0 PLF							
Yield Limit per Foot	245.6 PLF							
Yield Limit per Fastener	81.9 lb.							
Yield Mode	IV							
Edge Distance	1 1/2"							
Min. End Distance	3"							
Load Combination								
Duration Factor	1.00							

Concentrated Load

Fasten at concentrated side load at 1-1-0 with a minimum of (6) - 10d Box nails (.128x3") in the pattern shown.

pattern snown.		
Capacity	96.9 %	
Load	476.0lb.	
Total Yield Limit	491.0 lb.	
Cg	0.9998	
Yield Limit per Fastener	81.9 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Min/Max fastener distances for Concentrated Side Loads



Notes

Notes

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 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
- For flat roofs provide proper drainage to prevent ponding

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This design is valid until 2/26/2023 CSD DESIGN

Manufacturer Info

Client: Project: Address:

Ben Stout Real Estate

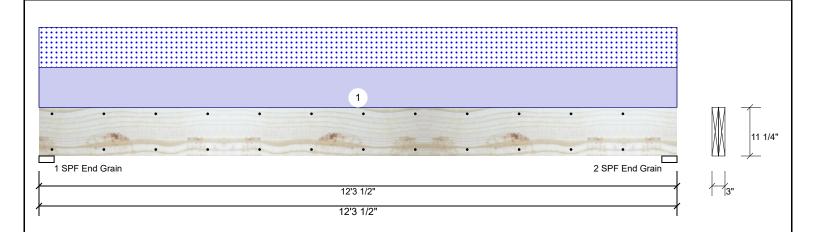
Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

Page 5 of 12

2.000" X 12.000" 2-Ply - PASSED S-P-F #2

Level: Level



Member Information							Reactions UNPATTERNED lb (Uplift)						
Type:	Girder		Applica	tion: F	loor		Brg	Live	Dea	d Snow	1	Wind	Const
Plies:	2		Design	Method: A	SD		1	0	79	9 799		0	0
Moisture Con	dition: Dry		Building	g Code: IE	BC/IRC 2015	j	2	0	79	9 799		0	0
Deflection LL	480		Load S	haring: N	lo								
Deflection TL	360		Deck:	N	lot Checked								
Importance:	Normal												
Temperature:	Temp <=	100°F					Bearing	S					
							Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF End	3.500"	36%	799 / 799	1598	L	D+S
Analysis Re	sults						Grain						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	2 - SPF	3.500"	36%	799 / 799	1598	L	D+S
Moment	4551 ft-lb	6'1 3/4"	5306 ft-lb	0.858 (86%	b) D+S	L	End Grain						
Unbraced	4551 ft-lb	6'1 3/4"	4558 ft-lb	0.998	D+S	L							

L

L

Design Notes

Shear

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".

1'2" 3493 lb

6'1 3/4" 0.296 (L/480) 0.390 (39%) S

6'1 3/4" 0.394 (L/360) 0.580 (58%) D+S

(100%)

0.371 (37%) D+S

- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 6'1 1/2" o.c.
- 6 Bottom braced at bearings.

1295 lb

LL Defl inch 0.115 (L/1234)

TL Defl inch 0.230 (L/617)

7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	130 PLF	0 PLF	130 PLF	0 PLF	0 PLF	D1

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CSD DESIGN

Client: Ben Stout Real Estate Date: 1/7/2021 Page 6 of 12 Project: Input by: David Landry isDesign Address: Job Name: Lot 31 Forest Ridge Project #: J1220-5672 Level: Level 2.000" X 12.000" 2-Ply - PASSED S-P-F #2 1 SPF End Grain 2 SPF End Grain 12'3 1/2" 12'3 1/2" Multi-Ply Analysis Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6" Capacity 0.0 PLF Load 157.4 PLF Yield Limit per Foot Yield Limit per Fastener 78.7 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3"

Load Combination Duration Factor 1.00

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Client:

Project: Address: Ben Stout Real Estate

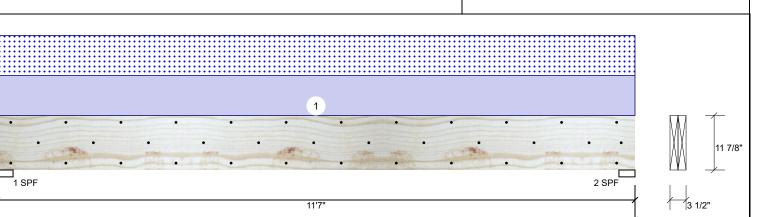
Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

evel: Level

Page 7 of 12

1.750" X 11.875" 2-Ply - PASSED **Kerto-S LVL** BM₅



Member Information Reactions UNPATTERNED Ib (Uplift) Application: Brg Live Wind Const Type: Floor Dead Snow Plies: 2 Design Method: ASD 0 1559 1506 0 0 1 Moisture Condition: Dry **Building Code: IBC/IRC 2015** 2 0 1559 1506 0 0 Deflection LL: 480 Load Sharing: No Deflection TL: 360 Deck: Not Checked Importance: Normal Temp <= 100°F Temperature: **Bearings** Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.500" D+S 1559 / 1506 3065 L 2 - SPF 3.500" 59% 1559 / 1506 3065 L D+S

11'7'

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8188 ft-lb	5'9 1/2"	22897 ft-lb	0.358 (36%)	D+S	L
Unbraced	8188 ft-lb	5'9 1/2"	8589 ft-lb	0.953 (95%)	D+S	L
Shear	2935 lb	1'2 5/8"	10197 lb	0.288 (29%)	D+S	L
LL Defl inch	0.103 (L/1298)	5'9 1/2"	0.278 (L/480)	0.370 (37%)	S	L
TL Defl inch	0.209 (L/637)	5'9 1/2"	0.371 (L/360)	0.560 (56%)	D+S	L

Design Notes

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Far Face	260 PLF	0 PLF	260 PLF	0 PLF	0 PLF	A2
	Self Weight				9 PLF					

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

Handling & Installation

- 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

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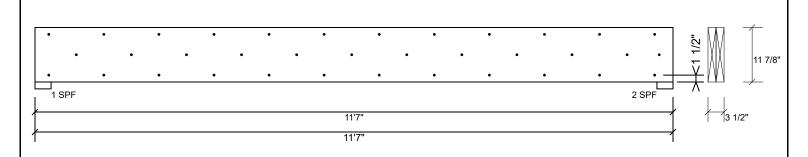
Page 8 of 12

Kerto-S LVL BM5

1.750" X 11.875"

2-Ply - PASSED

evel: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

		`	,
Capacity	92.1 %		
Load	260.0 PLF		
Yield Limit per Foot	282.4 PLF		
Yield Limit per Fastener	94.1 lb.		
Yield Mode	IV		
Edge Distance	1 1/2"		
Min. End Distance	3"		
Load Combination	D+S		
Duration Factor	1.15		

Notes

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 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

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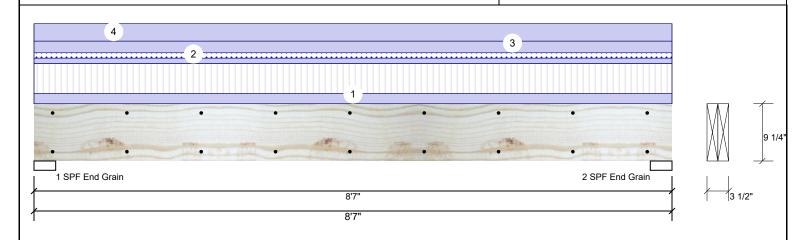
Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

Page 9 of 12

1.750" X 9.250" Kerto-S LVL 2-Ply - PASSED BM6

Level: Level



Member Information Reactions UNPATTERNED Ib (Uplift) Application: Brg Type: Floor Live Dead Snow Plies: 2 Design Method: ASD 1330 2005 240 1 Moisture Condition: Dry **Building Code: IBC/IRC 2015** 2 1330 2005 240 Deflection LL: 480 Load Sharing: No Deflection TL: 360 Deck: Not Checked Importance: Normal Temperature: Temp <= 100°F **Bearings** Bearing Length Cap. React D/L lb 1-SPF 3.500" 2005 / 1330

Ana	lysis	Results	ò
-----	-------	---------	---

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6413 ft-lb	4'3 1/2"	12542 ft-lb	0.511 (51%)	D+L	L
Unbraced	6413 ft-lb	4'3 1/2"	8468 ft-lb	0.757 (76%)	D+L	L
Shear	2558 lb	1'	6907 lb	0.370 (37%)	D+L	L
LL Defl inch	0.075 (L/1301)	4'3 9/16"	0.203 (L/480)	0.370 (37%)	L	L
TL Defl inch	0.188 (L/519)	4'3 9/16"	0.271 (L/360)	0.690 (69%)	D+L	L

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.

7 Lateral	slenderness ratio based on	single ply width.								
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	104 PLF	310 PLF	0 PLF	0 PLF	0 PLF	F1
2	Uniform			Тор	56 PLF	0 PLF	56 PLF	0 PLF	0 PLF	M1
3	Uniform			Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
4	Uniform			Тор	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1GE
	Self Weight				7 PLF					

End Grain 2 - SPF 3.500"

End Grain

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Handling & Installation

- 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

This design is valid until 2/26/2023

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Wind

Total Ld. Case

3335 L

3335 L

2005 / 1330

0

0

Const

0

0

Ld. Comb.

D+L

D+L

Client: Ben Stout Real Estate

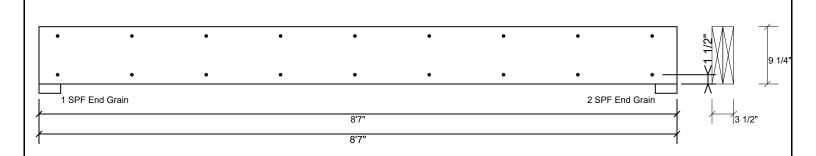
Project: Address: Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge Project #: J1220-5672

Page 10 of 12

1.750" X 9.250" **Kerto-S LVL** BM6

Level: Level 2-Ply - PASSED



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	163.7 PLF	
Yield Limit per Fastener	81.9 lb.	
Yield Mode	IV	
Edge Distance	1 1/2"	
Min. End Distance	3"	
Load Combination		
Duration Factor	1.00	

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

- L. UVL 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
- Danaged Beams must not be used
 Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS





Client:

Project: Address: Ben Stout Real Estate

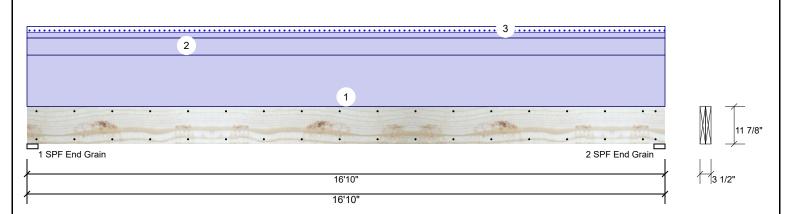
Date: 1/7/2021

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Page 11 of 12

1.750" X 11.875" 2-Ply - PASSED **Kerto-S LVL GDH**

Level: Level



Member Infor	mation						Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder		Application	n: F	loor		Brg	Live	Dead	d Snow	V	Vind	Const
Plies:	2		Design M	ethod: A	SD		1	0	226	6 168		0	0
Moisture Conditio	n: Dry		Building (Code: IE	3C/IRC 2015		2	0	226	6 168		0	0
Deflection LL:	480		Load Sha	ring: N	lo								
Deflection TL:	360		Deck:	N	lot Checked								
Importance:	Normal												
Temperature:	Temp <= 100)°F											
							Bearing	s					
							Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF End	3.500"	23%	2266 / 168	2434	L	D+S
Analysis Resul	ts						Grain						
Analysis A	tual	Location	Allowed	Capacity	Comb.	Case	2-SPF	3.500"	23%	2266 / 168	2434	L	D+S
Moment 90	24 ft-lb	8'5"	17919 ft-lb	0.504 (50%) D	Uniform	End Grain						
Unbraced 96	94 ft-lh	8'5"	9704 ft-lh	0 999	D+S	1							

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9024 ft-lb	8'5"	17919 ft-lb	0.504 (50%)	D	Uniform
Unbraced	9694 ft-lb	8'5"	9704 ft-lb	0.999 (100%)	D+S	L
Shear	1938 lb	15'7 3/8"	7980 lb	0.243 (24%)	D	Uniform
LL Defl inch	0.035 (L/5617)	8'5 1/16"	0.409 (L/480)	0.090 (9%)	S	L
TL Defl inch	0.506 (L/388)	8'5 1/16"	0.546 (L/360)	0.930 (93%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 9'6 3/4" o.c.
- 6 Bottom braced at bearings.

/ Lateral siende	erness rado based on	single ply width.									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Тор	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE	
2	Uniform			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above	
3	Tie-In	0-0-0 to 16-10-0	1-0-0	Тор	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load	
	Self Weight				9 PLF						

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

Handling & Installation

- Informing & Installation

 I. VIL 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

 Design assumes top edge is laterally restrained is provide lateral support at bearing points to avoid lateral displacement and rotation
- For flat roofs provide proper drainage to prevent ponding

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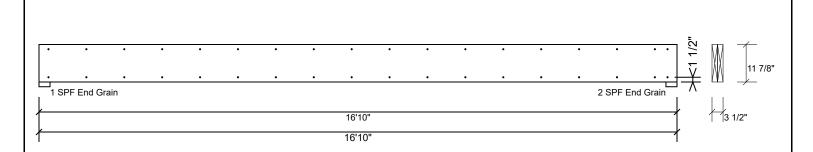
Project: Address: Date: 1/7/2021

Input by: David Landry Job Name: Lot 31 Forest Ridge J1220-5672

Page 12 of 12

Project #: 2-Ply - PASSED **Kerto-S LVL** 1.750" X 11.875" **GDH**

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c., Maximum end distance not to exceed 6"

1 3		•	,
Capacity	0.0 %		
Load	0.0 PLF		
Yield Limit per Foot	163.7 PLF		
Yield Limit per Fastener	81.9 lb.		
Yield Mode	IV		
Edge Distance	1 1/2"		
Min. End Distance	3"		
Load Combination			
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Notes

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

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