

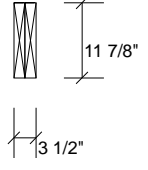
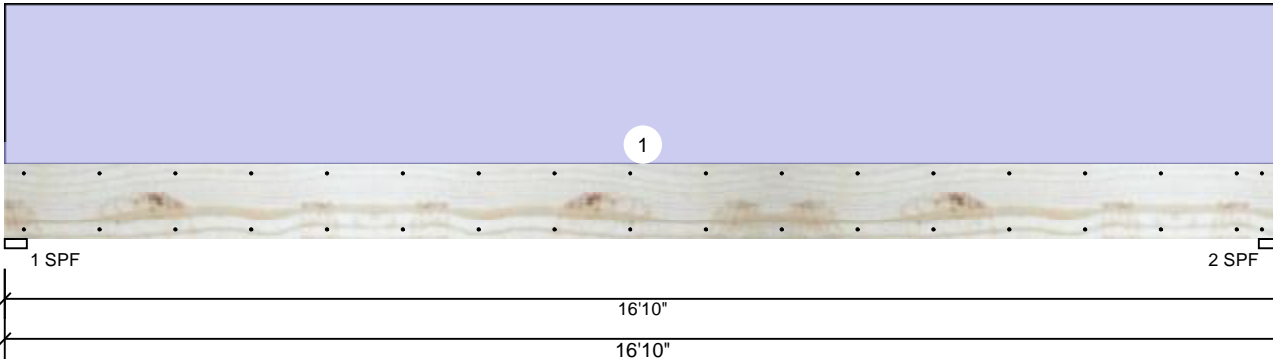


Client: Wellons Realty
 Project:
 Address:

Date: 8/30/2018
 Designer: Curtis Quick
 Job Name: The Pamlico Beams
 Project #:

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

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	2182	0	0	0
2	0	2182	0	0	0

Bearings

Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
1 - SPF	3.500"	42%	2182 Uniform	D
2 - SPF	3.500"	42%	2182 Uniform	D

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8689 ft-lb	8'5"	17919 ft-lb	0.485 (48%)	D	Uniform
Unbraced	8689 ft-lb	8'5"	8700 ft-lb	0.999 (100%)	D	Uniform
Shear	1866 lb	15'7 3/8"	7980 lb	0.234 (23%)	D	Uniform
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.453 (L/433)	8'5 1/16"	0.546 (L/360)	0.830 (83%)	D	Uniform

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 10'9" o.c.
- 6 Bottom unbraced.
- 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	250 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				9 PLF					

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

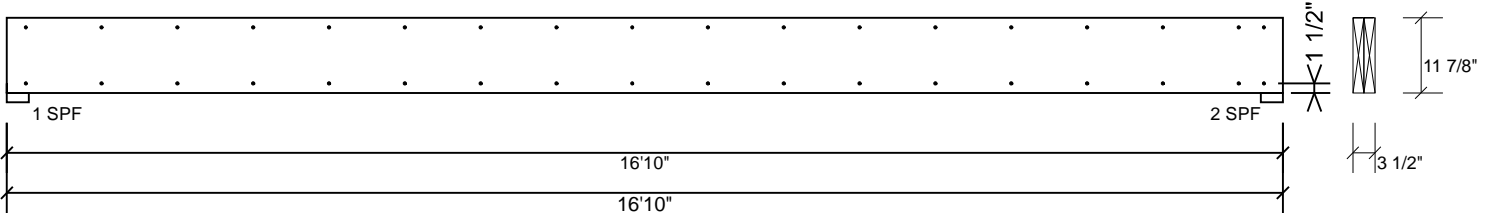
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

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"

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"

Notes

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

Lumber

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

chemicals

Handling & Installation

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6. For flat roofs provide proper drainage to prevent ponding

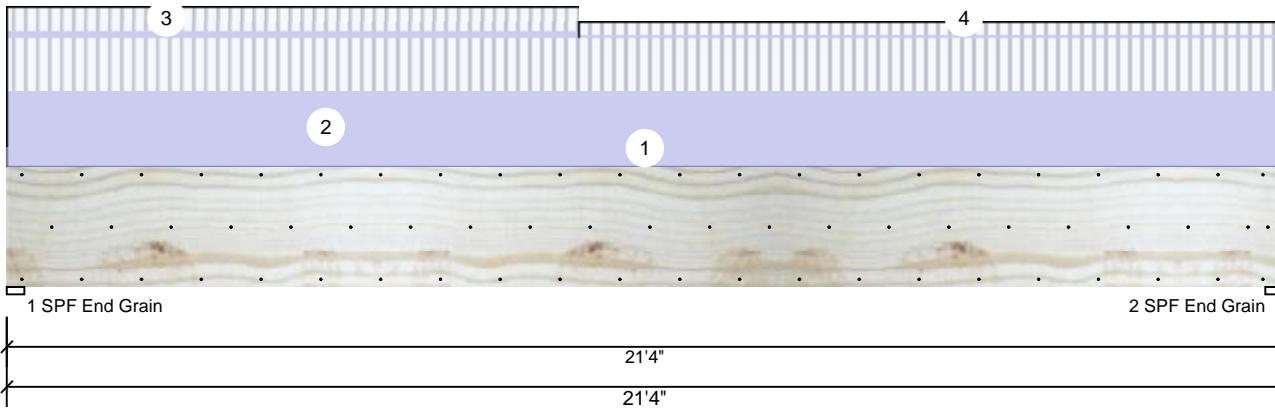
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BM1 Kerto-S LVL 1.750" X 24.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	4495	5209	0	0	0
2	4161	5096	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	91%	5209 / 4495	9704	L	D+L	
2 - SPF End Grain	3.500"	87%	5096 / 4161	9257	L	D+L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	48305 ft-lb	10'5 9/16"	73185 ft-lb	0.660 (66%)	D+L	L
Unbraced	48305 ft-lb	10'5 9/16"	48512 ft-lb	0.996 (100%)	D+L	L
Shear	7630 lb	2'2 5/8"	17920 lb	0.426 (43%)	D+L	L
LL Defl inch	0.245 (L/1024)	10'6 7/8"	0.522 (L/480)	0.470 (47%)	L	L
TL Defl inch	0.538 (L/466)	10'7 3/8"	0.697 (L/360)	0.770 (77%)	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 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 3'5 1/4" o.c.
- 6 Bottom unbraced.
- 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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	313 PLF	313 PLF	0 PLF	0 PLF	0 PLF	"B" Trusses
3	Part. Uniform	0-0-0 to 9-6-8		Top	43 PLF	127 PLF	0 PLF	0 PLF	0 PLF	F08
4	Part. Uniform	9-6-8 to 21-4-0		Top	22 PLF	65 PLF	0 PLF	0 PLF	0 PLF	F03
	Self Weight				19 PLF					

Notes

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Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

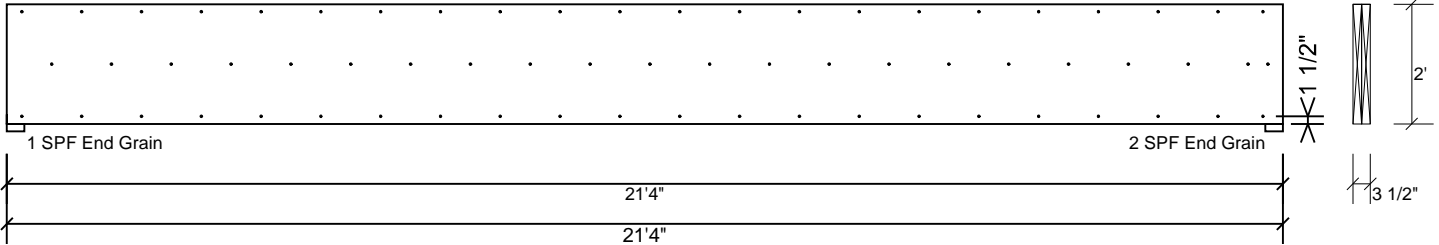
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BM1 Kerto-S LVL 1.750" X 24.000" 2-Ply - PASSED

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"

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"

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

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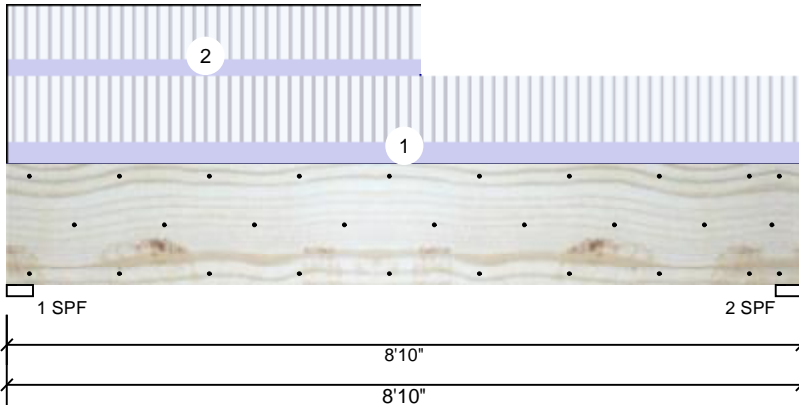



Client: Wellons Realty
 Project:
 Address:

Date: 8/30/2018
 Designer: Curtis Quick
 Job Name: The Pamlico Beams
 Project #:

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	2263	809	0	0	0
2	1687	617	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	59%	809 / 2263	3073	L	D+L
2 - SPF	3.500"	44%	617 / 1687	2304	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5489 ft-lb	4'	34565 ft-lb	0.159 (16%)	D+L	L
Unbraced	5489 ft-lb	4'	14061 ft-lb	0.390 (39%)	D+L	L
Shear	1880 lb	1'6 5/8"	11947 lb	0.157 (16%)	D+L	L
LL Defl inch	0.029 (L/3433)	4'2 3/4"	0.210 (L/480)	0.140 (14%)	L	L
TL Defl inch	0.040 (L/2523)	4'2 3/4"	0.280 (L/360)	0.140 (14%)	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 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top unbraced.
- 6 Bottom unbraced.
- 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	106 PLF	318 PLF	0 PLF	0 PLF	0 PLF	F05
2	Part. Uniform	0-0-0 to 4-7-0		Top	83 PLF	249 PLF	0 PLF	0 PLF	0 PLF	F07
	Self Weight				12 PLF					

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

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

6. For flat roofs provide proper drainage to prevent ponding

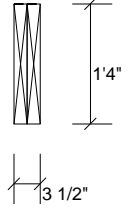
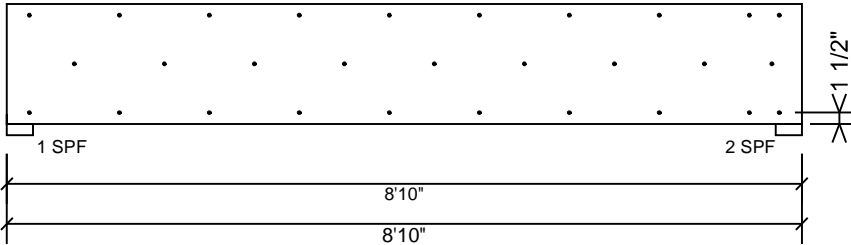
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BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

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"

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"

Notes

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Lumber

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

chemicals

Handling & Installation

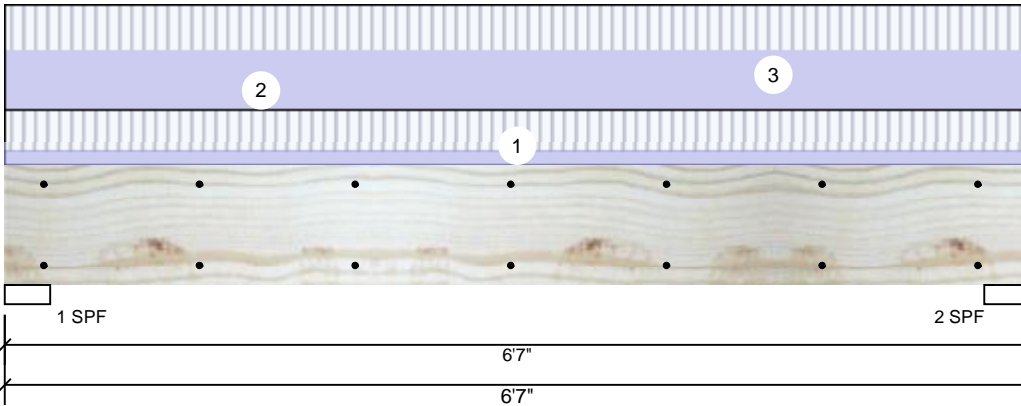
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED Level: Level

Member Information

Type:	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 2012
Load Sharing:	No
Deck:	Not Checked

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	2159	1887	0	0	0
2	2159	1887	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	78%	1887 / 2159	4046	L	D+L
2 - SPF	3.500"	78%	1887 / 2159	4046	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5764 ft-lb	3' 3 1/2"	12542 ft-lb	0.460 (46%)	D+L	L
Unbraced	5764 ft-lb	3' 3 1/2"	9934 ft-lb	0.580 (58%)	D+L	L
Shear	2817 lb	1'	6907 lb	0.408 (41%)	D+L	L
LL Defl inch	0.056 (L/1314)	3' 3 1/2"	0.153 (L/480)	0.370 (37%)	L	L
TL Defl inch	0.105 (L/701)	3' 3 1/2"	0.204 (L/360)	0.510 (51%)	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 unbraced.
- 6 Bottom unbraced.
- 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	106 PLF	316 PLF	0 PLF	0 PLF	0 PLF	F05
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Uniform			Top	340 PLF	340 PLF	0 PLF	0 PLF	0 PLF	"A" Trusses
	Self Weight				7 PLF					

Notes

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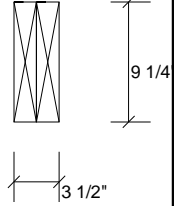
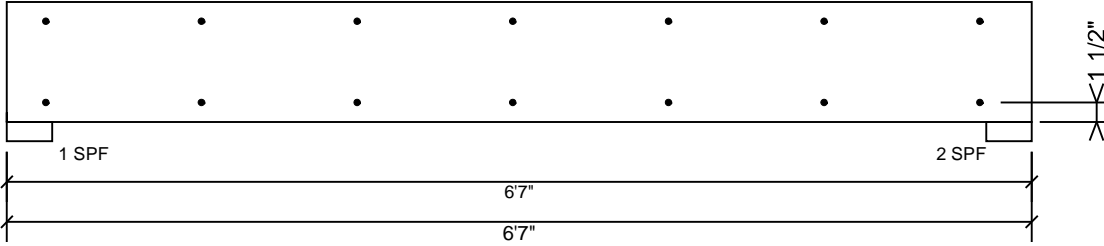
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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"

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"

Notes

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chemicals

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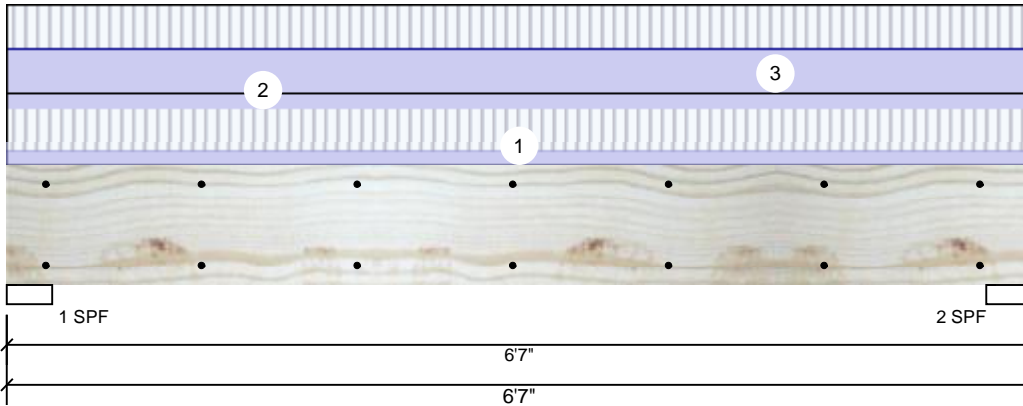
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BM4 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED Level: Level



Member Information

Type:	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 2012
Load Sharing:	No
Deck:	Not Checked

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	2015	1781	0	0	0
2	2015	1781	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	73%	1781 / 2015	3796	L	D+L	
2 - SPF	3.500"	73%	1781 / 2015	3796	L	D+L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5408 ft-lb	3' 3 1/2"	12542 ft-lb	0.431 (43%)	D+L	L
Unbraced	5408 ft-lb	3' 3 1/2"	9934 ft-lb	0.544 (54%)	D+L	L
Shear	2643 lb	1'	6907 lb	0.383 (38%)	D+L	L
LL Defl inch	0.052 (L/1408)	3' 3 1/2"	0.153 (L/480)	0.340 (34%)	L	L
TL Defl inch	0.098 (L/747)	3' 3 1/2"	0.204 (L/360)	0.480 (48%)	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 unbraced.
- 6 Bottom unbraced.
- 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	100 PLF	298 PLF	0 PLF	0 PLF	0 PLF	F03
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Uniform			Top	314 PLF	314 PLF	0 PLF	0 PLF	0 PLF	B1
	Self Weight				7 PLF					

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

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

6. For flat roofs provide proper drainage to prevent ponding

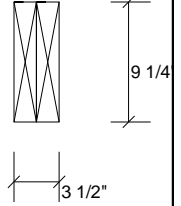
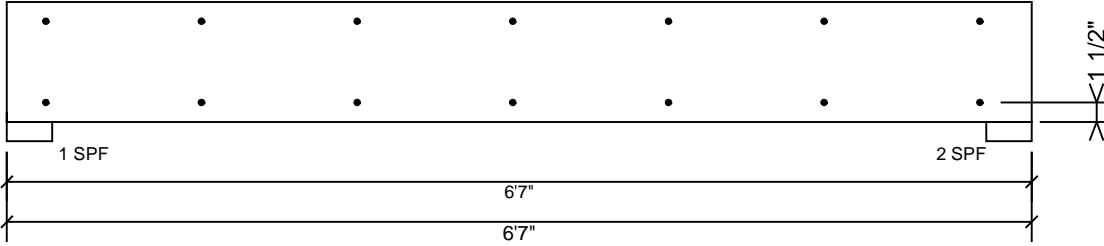
Manufacturer Info
 Metsä Wood
 3071 Commerce Dr, Suite E
 Fort Gratiot, MI 48059
 (800) 622-5850
www.metsawood.com/us
 ICC-ES: ESR-3633

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



BM4 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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"

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"

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

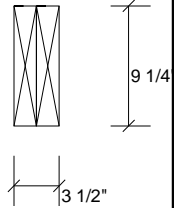
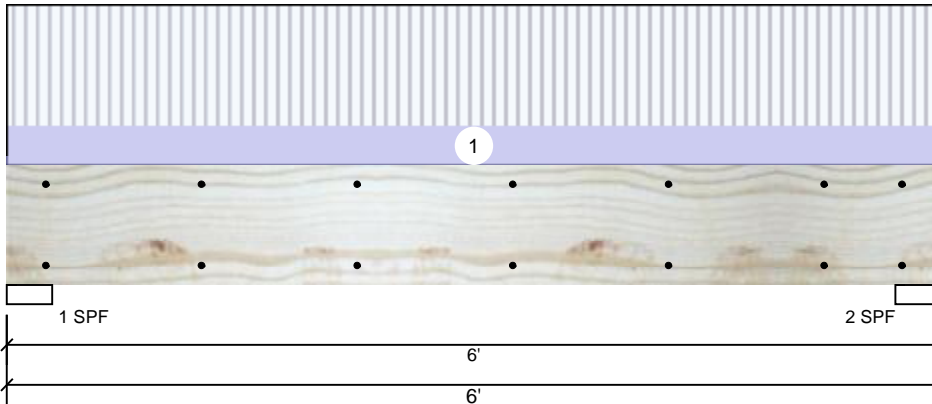
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BM5 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level


Member Information

Type:	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 2012
Load Sharing:	No
Deck:	Not Checked

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	1416	496	0	0	0
2	1416	496	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	37%	496 / 1416	1912	L	D+L	
2 - SPF	3.500"	37%	496 / 1416	1912	L	D+L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2446 ft-lb	3'	12542 ft-lb	0.195 (20%)	D+L	L
Unbraced	2446 ft-lb	3'	10359 ft-lb	0.236 (24%)	D+L	L
Shear	1274 lb	1'	6907 lb	0.185 (18%)	D+L	L
LL Defl inch	0.028 (L/2363)	3'	0.139 (L/480)	0.200 (20%)	L	L
TL Defl inch	0.038 (L/1750)	3'	0.185 (L/360)	0.210 (21%)	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 unbraced.
- 6 Bottom unbraced.
- 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	158 PLF	472 PLF	0 PLF	0 PLF	0 PLF	F01
	Self Weight				7 PLF					

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

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

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

6. For flat roofs provide proper drainage to prevent ponding

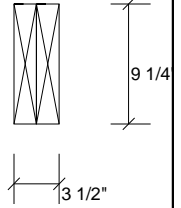
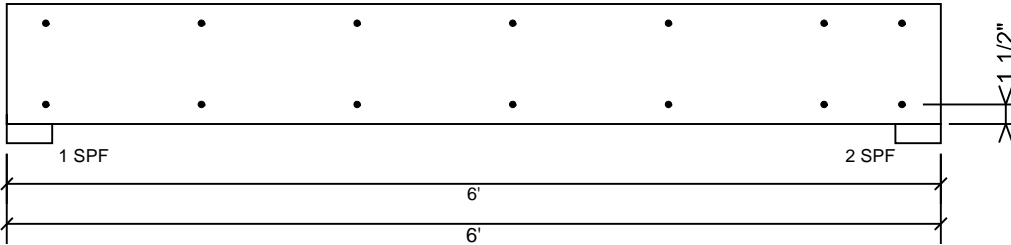
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BM5 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

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"

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"

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

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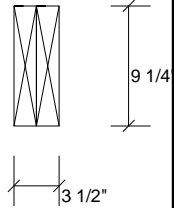
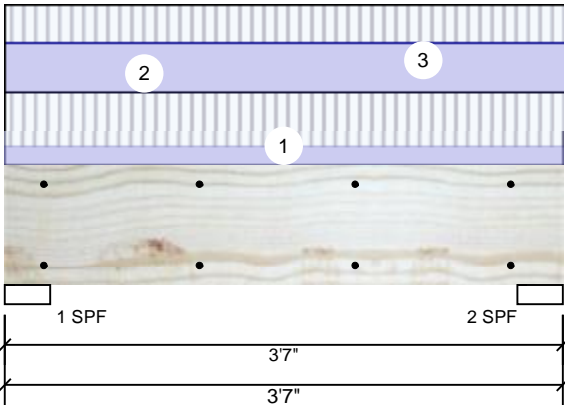



Client: Wellons Realty
 Project:
 Address:

Date: 8/30/2018
 Designer: Curtis Quick
 Job Name: The Pamlico Beams
 Project #:

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

Level: Level



Member Information

Type:	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 2012
Load Sharing:	No
Deck:	Not Checked

Reactions lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	1496	1133	0	0	0
2	1496	1133	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	50%	1133 / 1496	2629	L	D+L	
2 - SPF	3.500"	50%	1133 / 1496	2629	L	D+L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1791 ft-lb	1'9 1/2"	12542 ft-lb	0.143 (14%)	D+L	L
Unbraced	1791 ft-lb	1'9 1/2"	11883 ft-lb	0.151 (15%)	D+L	L
Shear	1162 lb	1'	6907 lb	0.168 (17%)	D+L	L
LL Defl inch	0.008 (L/4995)	1'9 1/2"	0.078 (L/480)	0.100 (10%)	L	L
TL Defl inch	0.013 (L/2843)	1'9 1/2"	0.104 (L/360)	0.130 (13%)	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 unbraced.
- 6 Bottom unbraced.
- 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	165 PLF	495 PLF	0 PLF	0 PLF	0 PLF	F06
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Uniform			Top	340 PLF	340 PLF	0 PLF	0 PLF	0 PLF	"A" Trusses
	Self Weight				7 PLF					

Notes
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Lumber
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Handling & Installation
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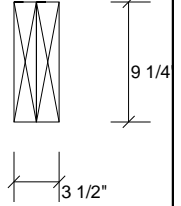
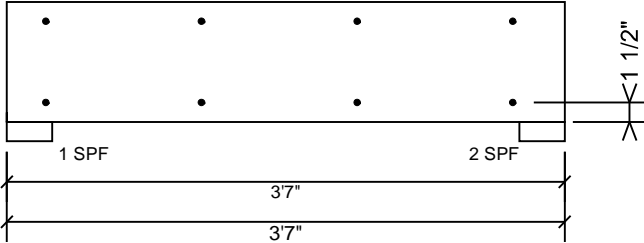
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BM6 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level


Multi-Ply Analysis

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Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
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