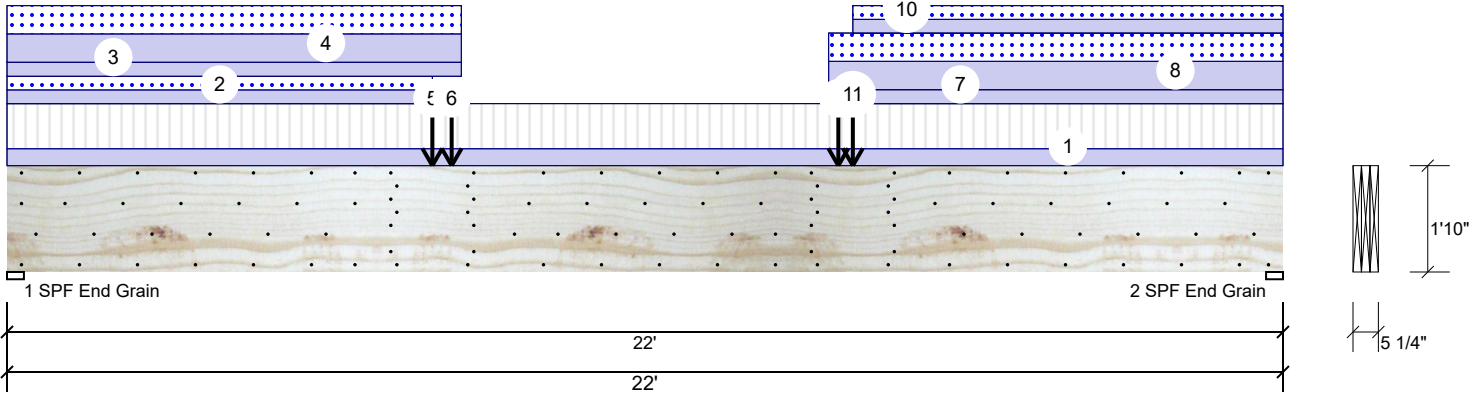


**BM1 Kerto-S LVL 1.750" X 22.000" 3-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	3190	6036	3853	0	0
2	3190	6032	3848	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	71%	6036 / 5282	11319	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	71%	6032 / 5279	11311	L	D+0.75(L+S)

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	58931 ft-lb	11' 3/8"	111772 ft-lb	0.527 (53%)	D+0.75(L+S)	L
Unbraced	58931 ft-lb	11' 3/8"	59148 ft-lb	0.996 (100%)	D+0.75(L+S)	L
Shear	10323 lb	2' 5/8"	28336 lb	0.364 (36%)	D+0.75(L+S)	L
LL Defl inch	0.286 (L/904)	11' 1/16"	0.539 (L/480)	0.530 (53%)	0.75(L+S)	L
TL Defl inch	0.606 (L/427)	11' 1/16"	0.719 (L/360)	0.840 (84%)	D+0.75(L+S)	L

**Design Notes**

- 1 Fasten all plies using 4 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 present.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 4' 3/8" o.c.
- 7 Lateral slenderness ratio based on single ply width.

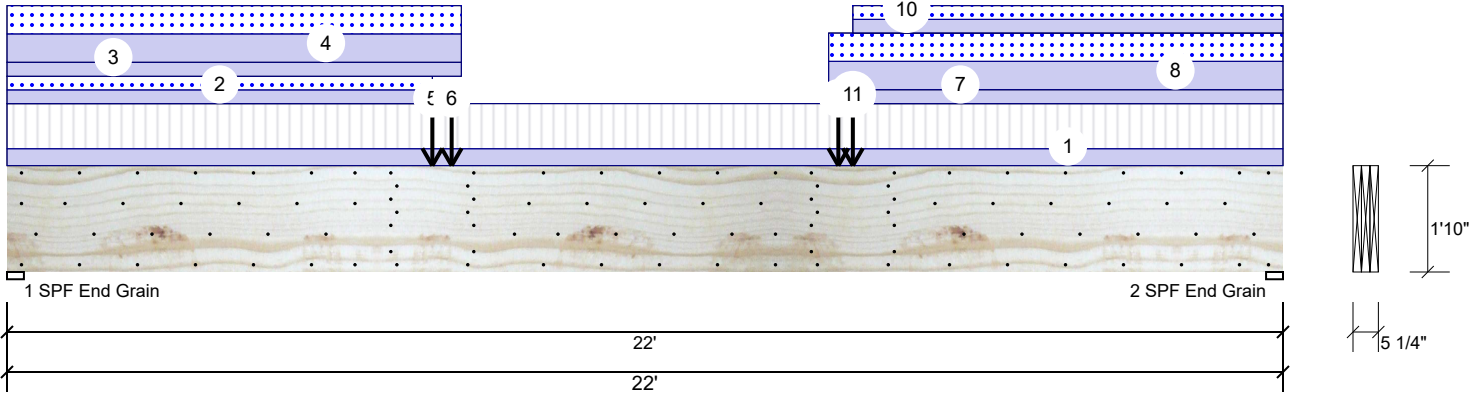
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 22-0-0	7-3-0	Near Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
2	Part. Uniform	0-0-0 to 7-4-0		Near Face	88 PLF	0 PLF	88 PLF	0 PLF	0 PLF	M1
3	Part. Uniform	0-0-0 to 7-10-0		Top	90 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
4	Part. Uniform	0-0-0 to 7-10-0		Top	182 PLF	0 PLF	182 PLF	0 PLF	0 PLF	A6
5	Point	7-4-0		Near Face	894 lb	0 lb	894 lb	0 lb	0 lb	M1-GR

Continued on page 2...

<p><b>Notes</b></p> <p>Calculated Structural 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.</p> <p><b>Lumber</b></p> <p>1. Dry service conditions, unless noted otherwise</p> <p>2. LVL not to be treated with fire retardant or corrosive chemicals</p>	<p><b>Handling &amp; Installation</b></p> <p>1. LVL beams must not be cut or drilled</p> <p>2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals</p> <p>3. Damaged Beams must not be used</p> <p>4. Design assumes top edge is laterally restrained</p> <p>5. Provide lateral support at bearing points to avoid lateral displacement and rotation</p>	<p>6. For flat roofs provide proper drainage to prevent ponding</p>	<p><b>Manufacturer Info</b></p> <p>Metsä Wood          301 Merritt 7 Building, 2nd Floor          Norwalk, CT 06851          (800) 622-5850          www.metsawood.com/us          ICC-ES: ESR-3633</p>	<p>Comtech, Inc.          1001 S. Reilly Road, Suite #639          Fayetteville, NC          USA          28314          910-864-TRUS</p>
			<p>This design is valid until 2/26/2023</p>	

**BM1 Kerto-S LVL 1.750" X 22.000" 3-Ply - PASSED**

Level: Level



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
6	Point	7-8-0		Top	882 lb	0 lb	882 lb	0 lb	0 lb	G1-GR
7	Part. Uniform	14-2-0 to 22-0-0		Top	90 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
8	Part. Uniform	14-2-0 to 22-0-0		Top	182 PLF	0 PLF	182 PLF	0 PLF	0 PLF	A6
9	Point	14-4-0		Top	882 lb	0 lb	882 lb	0 lb	0 lb	G1-GR
10	Part. Uniform	14-7-0 to 22-0-0		Near Face	88 PLF	0 PLF	88 PLF	0 PLF	0 PLF	M1
11	Point	14-7-0		Near Face	894 lb	0 lb	894 lb	0 lb	0 lb	M1-GR
	Self Weight				26 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

This design is valid until 2/26/2023

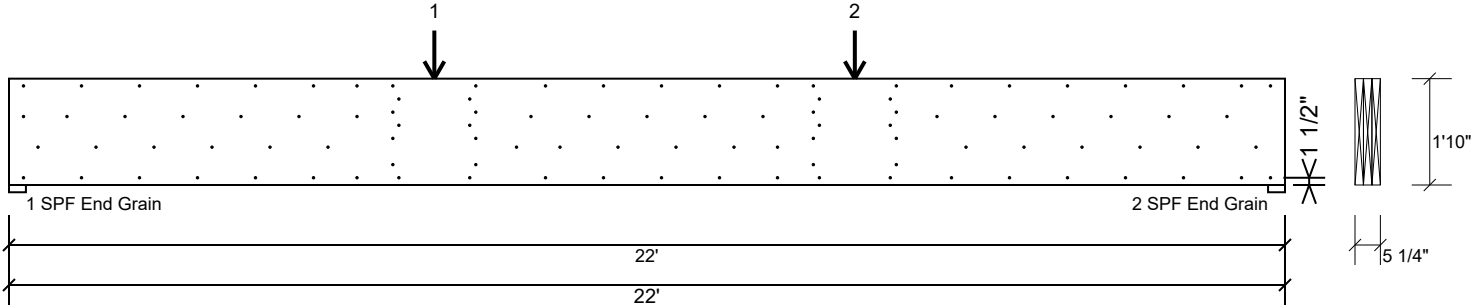
**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us  
 ICC-ES: ESR-3633

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**BM1 Kerto-S LVL 1.750" X 22.000" 3-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Nail from both sides. Maximum end distance not to exceed 6"

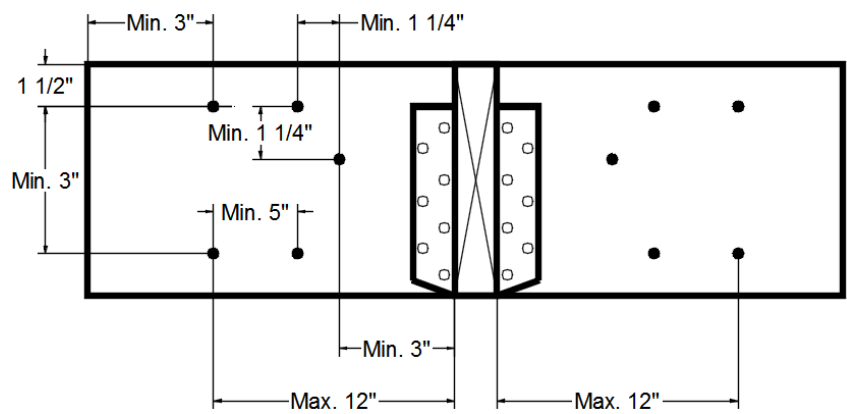
Capacity	99.1 %
Load	324.5 PLF
Yield Limit per Foot	327.4 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

**Concentrated Load**

Fasten at concentrated side load at 7-4-0 with a minimum of (14) – 10d Box nails (.128x3") in the pattern shown. Repeat fasteners on both sides.

Capacity	90.5 %
Load	1192.0lb.
Total Yield Limit	1317.0 lb.
Cg	0.9994
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Load Combination	D+S
Duration Factor	1.15

**Min/Max fastener distances for Concentrated Side Loads**



**Concentrated Load**

Fasten at concentrated side load at 14-7-0 with a minimum of (14) – 10d Box nails (.128x3") in the pattern shown. Repeat fasteners on both sides.

Capacity	90.5 %
Load	1192.0lb.
Total Yield Limit	1317.0 lb.
Cg	0.9994
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Load Combination	D+S
Duration Factor	1.15

**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

This design is valid until 2/26/2023

**Manufacturer Info**

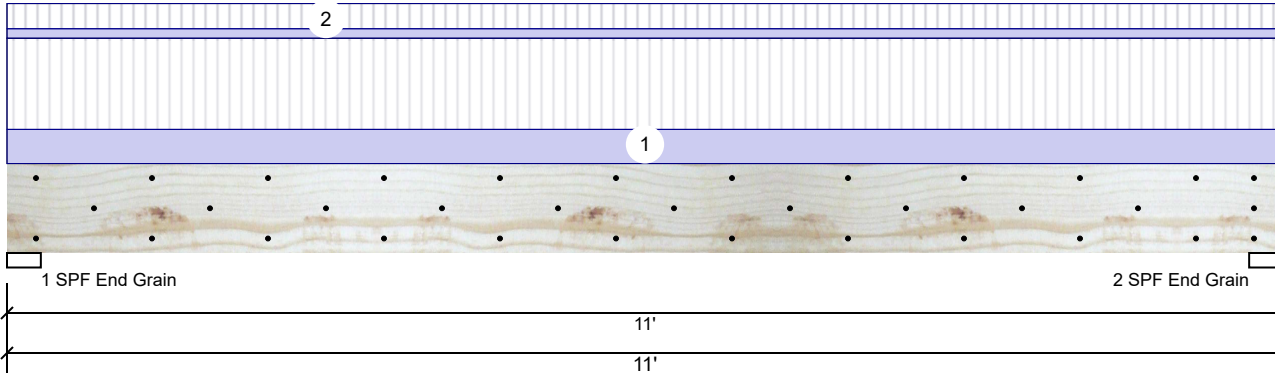
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[www.metsawood.com/us](http://www.metsawood.com/us)  
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 910-864-TRUS



**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	2035	803	0	0	0
2	2035	803	0	0	0

**Bearings**

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	27%	803 / 2035	2838	L	D+L	
2 - SPF End Grain	3.500"	27%	803 / 2035	2838	L	D+L	

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7167 ft-lb	5'6"	12542 ft-lb	0.571 (57%)	D+L	L
Unbraced	7167 ft-lb	5'6"	7168 ft-lb	1.000 (100%)	D+L	L
Shear	2714 lb	1'	6907 lb	0.393 (39%)	D+L	L
LL Defl inch	0.241 (L/525)	5'6"	0.264 (L/480)	0.910 (91%)	L	L
TL Defl inch	0.336 (L/376)	5'6"	0.351 (L/360)	0.960 (96%)	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 must be laterally braced at a maximum of 10'3" o.c.
- 5 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	Tie-In	0-0-0 to 11-0-0	7-3-0	Near Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
2	Tie-In	0-0-0 to 11-0-0	2-0-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
	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

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**

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

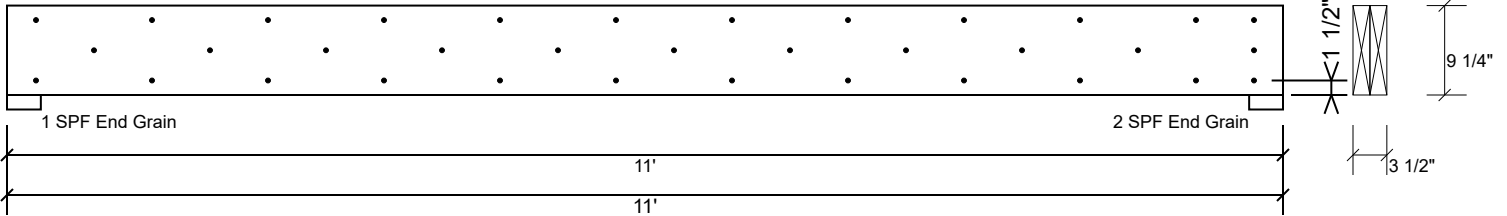
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This design is valid until 2/26/2023

**BM2 Kerto-S LVL 1.750" X 9.250" 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	81.2 %
Load	199.4 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	D+L
Duration Factor	1.00

**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

This design is valid until 2/26/2023

**Manufacturer Info**

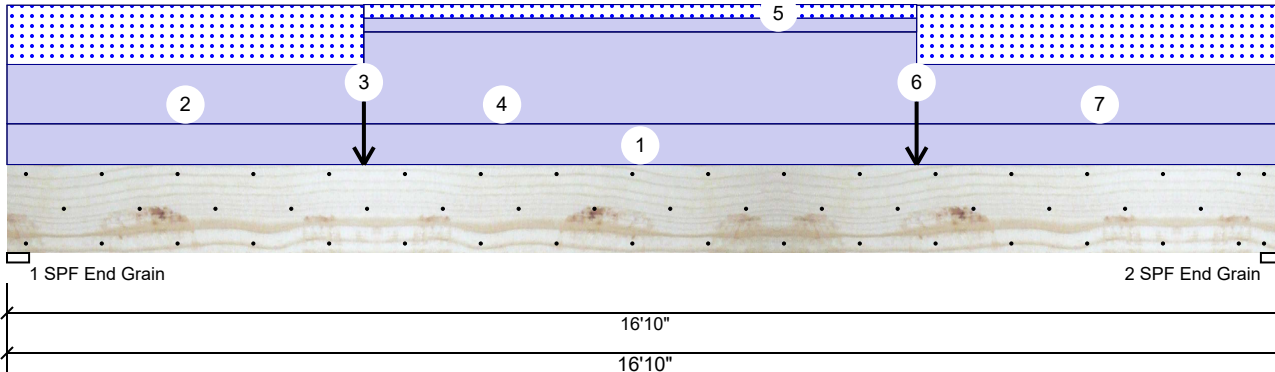
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**GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED Ib (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	2410	1317	0	0
2	0	2394	1309	0	0

**Bearings**

Bearing	Length	Cap. React	D/L Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	35%	2410 / 1317	3727	L	D+S
2 - SPF End Grain	3.500"	35%	2394 / 1309	3702	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	15725 ft-lb	8'5 5/8"	31049 ft-lb	0.506 (51%)	D+S	L
Unbraced	15725 ft-lb	8'5 5/8"	15781 ft-lb	0.996 (100%)	D+S	L
Shear	3386 lb	1'4 3/4"	12021 lb	0.282 (28%)	D+S	L
LL Defl inch	0.178 (L/1106)	8'5 1/8"	0.409 (L/480)	0.430 (43%)	S	L
TL Defl inch	0.528 (L/372)	8'5 1/16"	0.546 (L/360)	0.970 (97%)	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 loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 6'5 1/4" o.c.
- 6 Lateral slenderness ratio based on single ply width.

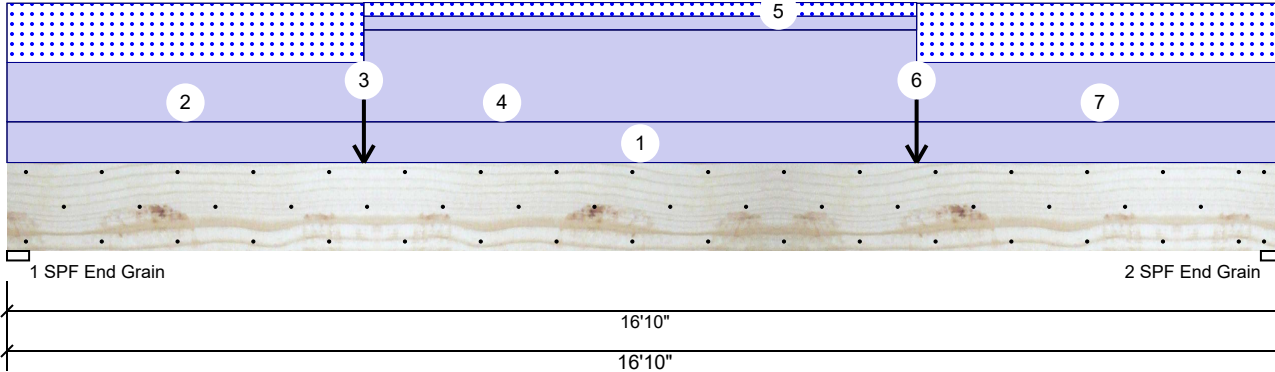
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Part. Uniform	0-0-0 to 4-8-8		Top	87 PLF	0 PLF	87 PLF	0 PLF	0 PLF	M1
3	Point	4-8-8		Top	825 lb	0 lb	825 lb	0 lb	0 lb	M1-GR
4	Part. Uniform	4-8-8 to 12-0-0		Top	135 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
5	Tie-In	4-8-8 to 12-0-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof
6	Point	12-0-0		Top	825 lb	0 lb	825 lb	0 lb	0 lb	M1-GR

Continued on page 2...

<p><b>Notes</b></p> <p>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.</p> <p><b>Lumber</b></p> <ol style="list-style-type: none"> <li>1. Dry service conditions, unless noted otherwise</li> <li>2. LVL not to be treated with fire retardant or corrosive chemicals</li> </ol>	<p><b>Handling &amp; Installation</b></p> <ol style="list-style-type: none"> <li>1. LVL beams must not be cut or drilled</li> <li>2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals</li> <li>3. Damaged Beams must not be used</li> <li>4. Design assumes top edge is laterally restrained</li> <li>5. Provide lateral support at bearing points to avoid lateral displacement and rotation</li> </ol>	<p>6. For flat roofs provide proper drainage to prevent ponding</p>	<p><b>Manufacturer Info</b></p> <p>Metsä Wood          301 Merritt 7 Building, 2nd Floor          Norwalk, CT 06851          (800) 622-5850          www.metsawood.com/us          ICC-ES: ESR-3633</p>	<p>Comtech, Inc.          1001 S. Reilly Road, Suite #639          Fayetteville, NC          USA          28314          910-864-TRUS</p>
			<p>This design is valid until 2/26/2023</p>	

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

Level: Level



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
7	Part. Uniform	12-0-0 to 16-10-0		Top	87 PLF	0 PLF	87 PLF	0 PLF	0 PLF	M1
	Self Weight				11 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

**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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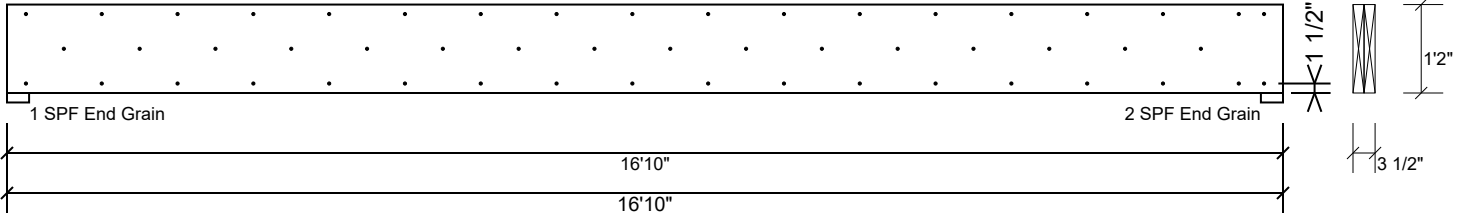
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 910-864-TRUS



This design is valid until 2/26/2023

**GDH Kerto-S LVL 1.750" X 14.000" 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"
Load Combination	
Duration Factor	1.00

**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

This design is valid until 2/26/2023

**Manufacturer Info**

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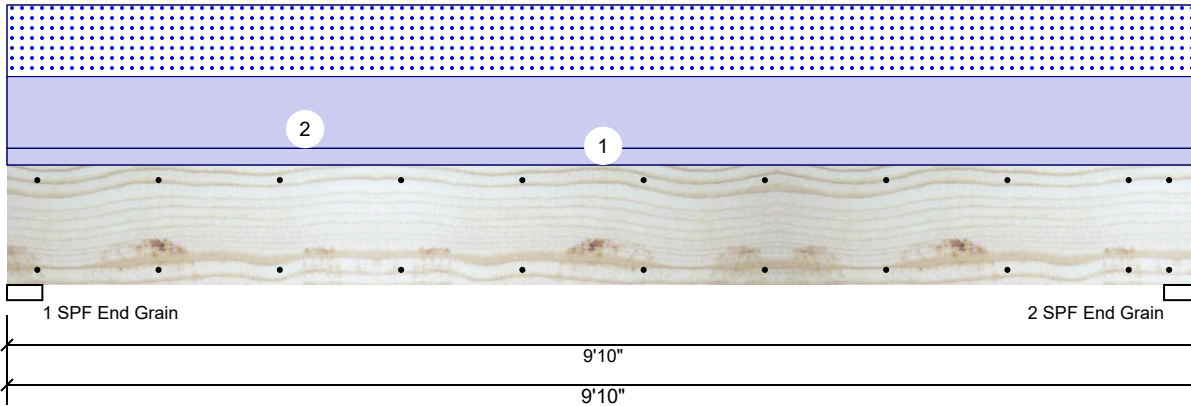
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**GDH2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1599	1259	0	0
2	0	1599	1259	0	0

**Bearings**

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	27%	1599 / 1259		2858	L	D+S
2 - SPF End Grain	3.500"	27%	1599 / 1259		2858	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6386 ft-lb	4'11"	22897 ft-lb	0.279 (28%)	D+S	L
Unbraced	6386 ft-lb	4'11"	9857 ft-lb	0.648 (65%)	D+S	L
Shear	2149 lb	1'2 5/8"	10197 lb	0.211 (21%)	D+S	L
LL Defl inch	0.053 (L/2109)	4'11"	0.234 (L/480)	0.230 (23%)	S	L
TL Defl inch	0.121 (L/929)	4'11"	0.312 (L/360)	0.390 (39%)	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 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			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	256 PLF	0 PLF	256 PLF	0 PLF	0 PLF	C1
	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

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

This design is valid until 2/26/2023

**Manufacturer Info**

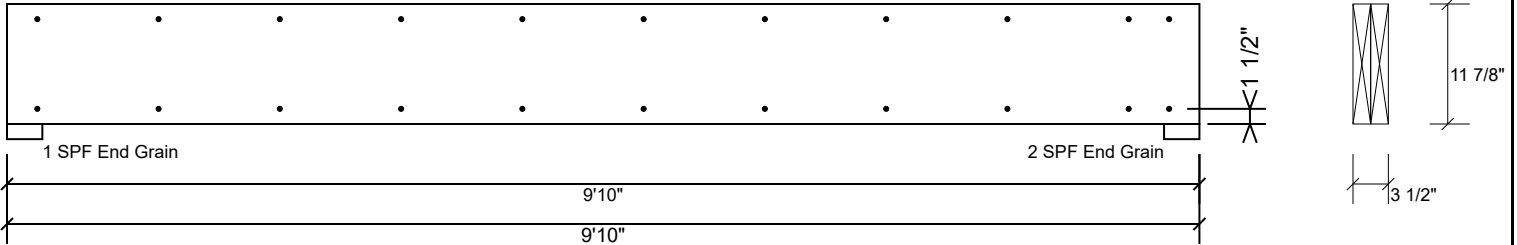
Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

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



**GDH2 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"
Load Combination	
Duration Factor	1.00

**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

This design is valid until 2/26/2023

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