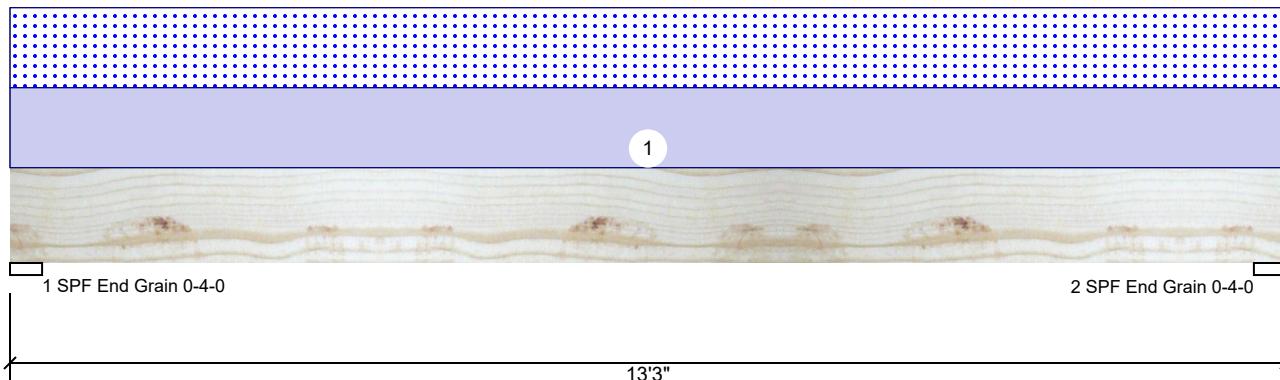


DB1 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level


Member Information
Reactions UNPATTERED lb (Uplift)

Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	Vertical	0	1910	1848	0	0
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015	2	Vertical	0	1910	1848	0	0
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II									
Temperature:	Temp <= 100°F									

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11451 ft-lb	6'7 1/2"	22897 ft-lb	50%	D+S	L
Unbraced	11451 ft-lb	6'7 1/2"	11461 ft-lb	100%	D+S	L
Shear	3008 lb	11'11 1/8"	10197 lb	29%	D+S	L
LL Defl inch	0.183 (L/832)	6'7 1/2"	0.318 (L/480)	58%	S	L
TL Defl inch	0.373 (L/409)	6'7 1/2"	0.635 (L/240)	59%	D+S	L

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings.
- Girders are designed to be supported on bottom edge only and across their full width.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at a maximum of 7'8 5/16" o.c.
- Bottom must be laterally braced at end bearings.
- 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	279 PLF	0 PLF	279 PLF	0 PLF	0 PLF	A1

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.	chemicals	6. For flat roofs provide proper drainage to prevent ponding	Handling & Installation	6. For flat roofs provide proper drainage to prevent ponding	Manufacturer Info	
Lumber	1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive	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	This design is valid until 2/28/2028			Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us	