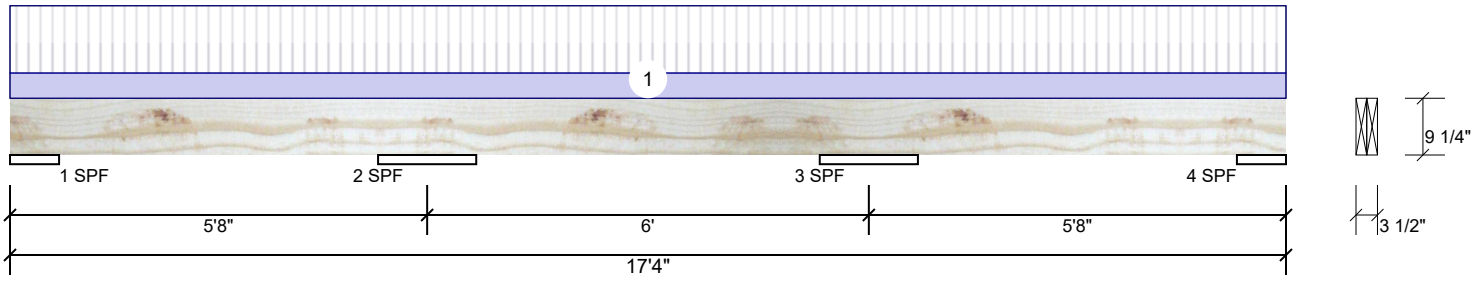
Client:	Benjamin Stout	Date:	5/9/2022
Project:		Input by:	David Landry
Address:		Job Name:	Cypress Crawl
		Project #:	Cypress Crawl LVL

DB1 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 - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1733	668	0	0	0
2	Vertical	4154	1602	0	0	0
3	Vertical	4154	1602	0	0	0
4	Vertical	1733	668	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	8.000"	Vert	22%	662 / 1975	2637	L_L	D+L
2 - SPF	16.000"	Vert	25%	1608 / 4455	6063	LL_	D+L
3 - SPF	16.000"	Vert	25%	1608 / 4455	6063	_LL	D+L
4 - SPF	8.000"	Vert	22%	662 / 1975	2637	L_L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-3184 ft-lb	5'8"	12542 ft-lb	0.254 (25%)	D+L	LL_
Unbraced	-3184 ft-lb	5'8"	4756 ft-lb	0.670 (67%)	D+L	LL_
Pos Moment	2273 ft-lb	2'9 5/8"	12542 ft-lb	0.181 (18%)	D+L	L_L
Unbraced	2273 ft-lb	2'9 5/8"	4756 ft-lb	0.478 (48%)	D+L	L_L
Shear	1704 lb	7'1 1/4"	6907 lb	0.247 (25%)	D+L	LL_
LL Defl inch	0.033 (L/2204)	8'8"	0.150 (L/480)	0.218 (22%)	L	_L_
TL Defl inch	0.040 (L/1784)	8'8"	0.200 (L/360)	0.202 (20%)	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 laterally braced at end bearings.
6 Bottom must be laterally braced at end 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	Tie-In Far	0-0-0 to 17-4-0	11-11-1 (Continuous)	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
1	Tie-In Near	0-0-0 to 17-4-0	5-0-11 (Continuous)	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	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

This design is valid until 11/3/2024

Manufacturer Info

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

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

Client:	Benjamin Stout	Date:	5/9/2022
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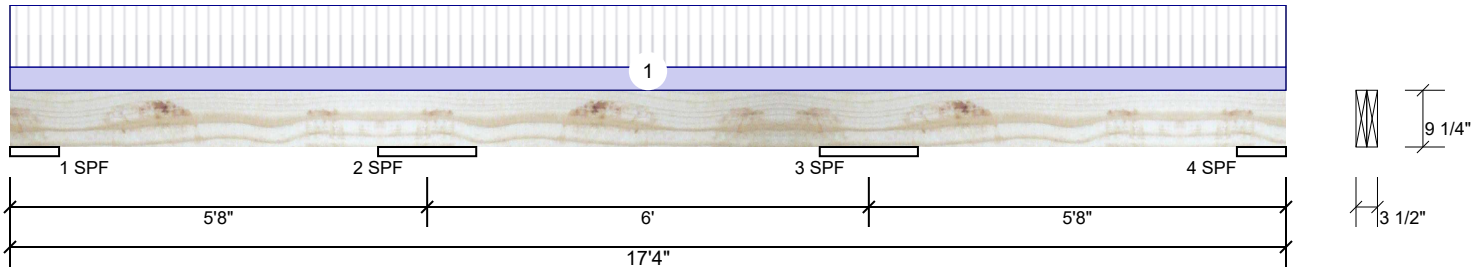
DB2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



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Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1284	500	0	0	0
2	Vertical	3077	1198	0	0	0
3	Vertical	3077	1198	0	0	0
4	Vertical	1284	500	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	8.000"	Vert	16%	495 / 1463	1959	L_L	D+L
2 - SPF	16.000"	Vert	19%	1203 / 3301	4503	LL_	D+L
3 - SPF	16.000"	Vert	19%	1203 / 3301	4503	_LL	D+L
4 - SPF	8.000"	Vert	16%	495 / 1463	1959	L_L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-2365 ft-lb	11'8"	12542 ft-lb	0.189 (19%)	D+L	_LL
Unbraced	-2365 ft-lb	11'8"	4756 ft-lb	0.497 (50%)	D+L	_LL
Pos Moment	1688 ft-lb	2'9 5/8"	12542 ft-lb	0.135 (13%)	D+L	L_L
Unbraced	1688 ft-lb	2'9 5/8"	4756 ft-lb	0.355 (35%)	D+L	L_L
Shear	1267 lb	7'1 1/4"	6907 lb	0.183 (18%)	D+L	LL_
LL Defl inch	0.024 (L/2976)	8'8"	0.150 (L/480)	0.161 (16%)	L	_L_
TL Defl inch	0.030 (L/2403)	8'8"	0.200 (L/360)	0.150 (15%)	D+L	_L_

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	Self Weight				7 PLF					

Notes

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