

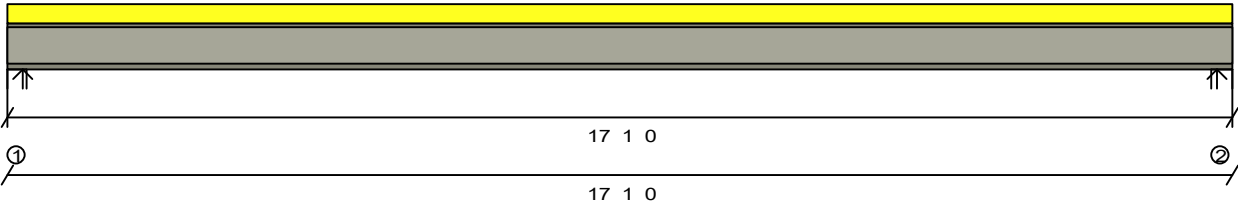
GS Beam® 5.011 (Build 20)  
kmBeamEngine 4.600y  
Materials Database 1381

Member Data

Description:	Member Type: Beam	Application: Floor
	Top Lateral Bracing: Continuous	
	Bottom Lateral Bracing: Continuous	
	Moisture Condition: Dry	Building Code: IBC/IRC
	Deflection Criteria: L/360 live, L/240 total	
Standard Load:	Deck Connection: Nailed	Member Weight: 20.9 PLF
Live Load: 40 PLF	Filename: KYB2	
Dead Load: 15 PLF		

Other Loads

Type (Description)	Side	Begin	End	Trib. Width	Other Start	End	Dead Start	End	Category
Replacement Uniform (PLF)	Top	0' 0.00"	17' 1.00"		460		195		Live



Bearings and Reactions

	Location	Type	Material	Input Length	Min Required	Gravity Reaction	Gravity Uplift
1	0' 0.000"	Wall	Steel	3.500"	N/A	5625#	-
2	17' 1.000"	Wall	Steel	3.500"	N/A	5625#	-

Maximum Load Case Reactions

Used for applying point loads (or line loads) to carrying members

	Live	Dead
1	3829#	1797#
2	3829#	1797#

Design spans  
16' 7.750"

Product: Metwood 959 - 9.25" x 5" 1 ply

PASSES DESIGN CHECKS

Design assumes continuous lateral bracing for both flanges.  
Web stiffeners are required at all bearing and point load locations unless reviewed by a design engineer.  
Consult manufacturer's installation guide (if applicable) for details.

Allowable Stress Design

	Actual	Allowable	Capacity	Location	Loading
Moment	280921."#	571200."#	49%	8.54'	Total Load D+L
Shear	5576.#	14400.#	38%	0.29'	Total Load D+L
V/M Interaction	0.24	1.00	24%	8.54'	Total Load D+L
TL Deflection	0.4383"	0.8323"	L/455	8.54'	Total Load D+L
LL Deflection	0.2983"	0.5549"	L/669	8.54'	Total Load L

Control: LL Deflection



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\*Passing is defined as when the member, floor joist, beam or girder, shown on this drawing meets applicable design criteria for Loads, Loading Conditions, and Spans listed on this sheet. The design must be reviewed by a qualified designer or design professional as required for approval. This design assumes product installation according to the manufacturer's specifications.

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