

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

Member Data

Description:

Standard Load:

Live Load: 40 PLF

Dead Load: 15 PLF

Member Type: Beam

Top Lateral Bracing: Continuous

Bottom Lateral Bracing: Continuous

Moisture Condition: Dry

Deflection Criteria: L/360 live, L/240 total

Deck Connection: Nailed

Filename: ENG16080 925

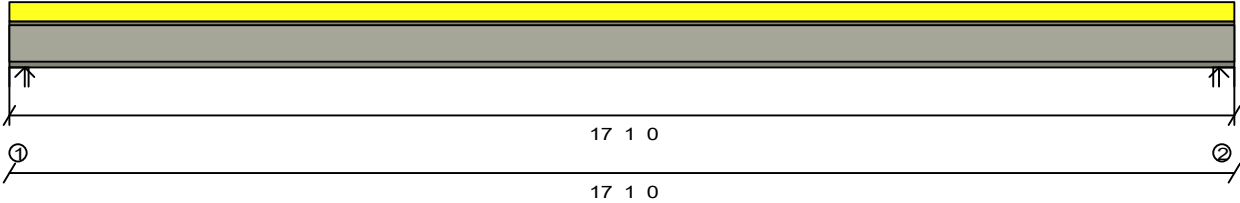
Application: Floor

Building Code: IBC/IRC

Member Weight: 19.9 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	5617#	-
2	17' 1.000"	Wall	Steel	3.500"	N/A	5617#	-

Maximum Load Case Reactions

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

	Live	Dead
1	3829#	1789#
2	3829#	1789#

Design spans
16' 7.750"

Product: Metwood 759 - 7.25" 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	280506."#	409200."#	68%	8.54'	Total Load D+L
Shear	5568.#	13350.#	41%	0.29'	Total Load D+L
V/M Interaction	0.47	1.00	46%	8.54'	Total Load D+L
TL Deflection	0.7764"	0.8323"	L/257	8.54'	Total Load D+L
LL Deflection	0.5292"	0.5549"	L/377	8.54'	Total Load L

Control: LL Deflection

