

ENVIRO-BEAM™ SPAN/LOAD TABLE

EB8-1.5-43

8 " DEPTH

Steel Shape ¹ (2) 800T150-43

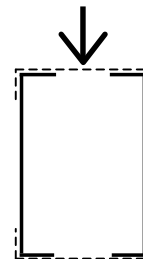
Steel thickness: 43 mil (0.0451 in - 18 ga)

Flange Width: 1.5 in

Section Properties: I: 7.38 in⁴
S: 1.31 in³

Fy: 33 ksi

Max. Allowable Bending Moment ⁶ : Ma: 2158 lb-ft
Max. Allowable Beam Shear: Va: 2060 lb



Span ³ (ft)	Maximum Allowable Uniformly Distributed Vertical Loads ² Pounds per Lineal Foot (lb/ft)				Critical Uniformly Distributed Load ^{4,5,6,7}	Deflection Due to Critical Load (in)	
	Load Controlled by:					S, B or L/240	L/360
	Shear	Bending ⁶	Deflection				
			L/240	L/360			
4	1030	1079	7430	4953	1030	0.03	
5	824	691	3804	2536	691	0.05	
6	687	480	2201	1468	480	0.07	
7	588	352	1386	924	352	0.09	
8	515	270	929	619	270	0.12	
9	458	213	652	435	213	0.15	
10	412	173	475	317	173	0.18	
11	374	143	357	238	143	0.22	
12	343	120	275	183	120	0.26	
13	317	102	216	144	102	0.31	
14	294	88	173	116	88	0.36	
15	275	77	141	94	77	0.41	
16	257	67	116	77	67	0.46	

Notes:

- Section designations and geometry are based on standard shapes defined by the Steel Stud Manufacturers Association (SSMA). Section properties are based on the 2001 NAS Specification.
- All loads are service loads
- Tables are extended to a maximum span/depth ratio of 24.
- Critical Load is the lowest uniform load capacity based on Bending, Shear or Deflection.
- Top and bottom tracks are required for proper stability of Enviro-Beam headers. Top and bottom tracks are not a part of the Enviro-Beam header and must be designed by a qualified professional and be properly fastened to the flanges of the Enviro-Beam. As a minimum, top and bottom tracks shall be at least the same gauge as the Enviro-Beam header.
- Bending capacities are based on the assumption that the compression flange is adequately laterally braced by a top track section. Lateral (wind or seismic) loads are assumed to be resisted by the top and bottom tracks and not by the Enviro-Beam header itself.
- When Enviro-Beam header is supported by bearing on steel studs, stiffened end is required to resist web crippling. When end support is by screwed side plate connectors, stiffened end is not required. See stiffened end detail.