

# ENVIRO-BEAM™ SPAN/LOAD TABLE

**EB12-1.5-54**

**12 " DEPTH**

Steel Shape <sup>1</sup> (2) 1200T150-54

Steel thickness: 54 mil (0.0566 in - 16 ga)

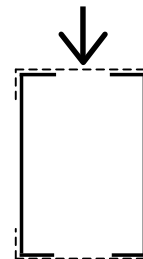
Flange Width: 1.5 in

Section Properties: I: 24.04 in<sup>4</sup>  
S: 2.63 in<sup>3</sup>

Fy: 50 ksi

Max. Allowable Bending Moment <sup>6</sup> : Ma: 6552 lb-ft

Max. Allowable Beam Shear: Va: 2709 lb



Span <sup>3</sup> (ft)	Maximum Allowable Uniformly Distributed Vertical Loads <sup>2</sup> Pounds per Lineal Foot (lb/ft)					Deflection Due to Critical Load (in)	
	Load Controlled by:			Critical Uniformly Distributed Load <sup>4,5,6,7</sup>	S, B or L/240	L/360	
	Shear	Bending <sup>6</sup>	Deflection				
			L/240	L/360			
6	903	1456	7172	4782	903	0.04	
7	774	1070	4517	3011	774	0.06	
8	677	819	3026	2017	677	0.09	
9	602	647	2125	1417	602	0.13	
10	542	524	1549	1033	524	0.17	
11	493	433	1164	776	433	0.20	
12	451	364	897	598	364	0.24	
13	417	310	705	470	310	0.29	
14	387	267	565	376	267	0.33	
15	361	233	459	306	233	0.38	
16	339	205	378	252	205	0.43	
17	319	181	315	210	181	0.49	
18	301	162	266	177	162	0.55	0.55
19	285	145	226	151	145	0.61	0.61
20	271	131	194	129	131	0.68	0.67
21	258	119	167	112	119	0.75	0.70
22	246	108	145	97	108	0.82	0.73
23	236	99	127	85	99	0.89	0.77
24	226	91	112	75	91	0.97	0.80

\* Deflection controls for L/360 condition

**Web-Height to thickness ratio exceeds 200. Flange-Bearing Web Stiffeners are required at all support points and concentrated loads. Stiffeners shall be designed by a qualified professional for the specific project conditions.**

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.