

# ENVIRO-BEAM™ SPAN/LOAD TABLE

**EB8-1.5-54**

**8 " DEPTH**

Steel Shape <sup>1</sup> (2) 800T150-54

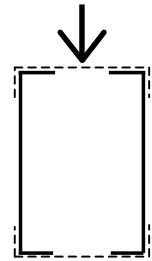
Steel thickness: 54 mil (0.0566 in - 16 ga)

Flange Width: 1.5 in

Section Properties: I: 9.38 in<sup>4</sup>  
S: 1.69 in<sup>3</sup>

Fy: 50 ksi

Max. Allowable Bending Moment <sup>6</sup> : Ma: 4211 lb-ft  
Max. Allowable Beam Shear: Va: 4078 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			
4	2039	2105	9450	6300	<b>2039</b>		0.04
5	1631	1347	4838	3226	<b>1347</b>		0.07
6	1359	936	2800	1867	<b>936</b>		0.10
7	1165	687	1763	1175	<b>687</b>		0.14
8	1019	526	1181	787	<b>526</b>		0.18
9	906	416	830	553	<b>416</b>		0.23
10	816	337	605	403	<b>337</b>		0.28
11	741	278	454	303	<b>278</b>		0.34
12	680	234	350	233	<b>234</b>	<b>233 *</b>	0.40 0.40
13	627	199	275	184	<b>199</b>	<b>184 *</b>	0.47 0.43
14	583	172	220	147	<b>172</b>	<b>147 *</b>	0.55 0.47
15	544	150	179	119	<b>150</b>	<b>119 *</b>	0.63 0.50
16	510	132	148	98	<b>132</b>	<b>98 *</b>	0.71 0.53

\* Deflection controls for L/360 condition

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.