

# ENVIRO-BEAM™ SPAN/LOAD TABLE

**EB12-1.5-97**

**12 " DEPTH**

Steel Shape <sup>1</sup> (2) 1200T150-97

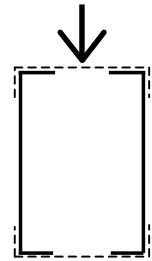
Steel thickness: 97 mil (0.0713 in - 12 ga)

Flange Width: 1.5 in

Section Properties: I: 51.44 in<sup>4</sup>  
S: 7.23 in<sup>3</sup>

Fy: 50 ksi

Max. Allowable Bending Moment <sup>6</sup> : Ma: 18044 lb-ft  
Max. Allowable Beam Shear: Va: 15804 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	5268	4010	15347	10231	<b>4010</b>	0.08	
7	4515	2946	9665	6443	<b>2946</b>	0.11	
8	3951	2256	6474	4316	<b>2256</b>	0.14	
9	3512	1782	4547	3031	<b>1782</b>	0.18	
10	3161	1444	3315	2210	<b>1444</b>	0.22	
11	2873	1193	2491	1660	<b>1193</b>	0.26	
12	2634	1002	1918	1279	<b>1002</b>	0.31	
13	2431	854	1509	1006	<b>854</b>	0.37	
14	2258	737	1208	805	<b>737</b>	0.43	
15	2107	642	982	655	<b>642</b>	0.49	
15.5	2039	601	890	593	<b>601</b>	0.52	0.52
16	1976	564	809	540	<b>564</b>	0.56	0.53
17	1859	499	675	450	<b>499</b>	0.63	0.57
18	1756	446	568	379	<b>446</b>	0.71	0.60
19	1664	400	483	322	<b>400</b>	0.79	0.63
20	1580	361	414	276	<b>361</b>	0.87	0.67
21	1505	327	358	239	<b>327</b>	0.96	0.70
22	1437	298	311	208	<b>298</b>	1.05	0.73
23	1374	273	272	182	<b>272</b>	1.15	0.77
24	1317	251	240	160	<b>240</b>	1.20	0.80

\* 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.