

ENVIRO-BEAM™ SPAN/LOAD TABLE

EB14-1.5-97

14 " DEPTH

Steel Shape ¹ (2) 1400T150-97

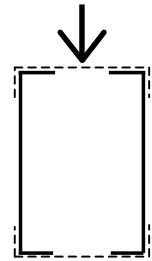
Steel thickness: 97 mil (0.1017 in - 12 ga)

Flange Width: 1.5 in

Section Properties: I: 74.57 in⁴
S: 8.66 in³

Fy: 50 ksi

Max. Allowable Bending Moment ⁶ : Ma: 21614 lb-ft
Max. Allowable Beam Shear: Va: 13522 lb



Span ³ (ft)	Maximum Allowable Uniformly Distributed Vertical Loads ² Pounds per Lineal Foot (lb/ft)					Deflection Due to Critical Load (in)	
	Load Controlled by:			Critical Uniformly Distributed Load ^{4,5,6,7}	S, B or L/240 L/360		
	Shear	Bending ⁶	Deflection L/240 L/360				
6	4507	4803	22248	14832	4507	0.06	
7	3863	3529	14010	9340	3529	0.09	
8	3381	2702	9386	6257	2702	0.12	
9	3005	2135	6592	4395	2135	0.15	
10	2704	1729	4806	3204	1729	0.18	
11	2459	1429	3611	2407	1429	0.22	
12	2254	1201	2781	1854	1201	0.26	
13	2080	1023	2187	1458	1023	0.30	
14	1932	882	1751	1168	882	0.35	
15	1803	769	1424	949	769	0.40	
16	1690	675	1173	782	675	0.46	
17	1591	598	978	652	598	0.52	
18	1502	534	824	549	534	0.58	
19	1423	479	701	467	479	0.65	0.63
20	1352	432	601	400	432	0.72	0.67
21	1288	392	519	346	392	0.79	0.70
22	1229	357	451	301	357	0.87	0.73
23	1176	327	395	263	327	0.95	0.77
24	1127	300	348	232	300	1.04	0.80
25	1082	277	308	205	277	1.12	0.83
26	1040	256	273	182	256	1.22	0.87
27	1002	237	244	163	237	1.31	0.90
28	966	221	219	146	219	1.40	0.93

* 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.