

ENVIRO-BEAM™ SPAN/LOAD TABLE

EB10-1.5-118

10 " DEPTH

Steel Shape ¹ (2) 1000T150-118

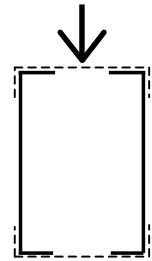
Steel thickness: 118 mil (0.0713 in - 10 ga)

Flange Width: 1.5 in

Section Properties: I: 40.24 in⁴
S: 7.70 in³

Fy: 50 ksi

Max. Allowable Bending Moment ⁶ : Ma: 19220 lb-ft
Max. Allowable Beam Shear: Va: 32469 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				
5	12988	6150	20747	13832	6150	0.07	
6	10823	4271	12007	8004	4271	0.11	
7	9277	3138	7561	5041	3138	0.15	
8	8117	2402	5065	3377	2402	0.19	
9	7215	1898	3558	2372	1898	0.24	
10	6494	1538	2593	1729	1538	0.30	
11	5903	1271	1948	1299	1271	0.36	
12	5412	1068	1501	1001	1068	0.43	0.40
13	4995	910	1180	787	910	0.50	0.43
14	4638	784	945	630	784	0.58	0.47
15	4329	683	768	512	683	0.67	0.50
16	4059	601	633	422	601	0.76	0.53
17	3820	532	528	352	528	0.85	0.57
18	3608	475	445	296	445	0.90	0.60
19	3418	426	378	252	378	0.95	0.63
20	3247	384	324	216	324	1.00	0.67

* 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.