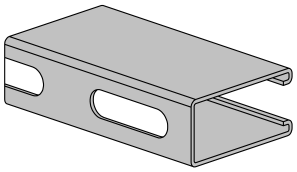
HAYDON®
Get Strut Done.

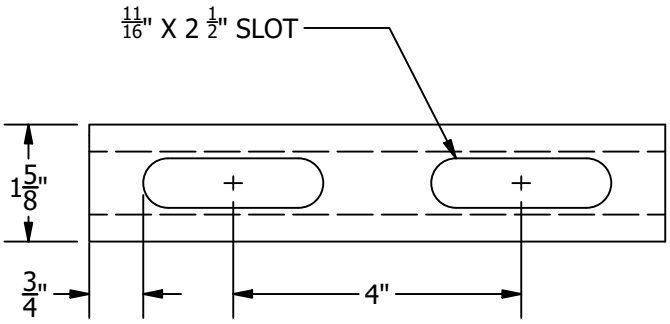
Submittal Sheets

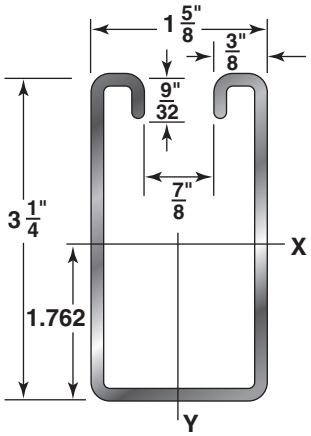
H-112-OS2.5

3¼" X 1⅝"
12 Gauge Channel
wt./100 ft. - 299#



Stocked in pre-galvanized, plain & powder coated Supr-Green, in both 10 & 20 ft. lengths. Note: Also available in Stainless Steel 304 & 316L Alloys. Other materials, finishes & lengths are available upon request.





Specifications

GENERAL

H-STRUT channels are manufactured by a series of forming dies, or rolls, which progressively cold work the strip steel into the desired channel configuration. This method produces a cross section of uniform dimensions within a tolerance of plus or minus 0.015", on outside dimensions.

LENGTH INFORMATION

H-STRUT Channels are produced and stocked in 10' and 20' lengths with a tolerance of ± ⅛".
Other lengths are available upon request.

LOADING DATA

1. When calculating load at center of span, multiply load from table by 0.5 and deflection by 0.8.
2. When calculating beam and column loads for aluminum, multiply by 33%.

MATERIAL

H-STRUT channels are produced from prime structural steel covered by the following specifications.
(See technical section for additional information)

- ❑ Pre-Galvanized Steel. . . . . .ASTM A-653-SS33
- ❑ Plain Steel . . . . . .ASTM A-1011-04-SS33
- ❑ Aluminum (Type 6063T6) . . . . . .ASTM B-221
- ❑ Stainless Steel (Type 304 & 316L) . .ASTM A-240

Other materials and specifications available on request.

FINISHES

All H-STRUT channels are stocked in pre-galvanized and powder coated Supr-Green. Some sizes are stocked in zinc trivalent chromium, PVC or hot dipped galvanized.

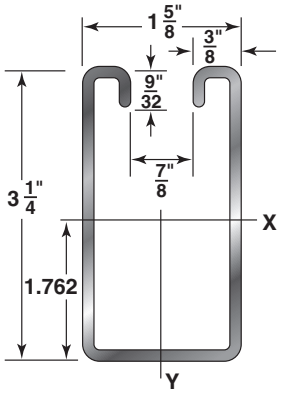
- ❑ Hot Dipped Galvanized. . . . . .ASTM A-123
- ❑ Zinc Trivalent Chromium. . . . . .ASTM B-633-85
- ❑ Powder Coated Supr-Green. . . .ASTM B-117
- ❑ PVC Coating 40 ML Thickness - Available Upon Request

HAYDON®
Get Strut Done.

Submittal Sheets

H-112-OS2.5

3¼" X 1⅝"
12 Gauge Channel
wt./100 ft. - 299# (Cont.)



SECTION PROPERTIES

Catalog No.	Wt./Ft. Lbs.	Area of Section Sq. In.	X-X Axis			Y-Y Axis		
			I in⁴	S in³	r in.	I in⁴	S in³	r in.
H-112-OS2.5	2.99	0.887	1.100	0.633	1.114	0.431	0.530	0.697

I = Moment of Inertia S = Section Modulus r = Radius of Gyration

Span or Unbraced Height (In)	Static Beam Load (X-X Axis)						Max. Allowable Load at Slot Face (Lbs)	Column Loading Data			
	Max Allowable Uniform Load (Lbs)	Deflection at Uniform Load (In)	Uniform Load at Deflection					Max. Column Load Applied at C.G.			
			Span/180 Deflection (Lbs)	Span/240 Deflection (Lbs)	Span/360 Deflection (Lbs)	Weight of Channel (Lbs)		k=.65 (Lbs)	k=.80 (Lbs)	k=1.0 (Lbs)	k=1.2 (Lbs)
12	10,610	0.01	10,610	10,610	10,610	3.1	6,170	19,600	19,060	18,210	17,240
18	7,070	0.02	7,070	7,070	7,070	4.7	5,950	18,320	17,240	15,630	13,920
24	5,300	0.03	5,300	5,300	5,300	6.3	5,650	16,720	15,070	12,770	10,560
30	4,240	0.05	4,240	4,240	4,240	7.8	5,270	14,920	12,770	10,030	7,640
36	3,540	0.07	3,540	3,540	3,540	9.4	4,840	13,060	10,560	7,640	5,650
42	3,030	0.09	3,030	3,030	3,030	11.0	4,360	11,230	8,560	5,910	4,450
48	2,650	0.12	2,650	2,650	2,650	12.5	3,860	9,530	6,850	4,790	3,660
60	2,120	0.18	2,120	2,120	1,920	15.7	3,100	6,680	4,790	3,450	2,710
72	1,770	0.26	1,770	1,770	1,340	18.8	2,570	4,980	3,660	2,710	2,170
84	1,520	0.36	1,520	1,470	980	21.9	2,200	3,950	2,960	2,240	1,820
96	1,330	0.47	1,330	1,130	750	25.0	1,930	3,270	2,500	1,920	1,580
108	1,180	0.60	1,180	890	590	28.2	1,730	2,800	2,170	1,690	1,390
120	1,060	0.74	960	720	480	31.3	1,560	2,450	1,920	1,510	**
144	880	1.06	670	500	330	37.6	1,320	1,980	1,580	**	**
168	760	1.44	490	370	250	43.8	1,150	1,670	1,340	**	**
180	710	1.65	430	320	210	47.0	**	1,550	**	**	**
192	660	1.88	380	280	190	50.1	**	1,450	**	**	**
216	590	2.38	300	220	150	56.3	**	**	**	**	**
240	530	2.94	240	180	120	62.6	**	**	**	**	**

Bearing Load may limit load

** Not recommended - KL/r exceeds 200

Notes

1. The beam capacities shown above include the weight of the strut beam. The beam weight must be subtracted from these capacities to arrive at the net beam capacity.

2. Allowable beam loads are based on a uniformly loaded, simply supported beam. For capacities of a beam loaded at midspan at a single point, multiply the beam capacity by 50% and deflection by 80%.

3. The above chart shows beam capacities for strut without holes. For strut with holes, multiply by the following:

OS2.5 by 86%,

4. Refer to the latest Haydon Engineering Catalog in our Literature Section for reduction factors for unbraced lengths or call us 1-800-2-HAYDON.

Project Information		
Project:		**Notes:**
Address:		
Contractor:		
Engineer:	**Date:**	

Approval		
❑ Approved	**Signature:**	**Remarks:**
❑ Approved as Noted		
❑ Not Approved		