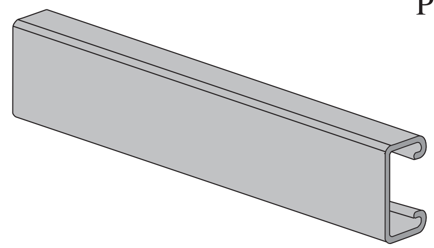
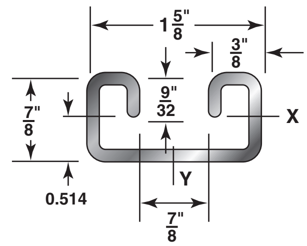
H-172

$\frac{7}{8}$" X 1$\frac{5}{8}$"
12 Gauge Channel
wt./100 ft. - 139#

Stocked in pre-galvanized, plain & powder coated Supr-Green, in both 10 & 20 ft. lengths. Note: Also available in Stainless Steel 304 & 316 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 ± $\frac{1}{8}$".
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
- ❑ Plain Steel . . . . ASTM A-1011-04-SS
- ❑ Aluminum (Type 6063T6) . . . . ASTM B-221
- ❑ Stainless Steel (Type 304 & 316) . . 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.

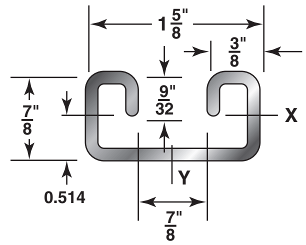
- ❑ Hot Dipped Galvanized. . . . . . . .ASTM A-123
- ❑ Zinc Trivalent Chromium. . . . . . .ASTM B-633-85
- ❑ Powder Coated Supr-Green. . . .ASTM B-117
- ❑ PVC Coating 40 ML Thickness - Available Upon Request

HAYDON
H-STRUT DIVISION

Submittal Sheets

H-172

$\frac{7}{8}$" X 1$\frac{5}{8}$"
12 Gauge Channel
wt./100 ft. - 139# (Cont.)



SECTION PROPERTIES

Catalog No.	Wt./Ft. Lbs.	Area of Section Sq. In.	X-X Axis			Y-Y Axis		
			I in^4	S in^3	r in.	I in^4	S in^3	r in.
H-172	1.39	0.397	0.039	0.077	0.313	0.147	0.181	0.609

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. Column Load Applied at C.G.			
	Max Allowable Uniform Load (Lbs)	Deflection at Uniform Load (In)	Uniform Load at Deflection: 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	1,280	0.03	1,280	1,280	1,280	1.4	2,550	8,760	8,550	8,250	7,940
18	860	0.06	860	860	760	2.1	2,410	8,280	7,940	7,490	6,950
24	640	0.10	640	640	430	2.8	2,260	7,780	7,350	6,500	5,560
30	510	0.16	510	410	270	3.5	2,060	7,320	6,500	5,330	4,180
36	430	0.23	380	280	190	4.2	1,860	6,620	5,560	4,180	2,960
42	370	0.31	280	210	140	4.9	1,660	5,860	4,630	3,140	2,180
48	320	0.40	210	160	110	5.6	1,460	5,090	3,740	2,400	1,670
60	260	0.63	140	100	70	7.0	1,130	3,640	2,400	1,540	**
72	210	0.90	90	70	50	8.3	890	2,530	1,670	**	**
84	180	1.23	70	50	30	9.7	**	1,860	**	**	**
96	160	1.61	50	40	30	11.1	**	1,420	**	**	**
108	140	2.04	40	30	20	12.5	**	**	**	**	**
120	130	2.51	30	30	20	13.9	**	**	**	**	**
144	110	3.62	20	20	NR	16.7	**	**	**	**	**
168	90	4.92	20	NR	NR	19.5	**	**	**	**	**
180	90	5.65	NR	NR	NR	20.9	**	**	**	**	**
192	80	6.43	NR	NR	NR	22.2	**	**	**	**	**
216	70	8.14	NR	NR	NR	25.0	**	**	**	**	**
240	60	10.05	NR	NR	NR	27.8	**	**	**	**	**

Bearing Load may limit load

NR = Not Recommended

** 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:

OS by 88%, OS3 by 90%,
RS ($\frac{9}{16}$ holes) by 88%, RS-3/4-MOD ($\frac{3}{4}$ holes) by 85%,
KO by 82%.

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:

Address:

Contractor:

Engineer: **Date:**

Notes:

Approval

❑ **Approved**

❑ **Approved as Noted**

❑ **Not Approved**

Signature:

Remarks: