

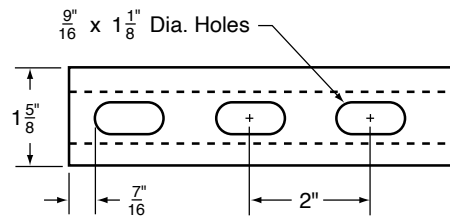
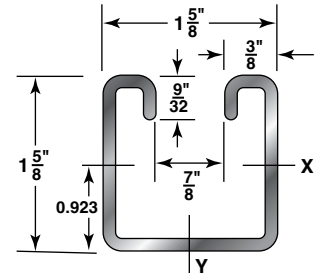
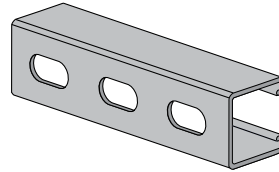
## H-132-OS

**1 5/8" X 1 5/8"**

**12 Gauge Channel**

**Weight/100 ft. - 189 lbs.**

H-STRUT® channels are available in pre-galvanized, plain, powder-coated, zinc trivalent, aluminum, stainless steel 304, and 316L. Standard lengths are 10' and 20'. Other materials, finishes, and 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  $\pm 0.015$ " on outside dimensions.

#### Length Information

H-Strut channels are produced in standard 10' and 20' lengths with a tolerance of  $\pm 1/8$ ". 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 metals covered by the following specifications.

(See the technical section for additional information.)

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

Other materials and specifications are available upon request.

#### Finishes

H-Strut is available in powder-coated, and zinc trivalent. Other finishes are available upon request.

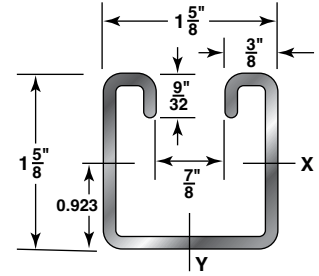
- Hot Dipped Galvanized . . . . . ASTM A-123
- Powder-Coated . . . . . ASTM B-117
- Zinc Trivalent Chromium (ZTC) . . . . . ASTM B-633-85

# H-132-OS

## Section Properties

| Catalog No. | Wt./Ft. Lbs. | Area of Section Sq. In. | X-X Axis          |                   |       | Y-Y Axis          |                   |       |
|-------------|--------------|-------------------------|-------------------|-------------------|-------|-------------------|-------------------|-------|
|             |              |                         | I in <sup>4</sup> | S in <sup>3</sup> | r in. | I in <sup>4</sup> | S in <sup>3</sup> | r in. |
| H-132-OS    | 1.89         | 0.552                   | 0.188             | 0.208             | 0.584 | 0.236             | 0.290             | 0.654 |

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                           | 3,480                            | 0.01                            | 3,480                      | 3,480                     | 3,480                     | 1.9                     | 3,850                                  | 12,240                           | 11,940      | 11,480      | 10,960      |
| 18                           | 2,320                            | 0.03                            | 2,320                      | 2,320                     | 2,320                     | 2.9                     | 3,710                                  | 11,540                           | 10,960      | 10,130      | 9,290       |
| 24                           | 1,740                            | 0.06                            | 1,740                      | 1,740                     | 1,740                     | 3.9                     | 3,530                                  | 10,690                           | 9,850       | 8,740       | 7,710       |
| 30                           | 1,390                            | 0.09                            | 1,390                      | 1,390                     | 1,310                     | 4.9                     | 3,330                                  | 9,780                            | 8,740       | 7,470       | 6,380       |
| 36                           | 1,160                            | 0.13                            | 1,160                      | 1,160                     | 910                       | 5.8                     | 3,120                                  | 8,880                            | 7,710       | 6,380       | 5,310       |
| 42                           | 990                              | 0.17                            | 990                        | 990                       | 670                       | 6.8                     | 2,910                                  | 8,020                            | 6,800       | 5,470       | 4,430       |
| 48                           | 870                              | 0.23                            | 870                        | 770                       | 510                       | 7.8                     | 2,710                                  | 7,240                            | 6,000       | 4,690       | 3,810       |
| 60                           | 700                              | 0.35                            | 660                        | 490                       | 330                       | 9.7                     | 2,340                                  | 5,910                            | 4,690       | 3,630       | 2,960       |
| 72                           | 580                              | 0.51                            | 460                        | 340                       | 230                       | 11.6                    | 2,040                                  | 4,840                            | 3,810       | 2,960       | 2,400       |
| 84                           | 500                              | 0.69                            | 340                        | 250                       | 170                       | 13.6                    | 1,800                                  | 4,040                            | 3,200       | 2,480       | 1,980       |
| 96                           | 430                              | 0.90                            | 260                        | 190                       | 130                       | 15.5                    | 1,600                                  | 3,480                            | 2,750       | 2,110       | 1,670       |
| 108                          | 390                              | 1.14                            | 200                        | 150                       | 100                       | 17.5                    | 1,440                                  | 3,050                            | 2,400       | 1,820       | **          |
| 120                          | 350                              | 1.41                            | 160                        | 120                       | 80                        | 19.4                    | 1,290                                  | 2,700                            | 2,110       | **          | **          |
| 144                          | 290                              | 2.03                            | 110                        | 90                        | 60                        | 23.3                    | 1,060                                  | 2,180                            | 1,670       | **          | **          |
| 168                          | 250                              | 2.77                            | 80                         | 60                        | 40                        | 27.2                    | **                                     | 1,790                            | **          | **          | **          |
| 180                          | 230                              | 3.18                            | 70                         | 50                        | 40                        | 29.1                    | **                                     | **                               | **          | **          | **          |
| 192                          | 220                              | 3.61                            | 60                         | 50                        | NR                        | 31.0                    | **                                     | **                               | **          | **          | **          |
| 216                          | 190                              | 4.57                            | 50                         | 40                        | NR                        | 34.9                    | **                                     | **                               | **          | **          | **          |
| 240                          | 170                              | 5.65                            | 40                         | NR                        | NR                        | 38.8                    | **                                     | **                               | **          | **          | **          |

# Bearing Load may limit load | NR = Not Recommended | \*\* Not recommended - KL/r exceeds 200

### Notes:

- 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.
- 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%.
- The above chart shows beam capacities for strut without holes. For strut with holes, multiply by the following:
  - OS by 88%
- Refer to the latest Haydon Engineering Catalog in our Literature Section for reduction factors for unbraced lengths or call us 1-800-242-9366.

| PROJECT INFORMATION |            |  |          |
|---------------------|------------|--|----------|
| Project:            |            |  | Notes:   |
| Address:            |            |  |          |
| Contractor:         |            |  |          |
| Engineer:           | Date:      |  |          |
| APPROVAL            |            |  |          |
| Approved            | Signature: |  | Remarks: |
| Approved as Noted   |            |  |          |
| Not Approved        |            |  |          |