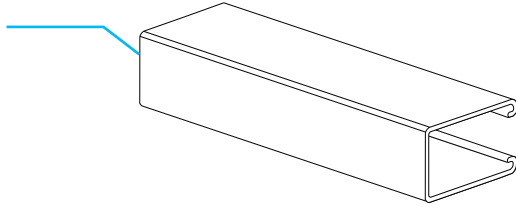


Channel

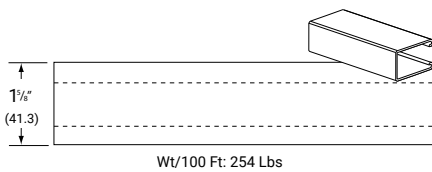
Figs. AS 150, AS 150EH, AS 150KO, AS150H, AS 150S



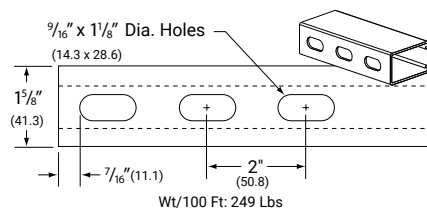
Description

Anvil-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.

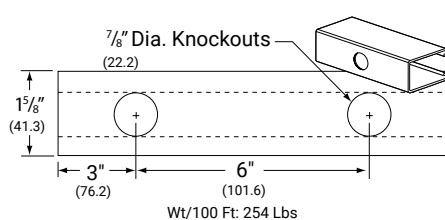
Solid AS 150 PL, GR, PG, Other



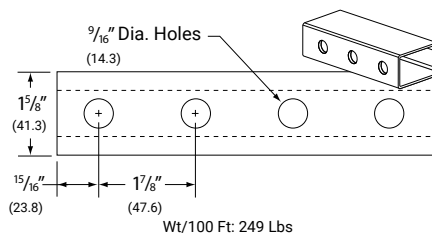
With Elongated Holes AS 150EH PL, GR, PG, Other



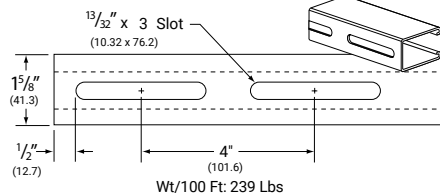
With Knock Out AS 150KO PL, GR, PG, Other



With Holes AS 150H PL, GR, PG, Other



With Long Slots AS 150S PL, GR, PG, Other



LEGEND:

- GR:** Powder Coated Supr-Green
- EG:** Electro-Galvanized
- PG:** Pre-Galvanized
- AL:** Aluminum
- HG:** Hot Dipped Galvanized
- PL:** Plain
- SS:** Stainless Steel
- ZTC:** Zinc Trivalent Chromium Stainless Steel (SS), Zinc Trivalent Chromium (ZTC) and Hot Dipped Galvanized (HG) are specialty finishes. Pricing is located in the Specialty Strut Section of the Anvil-Strut price book.

Specifications

Size:

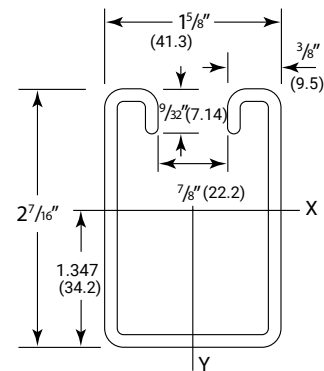
2 7/16" X 1 5/8" (61.9 x 41.3mm)
12 Gauge Channel • wt./100 ft. - 254 lbs.

Materials:

Carbon Steel
Stainless Steel
Aluminum

Finishes

Pre-Galvanized
Hot Dip Galvanized - Post Fabrication
Powder Coated Supr-Green
Zinc Trivalent Chromium
PVC



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

Channel

Figs. AS 150, AS 150EH, AS 150KO, AS150H, AS 150S

Properties of Section

Catalog Number	Wt./Ft.		Area of Selection		X-X Axis						Y-Y Axis					
	Lbs.	Kg.	Sq. In.	Sq. CM	I in ⁴	I cm ⁴	S in ³	S cm ³	r in	r cm	I in ⁴	I cm ⁴	S in ³	S cm ³	r in	r cm
AS 150	2.54	3.8	0.720	4.645	0.525	21.852	0.396	6.489	0.854	2.169	0.334	13.902	0.411	6.735	0.681	1.730

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

Beam and Column Loads

Span or Unbraced Height	Static Beam Load (X-X Axis)							Column Loading Data			
	Max Allowable Uniform Load	Deflection at Uniform Load	Uniform Load at Deflection				Max. Allowable Load at Slot Face	Max. Column Load Applied at C.G.			
			Span/180 Deflection	Span/240 Deflection	Span/360 Deflection	Weight of Channel		k=.65	k=.80	k=1.0	k=1.2
In	Lbs	In	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs
12	6,640	0.01	6,640	6,640	6,640	2.5	5,050	15,940	15,530	14,880	14,140
18	4,430	0.02	4,430	4,430	4,430	3.8	4,870	14,970	14,140	12,920	11,640
24	3,320	0.04	3,320	3,320	3,320	5.1	4,630	13,750	12,500	10,790	9,160
30	2,660	0.06	2,660	2,660	2,660	6.4	4,350	12,390	10,790	8,770	7,020
36	2,210	0.09	2,210	2,210	2,210	7.6	4,030	11,000	9,160	7,020	5,360
42	1,900	0.12	1,900	1,900	1,870	8.9	3,700	9,650	7,680	5,590	4,320
48	1,660	0.15	1,660	1,660	1,430	10.2	3,350	8,400	6,390	4,620	3,630
60	1,330	0.24	1,330	1,330	920	12.7	2,770	6,240	4,620	3,450	2,770
72	1,110	0.35	1,110	960	640	15.2	2,360	4,790	3,630	2,770	2,260
84	950	0.47	940	700	470	17.8	2,070	3,890	3,010	2,330	1,910
96	830	0.62	720	540	360	20.3	1,850	3,290	2,580	2,020	1,650
108	740	0.78	570	420	280	22.9	1,670	2,860	2,260	1,770	1,440
120	660	0.97	460	340	230	25.4	1,520	2,530	2,020	1,580	**
144	550	1.39	320	240	160	30.5	1,290	2,070	1,650	**	**
168	470	1.89	230	180	120	35.6	1,110	1,750	1,380	**	**
180	440	2.17	200	150	100	38.1	**	1,620	**	**	**
192	420	2.47	180	130	90	40.6	**	1,510	**	**	**
216	370	3.13	140	110	70	45.7	**	**	**	**	**
240	330	3.86	110	90	60	50.8	**	**	**	**	**

Bearing Load may limit load
 ** 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:
 EH by 88%, S by 90%,
 H (% holes) by 88%, KO by 82% .
 - Refer to the Anvil-Strut Catalog for reduction factors for unbraced lengths

Channel

Figs. AS 150, AS 150EH, AS 150KO, AS150H, AS 150S

Beam and Column Loads – Metric

Span or Unbraced Height	Static Beam Load (X-X Axis)							Column Loading Data			
	Max Allowable Uniform Load	Deflection at Uniform Load	Uniform Load at Deflection				Max. Allowable Load at Slot Face	Max. Column Load Applied at C.G.			
			Span/180 Deflection	Span/240 Deflection	Span/360 Deflection	Weight of Channel		k=.65	k=.80	k=1.0	k=1.2
mm	Kn	mm	Kn	Kn	Kn	Kg	Kn	Kn	Kn	Kn	
305	29.5	0.3	29.5	29.5	29.5	1.1	22.5	70.9	69.1	66.2	62.9
457	19.7	0.5	19.7	19.7	19.7	1.7	21.7	66.6	62.9	57.5	51.8
610	14.8	1.0	14.8	14.8	14.8	2.3	20.6	61.2	55.6	48.0	40.7
762	11.8	1.5	11.8	11.8	11.8	2.9	19.3	55.1	48.0	39.0	31.2
914	9.8	2.3	9.8	9.8	9.8	3.4	17.9	48.9	40.7	31.2	23.8
1,067	8.5	3.0	8.5	8.5	8.3	4.0	16.5	42.9	34.2	24.9	19.2
1,219	7.4	3.8	7.4	7.4	6.4	4.6	14.9	37.4	28.4	20.6	16.1
1,524	5.9	6.1	5.9	5.9	4.1	5.8	12.3	27.8	20.6	15.3	12.3
1,829	4.9	8.9	4.9	4.3	2.8	6.9	10.5	21.3	16.1	12.3	10.1
2,134	4.2	11.9	4.2	3.1	2.1	8.1	9.2	17.3	13.4	10.4	8.5
2,438	3.7	15.7	3.2	2.4	1.6	9.2	8.2	14.6	11.5	9.0	7.3
2,743	3.3	19.8	2.5	1.9	1.2	10.4	7.4	12.7	10.1	7.9	6.4
3,048	2.9	24.6	2.0	1.5	1.0	11.5	6.8	11.3	9.0	7.0	**
3,658	2.4	35.3	1.4	1.1	0.7	13.8	5.7	9.2	7.3	**	**
4,267	2.1	48.0	1.0	0.8	0.5	16.1	4.9	7.8	6.1	**	**
4,572	2.0	55.1	0.9	0.7	0.4	17.3	**	7.2	**	**	**
4,877	1.9	62.7	0.8	0.6	0.4	18.4	**	6.7	**	**	**
5,486	1.6	79.5	0.6	0.5	0.3	20.7	**	**	**	**	**
6,096	1.5	98.0	0.5	0.4	0.3	23.0	**	**	**	**	**

Channel

Figs. AS 150, AS 150EH, AS 150KO, AS150H, AS 150S

Materials

Carbon Steel: Channels are formed from high-quality, structural grade carbon steel which has been manufactured in accordance with ASTM A-1011-04- SS Grade 33 (hot rolled), or ASTM 366 (cold rolled), with mechanical properties of 33 ksi minimum yield and 52 ksi minimum tensile strength. The precision roll-forming process by which the channels are formed "cold works" the steel, thereby increasing its mechanical properties.

Stainless Steel: Channels are formed from chromium-nickel stainless steel sheet manufactured in accordance with ASTM A-240 specification, offered in both AISI Type 304 and 316 material to provide protection in varying corrosive conditions.

Aluminum: Extruded aluminum channel is produced from 6063-T6 alloy, and fittings are produced from 5052-H32 alloy, both in accordance with ASTM B-221 specifications. Aluminum is suitable for use in various corrosive environments.

Finishes

Pre-Galvanized: Hot dip, mill galvanized coating produced through a process of continuously passing the steel through a bath of molten zinc. This process is performed in accordance with ASTM A-653. The thickness of the zinc coating conforms with ASTM G-90 which represents a coating thickness of .90 ounces of zinc per square foot. This coating is applied to the steel master coils prior to slitting and fabrication.

Hot Dip Galvanized – Post Fabrication: The finished channel is completely immersed in a bath of molten zinc, resulting in the complete coating of all surfaces of the product, including edges and welds. Strut channels that are hot dip galvanized, have a total coating weight of 3.0 ounces of zinc per square foot in accordance with ASTM A-123 specification. This coating provides superior results in applications calling for prolonged outdoor exposure.

Supr-Green Powder Coating: Strut channels are coated after fabrication with polyester powder finish. This coating is applied using an electrostatic spray process, beginning with cleaning and phosphating, through a bonderite pretreatment process, and ending with oven curing. The resulting finish provides a high quality appearance and durability. Powder Coating is in accordance with ASTM B-117 (standard practice for operating salt spray (fog) apparatus) to 500 hours with less than 1/8" scribe creep.

Zinc Trivalent Chromium: The finished channel undergoes a multi-step process consisting of electrogalvanizing, in accordance with ASTM B-633-85, followed by an application of zinc trivalent chromium, which provides the distinctive gold coloration of the finish. All surfaces are coated because the process is performed after fabrication.

PVC: A corrosive resistant PVC (polyvinyl chloride) coating is applied over the completed strut channel. The coating process consists of surface pretreatment, followed by preheating of the part, which is then passed through a fluidized bed of vinyl plastic powder. The powder melts onto the heated channel forming a smooth coating which undergoes a final heat curing.