

4.0 MQ SUPPORT SYSTEM

HILTI STRUT

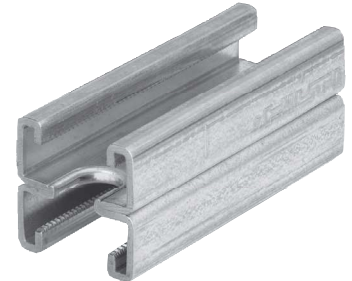
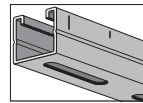
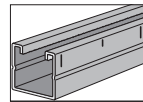
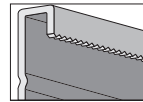
Product Description

C-Profile Channel

Hilti strut consists of a C-profile channel with serrated open edges rolled inwards. The strut provides an economical solution for mechanical, electrical and industrial supports.

Features

- C-Profile with serrated edges for greater hold and adjustability
- Scaled tick marks every 2" to assist with measurement, cutting and installation
- Full slot for greater flexibility in anchoring
- Longitudinal swaging for greater strength



Back-to-Back



C-Profile

MATERIAL

Material

Hot rolled sheet steel per ASTM A1011 and cold formed per ASTM A568. Manufactured to MFMA-4.

Carbon Steel

ASTM A653, Grade 33

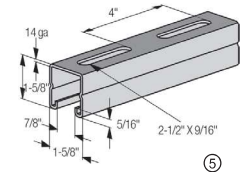
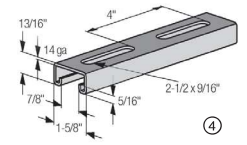
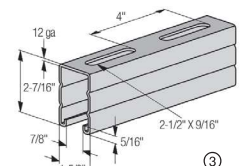
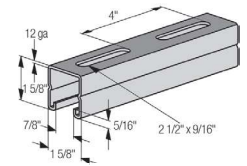
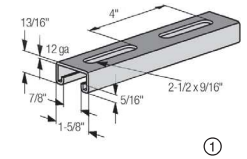
Stainless Steel

SAE SS 316 Ti (1.4571 (A5)) — Ti is titanium to improve welding properties
SAE SS 316 L (1.4404)

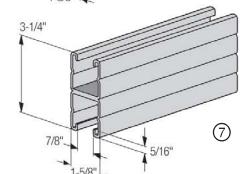
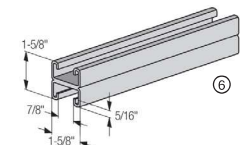
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Ordering Information

Description	Hole Configuration	Weight per piece (lb)	Qty	Item No. Single piece	Qty (VIP)	Item No. VIP Pack
Strut 13/16 in-12 gauge						
Strut 13/16 in-12 ga/PG 10 ft	①	2-1/2 in x 9/16 in	12.2	1	407543	50 3453066
Strut 13/16 in-12 ga/PG 20 ft	①	2-1/2 in x 9/16 in	24.3	1	407544	50 3453067
Strut 13/16 in-12 ga/PGS 10 ft	①	solid	15.4	1	407545	50 3453064
Strut 13/16 in-12 ga/PGS 20 ft	①	solid	30.8	1	407546	50 3453065
Strut 13/16 in-12 ga/HDG 10 ft		2-1/2 in x 9/16 in	12.8	1	407569	50 3453650
Strut 1-5/8 in-12 gauge						
Strut 1-5/8 in-12 ga/PG 2 ft Kwik Cut	②	2-1/2 in x 9/16 in	3.6	1	407551	50 3453075
Strut 1-5/8 in-12 ga/PG 4 ft Kwik Cut	②	2-1/2 in x 9/16 in	7.2	1	407552	50 3453076
Strut 1-5/8 in-12 ga/PG 6 ft Kwik Cut	②	2-1/2 in x 9/16 in	10.8	1	407553	50 3453077
Strut 1-5/8 in-12 ga/PG 6 ft 8 in Kwik Cut	②	2-1/2 in x 9/16 in	12.0	1	407554	50 3453078
Strut 1-5/8 in-12 ga/PG 10 ft	②	2-1/2 in x 9/16 in	18.0	1	407555	50 3453079
Strut 1-5/8 in-12 ga/PG 10 ft (11/16" slot)		2-1/2 in x 11/16 in	18.0	1	407560	50 3453081
Strut 1-5/8 in-12 ga/PG 20 ft	②	2-1/2 in x 9/16 in	36.0	1	407557	50 3453080
Strut 1-5/8 in-12 ga/PGS 10 ft	②	solid	18.5	1	407561	50 3453073
Strut 1-5/8 in-12 ga/PGS 20 ft	②	solid	37.0	1	407562	50 3453074
Strut 1-5/8 in-12 ga/HDG 10 ft		2-1/2 in x 9/16 in	18.8	1	407570	50 3453082
Strut 2-7/16 in-12 gauge						
Strut 2-7/16 in-12 ga/PG 10 ft	③	2-1/2 in x 9/16 in	24.5	1	407566	40 3453087
Strut 2-7/16 in-12 ga/PG 20 ft	③	2-1/2 in x 9/16 in	49.0	1	407567	40 3453088
Strut 2-7/16 in-12 ga/PG 20 ft (11/16" slot)		2-1/2 in x 11/16 in	48.5	1	407568	- -
Strut 13/16 in-14 gauge						
Strut 13/16 in-14 ga/PG 10 ft	④	2-1/2 in x 9/16 in	8.7	1	407547	50 3453070
Strut 13/16 in-14 ga/PG 20 ft	④	2-1/2 in x 9/16 in	17.4	1	407548	50 3453071
Strut 13/16 in-14 ga/PGS 10 ft	④	solid	9.7	1	407549	50 3453069
Strut 13/16 in-14 ga/SS316 Ti 9 ft 10 in	④	2-1/2 in x 9/16 in	9.9	1	3445372	- -
Strut 1-5/8 in-14 gauge						
Strut 1-5/8 in-14 ga/PG 10 ft	⑤	2-1/2 in x 9/16 in	13.6	1	407563	50 3453085
Strut 1-5/8 in-14 ga/PG 20 ft	⑤	2-1/2 in x 9/16 in	27.2	1	407564	50 3453086
Strut 1-5/8 in-14 ga/PGS 10 ft	⑤	solid	13.9	1	407565	50 3453089
Strut 1-5/8 in-14ga/SS316 9 ft 10 in		2-1/2 in x 9/16 in	14.0	1	303992	- -
Strut 1-5/8 in-14ga/SS316 19 ft 8 in		2-1/2 in x 9/16 in	28.0	1	303993	- -



Description	Hole Configuration	Weight per piece (lb)	Qty	Item No. Single piece
Strut 13/16 in-12 gauge back-to-back				
Strut 13/16 in-12 ga/PG back-to-back (10 ft)	⑥	2-1/2 in x 9/16 in	23.0	1 2007081
Strut 13/16 in-14 gauge back-to-back				
Strut 13/16 in-14ga/SS316 back-to-back 9 ft 10 in		1-9/16 in x 9/16 in	19.6	1 303998
Strut 1-5/8 in-12 gauge back-to-back				
Strut 1-5/8 in-12 ga/PG back-to-back (10 ft)	⑦	2-1/2 in x 9/16 in	35.9	1 2007082
Strut 1-5/8 in-12 ga/PG back-to-back (20 ft)	⑦	2-1/2 in x 9/16 in	80.8	1 2007083
Strut 1-5/8 in -12 ga/ HDG back-to-back (10 ft)	⑦	2-1/2 in x 9/16 in	37.6	1 2007087
Strut 1-5/8 in -12 ga/ PG back-to-back (20 ft) - 11/16" slot	⑦	2-1/2 in x 11/16 in	36.0	1 2007086
Strut 1-5/8 in-14 gauge back-to-back				
Strut 1-5/8 in-14ga/SS316 back-to-back 9 ft 10 in		1-9/16 in x 9/16 in	28.2	1 304002
Strut 2 7/16 in -12 gauge back-to-back				
Strut 2 7/16 in -12 ga/ PG back-to-back (20 ft) - 11/16" slot		2-1/2 in x 11/16 in	97.0	1 2007084



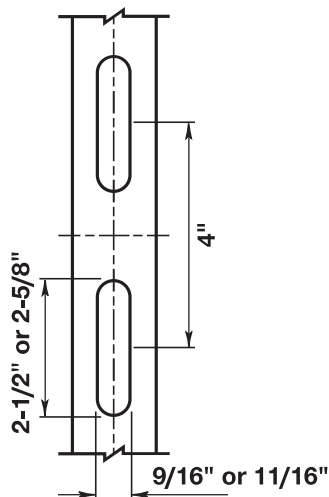
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CROSS-SECTION VALUES FOR HILTI STRUT PROFILES (SLOTTED STRUT)

	1316-12		158-12		2716-12		1316 B2B-12		158 B2B-12		2716 B2B-12	
12 Gauge												
Profile Weight	1,287 lb/ft	1,92 kg/m	1,881 lb/ft	2,80 kg/m	2,471 lb/ft	3,68 kg/m	2,533 lb/ft	3,77 kg/m	3,588 lb/ft	5,34 kg/m	6,095 lb/ft	9,07 kg/m
Area of section	0.343 in ²	2.21 cm ²	0.521 in ²	3.36 cm ²	0.691 in ²	4.46 cm ²	0.687 in ²	4.43 cm ²	1.042 in ²	6.72 cm ²	1.367 in ²	8.82 cm ²
Moment of inertia I_x	0.028 in ⁴	1.18 cm ⁴	0.169 in ⁴	7.05 cm ⁴	0.476 in ⁴	19.83 cm ⁴	0.148 in ⁴	6.17 cm ⁴	0.939 in ⁴	39.08 cm ⁴	2,816 in ⁴	117.19 cm ⁴
Moment of inertia I_y	0.136 in ⁴	5.65 cm ⁴	0.235 in ⁴	9.77 cm ⁴	0.331 in ⁴	13.78 cm ⁴	0.271 in ⁴	11.29 cm ⁴	0.470 in ⁴	19.55 cm ⁴	0.662 in ⁴	27.57 cm ⁴
Section Modulus S_x	0.062 in ³	1.01 cm ³	0.198 in ³	3.24 cm ³	0.378 in ³	6.19 cm ³	0.180 in ³	2.95 cm ³	0.581 in ³	9.52 cm ³	1.163 in ³	19.05 cm ³
Section Modulus S_y	0.167 in ³	2.73 cm ³	0.289 in ³	4.73 cm ³	0.406 in ³	6.66 cm ³	0.333 in ³	5.46 cm ³	0.577 in ³	9.45 cm ³	0.813 in ³	13.32 cm ³
Radius of Gyration R_x	0.287 in	0.73 cm	0.571 in	1.45 cm	0.831 in	2.11 cm	0.465 in	1.18 cm	0.949 in	2.41 cm	1.437 in	3.65 cm
Radius of Gyration R_y	0.630 in	1.60 cm	0.673 in	1.71 cm	0.693 in	1.76 cm	0.630 in	1.60 cm	0.673 in	1.71 cm	0.697 in	1.77 cm
Gravity Axis e₁	0.459 in	1.17 cm	0.857 in	2.18 cm	1.261 in	3.20 cm	0.824 in	2.09 cm	1.615 in	4.10 cm	2.422 in	6.15 cm

- Strut data is given for 9/16" slotted strut except 2716B2B slot 11/16"
- Nominal thickness of 12 gauge strip steel is 0.101 inches (2.57mm)
- Modulus of elasticity = 29,500,000 psi

Slot Configurations



Hilti Full Slot

Technical Data and Strut Profile		1316-14		158-14	
14 Gauge					
Profile Weight	1,004 lb/ft	1,49 kg/m	1,445 lb/ft	2,15 kg/m	
Area of section	0.270 in ²	1.74 cm ²	0.395 in ²	2.55 cm ²	
Moment of inertia I_x	0.024 in ⁴	0.98 cm ⁴	0.132 in ⁴	5.51 cm ⁴	
Moment of inertia I_y	0.109 in ⁴	4.53 cm ⁴	0.185 in ⁴	7.68 cm ⁴	
Section Modulus S_x	0.053 in ³	0.87 cm ³	0.156 in ³	2.55 cm ³	
Section Modulus S_y	0.134 in ³	2.19 cm ³	0.225 in ³	3.69 cm ³	
Radius of Gyration R_x	0.295 in	0.75 cm	0.579 in	1.47 cm	
Radius of Gyration R_y	0.638 in	1.62 cm	0.685 in	1.74 cm	
Gravity Axis e₁	0.446 in	1.13 cm	0.851 in	2.16 cm	

- Strut data is given for 9/16" slotted strut
- Nominal thickness of 14 gauge strip steel is 0.078 inches (2.00mm)
- Modulus of elasticity = 29,500,000 psi

FOR MAXIMUM CAPACITIES UTILIZE HILTI'S PROFIS INSTALLATION SOFTWARE