



Back-To-Back Strut, Elongated Holes Deep Profile

STR-12G-158-158-EHO-BB

Features and Benefits

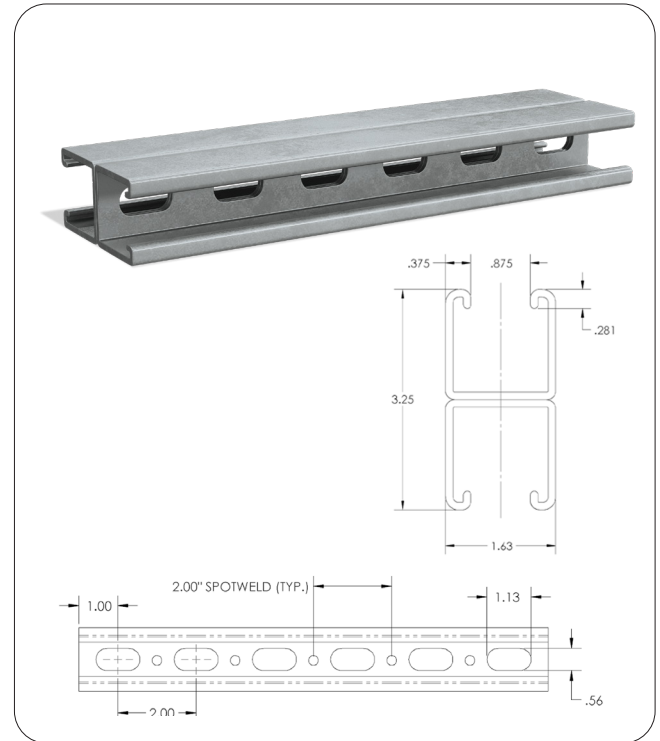
- RMC's Pre-Galvanized Deep Strut Channel metal framing is used to support conduit, panel boxes, raceway systems and other electrical components.
- Strut Channel raceways are exceptionally versatile in that the support systems can be attached to ceilings, wood or steel beams, inside columns or imbedded in concrete.
- Steel strut combines strength, durability, and corrosion resistance, making it a reliable choice for various construction and engineering projects where stability and longevity are essential.
- Back-To-Back configuration provides enhanced structural capacity.
- Material (steel strip) is immersed in a galvanized bath prior to roll-forming or press operations that cold works the strip steel into the desired channel profile.
- This method produces a cross section of uniform dimensions within a tolerance of $\pm .015"$.

Applications

- Elongated holes provide flexibility for installation and adjustment. Back-to-back configuration (3-1/4" X 1-5/8" 12 gauge) offers increased load capacity and structural performance for demanding applications.

Certifications

- Rep Material's Pre-Galvanized Strut coating conforms to ASTM A653, Grade 90 General Requirement for Steel Sheet, Zinc-Coated (Galvanized) by Hot Dip Process. Provides superior corrosion protection for long-term reliability.



Beam Loading 3-1/4" x 1-5/8" 12 Gauge					
SPAN (IN)	MAX. ALLOWABLE UNIFORM LOAD (LBS.)	DEFLECTION @ UNIFORM LOAD (IN.)	SPAN/180 (LBS.)	SPAN/240 (LBS.)	SPAN/360 (LBS.)
24	3500*	0.02	3500*	3500*	3500*
36	3190	0.07	3190	3190	3190
48	2390	0.13	2390	2390	2390
60	1910	0.2	1910	1910	1620
72	1600	0.28	1600	1600	1130
84	1370	0.39	1370	1240	830
96	1200	0.51	1200	950	630
108	1060	0.64	1000	750	500
120	960	0.79	810	610	410
144	800	1.14	560	420	280
168	680	1.53	410	310	210
192	600	2.02	320	240	160
216	530	2.54	250	190	130

*Load limited by spot weld shear.
This load table is based on a solid channel section STR-12G-158-158-SLD.
For elongated hole channels STR-12G-158-158-EHO reduce beam load values by 15%.
For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by .80.
Loads include weight of channel, which must be deducted.
Loads must be multiplied by the applicable unbraced factor from the "Lateral Bracing Load Reduction Chart".



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Column Loading 3-1/4" x 1-5/8" 12 Gauge					
UNBRACED HEIGHT (IN.)	MAX. ALLOWABLE LOAD @ SLOT FACE (LBS.)	K=0.65 (LBS.)	K=0.80 (LBS.)	K=1.0 (LBS.)	K=1.2 (LBS.)
24	6430	24280	23610	22700	21820
36	6290	22810	21820	20650	19670
48	6160	21410	20300	18670	16160
60	6000	20210	18670	15520	12390
72	5620	18970	16160	12390	8950
84	5170	16950	13630	9470	6580
96	4690	14890	11190	7250	5040
108	4170	12850	8950	5730	3980
120	3690	10900	7250	4640	***
144	2930	7630	5040	***	***

***- Not Recommended KL/r exceeds 200

Column loads are for allowable axial loads and must be reduced for eccentric loading

Lateral Bracing Factors - Back to Back Channel		
SPAN (FT.)	SPAN (IN.)	1-5/8" X 1-5/8" X 10' 12 GAUGE (DEEP PROFILE)
2	24	1
3	36	1
4	48	1
5	60	0.97
6	72	0.93
7	84	0.89
8	96	0.85
9	108	0.81
10	120	0.78
12	144	0.7
14	168	0.63
16	192	0.56
18	216	0.49
20	240	0.44