

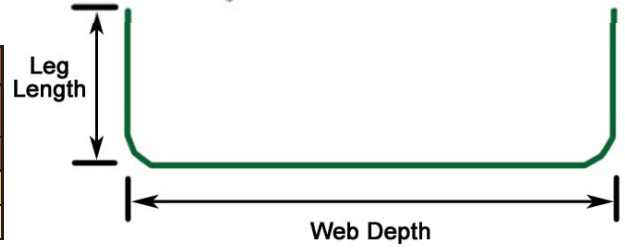
150U050-54, 33 ksi



Material Composition

ASTM A1003/A 1003M Non Structural Grade 33 (230), 33 ksi (230 MPa) minimum yield strength, G40 (Z120) hot-dipped galvanized coating, or equivalent.

Section	Product Profile					
	Web Depth	Leg Length	Gauge	Design Thickness	Min Steel Thickness	Inside Bend Radius
	(D)	(B)	(ga)	(t)	(t _{min})	(R)
075U050-54, 33 ksi	0.75	0.5	16	0.0566	0.0538	0.0849
150U050-54, 33 ksi	1.5	0.5	16	0.0566	0.0538	0.0849



Section	Gross Properties						Effective Properties			
	Area	Weight	I _x	R _x	I _y	R _y	I _{xe}	S _{xe}	M _a	V _a
	(in ²)	(lbs/ft)	(in ⁴)	(in)	(in ⁴)	(in)	(in ⁴)	(in ³)	(in-k)	(lb)
075U050-54, 33 ksi	0.087	0.296	0.007	0.289	0.002	0.156	0.007	0.019	0.459	315
150U050-54, 33 ksi	0.130	0.441	0.039	0.547	0.003	0.146	0.039	0.052	1.230	840

Important Notes

1. Section properties and capacities are calculated in accordance with AISI-NASPEC 2007.
2. Tabulated gross properties are based on the full, unreduced cross section of the cold-rolled channel.
3. For deflection calculations, use the effective moment of inertia (I_e). This I_e is calculated at a stress which results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable moment. AISI S100-07 Procedure I for serviceability determination has been used.

Cold Rolled Channel (U) Allowable Ceiling Spans - L/120																					
Section	Span	4 psf					6 psf					13 psf					15 psf				
		Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
075U050-54, 33 ksi	Single	4' 10"	4' 1"	3' 7"	3' 3"	3' 0"	4' 1"	3' 5"	3' 0"	2' 9"	2' 6"	2' 11"	2' 5"	2' 2"	1' 11"	1' 9"	2' 9"	2' 4"	2' 0"	1' 10"	1' 8"
	Multiple	5' 5"	4' 6"	4' 2"	3' 10"	3' 5"	4' 6"	3' 11"	3' 5"	3' 2"	2' 11"	3' 5"	2' 9"	2' 4"	2' 1"	1' 11"	3' 1"	2' 7"	2' 2"	2' 0"	1' 9"
150U050-54, 33 ksi	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 4"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
Cold Rolled Channel (U) Allowable Ceiling Spans - L/240																					
075U050-54, 33 ksi	Single	3' 11"	3' 5"	3' 1"	2' 11"	2' 9"	3' 5"	3' 0"	2' 9"	2' 6"	2' 4"	2' 8"	2' 4"	2' 1"	1' 11"	1' 9"	2' 6"	2' 2"	2' 0"	1' 10"	1' 8"
	Multiple	4' 10"	4' 2"	3' 10"	3' 7"	3' 4"	4' 2"	3' 8"	3' 4"	3' 1"	2' 10"	3' 3"	2' 9"	2' 4"	2' 1"	1' 11"	3' 1"	2' 7"	2' 2"	2' 0"	1' 9"
150U050-54, 33 ksi	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 4"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
Cold Rolled Channel (U) Allowable Ceiling Spans - L/360																					
075U050-54, 33 ksi	Single	3' 5"	3' 0"	2' 9"	2' 6"	2' 4"	3' 0"	2' 7"	2' 4"	2' 2"	2' 1"	2' 4"	2' 0"	1' 10"	1' 8"	1' 7"	2' 2"	1' 11"	1' 9"	1' 7"	1' 6"
	Multiple	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	3' 8"	3' 2"	2' 11"	2' 8"	2' 7"	2' 10"	2' 6"	2' 3"	2' 1"	1' 11"	2' 8"	2' 4"	2' 2"	2' 0"	1' 9"
150U050-54, 33 ksi	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 4"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"

Important Notes

1. Allowable ceiling spans are based on effective properties.
2. Multiple span indicates two or more equal spans with channel continuous over center support.
3. Bearing length is equal to 0.75 inches.
4. Table values are based on the compression flanged laterally unsupported.