

1000S300-97

» **Product Information**

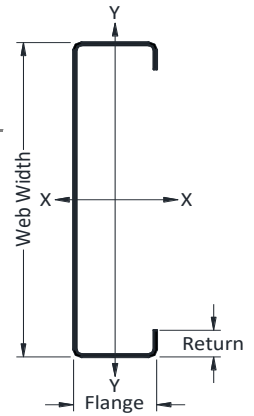
The structural stud is fabricated from prime mill certified steel with a true galvanized coating. Heavier coatings may be available upon request.

» **Steel Material Properties**

97 Mil	Labeled Thickness
0.1017"	Design Thickness
0.0966"	Minimum Thickness
50 ksi	Yield Strength (Fy)
65 ksi	Tensile Strength (Fu)
G90	Galvanize Coating Thickness
Red	Color Code (Painted Ends)

» **Geometric Properties**

10"	Web Width
3"	Flange Height
5/8"	Return Length



» **LEED - Contributing Credits**

- All Steel-Con materials have a high inherent recycled steel content.
- LEED 2009 - MRc2 (2 points) & MRc4 (2 points)
 - LEED v4 - MR Credits - EPD (2 points) - Waste Management (2 points) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Innovation (2 points)

» **Recycled Content of Steel**

- 14.4% Pre-Consumer Scrap Recycled Content
- 19.8% Post-Consumer Scrap Recycled Content
- 34.2% Total Recycled Content

» **ASTM and AISI Code Standards**

- ASTM A653/A653M, A924/A924M, A1003, C645, C754, C955, C1007
- AISI S100-16 per 2018 IBC, AISI S100-16(2020) w/ S2-20 per 2021 IBC
- 2018, 2021 International Building Codes
- 6th Edition 2017 and 7th Edition 2020 FBC & FBC-R

» **Steel-Con Technical Services**

For additional information, visit www.steelconsystems.com or contact technical services at 407-404-5292 or Technical@steelconsys.com

» **Section Properties**

Table Notes:

1. The centerline bend radius is based on inside corner radii.
2. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI S100 A7.2.
3. Tabulated gross properties are based on the full-unreduced cross section of the studs away from punch-out's.
4. For deflection calculations, use the effective moment of inertia.
5. Allowable moment is the lesser of Mal and Mad. Stud distortional buckling is based on an assumed $K\phi = 0$.



Section	Gross Properties							Effective and Distortional Properties							Torsional Properties					Lu (in)
	Area (in ²)	Weight (lb/ft)	Ix (in ⁴)	Sx (in ³)	Rx (in)	Iy (in ⁴)	Ry (in)	Ixe (in ⁴)	Sxe (in ³)	Mal (in-k)	Mad (in-k)	Vag (lb)	VaNet (lb)	Jx1000 (in ⁴)	Cw (in ⁶)	Xo (in)	m (in)	Ro (in)	B	
1000S300-97	1.677	5.71	24.318	4.864	3.808	1.702	1.007	23.970	4.499	134.69	115.62	9864	7177	5.783	33.570	-1.838	1.158	4.346	0.821	57.4

» **Limiting Wall Heights**

Table Notes:

1. Listed wind pressures represent calculated designed wind pressure (1.0 W based on 2009 or 0.6 W based on 2012 IBC). For deflection calculations, listed wind pressures have been reduced by 0.70 as allowed by IBC. The 5 psf pressure has not been reduced for deflection checks.
2. Studs must be braced against rotation and lateral movement at all supports.
3. Studs are assumed to be adequately braced at a maximum spacing of Lu to develop full allowable moment.
4. Web crippling check is based on 1" of bearing at end supports and 3" of bearing at interior support.
5. Shear and web crippling capacity at end supports have not been reduced for punch-out's. Shear and web crippling capacity at interior support have been reduced for the presence of punch-out adjacent to the support.
4. Combined bending and shear check at interior support is based on unreinforced web per AISI S100 (Eq. C3.3.1-1). Shear capacity and combined bending and shear check at interior support have been reduced for the presence of punch-out's adjacent to support.

Stud Spacing (in)	Non-Composite Fully Braced (5 psf)			Non-Composite Fully Braced (15 psf)			Non-Composite Fully Braced (20 psf)		
	L/120	L/240	L/360	L/240	L/360	L/600	L/240	L/360	L/600
12" o.c.	86' 0"	68' 3"	59' 8"	53' 4"	46' 7"	39' 3"	48' 5"	42' 4"	35' 8"
16" o.c.	78' 2"	62' 0"	54' 2"	48' 5"	42' 4"	35' 8"	44' 0"	38' 5"	32' 5"
24" o.c.	68' 3"	54' 2"	47' 4"	42' 4"	36' 11"	31' 2"	38' 5"	33' 7"	28' 4"