

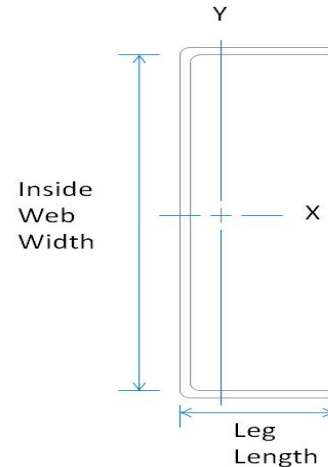
Member Designator 400PT300-15

Coating G40 EQ

Physical Properties

Design Thickness 0.0158 in
 Mil 15 mil
 Gauge 25 Gauge
 Web Width 4.00 in
 Flange Width 3.00 in
 Yield Strength 50 ksi

Note : Web depth to thickness ratio exceeds 200, web stiffeners are required at bearing locations in non-composite conditions



Gross Properties

Gross Properties						
Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)
0.158	0.538	0.474	0.233	1.732	0.155	0.992

Effective Properties

Effective Properties			
A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	M _a (in-lbs)
0.021	0.178	0.040	1204

Torsional Properties

Torsional				
J ^{x1000} (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	β
0.013	0.450	-2.116	2.909	0.471

General Notes

- Physical properties and load tables have been calculated based on AISI S100-07, NASPEC for Design of Cold-Formed Steel Structural Members.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- Allowable moment includes cold-work of forming.
- Tabulated gross properties, including torsional properties, are based on full-unreduced cross section of the studs (away from punchouts) & tracks.
- Allowable moment is taken as the lowest value based on local or distortional buckling. Distortional buckling strength is based on a k-phi = 0.
- Drywall framing members have a protective coating conforming to ASTM spec A 653/A 653M, G-40 min, or equivalent corrosion resistance.
- Reference ASTM specification A 1003/A 1003 M table 1 for the universe of allowable coatings for light gauge steel framing.
- Drywall framing members are marked with product information per the requirements of ASTM C 645 section 14.
- All delivered material must be kept dry. If it is necessary to store material outside, it must be stacked off the ground, properly supported on a level platform, and fully protected from the weather. Reference ASTM C 754 section 8 and ASTM C 1007 section 4.
- Drywall framing [nonstructural 25 gauge, 22 gauge and 20 gauge] is not permitted in load bearing (i.e. axial load greater than 200 lbs.) or exterior applications (i.e. transverse load greater than 10 PSF). Reference ASTM C 645 section 3.2.2.

LEED Green Building Credits

- MR Credit 2: Construction Waste Management – MBA steel framing is 100% recyclable.
- MR Credit 4: Recycled Content – MBA steel framing is formed from no less than 25.5% post-consumer and 6.8% pre-consumer recycled content.
- MR Credit 5: Regional Materials – MBA has manufacturing facilities in multiple states.