

Member Designator **400PT300-33**
 Coating G40 EQ

Physical Properties

Design Thickness 0.0346 in
 Mil 33 mil
 Gauge 20 Gauge
 Web Width 4.00 in
 Flange Width 3.00 in
 Yield Strength 33 ksi



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)
0.346	1.176	1.045	0.508	1.738	0.338	0.989

Effective Properties

Effective Properties			
A _e (in ²)	I _{xe} (in ⁴)	S _{xe} (in ³)	M _a (in-lbs)
0.109	0.671	0.210	4158

Torsional Properties

Torsional				
J ^{x1000} (in ⁴)	C _w (in ⁶)	X _o (in)	R _o (in)	β
0.138	0.988	-2.105	2.904	0.474

General Notes

- MBA Building Supplies is a SSMA member company. MBA adheres to the product standards and quality standards as required by SSMA.
- Physical properties and load tables have been calculated in conformance with the 2001 NASPEC for the Design of Cold-Formed Steel Structural Members, including the 2004 Supplement, and the IBC 2006, unless noted otherwise.
- Allowable composite heights are calculated using ICC-ES AC86-2010. The 1/3 stress increase was not used.
- 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, preferably by being stored inside a building under a roof. 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 Illinois and Alabama.