

**Member Designator**    **400PT250-30**  
 Coating                      G40 EQ

## Physical Properties

Design Thickness            0.0312 in  
 Mil                              30 mil  
 Gauge                         20 Gauge  
 Web Width                    4.00 in  
 Flange Width                2.50 in  
 Yield Strength                33 ksi



## Gross Properties

Gross Properties						
Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)
0.281	0.955	0.812	0.396	1.701	0.187	0.816

## Effective Properties

Effective Properties			
A <sub>e</sub> (in <sup>2</sup> )	I <sub>xe</sub> (in <sup>4</sup> )	S <sub>xe</sub> (in <sup>3</sup> )	M <sub>a</sub> (in-lbs)
0.090	0.551	0.173	3425

## Torsional Properties

Torsional				
J <sup>x1000</sup> (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>o</sub> (in)	R <sub>o</sub> (in)	β
0.091	0.543	-1.662	2.514	0.563

## 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.