400PS125-18

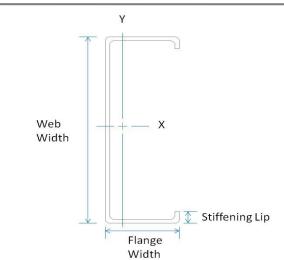


Member Designator

Coating CP40, G40

Physical Properties

Design Thickness 0.019 in Mil 18 mil Gauge 20 Gauge Web Width 4.000 in Flange Width 1.25 in Stiffening Lip 0.340 in Yield Strength 70 ksi



Gross Properties

Area	Weight	lx	Rx	ly	Ry		
(in²)	(lb/ft)	(in ⁴)	(in)	(in⁴)	(in)		
0.133	0.45	0.321	1.551	0.027	0.453		

Effective Properties

Ae	lx	Sx	Ma	Vag	Va _{net}
(in²)	(in ⁴)	(in³)	(in-lbs)	(lb)	(lb)
0.046	0.286	0.084	3532	157	157

1.75"
5"

Torsional Properties

Jx1000	Cw Xo		Ro	β
(in²)	(in ⁴)	(in³)	(in-lbs)	
0.01605	0.089	-0.859	1.83	0.78

Keyhole Punch

Composite Limiting Wall Heights (5/8" Type X Generic Gypsum Board)

Member	Spacing		5psf			7.5 psf	_		10 psf			15 psf	
	(inches)	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
	12	22' 9"	18' 8''	16' 4''	19' 11"	16' 4"	14' 3"	18' 1"	14' 10"	13' 0"	12' 6" f	12' 6" f	11' 3"
400PS125-18	16	21' 4"	17' 7"	15' 4''	18' 8"	15' 4"	13' 5"	16' 11"	13' 11"	12' 2"	11' 2" f	11' 2" f	10' 5"
	24	19' 3"	15' 10"	13' 10"	16' 7" f	13' 10"	12' 1"	14' 4" f	12' 6"	10' 9"	9' 5" f	9' 5" f	9' 1"

General Notes

- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members and AISI S220-15, North American Standard for Cold-Formed Steel Framing - Nonstructural Members.
- 2. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- 3. Allowable moment includes cold-work of forming.
- 4. Tabulated gross properties including torsional properties are based on full-unreduced cross section of the studs, away from punchouts.
- 5. For deflection calculations, use the effective moment of inertia.
- 6. Allowable moment is taken as the lowest value based on local or distortional buckling. Distortional buckling strength is based on a k-phi = 0.
- 7. Drywall framing members have a protective coating conforming to ASTM spec A 653/A 653M, G-40 min, or equivalent corrosion resistance.
- 8. Reference ASTM specification A 1003/A 1003 M table 1 for the universe of allowable coatings for light gauge steel framing.
- 9. Drywall framing members are marked with product information per the requirements of ASTM C 645 section 14.
- 10. 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.
- 11. 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

LEED v4 MR Credit - Building Product Disclosure Optimization: EPD (1 Point), Raw Material Sourcing (1 Point), Material Ingredients (1 Point), Construction and Demolition Waste (up to 2 points), Innovation Credit (up to 2 points)

LEED 2009 Credit - MBA steel products are 100% recyclable with a minimum recycle content of 32.7% (25.5% Post-Consumer and 6.8% Pre-Consumer/Post-Industrial). Higher rates can be achieved for MR5 by pre-planning with MBA sales@mbastuds.com or (888) 248-8076.

