

Marino\WARE® Product Submittal Data

PRODUCT NAME: Viper20 (400VT300-18)

MARINO\WARE PART # 400VT318

PROPERTIES:

A. Web (in)	4	Yield Strength Fy (KSI)	70
B. Leg (in)	3	Design Thickness (in)	0.0190
Mils	18	Minimum Thickness (in)	0.0181
Finish*	G40EQ	Gauge EQ	20 DW

*Or other ASTM A1003 Table 1 Coating

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Weight of Member: (lb/ft)	0.6402
Cross Sectional Area: A (in²)	0.1883
Moment of Inertia: Ix (in⁴)	0.5160
Section Modulus about the X-axis: Sx (in³)	0.2601
Radius of Gyration: Rx (in)	1.6555
Gross Moment of Inertia: Iy (in⁴)	0.1810
Section Modulus about the Y-axis: Sy (in³)	0.0873
Gross Radius of Gyration: Ry (in)	0.9805

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ixd (in⁴)	0.1844
Section Modulus: Sxe (in³)	0.0600
Allowable Moment: Ma (in-k)	2.0999

TORSIONAL PROPERTIES

Shear Center to Centroid on Principal X-axis: Xo (in)	-2.0917
St. Venant Torsional Constant: Jx10³ (in⁴)	0.0227
Torsional Warping Constant: Cw (in⁶)	0.5256
Radius of Gyration on the Centroid Principal axis: ro (in)	2.8421
Torsional Flexural Constant: β=1-(xo/ro)²	0.4583

CODES & STANDARDS

- Meets IBC 2015, 2018 & FBC 2017
- Meets or tested to: ASTM C 645, C 754, E 90, E 119 & AISI S220
- Steel sheet meets ASTM A 1003 & A 653
- Third Party Code Evaluation Report: CRR-0154
- Multiple Fire Rated Assemblies

GREEN INFO

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information



09.22.16 Non-Structural Metal Stud

