

# Marino\WARE® Product Submittal Data

**PRODUCT NAME:** Viper20 (400VS125-18)

**MARINO\WARE PART #**

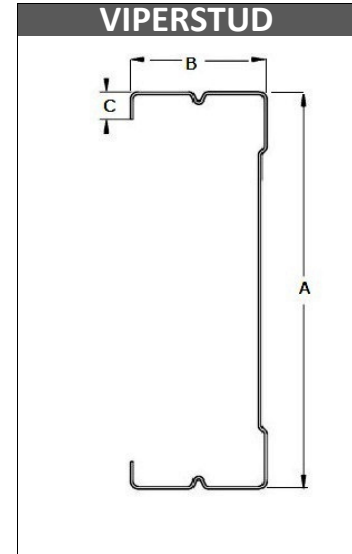


**PROPERTIES:**

<b>A. Web (in)</b>	4	<b>Yield Strength Fy (KSI)</b>	70
<b>B. Flange (in)</b>	1-1/4"	<b>Design Thickness (in)</b>	0.0190
<b>C. Lip (in)</b>	0.338	<b>Minimum Thickness (in)</b>	0.0181
<b>Mils</b>	18	<b>Gauge EQ</b>	20 DW
<b>Finish*</b>	G40EQ		

\* Or other ASTM A1003 Table 1 Coating

09.22.16 Non-Structural Metal Stud



**SECTION PROPERTIES**

**GROSS SECTION PROPERTIES**

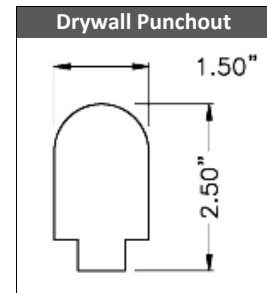
Weight of Member: (lb/ft)	0.449
Cross Sectional Area: <b>A</b> (in <sup>2</sup> )	0.132
Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )	0.315
Radius of Gyration: <b>Rx</b> (in)	1.545
Gross Moment of Inertia: <b>Iy</b> (in <sup>4</sup> )	0.027
Gross Radius of Gyration: <b>Ry</b> (in)	0.449

**EFFECTIVE SECTION PROPERTIES**

Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> )	0.265
Section Modulus: <b>Sx</b> (in <sup>3</sup> )	0.085

**MOMENTS**

Allowable Bending Moment: <b>Ma</b> (in-k)	3.44
Local Buckling Nominal Moment: <b>Mnl</b> (in-k)	5.93
Distortional Buckling Moment: <b>Mnd</b> (in-k)	5.74



**LIMITING HEIGHTS - COMPOSITE (ft-in)**

Spacing (in)	5 psf			7.5 psf			10 psf		
	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
12	22-11	18-11	16-8	20-0	16-7	14-7	18-2	15-1	13-3
16	20-10	17-3	15-2	18-2	15-1	13-3	16-6	13-8	12-1
24	18-2	15-1	13-3	15-10	13-2	11-7	14-5	11-11	10-5

1. Gypsum must be vertically oriented, applied full height to both sides, and fastened to each stud and track flange.
2. Acceptable wallboards are 5/8" type X from: USG, National, GP, Pabco, American, Continental & CertainTeed.
3. No screws are required between stud and track, except as required by ASTM C754.
4. See CCRR-0154 for additional information. Review fire related assemblies for any additional requirements.

**CODES & STANDARDS**

- Meets IBC 2015, 2018 & FBC 2020
- ASTM C 645, C 754, E 90, E 119 & AISI S220
- Steel sheet meets ASTM A 1003 or A 653
- Third Party Code Evaluation Report: CCRR-0154
- Multiple Fire Rated Assemblies

**GREEN INFO**

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



For more information, please contact Marino\WARE Technical Services at 866-545-1545

This technical information reflects the most current information available and supersedes any and all publications, effective 4/2/22.

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