

# Marino\WARE® Product Submittal Data

**PRODUCT NAME:** Viper20 (162VS125-18)

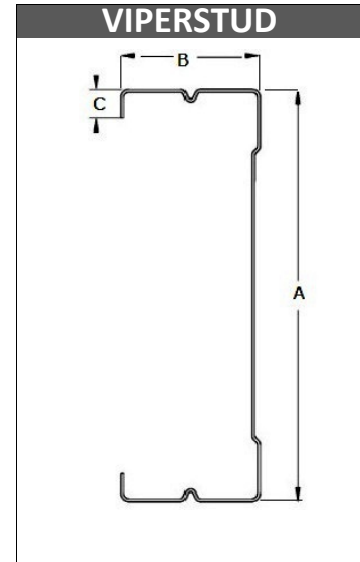
**MARINO\WARE PART #**



**PROPERTIES:**

<b>A. Web (in)</b>	1-5/8"	<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>	0.263	<b>Minimum Thickness (in)</b>	0.0181
<b>Mils</b>	18	<b>Gauge EQ</b>	20 DW
<b>Finish</b>	CP60		

09.22.16 Non-Structural Metal Stud



**SECTION PROPERTIES**

**GROSS SECTION PROPERTIES**

Weight of Member: <b>(lb/ft)</b>	0.285
Cross Sectional Area: <b>A (in<sup>2</sup>)</b>	0.084
Moment of Inertia: <b>Ix (in<sup>4</sup>)</b>	0.039
Radius of Gyration: <b>Rx (in)</b>	0.683
Gross Moment of Inertia: <b>Iy (in<sup>4</sup>)</b>	0.018
Gross Radius of Gyration: <b>Ry (in)</b>	0.462

**EFFECTIVE SECTION PROPERTIES**

Moment of Inertia-Deflection: <b>Ix (in<sup>4</sup>)</b>	0.033
Section Modulus: <b>Sx (in<sup>3</sup>)</b>	0.029

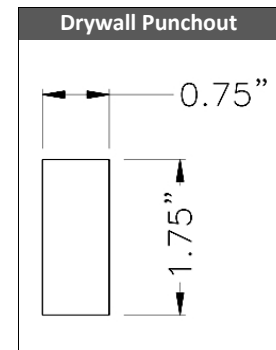
**MOMENTS**

Allowable Bending Moment: <b>Ma (in-k)</b>	1.19
Local Buckling Nominal Moment: <b>Mnl (in-k)</b>	1.99
Distortional Buckling Nominal Moment: <b>Mnd (in-k)</b>	2.02

**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	13-10	11-0	9-7	12-1	9-7	8-5	11-0	8-9	--
16	12-7	10-0	8-9	11-0	8-9	7-11	10-0	7-11	--
24	11-0	8-9	--	9-7	--	--	8-9	--	--

- Gypsum must be vertically oriented, applied full height to both sides, and fastened to each stud and track flange
- Acceptable wallboards are 5/8" type X from: USG, National, GP, Pabco, American, Continental & CertainTeed.
- No screws are required between stud and track, except as required by ASTM C754.
- 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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