

Marino\WARE® Product Submittal Data

PRODUCT NAME: Viper20 (162VS125-18)

MARINO\WARE PART #

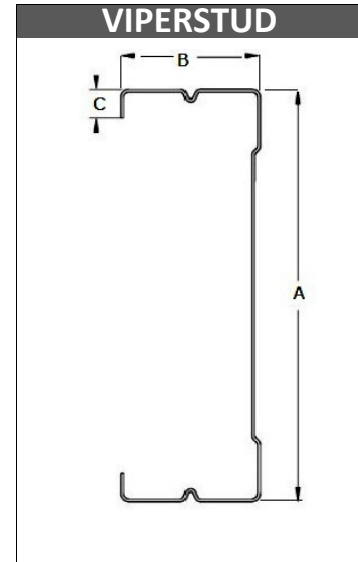


PROPERTIES:

A. Web (in)	1-5/8"	Yield Strength Fy (KSI)	70
B. Flange (in)	1-1/4"	Design Thickness (in)	0.0190
C. Lip (in)	0.263	Minimum Thickness (in)	0.0181
Mils	18	Gauge EQ	20 DW
Finish*	G40EQ		

* Or other ASTM A1003 Table 1 Coating

09.22.16 Non-Structural Metal Stud



SECTION PROPERTIES

GROSS SECTION PROPERTIES

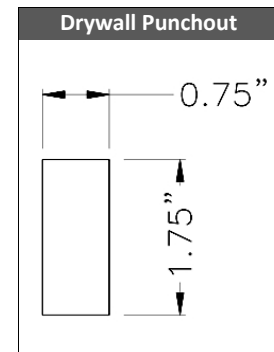
Weight of Member: (lb/ft)	0.285
Cross Sectional Area: A (in²)	0.084
Moment of Inertia: Ix (in⁴)	0.039
Radius of Gyration: Rx (in)	0.683
Gross Moment of Inertia: Iy (in⁴)	0.018
Gross Radius of Gyration: Ry (in)	0.462

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: Ix (in⁴)	0.033
Section Modulus: Sx (in³)	0.029

MOMENTS

Allowable Bending Moment: Ma (in-k)	1.19
Local Buckling Nominal Moment: Mnl (in-k)	1.99
Distortional Buckling Nominal Moment: Mnd (in-k)	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	--	--

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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