



Expanding Your Solutions

**Corporate Headquarters**  
13191 Crossroads Pkwy N., Ste 325  
City of Industry, CA 91746  
Phone: 800.775.2362  
Fax: 626.330.7598  
www.cemcosteel.com

**Manufacturing Facilities**  
City of Industry, CA  
Denver, CO  
Ft. Worth, TX  
Pittsburg, CA

**Structural Engineering/Design**  
1001-A Pittsburgh Antioch Hwy  
Pittsburg, CA 94565  
Phone: 800.775.2362  
Fax: 626.330.7598  
www.cemcoengineering.com

**Technical Services**  
13191 Crossroads Pkwy N., Ste 325  
City of Industry, CA 91746  
Phone: 800.416.2278  
Fax: 626.249.5004

## 400VT150-33 VIPERTRACK

### Geometric Properties

4" ViperTrack with 1-1/2" legs is manufactured from standard G40 hot-dipped galvanized steel. G60 and G90 coatings are available through special order, and may require up-charges and extended lead times.

### Physical Properties

Model No.	Design Thickness (in)	Minimum Thickness (in)	Yield (ksi)	Coating <sup>3,4</sup>	Web Depth (in)	Leg Size (in)	GAP <sup>5</sup> (in)	Load <sup>5</sup> (lb.)	Max Height <sup>5</sup> 5 psf, 16" o.c.
400VT150-33	0.0346	0.0329	33	G40	4	1-1/2	--	--	--

**Notes:**

1. Uncoated steel thickness. Thickness is for carbon sheet steel.
2. Minimum thickness represents 95% of the design thickness and is the minimum acceptable thickness.
3. Per ASTM C645 & A1003, Table 1.
4. G60 and G90 available upon request. Will require extended lead time and upcharge.
5. Use Gap, Load and Maximum Height data when member is used as a top deflection track.

**Color Code (painted on ends):** 33 mil: White

#### ASTM & Code Standards:

- ASTM A653/A653M, A924/A924M, A1003/A1003M, C645, C754, E119
- IBC: 2015, 2018, 2021
- CBC: 2016, 2019, 2022
- AISI: S100, S220

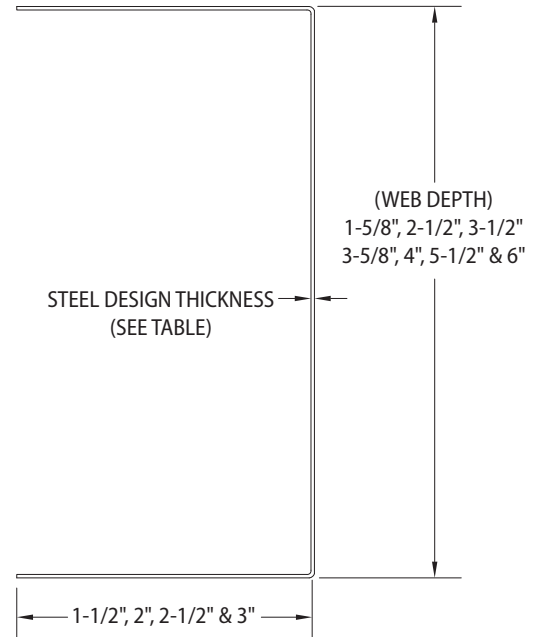
#### LEED v4 for Building and Design Construction

- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization – Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization – Environmental Product Declarations, Options 1 & 2.
- MR Credit: Building Product Disclosure and Optimization – Material Ingredients, Option 1.
- MR Credit: Building Life-Cycle Impact Reduction, Option 4.

#### CEMCO cold-formed steel framing products contain 30% to 37% recycled steel.

- Total Recycled Content: 36.9%
- Post-Consumer: 19.8%
- Pre-Consumer: 14.4%

**CSI Division:** 09.22.16 – Non-Structural Metal Framing



### ViperTrack 1.50" Leg

Member	Leg Size (in)	Weight (lb/ft)	Design (in)	Min (in)	Yield (ksi)	Gross Properties						Effective Properties			Torsional Properties					
						Area (in <sup>2</sup> )	I <sub>x</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	I <sub>y</sub> (in <sup>4</sup> )	S <sub>y</sub> (in <sup>3</sup> )	R <sub>y</sub> (in)	I <sub>xd</sub> (in <sup>4</sup> )	S <sub>xe</sub> (in <sup>3</sup> )	Ma (in-k)	X <sub>o</sub> (in)	Jx10 <sup>3</sup> (in <sup>4</sup> )	C <sub>w</sub> (in)	R <sub>o</sub> (in)	β
400VT150-33	1.50	0.8240	0.0346	0.0329	33	0.2424	0.6062	0.2979	1.5815	0.0510	0.1444	0.4586	0.4692	0.2027	4.0050	-0.813	0.0967	0.1509	1.836	1.513

**Notes:**

1. Section properties are in accordance with AISI S100-16/S2-20.
2. Cold-work of forming is not included.
3. The effective moment of inertia for deflection is calculated based on AISI S100-16/S2-20 procedure 1 for serviceability determination.
4. The center line bend radius is greater than 2 times the design thickness or 3/32".
5. Web-to-thickness ratio exceeds 200.
6. Web-to-thickness ratio exceeds 260.
7. Flange-width-to-thickness-ratio exceeds 60, only gross properties will be determined.

Check the updated list of Certified Production Facilities at Intertek's website at <http://www.intertek.com/building/sfia>



This technical information reflects the most current information available and supersedes any and all previous publications effective September 25, 2023.  
09-25-23 AT