



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
Ft. Worth, TX
Henderson, CO
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 ^{3,4}	Web Depth (in)	Leg Size (in)	GAP ⁵ (in)	Load ⁵ (lb.)	Max Height ⁵ 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 ²)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	S _y (in ³)	R _y (in)	I _{xd} (in ⁴)	S _{xe} (in ³)	Ma (in-k)	X _o (in)	Jx10 ³ (in ⁴)	C _w (in)	R _o (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