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400VT250-18-70 (20EQ) VIPERTRACK

Geometric Properties

4" ViperTrack with 2-1/2" 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.
400VT250-18-70 (20EQ)	0.0190	0.0181	70	G40	4	2-1/2	3/4	54	16'-1"

Notes:

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

Color Code (painted on ends): 18 mil: None

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 2.50" 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
400VT250-18-70 (20EQ)	2.50	0.64	0.0190	0.0181	70	0.169	0.488	0.226	1.628	0.110	0.062	0.807	0.178	0.060	2.09	-1.642	0.0204	0.3170	2.45	0.551

Notes:

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