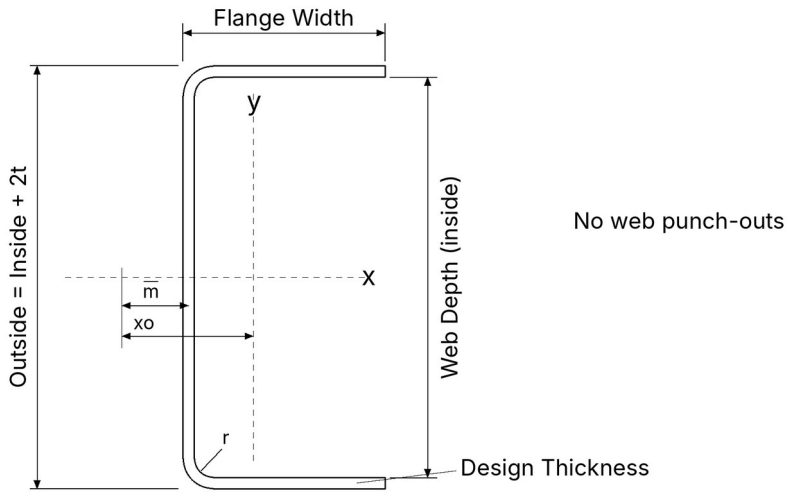
PRODUCT SUBMITTAL SHEET

Product Type: Structural Track

Product Definition: 400T250-43 (50ksi)

CSI Code: 05 41 00



Profile Properties:

Web Depth (inside)	4.000 in	Yield Strength Fy:	50 ksi
Flange Width	2.500 in	Unit Weight	1.37 lb/ft
Web Depth (outside)	4.0902 in	Punchout Width / Length	None
Design Thickness	0.0451 in	Coating	G60 or G90
Thickness	43 mils (18 Ga)	Min. Steel Thickness	0.0428 in
Inside Bend Radius	0.0712 in	Tensile Strength Fu	65 ksi

Gross Section Properties:

Cross Sectional Area	Agross	0.4023 in2
Member weight per foot of length		1.37 lb/ft
Moment of Inertia. x-axis	Ix	1.1480 in4
Section Modulus. x-axis	Sx	0.5613 in3
Radius of Gyration. x-axis	rx	1.6893 in
Moment of Inertia. y-axis	Iy	0.2666 in4
Radius of Gyration. y-axis	ry	0.8141 in

Torsional Properties:

St. Venant Torsion Constant	J x 1000	0.2727 in4
Warping Constant	Cw	0.7676 in6
Distance Between Shear Axis and Neutral Axis	x0	-1.6620 in
Shear Center to Web Centerline	m	0.9737 in
Polar Radius of Gyration	r0	2.5058 in
Torsional Flexural Constant	β	0.5601
Limit of Unbraced Length	Lu	23.77 in

Effective Section Properties:

Effective Area	Aeff	0.1538 in2
Effective Moment of Inertia for Deflection	Ixe	0.7479 in4
Effective Section Modulus	Sxe	0.2948 in3
Allowable Bending Moment	Ma	8.8278 in.k
Allowable Shear Force	Vag	2116 lbs

Codes & Standards:

- Calculations are based on AISI S240-20 and AISI S100-16 (2020) w/S2-20.
- AISI S240-20 North American Standard for Cold-Formed Steel Structural Framing: Section A3 Material (ASTM A1003/A1003M); Section A4 Corrosion Protection (ASTM A653/A653M); Section A5 Products – thickness, shapes, tolerances, identification; Section C Installation (ASTM C1007).
- IBC 2024 International Building Code. ASTM C955. ASTM A1003. ASTM A653 SS Grade 50 Class 1. Coating G60 or G90 per AISI S240 Section A4.
- ICC-ES ESR-5905 UMS Joists, UMS Studs and UMS Tracks.
- LEED / Sustainability Credits: Environmental Product Declaration S-P Code: S-P-00869
- Note: Tracks are manufactured without web punch-outs. Web depth designation is the inside-to-inside dimension; outside web depth = designation + 2 × design thickness (tolerance 0 to +1/8'').

Structural Track. The technical content of this literature is effective 10/30/2026 and supersedes all previous information.