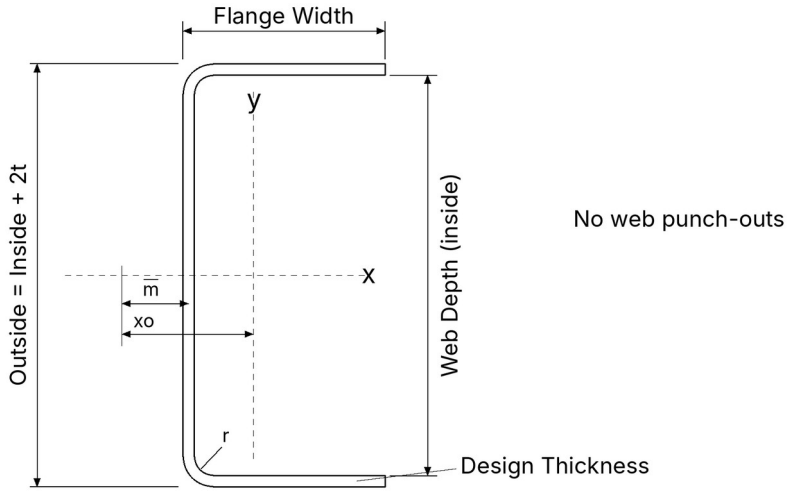
PRODUCT SUBMITTAL SHEET

Product Type: Structural Track

Product Definition: 400T250-97 (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	3.05 lb/ft
Web Depth (outside)	4.2034 in	Punchout Width / Length	None
Design Thickness	0.1017 in	Coating	G60 or G90
Thickness	97 mils (12 Ga)	Min. Steel Thickness	0.0966 in
Inside Bend Radius	0.1525 in	Tensile Strength Fu	65 ksi

Gross Section Properties:

Cross Sectional Area	Agross	0.8975 in2
Member weight per foot of length		3.05 lb/ft
Moment of Inertia. x-axis	Ix	2.6031 in4
Section Modulus. x-axis	Sx	1.2386 in3
Radius of Gyration. x-axis	rx	1.7030 in
Moment of Inertia. y-axis	Iy	0.5807 in4
Radius of Gyration. y-axis	ry	0.8043 in

Torsional Properties:

St. Venant Torsion Constant	J x 1000	3.0944 in4
Warping Constant	Cw	1.7330 in6
Distance Between Shear Axis and Neutral Axis	x0	-1.6377 in
Shear Center to Web Centerline	m	0.9574 in
Polar Radius of Gyration	r0	2.4958 in
Torsional Flexural Constant	β	0.5694
Limit of Unbraced Length	Lu	32.88 in

Effective Section Properties:

Effective Area	Aeff	0.6750 in2
Effective Moment of Inertia for Deflection	Ixe	2.1541 in4
Effective Section Modulus	Sxe	0.9184 in3
Allowable Bending Moment	Ma	27.4974 in.k
Allowable Shear Force	Vag	7046 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.