

PRODUCT SUBMITTAL SHEET TECH SUPPORT: 305.634.0012

PRODUCT CATEGORY: PROTRAK 20 GA PRODUCT NUMBER: 550PDT125-30

COATING: G40

PHYSICAL PROPERTIES

WEB DEPTH: 5.5000 IN. FLANGE HEIGHT: 1.2500 IN. **DESIGN THICKNESS:** 0.0312 IN. YIELD: 33 KSI

WEIGHT: 0.8471 LB/LFT



TORSIONAL PROPERTIES

CROSS SECTIONAL AREA (A): 0.2490 IN^2 MOMENT OF INERTIA (IX): 1.0360 IN^4

RADIUS OF GYRATION (RX): 2.0380 IN. GROSS MOMENT OF INERTIA: (IY) 0.0300 IN^4

GROSS RADIUS OF GYRATION (RY): 0.3470 IN.

0.0809 IN^4

WARPING CONSTANT (CW): 0.1740 IN^6 DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0): -0.5430 IN. RADII OF GYRATION (RO): 2.1380 IN.

TORSIONAL FLEXURAL CONSTANT (B): 0.9350



EFFECTIVE SECTION PROPERTIES

EFFECTIVE AREA (AE): 0.0890 IN. MOMENT OF INERTIA (IX): 0.8800 IN^4 SECTION MODULUS (SX): 0.2180 IN³

ALLOWABLE BENDING MOMENT (MA): 4,306.00 IN-KIPS.

SECTION PROPERTIES TABLE NOTES:

ST VENANT TORSION CONSTANT (JX1000):

- 1) CALCULATED PROPERTIES ARE BASED ON AISI S100-07, NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMB ERS.
- 2) EFFECTIVE PROPERTIES INCORPORATE THE STRENGTH INCREASE FROM THE COLD WORK OF FORMING AS APPLICABLE PER AISI A7.2.
- 3) TABULATED GROSS PROPERTIES INCLUDING TORSIONAL PROPERTIES ARE BASED ON FULL-UNREDUCED CROSS SECTION OF THE TRACKS.
- 4) FOR DEFLECTION CALCULATIONS, USE THE EFFECTIVE MOMENT OF INERTIA.
- 5) ALLOWABLE MOMENT INCLUDES COLD-WORK OF FORMING.
- 6) WEB DEPTH FOR TRACK SECTIONS IS EQUAL TO THE NOMINAL HEIGHT PLUS 2 TIMES THE DESIGN THICKNESS PLUS THE BEND RADIUS. HEMS ON NON-STRUCTURAL RACK SECTIONS ARE IGNORED.
- 7) WEB-HEIGHT TO THICKNESS RATIO EXCEEDS 200.
- 8) WEB-HEIGHT-TO THICKNESS RATIO EXCEEDS 260.

COMPLIES WITH ASTM C645

LEED CREDITS MR 2: CONSTRUCTION WASTE MATERIAL-RAM STEEL FRAMING IS 100% RECYCLEABLE

LEED CREDITS MR 4: RAM STEEL FRAMING IS FORMED WITH A MINIMUM 25.5% POST CONSUMER AND 14.4% PRE-CONSUMER CONTENT

LEED CREDITS MR 5: REGIONAL MATERIALS MAY APPLY

PROJECT INFORMATION	CONTRACTOR INFORMATION	ARCHITECT INFORMATION
NAME:	NAME:	NAME:
ADDRESS:	CONTACT:	CONTACT:
	PHONE:	PHONE:
	FAX:	FAX: