

PRODUCT CATEGORY: PROTRAK 20 GA EQ
 PRODUCT NUMBER: 400PDT125-19
 COATING: G40


PHYSICAL PROPERTIES

WEB DEPTH: 4.0000 IN.
 FLANGE HEIGHT: 1.2500 IN.
 DESIGN THICKNESS: 0.0200 IN.
 YIELD: 50 KSI
 WEIGHT: 0.4421 LB/LFT

GROSS SECTION PROPERTIES

CROSS SECTIONAL AREA (A): 0.1299 IN²
 MOMENT OF INERTIA (IX): 0.3125 IN⁴
 RADIUS OF GYRATION (RX): 1.5507 IN.
 GROSS MOMENT OF INERTIA: (IY) 0.0181 IN⁴
 GROSS RADIUS OF GYRATION (RY): 0.3736 IN.

EFFECTIVE SECTION PROPERTIES

EFFECTIVE AREA (AE): 0.0321 IN.
 MOMENT OF INERTIA (IX): 0.2317 IN⁴
 SECTION MODULUS (SX): 0.0608 IN³
 ALLOWABLE BENDING MOMENT (MA): 1,821.65 IN-KIPS.

TORSIONAL PROPERTIES

ST VENANT TORSION CONSTANT (JX1000): 0.0173 IN⁴
 WARPING CONSTANT (CW): 0.0539 IN⁶
 DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0): -0.6378 IN.
 RADII OF GYRATION (RO): 1.7178 IN.
 TORSIONAL FLEXURAL CONSTANT (B): 0.8621

SECTION PROPERTIES TABLE NOTES:

- 1) CALCULATED PROPERTIES ARE BASED ON AISI S100-07, NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
- 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: