

PRODUCT CATEGORY: PROTRAK 20 GA STR  
 PRODUCT NUMBER: 550PDT125-33  
 COATING: G40


**PHYSICAL PROPERTIES**

WEB DEPTH: 5.5000 IN.  
 FLANGE HEIGHT: 1.2500 IN.  
 DESIGN THICKNESS: 0.0346 IN.  
 YIELD: 33 KSI  
 WEIGHT: 0.9390 LB/LFT

**GROSS SECTION PROPERTIES**

CROSS SECTIONAL AREA (A): 0.2760 IN<sup>2</sup>  
 MOMENT OF INERTIA (IX): 1.1490 IN<sup>4</sup>  
 RADIUS OF GYRATION (RX): 2.0390 IN.  
 GROSS MOMENT OF INERTIA: (IY) 0.0330 IN<sup>4</sup>  
 GROSS RADIUS OF GYRATION (RY): 0.3470 IN.

**EFFECTIVE SECTION PROPERTIES**

EFFECTIVE AREA (AE): 0.1080 IN.  
 MOMENT OF INERTIA (IX): 1.0110 IN<sup>4</sup>  
 SECTION MODULUS (SX): 0.2610 IN<sup>3</sup>  
 ALLOWABLE BENDING MOMENT (MA): 5,157.00 IN-KIPS.

**TORSIONAL PROPERTIES**

ST VENANT TORSION CONSTANT (JX1000): 0.1103 IN<sup>4</sup>  
 WARPING CONSTANT (CW): 0.1920 IN<sup>6</sup>  
 DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0): -0.5420 IN.  
 RADII OF GYRATION (RO): 2.1380 IN.  
 TORSIONAL FLEXURAL CONSTANT (B): 0.9360

**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: