

PRODUCT CATEGORY: ProTRAK  
 PRODUCT NUMBER: 250PDT125-15  
 COATING: G40 (G60/G90 Available)



**PHYSICAL PROPERTIES**

WEB DEPTH: 2.500 IN  
 FLANGE HEIGHT: 1.250 IN  
 DESIGN THICKNESS: 0.0158 IN  
 YIELD: 50 KSI  
 WEIGHT: 0.27 LB/LFT

**GROSS SECTION PROPERTIES**

CROSS SECTIONAL AREA (A): 0.079 IN<sup>2</sup>  
 MOMENT OF INERTIA (Ix): 0.085 IN<sup>4</sup>  
 RADIUS OF GYRATION (Rx): 1.038 IN  
 GROSS MOMENT OF INERTIA (Iy): 0.013 IN<sup>4</sup>  
 GROSS RADIUS OF GYRATION (Ry): 0.4 IN

**EFFECTIVE SECTION PROPERTIES**

EFFECTIVE AREA (Ae): 0.02 IN<sup>2</sup>  
 MOMENT OF INERTIA (Ix): 0.059 IN<sup>4</sup>  
 SECTION MODULUS (Sx): 0.024 IN<sup>3</sup>  
 ALLOWABLE BENDING MOMENT (Ma): 724 IN-LBS  
 ALLOWABLE SHEAR FORCE (Vag): 143 LB

**TORSIONAL PROPERTIES**

ST VENANT TORSION CONSTANT (J x 1000): 0.00657 IN<sup>4</sup>  
 WARPING CONSTANT (Cw): 0.015 IN<sup>6</sup>  
 DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (Xo): -0.771 IN  
 RADII OF GYRATION (Ro): 1.353 IN  
 TORSIONAL FLEXURAL CONSTANT (B): 0.675

**SECTION PROPERTIES TABLE NOTES:**

- CALCULATED PROPERTIES ARE BASED ON AISI S100-12, NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS AND AISI S220-15, NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING "NONSTRUCTURAL MEMBERS."
- EFFECTIVE PROPERTIES INCORPORATE THE STRENGTH INCREASE FROM THE COLD WORK OF FORMING AS APPLICABLE PER AISI A7.2.
- TABULATED GROSS PROPERTIES, INCLUDING TORSIONAL PROPERTIES, ARE BASED ON FULL-UNREDUCED CROSS SECTION OF THE STUDS, AWAY FROM PUNCHOUTS
- TABULATED GROSS PROPERTIES, INCLUDING TORSIONAL PROPERTIES, ARE BASED ON FULL-UNREDUCED CROSS SECTION OF THE TRACKS.
- FOR DEFLECTION CALCULATIONS, USE THE EFFECTIVE MOMENT OF INERTIA.
- ALLOWABLE MOMENT INCLUDES COLD WORK OF FORMING.
- ALLOWABLE MOMENT IS TAKEN AS THE LOWEST VALUE BASED ON LOCAL OR DISTORTIONAL BUCKLING. DISTORTIONAL BUCKLING STRENGTH IS BASED ON A K-PHI = 0.
- WEB DEPTH FOR TRACK SECTIONS IS EQUAL TO THE NOMINAL HEIGHT PLUS TWO TIMES THE DESIGN THICKNESS PLUS THE BEND RADIUS. HEMS ON NONSTRUCTURAL TRACK SECTIONS ARE IGNORED

**LEED:**

- COMPLIES WITH ASTM C955
- 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