

# SUBMITTAL SHEET Tech Support: 305.634.0012

PRODUCT CATEGORY: ProTRAK

PRODUCT NUMBER: 600PDT125-15

COATING: G40 (G60/G90 Available)

#### PHYSICAL PROPERTIES

 WEB DEPTH:
 6.000 IN

 FLANGE HEIGHT:
 1.250 IN

 DESIGN THICKNESS:
 0.0158 IN

 YIELD:
 50 KSI

 WEIGHT:
 0.46 LB/LFT



**EFFECTIVE SECTION PROPERTIES** 

#### **GROSS SECTION PROPERTIES**

CROSS SECTIONAL AREA (A):	0.134 IN <sup>2</sup>	EFFECTIVE AREA (Ae):	0.021 IN <sup>2</sup>
MOMENT OF INERTIA (IX):	0.646 IN <sup>4</sup>	MOMENT OF INERTIA (IX):	0.35 IN <sup>4</sup>
RADIUS OF GYRATION (Rx):	2.194 IN	SECTION MODULUS (Sx):	0.059 IN <sup>3</sup>
GROSS MOMENT OF INERTIA (Iy):	0.016 IN <sup>4</sup>	ALLOWABLE BENDING MOMENT (Ma):	1762 IN- LBS
GROSS RADIUS OF GYRATION (Ry):	0.343 IN	ALLOWABLE SHEAR FORCE (Vag):	59 LB

#### TORSIONAL PROPERTIES

ST VENANT TORSION CONSTANT (J x 1000):  $0.01117 \text{ IN}^4$ WARPING CONSTANT (Cw):  $0.108 \text{ IN}^6$ DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0): 0.524 INRADII OF GYRATION (R0): 0.524 INTORSIONAL FLEXURAL CONSTANT (B): 0.947

## 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&E"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.
- $\bullet\,\,$  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