

# SUBMITTAL SHEET Tech Support: 305.634.0012

PRODUCT CATEGORY:	ProTRAK
PRODUCT NUMBER:	600PDT125-33
COATING:	G40 (G60/G90 Available)
PHYSICAL PROPERTIES	
WEB DEPTH:	6.000 IN
FLANGE HEIGHT:	1.250 IN
DESIGN THICKNESS:	0.0346 IN
YIELD:	33 KSI
WEIGHT:	1 LB/LFT
GROSS SECTION PROPERTIES	
CROSS SECTIONAL AREA (A):	0.294 IN <sup>2</sup>
MOMENT OF INERTIA (IX):	1.418 IN <sup>4</sup>
RADIUS OF GYRATION (Rx):	2.197 IN
GROSS MOMENT OF INERTIA (Iy):	0.034 IN <sup>4</sup>
GROSS RADIUS OF GYRATION (Ry):	0.339 IN
TORSIONAL PROPERTIES	
ST VENANT TORSION CONSTANT (J x 1000):	0.11723 IN <sup>4</sup>
WARPING CONSTANT (Cw):	0.234 IN <sup>6</sup>
DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (Xo):	-0.517 IN



## EFFECTIVE SECTION PROPERTIES

EFFECTIVE AREA (Ae):	0.109 IN <sup>2</sup>
MOMENT OF INERTIA (Ix):	1.237 IN <sup>4</sup>
SECTION MODULUS (Sx):	0.287 IN <sup>3</sup>
ALLOWABLE BENDING MOMENT (Ma):	5681 IN- LBS
ALLOWABLE SHEAR FORCE (Vag):	619 LB

ST VENANT TORSION CONSTANT (J x 1000):	0.11723 IN <sup>4</sup>
WARPING CONSTANT (Cw):	0.234 IN <sup>6</sup>
DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0):	-0.517 IN
RADII OF GYRATION (Ro):	2.282 IN
TORSIONAL FLEXURAL CONSTANT (B):	0.949

## 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& WONSTRUCTURAL 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