PRODUCT CATEGORY:	ProTRAK
PRODUCT NUMBER:	400PDT125-18
COATING:	G40 (G60/G90 Available)

PHYSICAL PROPERTIES

WEB DEPTH:	4.000 IN
FLANGE HEIGHT:	1.250 IN
DESIGN THICKNESS:	0.019 IN
YIELD:	50 KSI
WEIGHT:	0.42 LB/LFT

GROSS SECTION PROPERTIES

CROSS SECTIONAL AREA (A):	0.123 IN^2
MOMENT OF INERTIA (Ix):	0.297 IN^4
RADIUS OF GYRATION (Rx):	1.55 IN
GROSS MOMENT OF INERTIA (Iy):	0.017 IN^4
GROSS RADIUS OF GYRATION (Ry):	0.374 IN

EFFECTIVE SECTION PROPERTIES

EFFECTIVE AREA (Ae):	0.029 IN^2
MOMENT OF INERTIA (Ix):	0.211 IN^4
SECTION MODULUS (Sx):	0.055 IN^3
ALLOWABLE BENDING MOMENT (Ma):	1653 IN-LBS
ALLOWABLE SHEAR FORCE (Vag):	154 LB

TORSIONAL PROPERTIES

ST VENANT TORSION CONSTANT (J x 1000):	0.01486 IN^4
WARPING CONSTANT (Cw):	0.051 IN^6
DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (Xo):	-0.638 IN
RADII OF GYRATION (Ro):	1.718 IN
TORSIONAL FLEXURAL CONSTANT (B):	0.862

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 FRAMINGâ€"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