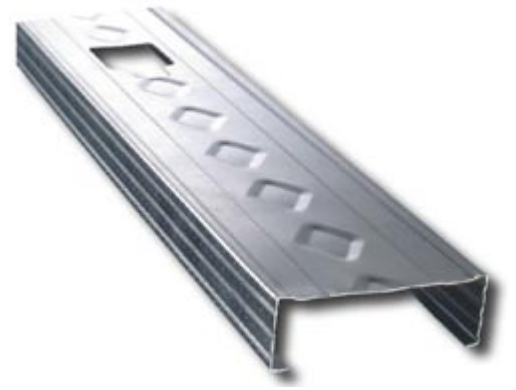


PRODUCT CATEGORY: PROSTUD 20 GA EQ
 PRODUCT NUMBER: 400PDS125-19
 COATING: G40


PHYSICAL PROPERTIES

WEB DEPTH: 4.0000 IN.
 FLANGE HEIGHT: 1.2500 IN.
 STIFFENING LIP: 0.3300 IN.
 DESIGN THICKNESS: 0.0200 IN.
 YIELD: 65 KSI
 WEIGHT: 0.4759 LB/LFT

GROSS SECTION PROPERTIES

CROSS SECTIONAL AREA (A): 0.1399 IN²
 MOMENT OF INERTIA (IX): 0.3361 IN⁴
 RADIUS OF GYRATION (RX): 1.5501 IN.
 GROSS MOMENT OF INERTIA: (IY) 0.0284 IN⁴
 GROSS RADIUS OF GYRATION (RY): 0.4507 IN.

EFFECTIVE SECTION PROPERTIES

EFFECTIVE AREA (AE): 0.0496 IN.
 MOMENT OF INERTIA (IX): 0.3161 IN⁴
 SECTION MODULUS (SX): 0.0909 IN³
 ALLOWABLE BENDING MOMENT (MA): 3,537.23 IN-KIPS.

TORSIONAL PROPERTIES

ST VENANT TORSION CONSTANT (JX1000): 0.0187 IN⁴
 WARPING CONSTANT (CW): 0.0917 IN⁶
 DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0): -0.8510 IN.
 RADII OF GYRATION (RO): 1.8249 IN.
 TORSIONAL FLEXURAL CONSTANT (B): 0.7825
 UNBRACED LENGTH (LU): 22.1516 IN.

NOTES:

- 1) CALCULATED PROPERTIES ARE BASED ON AISI S100-07,NASPEC FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
- 2) EFFECTIVE PRPERTIES INCORPORATE THE STRENGTH INCREASE FROM COLD FORMING AS APPLICABLE PER AISI A7.2
- 3) TABULATED GROSS PROPERTIES, INCLUDING TORSIONAL PROPERTIES, ARE BASED ON FULL-UNREDUCED CROSS SECTION OF THE STUDS, AWAY FROM PUNCHOUTS
- 4) ALLOWABLE MOMENT INCLUDES COLD WORK OF FORMING
- 5) ALLOWABLE MOMENT IS TAKEN AS THE LOWEST VALUE BASED ON LOCAL OR DISTORTIONAL BUCKLING. DISTORTIONAL BUCKING STRENGTH IS BASED ON A K-PHI

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:

PRODUCT CATEGORY: PROSTUD 20 GA EQ
 PRODUCT NUMBER: 400PDS125-19

LIMITING HEIGHTS

SPACING INCHES	5 PSF			7.5 PSF			10 PSF		
	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
12	24'-4"	20'-2"	17'-9"	21'-3"	17'-8"	15'-6"	19'-4"	16'-0"	14'-1"
16	22'-2"	18'-4"	16'-1"	19'-4"	16'-0"	14'-1"	17'-7" f	14'-7"	12'-9"
24	19'-4"	16'-0"	14'-1"	16'-6" f	14'-0"	12'-4"	14'-4" f	12'-9"	11'-0"

NOTES:

- * ALLOWABLE COMPOSITE LIMITING HEIGHTS WERE DETERMINED IN ACCORDANCE WITH ICC•ES AC86•2010.
- * ADDITIONAL COMPOSITE WALL TESTING AND ANALYSIS REQUIREMENTS OF THE SFIA CODE COMPLIANCE CERTIFICATION PROGRAM WAS OBSERVED.
- * IN ACCORDANCE WITH CURRENT BUILDING CODES AND AISI DESIGN STANDARDS, THE 1/3 STRESS INCREASE FOR STRENGTH WAS NOT USED.
- * THE COMPOSITE LIMITING HEIGHTS PROVIDED IN THE TABLES ARE BASED ON A SINGLE LAYER OF TYPE X GYPSUM BOARD FROM THE FOLLOWING MANUFACTURERS: AMERICAN, CERTAINTEED, GEORGIA PACIFIC, LAFARGE, NATIONAL, TEMPLE INLAND, AND USG.
- * THE GYPSUM BOARD MUST BE APPLIED FULL HEIGHT IN THE VERTICAL ORIENTATION TO EACH STUD FLANGE AND INSTALLED IN ACCORDANCE WITH ASTM C754•2004 USING MINIMUM NO. 6 TYPE S DRYWALL SCREWS SPACED AS LISTED BELOW:
 - SCREWS SPACED A MINIMUM OF 16 IN ON•CENTER TO FRAMING MEMBERS SPACED AT 16 IN OR 12 IN ON•CENTER.
 - SCREWS SPACED A MINIMUM OF 12 IN ON•CENTER TO FRAMING MEMBERS SPACED AT 24 IN ON•CENTER.
- * NO FASTENERS ARE REQUIRED FOR ATTACHING THE STUD TO THE TRACK EXCEPT AS DETAILED IN ASTM C754•2004.
- * STUD END BEARING MUST BE A MINIMUM OF 1 INCH.
- F ADJACENT TO THE HEIGHT VALUE INDICATES THAT FLEXURAL STRESS CONTROLS THE ALLOWABLE WALL HEIGHT.
- S ADJACENT TO THE HEIGHT VALUE INDICATES THAT SHEAR/END REACTION CONTROLS THE ALLOWABLE WALL HEIGHT.

NON-COMPOSITE LIMITING HEIGHTS

SPACING INCHES	5 PSF			7.5 PSF			10 PSF		
	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
12	20' 3"	16' 1"	14' 0"	17' 8"	14' 0"	12' 3"	15' 4"	12' 9"	11' 2"
16	18' 5"	14' 7"	12' 9"	15' 4"	12' 9"	11' 2"	13' 4"	11' 7"	10' 1"
24	15' 4"	12' 9"	11' 2"	12' 6"	11' 2"	9' 9"	10' 10"	10' 1"	8' 10"

FULLY BRACED NON-COMPOSITE LIMITING HEIGHTS TABLE NOTES

- * HEIGHTS ARE BASED ON 2007 NORTH AMERICAN SPECIFICATION S100-07 USING STEEL PRPERTIES ALONE.
- * ABOVE LISTED NON-COMPOSITE LIMITING HEIGHTS IS APPLICABLE WHEN THE UNBRACED LENGTH IS LESS THAN OR EQUAL TO L.
- * HEIGHTS NOT IN PARENTHESES ARE LIMITED BY MOMENT, DEFLECTION, SHEAR, AND WEB CRIPPLING (ASSUMING 1" END REACTION BEARING).
- * HEIGHTS IN PARENTHESES ARE LIMITED BY MOMENT, DEFLECTION, AND SHEAR, AND REQUIRE END BEARING STIFFENERS IN ORDER TO ACHIEVE THE INDICATED HEIGHT.
- * DEPTH OVER THICKNESS (H/T) RATIO IS GREATER THAN 200.