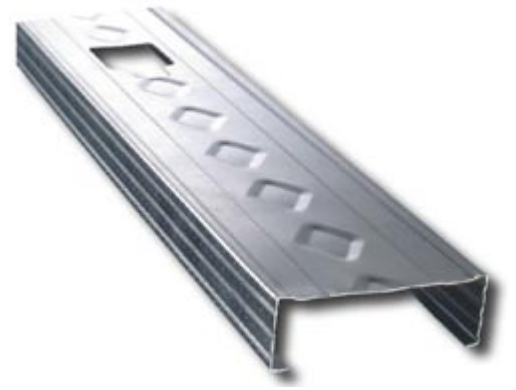


PRODUCT CATEGORY: PROSTUD 20 GA EQ
 PRODUCT NUMBER: 550PDS125-19
 COATING: G40


PHYSICAL PROPERTIES

WEB DEPTH: 5.5000 IN.
 FLANGE HEIGHT: 1.2500 IN.
 STIFFENING LIP: 0.3500 IN.
 DESIGN THICKNESS: 0.0200 IN.
 YIELD: 65 KSI
 WEIGHT: 0.5807 LB/LFT

GROSS SECTION PROPERTIES

CROSS SECTIONAL AREA (A): 0.1707 IN²
 MOMENT OF INERTIA (IX): 0.7209 IN⁴
 RADIUS OF GYRATION (RX): 2.0551 IN.
 GROSS MOMENT OF INERTIA: (IY) 0.0317 IN⁴
 GROSS RADIUS OF GYRATION (RY): 0.4310 IN.

EFFECTIVE SECTION PROPERTIES

EFFECTIVE AREA (AE): 0.0515 IN.
 MOMENT OF INERTIA (IX): 0.5995 IN⁴
 SECTION MODULUS (SX): 0.1444 IN³
 ALLOWABLE BENDING MOMENT (MA): 4,967.31 IN-KIPS.

TORSIONAL PROPERTIES

ST VENANT TORSION CONSTANT (JX1000): 0.0228 IN⁴
 WARPING CONSTANT (CW): 0.1917 IN⁶
 DISTANCE FROM SHEAR CENTER TO NEUTRAL AXIS (X0): -0.7491 IN.
 RADII OF GYRATION (RO): 2.2294 IN.
 TORSIONAL FLEXURAL CONSTANT (B): 0.8871
 UNBRACED LENGTH (LU): 21.9100 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: 550PDS125-19

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	31'-10"	25'-4"	22'-1"	27'-10" f	22'-1"	19'-4"	24'-3" f	20'-1"	17'-6"
16	28'-11"	23'-0"	20'-1"	24'-3" f	20'-1"	17'-6"	21'-0" f	18'-3"	15'-11"
24	24'-3" f	20'-1"	17'-6"	19'-10" f	17'-6"	15'-3"	17'-2" f	15'-11"	13'-9"

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									
16									
24									

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.