



True Gauge Stud & Track

Specification Documentation

Manufactured by Trakloc Midwest, LLC

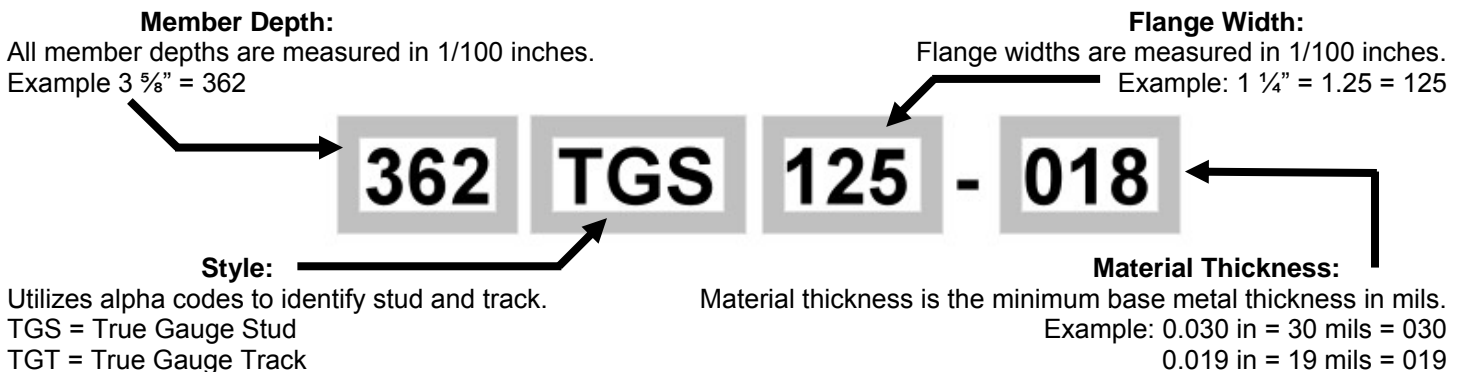


While the Trakloc Steel Framing system continues to provide unique and unparalleled time savings, we have also paid very close attention to the comments made by field installers of today's conventional "equivalent" stud and track. Based on these discussions we are pleased to provide you with what you have been asking for, a flat stud and track made from true 20GA and 25GA material. Our "TRUE GAUGE" stud and track are designed to meet or exceed to all the ASTM C645 criterion.

True Gauge is available in 2 1/2", 3 5/8" and 6" widths in stock sizes of 10', 12', and 14', or rolled to your custom lengths with service holes positioned every 12" starting at either 12" or 24" from the bottom of the stud.

PRODUCT IDENTIFICATION:

In keeping with standard product identification, True Gauge Stud and Track utilize a four part identification system. This identifies the size (both web and flange) as well as material thickness.



RAW MATERIAL & MANUFACTURING:

All materials used in the production of True Gauge Stud and Track are rolled from steel with a minimum yield strength of 33 KSI (1000 pounds per square inch). All stud and track is engineered to meet the 2004 Edition of the AISI (American Iron and Steel Institute) North American Specification for the Design of Cold-Formed steel Structural Members. All True Gauge Stud and Track is manufactured at the Trakloc Midwest, LLC manufacturing facility located at 6500 W. Calumet Rd., Milwaukee, Wisconsin. As such the facility operates under ICC guidelines and is inspected for compliance quarterly by Intertek (www.intertek.com). Intertek is an industry leader with more than 24,000 people in 1,000 locations in over 100 countries, ensuring products meets quality, health, environmental, safety, and social accountability standards for virtually any market around the world.



ASTM C645-08a COMPLIANCE:

True Gauge Stud and Track is warranted to meet or exceed all ASTM C645 criterion as listed below.

4. Material and Manufacture

- 4.1 Members shall be manufactured from steel meeting the requirements of Specification A 1003/A 1003M
- 4.2 Members shall have a protective coating conforming to Specification A 653/A 653M - G40 minimum or shall have a protective coating with an equivalent corrosion resistance.
- 4.3 Members shall be manufactured from steel having a minimum thickness, individual measurement of 0.0179 in. (0.455) before application of protective coating.

5. Dimensions and Permissible Variations

- 5.1.1 Members, except main beams of grid suspension systems, shall be sufficiently rigid to permit penetration of the screw.
- 5.1.2 Minimum width of face to which gypsum board is screw-attached shall be not less than 1 1/4 in. (32 mm).
- 5.1.3 Minimum lip dimension shall be 3/16 in. (5mm). See Fig. 1.
- 5.2 Members shall be manufactured within the limits as shown in Table 1 and Fig. 2.

Fig. 1 Minimum Drywall Stud Cross Section

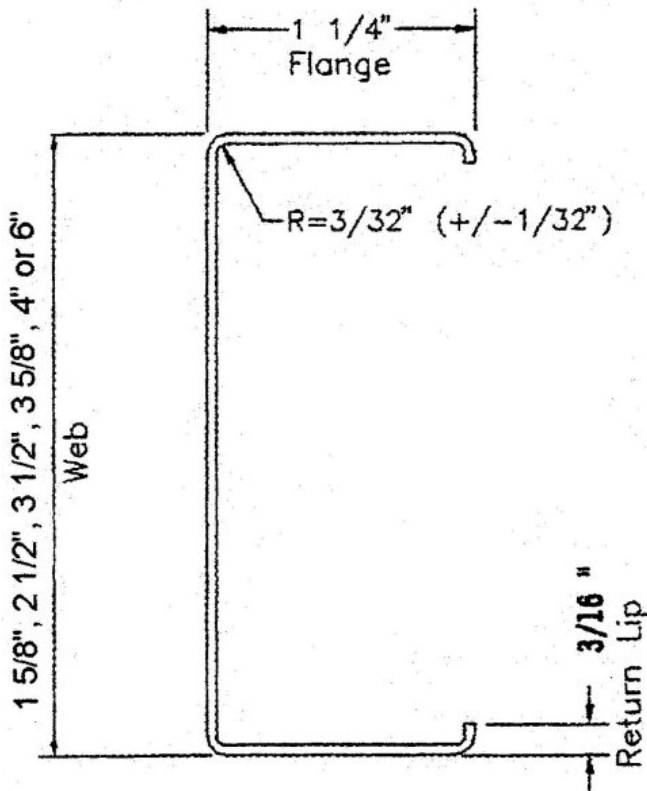


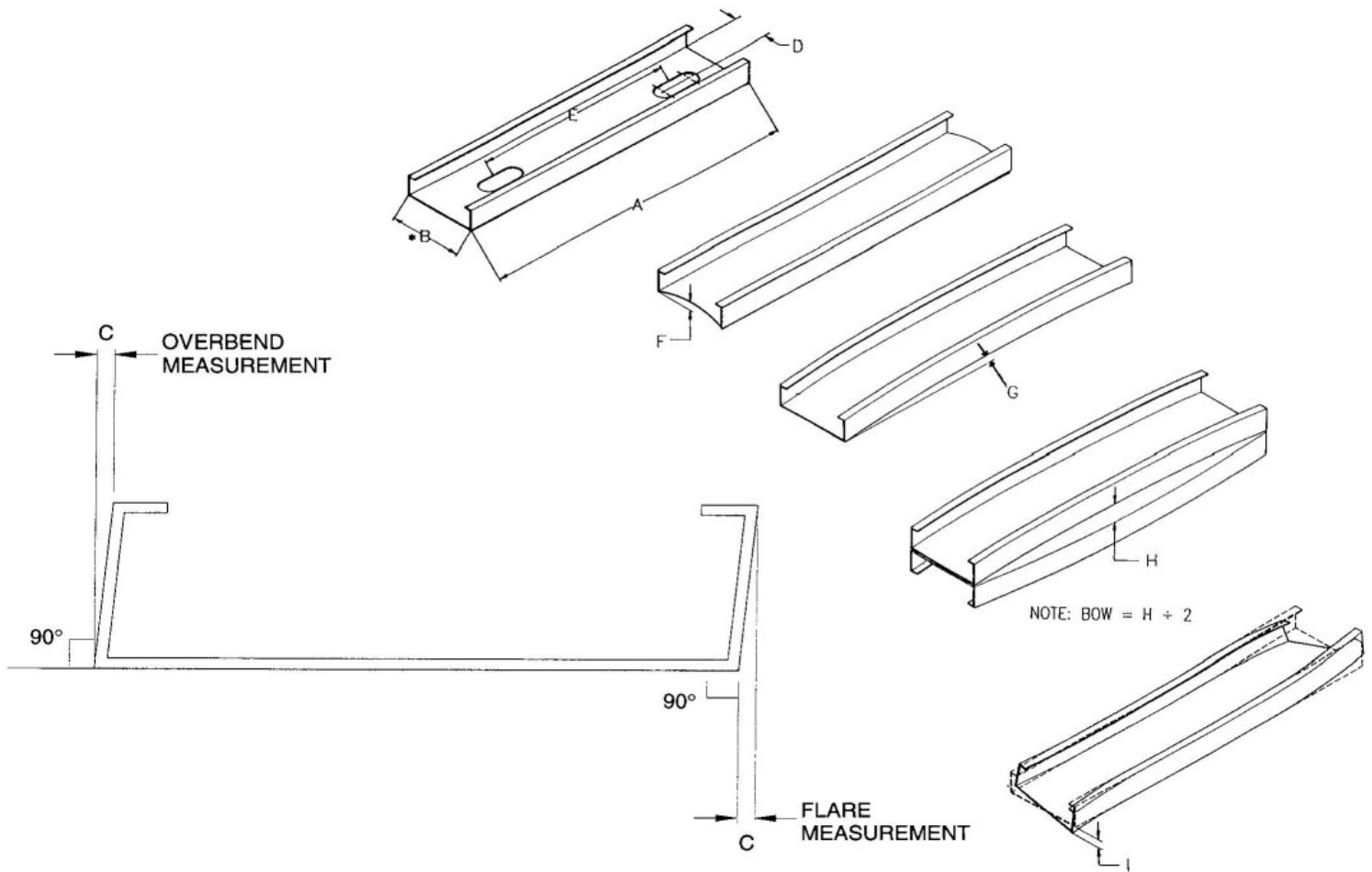
Table 1 Manufacturing Tolerances

Dimension ^A	Item Checked	Drywall Studs, in. (mm)	Drywall Track, in. (mm)
A	length	+ 1/8 (3.18)	+ 1 (25.40)
		- 1/4 (6.35)	- 1/4 (6.35)
B ^B	web width	+ 1/32 (0.79)	+ 1/8 (3.18)
		- 1/32 (0.79)	- 0 (0)
C	flare overbend	+ 1/16 (1.59)	+ 0 (0)
		- 1/16 (1.59)	- 3/16 (4.76)
D	hole center width	+ 1/8 (3.18)	NA
		- 1/8 (3.18)	
E	hole center length	+ 1/4 (6.35)	NA
		- 1/4 (6.35)	
F	crown	+ 1/8 (3.18)	+ 1/8 (3.18)
		- 1/8 (3.18)	- 1/8 (3.18)
G	camber	1/32 per ft (0.79)	1/32 per ft (0.79)
		1/2 max (12.7)	1/2 max (12.7)
H	bow	1/32 per ft (0.79)	1/32 per ft (0.79)
		1/2 max (12.7)	1/2 max (12.7)
I	twist	1/32 per ft (0.79)	1/32 per ft (0.79)
		1/2 max (12.7)	1/2 max (12.7)

^A All measurements shall be taken not less than 1 ft (305 mm) from the end.

^B Outside dimension for stud; inside for track.

FIG. 2 Manufacturing Tolerances



MINIMUM SECTION PROPERTIES FOR VARIOUS STUDS

Section Designator ^A	Stud Depth in. (mm)		Design Thickness in. (mm)		Minimum Base Metal Thickness ^B in. (mm)		Area		Effective Properties ^C			
									$I_x D$ Ma			
							in ²	(mm ²)	in ⁴	(1000 mm ⁴)	(in-k)	(N-m)
250S125-18	2.500	64	0.0188	0.478	0.0179	0.454	0.097	63	0.089	37	1.17	132
250S125-30	2.500	64	0.0312	0.792	0.0296	0.752	0.159	102	0.159	66	2.06	2.33
362S125-18	3.625	92	0.0188	0.478	0.0179	0.454	0.118	76	0.215	89	1.78	201
362S125-30	3.625	92	0.0312	0.792	0.0296	0.752	0.194	125	0.375	156	3.46	391
600S125-30	6.000	152	0.0312	0.792	0.0296	0.752	0.268	173	1.259	524	6.54	739
600S125-33	6.000	152	0.0346	0.879	0.0329	0.835	0.297	192	1.391	579	8.06	911

A The section designator defines the cold-formed steel framing member dimensions.

Example: 350S125-18

350 designates the member web depth in 100ths of an inch, 350 = 3.50 in. (88.9 mm)

S designates the type of member, S = Stud

125 designates the member flange width in 100ths of an inch, 125 = 1.25 in. (31.8 mm)

-18 designates the minimum base metal thickness in mils, 18 = 0.0179 in. (0.454 mm)

-30 designates the minimum base metal thickness in mils, 30 = 0.0296 in. (0.752 mm)

-33 designates the minimum base metal thickness in mils, 33 = 0.0329 in. (0.836 mm)

B Minimum base metal thickness is 95 % of Design Thickness.

C Effective properties are calculated in accordance with the AISI "Specification for the Design of Cold-Formed Steel Structural Members,"

1996 edition and are based

on a yield strength, $F_y = 33$ ksi.

D Moment of inertia, I_x , given is for deflection calculations.

E Where noted, member web height-to-thickness ratio exceeds 200, web stiffeners required at supports.

Materials and Manufacture

- 4.1 Members shall be manufactured from steel meeting the requirements of Specification A 1003/A 1003M.
- 4.2 Members shall have a protective coating conforming to Specification A 653/A 653M – G 40 minimum or shall have a protective coating with an equivalent corrosion resistance.
- 4.3 Members shall be manufactured from steel having a minimum thickness, individual measurement of 0.0179 in. (0.455 mm) before application of protective coating.

Type	CS-B per ASTM A653/A653M-03
Tensile Strength	45ksi
Yield Strength	33ksi
Elongation	20 minimum
Coating	G401 minimum or protective coating with an equivalent corrosion resistance. As per ASTM A645-00

Min. Base Metal Thickness (inches)	Design Thickness (inches)	Purchase Thickness (inches)
0.0179	0.0188	0.0188 Tolerance: +0.002
0.0237	0.0249	0.0249 Tolerance: +0.002
0.0296	0.0312	0.0312 Tolerance: +0.002

LIMITING WALL HEIGHTS:

True Gauge Studs -
Composite Wall
Allowable Wall Heights - Lateral Load Only

Stud Member	OC Spacing (in)	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
250TGS125-018	12	13' 1"	10' 10"	9' 5"	10' 2"	9' 2"	8' 0"	9' 3"	8' 7"	7' 6"
	16	11' 4"	9' 10"	8' 7"	8' 10"	8' 4"	7' 3"	8' 0"	7' 9"	6' 9"
	24	9' 3"	8' 7"	7' 6"	6' 11"	6' 11"	6' 4"	5' 5"	5' 5"	5' 5"
250TGS125-030	12	16' 3"	12' 11"	11' 3"	14' 2"	11' 3"	9' 10"	12' 7"	10' 3"	8' 11"
	16	14' 9"	11' 9"	10' 3"	12' 7"	10' 3"	8' 11"	10' 10"	9' 4"	8' 1"
	24	12' 7"	10' 3"	8' 11"	10' 3"	8' 11"	7' 10"	8' 10"	8' 1"	7' 1"
362TGS125-018	12	16' 2"	14' 5"	12' 7"	13' 2"	12' 7"	11' 0"	10' 3"	10' 3"	10' 0"
	16	14' 0"	13' 1"	11' 5"	10' 3"	10' 3"	10' 0"	7' 8"	7' 8"	7' 8"
	24	10' 3"	10' 3"	10' 0"	6' 10"	6' 10"	6' 10"	5' 1"	5' 1"	5' 1"
362TGS125-030	12	21' 8"	17' 2"	15' 0"	18' 7"	15' 0"	13' 1"	16' 1"	13' 8"	11' 11"
	16	19' 8"	15' 7"	13' 8"	16' 1"	13' 8"	11' 11"	13' 11"	12' 5"	10' 10"
	24	16' 1"	13' 8"	11' 11"	13' 2"	11' 11"	10' 5"	11' 5"	10' 10"	9' 5"
600TGS125-030	12	29' 10"	25' 6"	22' 3"	24' 5"	22' 3"	19' 5"	21' 1"	20' 3"	17' 8"
	16	25' 10"	23' 2"	20' 3"	21' 1"	20' 3"	17' 8"	18' 3"	18' 3"	16' 1"
	24	21' 1"	20' 3"	17' 8"	17' 0"	17' 0"	15' 5"	12' 9"	12' 9"	12' 9"