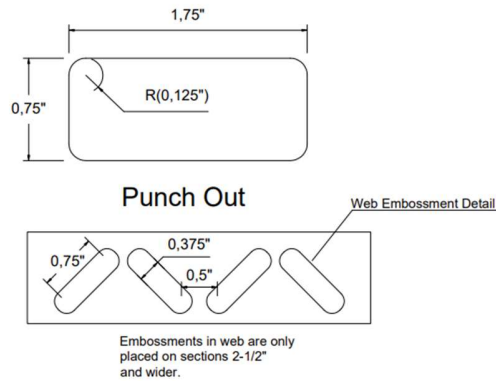
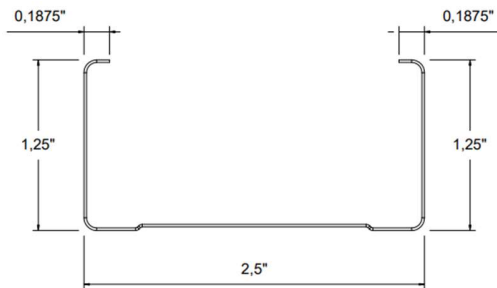


**Product Type:** Drywall Stud  
**Product Definition:** 250S125-30 33ksi  
**CSI Code:** 09.22.16.13



## Profile Properties:

Web Depth	2,500 in	Yield Strength:	33 ksi
Flange Width	1,250 in	Unit Weight	0,54 lb/ft
Stiffening Lip	0,1875 in	Punchout Width / Length	0,75 in / 1,75 in
Design Thickness	0,0312 in	Finish	G40
Minimum Thickness	0,0296 in	Color Coding	Pink

## Gross Section Properties:

Cross Sectional Area	Agross	0,1589 in <sup>2</sup>
Moment of Inertia, x-axis	Ix	0,1616 in <sup>4</sup>
Radius of Gyration, x-axis	rx	1,0083 in
Moment of Inertia, y-axis	Iy	0,0298 in <sup>4</sup>
Radius of Gyration, y-axis	ry	0,4333 in

## Torsional Properties:

St. Venant Torsion Constant	J x 1000	0,0516 in <sup>4</sup>
Warping Constant	Cw	0,0369 in <sup>6</sup>
Distance Between Shear Axis and Neutral Axis	x0	-0,8896 in
Polar Radius of Gyration	r0	1,4127 in
Torsional Flexural Constant	β	0,6035
Limit of Unbraced Length	Lu	38,03 in

## Effective Section Properties:

Effective Area	Aeff	0,1559 in <sup>2</sup>
Effective Moment of Inertia for Deflection	Ixe	0,1590 in <sup>4</sup>
Effective Section Modulus	Sxe	0,1262 in <sup>3</sup>
Allowable Bending Moment	Ma	2,0900 in.k
Allowable Shear Force	Vag	851 lbs

## Codes & Standards:

- Calculations are based on AISI S220-20 and AISI S100-16.
- Complies with IBC2021, ASTM C645, ASTM C754, ASTM A653, ASTM A1003, ASTM E72
- Intertek Certificate of Compliance No: COC-WHI23-37729201
- LEED / Sustainability Credits: Environmental Product Declaration S-P Code: S-P-00869

## Limiting Heights, Non Composite (ft-in):

Profile	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' - 2"	12' - 10"	11' - 3"	13' - 7"	11' - 3"	9' - 10"	11' - 0"	10' - 2"	8' - 11"
16	14' - 4"	11' - 8"	10' - 2"	11' - 0"	10' - 2"	8' - 11"	10' - 3"	9' - 3"	8' - 1"
24	11 - 10"	10' - 3"	8' - 11"	9' - 8"	8' - 11"	7' - 9"	8' - 5"	8' - 1"	7' - 1"

- Heights are based on AISI S220-20 and AISI S100-16, using steel properties alone.
- Above listed Non-Composite Limiting Heights are applicable when the unbraced length is less than or equal to  $L_u$ . Heights are limited by moment, deflection and shear.

## Limiting Heights, Composite – Fully Braced (ft-in):

Profile	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	18' - 5"	15' - 10"	14' - 1"	16' - 1"	13' - 10"	12' - 4"	14' - 7"	12' - 7"	11' - 2"
16	16' - 9"	14' - 5"	12' - 10"	14' - 7"	12' - 7"	11' - 2"	13' - 3"	11' - 5"	10' - 2"
24	14' - 7"	12' - 7"	11' - 2"	12' - 9"	11' - 0"	9' - 9"	11' - 7"	10' - 0"	8' - 8"

- The composite limiting heights are taken from ASTM C754-20 and based on a single layer of 5/8" Type X gypsum board to each stud flange.
- The gypsum board must be applied full height in the vertical orientation in accordance with ASTM C754 using minimum No. 6 Type S Drywall screws.
- Screws shall be spaced a maximum of 16 in on-center to framing members (including top & bottom track] spaced at 16 in or 12 in on-center.
- Screws shall be spaced a maximum of 12 in on-center to framing members (including top & bottom track] spaced at 24 in on-center.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754.
- Stud end bearing must be a minimum of 1 inch.

