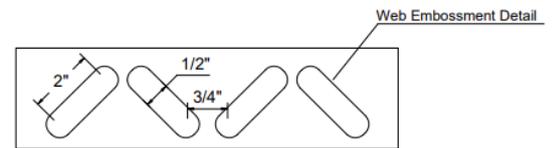
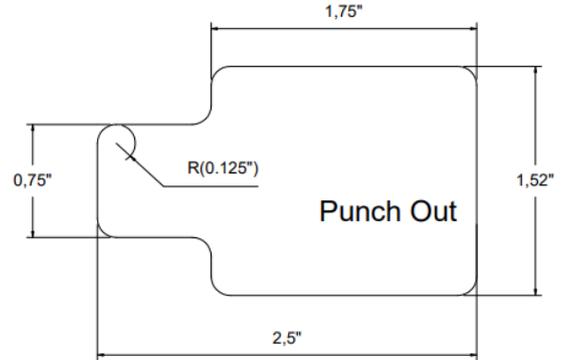
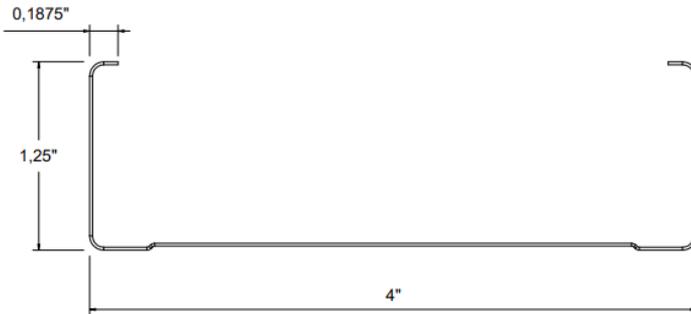


**Product Type:** Drywall Stud  
**Product Definition:** 400S125-33 33ksi  
**CSI Code:** 09.22.16.13



Embossments in web are only placed on sections 2-1/2" and wider.

### Profile Properties:

Web Depth 4,000 in  
 Flange Width 1,250 in  
 Stiffening Lip 0,1875 in  
 Design Thickness 0,0346 in  
 Minimum Thickness 0,0329 in

Yield Strength: 33 ksi  
 Unit Weight 0,77 lb/ft  
 Punchout Width / Length Please see figure  
 Finish G40  
 Color Coding

### Gross Section Properties:

Cross Sectional Area	Agross	0,2291 in <sup>2</sup>
Moment of Inertia, x-axis	Ix	0,5363 in <sup>4</sup>
Radius of Gyration, x-axis	rx	1,5299 in
Moment of Inertia, y-axis	Iy	0,0337 in <sup>4</sup>
Radius of Gyration, y-axis	ry	0,4002 in

### Torsional Properties:

St. Venant Torsion Constant	J x 1000	0,0914 in <sup>4</sup>
Warping Constant	Cw	0,1094 in <sup>6</sup>
Distance Between Shear Axis and Neutral Axis	x0	-0,7040 in
Polar Radius of Gyration	r0	1,7308 in
Torsional Flexural Constant	β	0,8211
Limit of Unbraced Length	Lu	36,95 in

## Effective Section Properties:

Effective Area	Aeff	0,2266 in <sup>2</sup>
Effective Moment of Inertia for Deflection	Ixe	0,5275 in <sup>4</sup>
Effective Section Modulus	Sxe	0,2611 in <sup>3</sup>
Allowable Bending Moment	Ma	4,7887 in.k
Allowable Shear Force	Vag	984 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	22' 8"	19' 1"	16' 8"	18' 9"	16' 8"	14' 7"	16' 5"	15' 2"	13' 3"
16	19' 10"	17' 4"	15' 2"	16' 5"	15' 2"	13' 3"	14' 3"	13' 9"	12' 0"
24	16' 5"	15' 2"	13' 3"	13' 6"	13' 3"	11' 7"	11' 9"	11' 9"	10' 6"

- 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 Lu. 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	25' 3"	20' 1"	17' 6"	22' 1"	17' 6"	15' 4"	20' 1"	15' 11"	13' 11"
16	22' 11"	18' 3"	15' 11"	20' 1"	15' 11"	13' 11"	18' 3"	14' 5"	12' 7"
24	20' 1"	15' 11"	13' 11"	17' 3"	13' 11"	12' 0"	15' 0"	12' 7"	10' 9"

- 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.