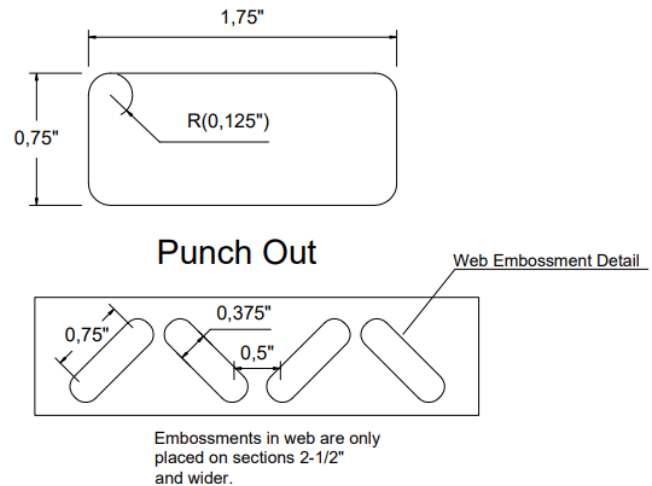
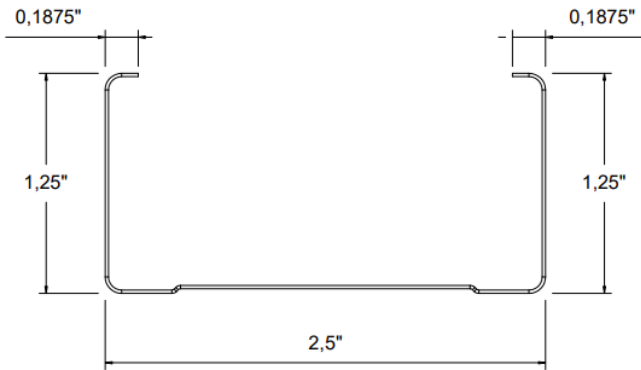


Product Type: Drywall Stud

Product Definition: 250S125-18 20EQ

CSI Code: 09.22.16.13



Profile Properties:

Web Depth 2,500 in

Flange Width 1,250 in

Stiffening Lip 0,1875 in

Design Thickness 0,0188 in

Minimum Thickness 0,0179 in

Yield Strength: 70 ksi

Unit Weight 0,33 lb/ft

Punchout Width / Length 0,75 in / 1,75 in

Finish G40

Color Coding

Gross Section Properties:

Cross Sectional Area

Moment of Inertia, x-axis

Radius of Gyration, x-axis

Moment of Inertia, y-axis

Radius of Gyration, y-axis

Agross 0,0973 in²

I_x 0,1001 in⁴

r_x 1,0142 in

I_y 0,0182 in⁴

r_y 0,4324 in

Torsional Properties:

St. Venant Torsion Constant

Warping Constant

Distance Between Shear Axis and Neutral Axis

Polar Radius of Gyration

Torsional Flexural Constant

Limit of Unbraced Length

J x 1000 0,0115 in⁴

C_w 0,0217 in⁶

x₀ -0,8690 in

r₀ 1,4037 in

β 0,6169

L_u 27,89 in

Effective Section Properties:

Effective Area	A _{eff}	0,0873 in ²
Effective Moment of Inertia for Deflection	I _{xe}	0,0835 in ⁴
Effective Section Modulus	S _{xe}	0,0601 in ³
Allowable Bending Moment	M _a	1,9676 in.k
Allowable Shear Force	V _{ag}	241 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	12' 11"	10' 3"	8' 11"	11' 3"	8' 11"	7' 10"	10' 3"	8' 2"	7' 1"
16	11' 9"	9' 4"	8' 2"	10' 3"	8' 2"	7' 1"	9' 4"	7' 5"	6' 5"
24	10' 3"	8' 2"	7' 1"	8' 11"	7' 1"	6' 2"	8' 2"	6' 5"	5' 8"

- 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	17' 5"	14' 8"	12' 11"	15' 3"	12' 10"	11' 3"	13' 10"	11' 8"	10' 3"
16	16' 8"	14' 0"	12' 4"	14' 6"	12' 3"	10' 9"	13' 2"	11' 2"	9' 9"
24	15' 2"	12' 10"	11' 3"	13' 2"	11' 2"	9' 10"	11' 5"	10' 2"	8' 5"

- 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.