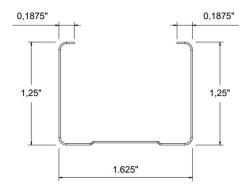
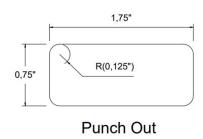


# **PRODUCT SUBMITTAL SHEET**

Product Type:Drywall StudProduct Definition:162S125-33 33ksiCSI Code:09.22.16.13





#### **Profile Properties:**

Web Depth	1,625 in	Yield Strength:	33 ksi
Flange Width	1,250 in	Unit Weight	0,49 lb/ft
Stiffening Lip	0,1875 in	Punchout Width / Length	0,75 in / 1,75 in
Design Thickness	0,0346 in	Finish	G40
Minimum Thickness	0,0329 in	Color Coding	White

### **Gross Section Properties:**

Cross Sectional Area	Agross	0,1454 in2
Moment of Inertia, x-axis	lx	0,0671 in4
Radius of Gyration, x-axis	rx	0,6795 in
Moment of Inertia, y-axis	ly	0,0281 in4
Radius of Gyration, y-axis	ry	0,4400 in

### **Torsional Properties:**

St. Venant Torsion Constant	J x 1000	0,0580 in4
Warping Constant	Cw	0,0157 in6
Distance Between Shear Axis and Neutral Axis	x0	-1,0098 in
Polar Radius of Gyration	r0	1,2942 in
Torsional Flexural Constant	β	0,3912
Limit of Unbraced Length	Lu	37,60 in

### **Effective Section Properties:**

Effective Area	Aeff	0,1417 in2
Effective Moment of Inertia for Deflection	lxe	0,0660 in4
Effective Section Modulus	Sxe	0,0805 in3
Allowable Bending Moment	Ma	1,3700 in.k
Allowable Shear Force	Vag	608 lbs

1417 Irving Park Rd. Suite Number: B-1 6, Franklin Park, IL 60131-3882 sales@umsmetal.com engineering@umsmetal.com







## **PRODUCT SUBMITTAL SHEET**

#### **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' - 1"	9' - 7"	8' - 5"	10' - 7"	8' - 5"	7' - 4"	9' - 7"	7' - 7"	6' - 8"
16	11' - 0"	8' - 9"	7' - 7"	9' - 7"	7' - 7"	6' - 8"	8' - 8"	6' - 11"	6' - 0"
24	9' - 7"	7' - 7"	6' - 8"	8' - 2"	6' - 8"	5' - 10"	7' - 1"	6' - 0"	5' - 3"

- 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.

#### <u>Limiting Heights, Composite – Fully Braced (ft-in):</u>

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	15' - 4"	12' - 2"	10' - 8"	13' - 6"	10' - 8"	9' - 2"	12' - 2"	9' - 7"	8' - 2"
16	14 - 0"	11' - 1"	9' - 7"	12' - 2"	9' - 8"	8' - 2"	11' - 1"	8' - 6"	-
24	12' - 2"	9' - 7"	8' - 2"	10' - 8"	8' - 2"	-	9' - 7"	-	-

- 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.



