

**Product Category:** 092216 - Non-Structural Framing **Product Name:** 362PWS134-19 20GA EQ

#### **Important Properties Notes:**

- Calculated properties are based on AISI S100-16
   Supplement, North American Specification for Design of Cold-Formed
   Steel Structural Members and Meets IBC 2018 Code
- The centerline bend radius is based on inside corner radii shown in thickness chart.
- Effective properties incorporate the strength cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties are based on fullsection of the studs, away from punchouts.
- · For deflection calculations, use the effective
- · Allowable moment includes cold-work of forming.

#### **Project Information**

Name: Address:

# **Contractor Information** Name:

Contact: Phone: Fax:

#### **Architect Information**

Name: Contact: Phone: Fax:

### **Distributor/Rep Information**

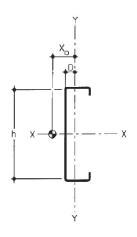
Name: Contact: Phone: Email /Web:

# **Properties**

Weight

362PWS134-19 2	OGA EQ	<b>Properties</b>	362PWS
Finish:	G40		Gross Se
Web Depth	3-5/8"		Cross sec
Flange Width	1-11/32"	in	Moment of
Return Lip	0.406	in	Section Mo
Design Thickness			Radius of
Yield stress, Fy	55	ksi	Gross mor

0.470 lb/ft



# 362PWS134-19 20GA EQ Section Properties

Gross Section Properties					
Cross sectional area (A)	0.138 in <sub>2</sub>				
Moment of inertia (lx)	0.28 In4				
Section Modulus (Sx)	0.155 in				
Radius of gyration (Rx)	1.427 in4				
Gross moment of inertia (ly)	0.035 in				
Gross Radius of gyration (Ry)	0.502 in <sub>2</sub>				

# **Effective Section Properties**

Moment of inertia for deflection (lxe)	0.269	in4
Section modulus (Sxe)	0.097	in3
Allowable bending moment (Ma)	3.200	In-lbs
Allowable bending moment (Ma-D)	3.02	In-k
(Vag)	208	lb
(Vanet)	185	lb
Fya	55	ksi

# **Torsional Properties**

St. Venant torsion constant (J x 1000)	0.018 in4
Warping constant (Cw)	0.100 in6
Distance from shear center to neutral	-1.013 in
axis (Xo)	
m	0.622 in
Radii of gyration (Ro)	1.821 in
Torsional flexural constant (Beta)	0.690
Unbraced Length (Lu)	26.9 in



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## **Limiting Heights Properties**

Non-Composite Limiting Heights - Fully Braced

Spacing	5psf			10psf		
(inches)	L/120	L/240	L/360	L/120	L/240	L/360
12	19'-3"	15'-5"	13'-6"	14'-2"	12'-3"	10'-8"
16	17'-4"	14'-0"	12'-3"	12'-3"	11'-1"	9'-9"
24	14'-2"	12'-3"	10'-8"	10-0" e	9'-8" e	8'-6"

Composite Limiting Heights with 5/8" Type X Gypsum Board

Spacing	5psf			10psf		
(inches)	L/120	L/240	L/360	L/120	L/240	L/360
12	22'-7"	18'-7"	16'-4"	17'-11"	14'-9"	12'-11"
16	20'-6"	16'-11"	14'-10"	16'-2" f	16'-5"	11'-9"
24	17'-11"	14'-9"	12'-11"	13'-3" f	11'-9"	9'-11"

#### Fully Braced Non-Composite Limiting Heights Table Notes

-Calculations are based on AISI Standard, North American Specification for the Design of Cold-Formed Steel Structural Members, 2016 edition (AISI S100-2016). All calculations are based on allowable strength design (ASD).

-When provided, factory punchouts will be located along the centerline of the webs of the members and will have a minimum center-to-center spacing of 24 inches. Punchouts for members > 2.5 inches deep are a maximum of

1.5 inches wide x 4 inches

long. Members with depths 2.5" and smaller are maximum 3/4" wide x 4 inches long.

- -For deflection determination, use the effective moment of inertia.
- -The effective moment of inertia for deflection is calculated at a stress which results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable local buckling moment, Ma-L.
- -Tabulated gross and torsional properties are based on the full, unreduced section away from punchouts
- -Effective X-X Axis properties of all stud and joist sections based on punched sections.
- -Where section designations include a superscript '1', web height-to-thickness exceeds 200. Web stiffeners are required at all supports and concentrated loads.
- -Where effective properties are not listed for a section, web depth-to-thickness or flange width-to-thickness limits from the AISI S100 are exceeded. Only gross properties are available.
- -Allowable bending moment and moment of inertia for 6" studs based on the direct strength method (DSM).

### **Additional Specification Information**

Studs Unlimited is an SFIA member. Studs Unlimited acts in accordance with the product and quality standards required by the SFIA program.

Studs Unlimited meets or exceeds ASTM C955, A653, and A1003.

Prime Wall is owned by and licensed by MRI Steel Framing

#### **LEED Specification Information**

Materials & Resources Credit 2: Construction Waste Management - Studs Unlimited Steel Framing Products are formed from steel and are 100% recyclable. (1 point)

Materials & Resources Credit 4: Recycled Content intends to increase demand for building products that incorporate recycled content materials, therefore reducing impacts resulting from extraction and processing of new virgin materials. As discussed and demonstrated below, North American steel building products contribute positively toward points under Credits 4.1 and 4.2. The following is required by LEED-NC Versions 2.2 and 2009:

**Credit 4.1 (1 point)** Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of pre-consumer content constitutes at least 10%(based on cost) of the total value of the materials in the project.

Credit 4.2 (1 point) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of pre-consumer content constitutes at least 20% of the total value of the materials in the project.

Materials & Resources Credit 5: Regional Materials - Contact Studs Unlimited directly for information

Studs Unlimited is located in Oklahoma City, Oklahoma. (1 point)