

Product category: ProSTUD® 20 Drywall Stud (West Coast)
Product name: 362PDS125-22 65ksi G40EQ - Punched
 3-5/8" ProSTUD 20 (22mil)

Finish: G40EQ
 Color coding: Pink

Geometric Properties

Web depth	3.625 in	Weight	0.509 lb/ft
Flange width	1.250 in	Punchout width	1.500 in
Stiffening lip	0.250 in	Punchout length	2.250 in
Design thickness	0.0232 in	Minimum thickness	0.0220 in
Yield stress, Fy	65 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.150 in ²
Moment of inertia (Ix)	0.300 in ⁴
Section modulus (Sx)	0.166 in ³
Radius of gyration (Rx)	1.417 in
Gross moment of inertia (Iy)	0.029 in ⁴
Gross radius of gyration (Ry)	0.438 in

Effective Section Properties, Strong Axis

Effective area (Ae)	0.052 in ²
Moment of inertia for deflection (Ixe)	0.252 in ⁴
Section modulus (Sxe)	0.091 in ³
Allowable bending moment (Ma)	3,526 in-lbs

Torsional Properties

St. Venant torsion constant (J x 1000)	0.0268 in ⁴
Warping constant (Cw)	0.074 in ⁶
Distance from shear center to neutral axis (Xo)	-0.828 in
Radii of gyration (Ro)	1.699 in
Torsional flexural constant (Beta)	0.762

Unbraced Length (Lu)	21.2 in
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Notes:

- Section properties were determined in accordance with AISI-NASPEC 2001 w/ 2004 Supplement.
- Calculated effective moment of inertia (Ixe) is based on serviceability determination.
- Effective properties and moment capacity did not incorporate stress increase as a result of cold work of forming.
- Ma is a full braced allowable bending moment.
- Effective Properties are conservatively based upon the basic C-Section, improved values are possible by applying the AISI Direct Strength Method.

GREEN Benefits and Recycled Content:

LEED Credit MR 2 - ClarkDietrich products are manufactured from cold-formed steel. Steel is 100% recyclable, which helps divert debris from the waste stream. The contribution to LEED must be calculated by the contractor based on weight or volume.

LEED Credit MR 4 - ClarkDietrich's steel products have a minimum of 25.5% post-consumer recycled content, and 6.8% pre-consumer. If you wish to report a higher number for your project or seek Credit MR 5 please contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com.

09.22.16 (Non-Structural Metal Framing)



Drywall Stud

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

ASTM & Code Standards:

- AISI-NASPEC 2001 w/2004 Supplement
- Meets or exceeds ASTM C645 & C754
- ASTM E119, E72 & E90
- IAPMO #0171 & #0189
- Multiple UL® Design Listing including: V438, V450 & U419
- MSDS & Product Certification Information available at www.clarkdietrich.com



Project Information

Name:
 Address:

Contractor Information

Name:
 Contact:
 Phone:
 Fax:

Architect Information

Name:
 Contact:
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Product category: ProSTUD® 20 Drywall Stud (West Coast)
Product name: 362PDS125-22 65ksi G40EQ - Punched
 3-5/8" ProSTUD 20 (22mil)

3-5/8" ProSTUD 20 (22mil) Drywall Stud - COMPOSITE Limiting Heights (AC86-2008)

(1 layer) 5/8" GENERIC Gypsum Board (All Brands & Types)

Spacing (inches)	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	21'-10"	17'-4"	15'-2"	19'-1"	15'-2"	13'-3"	17'-4"	13'-9"	11'-11"
16	19'-10"	15'-9"	13'-9"	17'-4"	13'-9"	11'-11"	15'-9"	12'-6"	10'-8"
24	17'-4"	13'-9"	11'-11"	15'-2"	11'-11"	10'-3"	13'-9"	10'-8"	-

* GENERIC - As outlined by AC86 Section 3.1.3, the gypsum board is considered generic since the flexural strength test results do not exceed 15 percent above the applicable ASTM standard.

3-5/8" ProSTUD 20 (22mil) Drywall Stud - COMPOSITE Limiting Heights (AC86-2008)

(1 layer) 5/8" Type X Gypsum Board

Spacing (inches)	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	23'-9"	18'-11"	16'-6"	20'-9"	16'-6"	14'-5"	18'-11"	15'-0"	13'-1"
16	21'-7"	17'-2"	15'-0"	18'-11"	15'-0"	13'-1"	17'-2"	13'-7"	11'-10"
24	18'-11"	15'-0"	13'-1"	16'-6"	13'-1"	11'-4"	15'-0"	11'-10"	10'-3"

The data in this table was based off of testing conducted using USG Brand 5/8" thick Type X Gypsum Board.

Composite Table Notes:

- Allowable composite limiting heights are calculated using ICC-ES AC86-2010. In accordance with current building codes and AISI design standards, the 1/3 Stress Increase for strength was not used.
- The composite limiting heights provided in the tables are based on a single layer of gypsum board complying with ASTM C1396.
- The gypsum board must be applied full height to each stud flange and installed using minimum No. 6 Type S Drywall screws spaced a minimum of 12-in on-center to the framing members in accordance with ASTM C754-2004.
- No fasteners are required for attaching the stud to the track except as detailed in ASTM C754-2004.
- Stud end bearing must be a minimum of 1 inch.
- Minimum material yield strength equals 70 ksi for 15-mil and 18-mil studs, 65 ksi for 22-mil and 26-mil studs, and 33 ksi for 30-mil and 33-mil studs.
- "f" Indicates that flexural stress controls the allowable wall height. "s" Indicates that shear/end reaction controls the allowable wall height.

3-5/8" ProSTUD 20 (22mil) Drywall Stud - NON-COMPOSITE Limiting Heights (FULLY BRACED)

Spacing (inches)	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'-9"	14'-11"	13'-0"	16'-5"	13'-0"	11'-4"	14'-11"	11'-10"	10'-4"
16	17'-0"	13'-6"	11'-10"	14'-11"	11'-10"	10'-4"	13'-3" f	10'-9"	9'-5"
24	14'-11"	11'-10"	10'-4"	12'-6" f	10'-4"	9'-0"	10'-10" f	9'-5"	8'-2"

Non-Composite Table Notes:

- Heights are based on 2001 North American Specification w/ 2004 Supplement using steel properties alone.
- Heights are based on continuous lateral support of each flange over the full length of the stud.
- * Notes that higher heights can be achieved by using end bearing stiffeners. See full ProSTUD non-composite charts at clarkdietrich.com
- Minimum yield strength for ProSTUD 25 & 22 = 70ksi For ProSTUD 20 & 20HD = 65ksi For ProSTUD 30MIL & 33MIL = 33ksi

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Project Information

 Name:
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Contractor Information

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Architect Information

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