

TradeReady® Floor Joist

05.40.00 (Cold-Formed Metal Framing)

Product category 8" x 1-3/4" Flange 14ga TradeReady Joist
 Product name 800TDJ175-68 (50ksi) - Punched Finish: CP60

Geometric Properties

Web depth: 8.000 in	Knock Out Shape: Ellipse	Design thickness: 0.0713 in
Flange width: 1.750 in	Knock Out Height: 4-1/4"	Min. steel thickness: 0.0677 in
Stiffening lip: 0.625 in	Knock Out Width: 7"	Yield stress, Fy: 50ksi
	Small Hole Dia.: 1-11/32"	Ultimate, Fu: 65 ksi

Gross Section Properties of Full Section

Cross sectional area (A)	0.871 in ⁽²⁾
Member weight per foot of length	2.850 lbs/ft
Moment of inertia (Ix)	7.579 in ⁽⁴⁾
Radius of gyration (Rx)	2.950 in
Gross moment of inertia (Iy)	0.313 in ⁽⁴⁾
Gross radius of gyration (Ry)	0.600 in

Net Section Properties (at knockout)

Cross sectional area (A)	0.623 in ⁽²⁾
Moment of inertia (Ix)	7.391 in ⁽⁴⁾
Radius of gyration (Rx)	3.444 in
Gross moment of inertia (Iy)	0.242 in ⁽⁴⁾
Gross radius of gyration (Ry)	0.623 in

Allowable Capacities

Fully Braced Allowable Moment at Knockout (Ma-kno)	49,123 in-lbs
Fully Braced Allowable Moment at Full Section (Ma-full)	53,427 in-lbs
Allowable Shear at Knockout (Va-kno)	2,091 lbs
Allowable Shear at Full Section (Va-full)	4,221 lbs

Torsional Section Properties

Distance between centroid and shear-center (Xo)	-1.058 in
Distance between centroid and web-centerline (X)	0.376 in
St. Venant torsional constant (J*1000)	1.474 (in ⁴)
Torsional warping constant (Cw)	4.181 (in ⁶)
Radii of gyration (Ro)	3.191 in
Torsional flexural constant (Beta)	0.890

Effective Section Properties

Moment of inertia (Ix)	7.556 (in ⁴)
Section modulus (Sx)	1.784 (in ³)

ASTM & Code Standards:

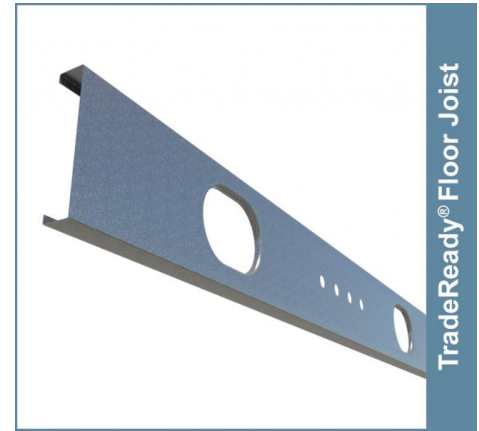
- AISI North American Specification [NASPEC] 2004
- Structural framing is produced to meet or exceed ASTM C955
- Sheet steel meets or exceeds mechanical and chemical requirements of ASTM A1003
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs
- U.S. Patent Nos. 6,301,854; 6,691,478; 6,418,694; 6,691,487; 6,761,005; 7,240,459
- Canadian Patent No. 2319346, Mexican Patent No. 243294

Sustainability Credits:

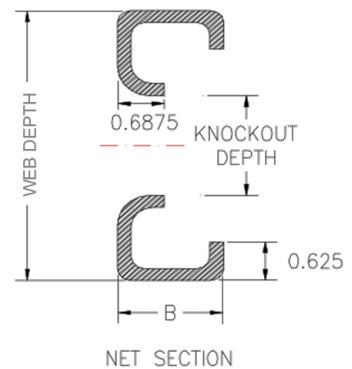
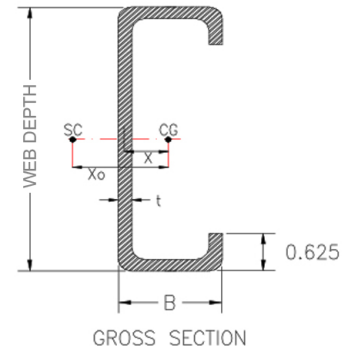
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)



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Project Information

Name:
Address:

Contractor Information

Name:
Contact:
Phone:
Fax:

Architect Information

Name:
Contact:
Phone:
Fax: