

## TradeReady® Floor Joist

Product category: 10" x 2" Flange 14ga TradeReady Joist  
 Product name: 1000TDW200-68 (50ksi) - Punched Finish: CP60

### Geometric Properties

Web depth:	10.000 in	Knock Out Shape:	Ellipse	Design thickness:	0.0713 in
Flange width:	2.000 in	Knock Out Height:	6-1/4"	Min. steel thickness:	0.0677 in
Stiffening lip:	0.625 in	Knock Out Width:	9"	Yield stress, Fy:	50ksi
		Small Hole Dia.:	1-11/32"	Ultimate, Fu:	65 ksi

### Gross Section Properties of Full Section

Cross sectional area (A)	1.049 in <sup>(2)</sup>
Member weight per foot of length	3.432 lbs/ft
Moment of inertia (Ix)	13.99 in <sup>(4)</sup>
Radius of gyration (Rx)	3.652 in
Gross moment of inertia (Iy)	0.460 in <sup>(4)</sup>
Gross radius of gyration (Ry)	0.662 in

### Net Section Properties (at knockout)

Cross sectional area (A)	0.659 in <sup>(2)</sup>
Moment of inertia (Ix)	13.11 in <sup>(4)</sup>
Radius of gyration (Rx)	4.461 in
Gross moment of inertia (Iy)	0.335 in <sup>(4)</sup>
Gross radius of gyration (Ry)	0.714 in

### Allowable Capacities

Fully Braced Allowable Moment at Knockout (Ma-kno)	66,582 in-lbs
Fully Braced Allowable Moment at Full Section (Ma-full)	72,416 in-lbs
Allowable Shear at Knockout (Va-kno)	2,282 lbs
Allowable Shear at Full Section (Va-full)	3,346 lbs

### Torsional Section Properties

Distance between centroid and shear-center (Xo)	-1.120 in
Distance between centroid and web-centerline (X)	0.391 in
St. Venant torsional constant (J*1000)	1.776 (in <sup>4</sup> )
Torsional warping constant (Cw)	9.397 (in <sup>6</sup> )
Radii of gyration (Ro)	3.877 in
Torsional flexural constant (Beta)	0.917

### Effective Section Properties

Moment of inertia (Ix)	13.66 (in <sup>4</sup> )
Section modulus (Sx)	2.419 (in <sup>3</sup> )

### 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](http://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

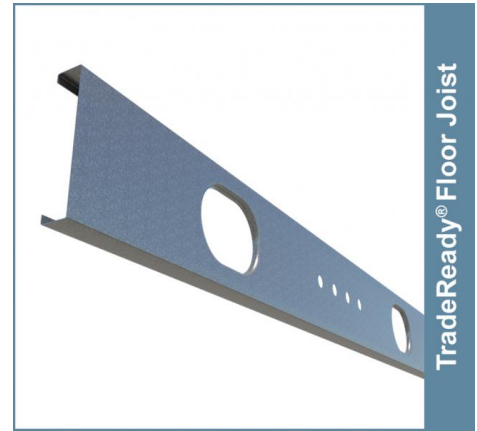
### Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit [www.clarkdietrich.com/LEED](http://www.clarkdietrich.com/LEED)

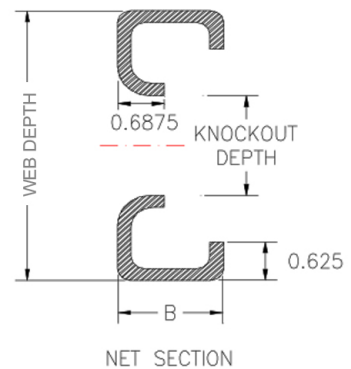
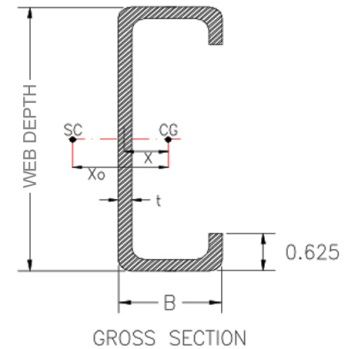
**LEED v4 MR Credit** -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

**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](mailto:info@clarkdietrich.com) / 888-437-3244)

## 05.40.00 (Cold-Formed Metal Framing)



TradeReady® Floor Joist



### Project Information

Name:  
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### Contractor Information

Name:  
Contact:  
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Fax:

### Architect Information

Name:  
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