

# **Product Submittal Sheet**

Technical Services: 888-437-3244 Engineering Services: 877-832-3206

Finish: CP60

Sales: 800-543-7140 clarkdietrich.com

# **TradeReady® Floor Joist**

Product category 12" x 2" Flange 12ga TradeReady Joist Product name 1200TDW200-97 (50ksi) - Punched

**Geometric Properties** 

Web depth: 12.000 in Knock Out Shape: Circlular Design thickness: 0.1017 in Knock Out Height: 8" Flange width: 2.000 in Min. steel thickness: 0.0966 in Stiffening lip: 0.625 in Knock Out Width: 8" 50ksi Yield stress, Fy: Small Hole Dia.: 1-11/32" Ultimate, Fu: 65 ksi

### **Gross Section Properties of Full Section**

Cross sectional area (A)

Member weight per foot of length

Moment of inertia (Ix)

Radius of gyration (Rx)

Gross moment of inertia (Iy)

Gross radius of gyration (Ry)

1.682 in(^2)

5.503 lbs/ft

30.600 in(^4)

4.265 in

0.642 in(^4)

0.618 in

### **Net Section Properties (at knockout)**

Cross sectional area (A) 0.940 in(^2)

Moment of inertia (lx) 27.45 in(^4)

Radius of gyration (Rx) 5.405 in

Gross moment of inertia (ly) 0.457 in(^4)

Gross radius of gyration (Ry) 0.698 in

### **Allowable Capacities**

Fully Braced Allowable Moment at Knockout (Ma-kno) 128,668 in-lbs
Fully Braced Allowable Moment at Full Section (Ma-full) 139,942 in-lbs
Allowable Shear at Knockout (Va-kno) 4,357 lbs
Allowable Shear at Full Section (Va-full) 8,108 lbs

### **Torsional Section Properties**

Distance between centroid and shear-center (Xo)

Distance between centroid and web-centerline (X)

St. Venant torsional constant (J\*1000)

Torsional warping constant (Cw)

Radii of gyration (Ro)

Torsional flexural constant (Beta)

-0.988 in

0.332 in

5.797 (in^4)

19.15 (in^6)

4.421 in

0.950

### **Effective Section Properties**

Moment of inertia (lx) 30.32 (in^4)
Section modulus (Sx) 4.674 (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:

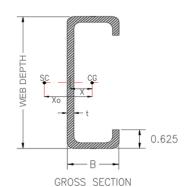
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

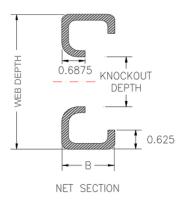
**LEED v4 MR Credit** -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

**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)

# TradeReady® Floor Joist

05.40.00 (Cold-Formed Metal Framing)





Project Information	Contractor Information	Architect Information
Name:	Name:	Name:

 Name:
 Name:
 Name:

 Address:
 Contact:
 Contact:

 Phone:
 Phone:

 Fax:
 Fax:

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