

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 10" x 2" Flange 16ga TradeReady Joist Product name 1000TDW200-54 (50ksi) - Punched

Geometric Properties

Web depth: 10.000 in Knock Out Shape: Ellipse Design thickness: 0.0566 in Knock Out Height: 6-1/4" Flange width: 2.000 in Min. steel thickness: 0.0538 in Stiffening lip: 0.625 in Knock Out Width: 9" 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)

0.840 in(^2)

2.748 lbs/ft

11.290 in(^4)

3.666 in

0.378 in(^4)

0.671 in

Net Section Properties (at knockout)

Cross sectional area (A) 0.532 in(^2)

Moment of inertia (lx) 10.60 in(^4)

Radius of gyration (Rx) 4.466 in

Gross moment of inertia (ly) 0.277 in(^4)

Gross radius of gyration (Ry) 0.722 in

Allowable Capacities

Fully Braced Allowable Moment at Knockout (Ma-kno) 46,986 in-lbs
Fully Braced Allowable Moment at Full Section (Ma-full) 51,102 in-lbs
Allowable Shear at Knockout (Va-kno) 1,493 lbs
Allowable Shear at Full Section (Va-full) 1,661 lbs

Torsional Section Properties

Distance between centroid and shear-center (Xo)

-1.135 in
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)

-1.135 in
0.398 in
0.898 (in^4)
7.669 (in^6)
3.896 in
0.915

Effective Section Properties

 $\begin{array}{ll} \text{Moment of inertia (lx)} & 10.776 \text{ (in^4)} \\ \text{Section modulus (Sx)} & 1.707 \text{ (in^3)} \end{array}$

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:

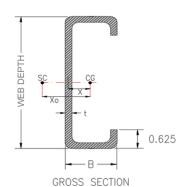
For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

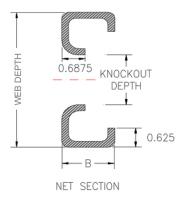
LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

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)

rade Ready® 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:

TradeReady Steel Joist @ 05/2021 ClarkDietrich