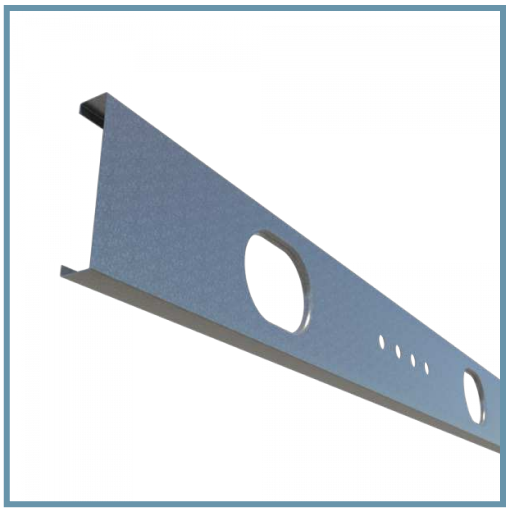
TradeReady® Floor Joist

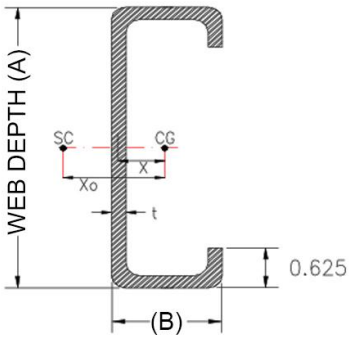
Product category 7-1/4" x 1-3/4" Flange 14ga TradeReady Joist
Product name 725TDJ175-68 (50ksi) - Punched **Finish:** CP60



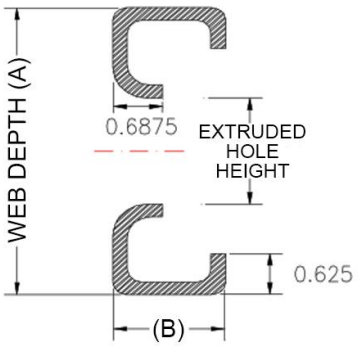
Geometric Properties

Web depth (A):	7.250 in	**Knock Out Shape:**	Ellipse	**Design thickness:**	0.0713 in
Flange width (B):	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)	0.817 in^2
Member weight per foot of length	2.673 lbs/ft
Moment of inertia (Ix)	5.968 in^4
Radius of gyration (Rx)	2.702 in
Gross moment of inertia (Iy)	0.305 in^4
Gross radius of gyration (Ry)	0.611 in
Net Section Properties (at knockout)	
Cross sectional area (A)	0.570 in^2
Moment of inertia (Ix)	5.781 in^4
Radius of gyration (Rx)	3.186 in
Gross moment of inertia (Iy)	0.222 in^4
Gross radius of gyration (Ry)	0.624 in
Allowable Capacities	
Fully Braced Allowable Moment at Knockout (Ma-kno)	43,706 in-lbs
Fully Braced Allowable Moment at Full Section (Ma-full)	47,535 in-lbs
Allowable Shear at Knockout (Va-kno)	1,991 lbs
Allowable Shear at Full Section (Va-full)	4,680 lbs
Torsional Section Properties	
Distance between centroid and shear-center (Xo)	-1.109 in
Distance between centroid and web-centerline (X)	0.400 in
St. Venant torsional constant (J*1000)	1.384 in^4
Torsional warping constant (Cw)	3.365 in^6
Radii of gyration (Ro)	2.984 in
Torsional flexural constant (Beta)	0.862
Effective Section Properties	
Moment of inertia (Ix)	5.966 in^4
Section modulus (Sx)	1.588 in^3



GROSS SECTION



NET SECTION

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