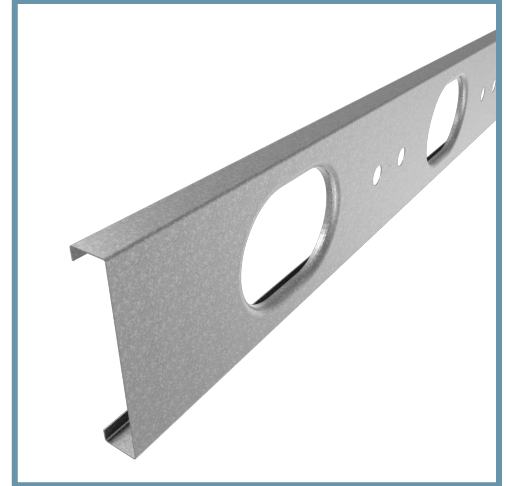


## 11-1/4" TradeReady® Floor Joist (1125TDJ24-175-97)

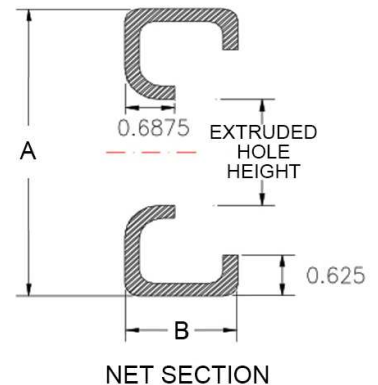
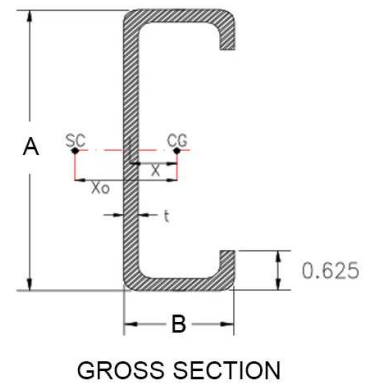
Floor Joist with extruded holes

### Geometric Properties

<b>Web depth (A):</b> 11.25 in	<b>Extruded hole shape:</b> Ellipse	<b>Design thickness:</b> 0.1017 in
<b>Flange width (B):</b> 1.75 in	<b>Extruded hole Height:</b> 6.25"	<b>Min. steel thickness:</b> 0.0966 in
<b>Extruded hole spacing:</b> 24 in	<b>Extruded hole width:</b> 9"	<b>Yield stress, Fy:</b> 50 ksi
<b>Coating:</b> CP60		



Gross Section Properties of Full Section	
Cross sectional area	1.550 in <sup>2</sup>
Member weight per foot of length	5.087 lbs/ft
Moment of inertia (Ix)	24.283 in <sup>4</sup>
Radius of gyration (Rx)	3.959 in
Gross moment of inertia (Iy)	0.445 in <sup>4</sup>
Gross radius of gyration (Ry)	0.536 in
Net Section Properties (at Extruded Hole)	
Cross sectional area (A net)	1.025 in <sup>2</sup>
Moment of inertia (Ix net)	23.332 in <sup>4</sup>
Radius of gyration (Rx net)	4.772 in
Net moment of inertia (Iy net)	0.359 in <sup>4</sup>
Net radius of gyration (Ry net)	0.592 in
Allowable Capacities (Fully Braced)	
Local Moment at Full Section (Mal-full)	124.55 in-kips
Distortional Moment at Full Section (Mad-full)	110.42 in-kips
Local Moment at Knockout (Mal-kno)	124.19 in-kips
Distortional Moment at Knockout (Mad-kno)	93.32 in-kips
Shear at Knockout (Va-kno)	4208 lbs
Shear at Full Section (Va-full)	8714 lbs
Torsional Section Properties	
Distance between centroid and shear-center (Xo)	-0.856 in
Distance between centroid and web-centerline (X)	0.284 in
St. Venant torsional constant (J*1000)	5.345 in <sup>4</sup>
Torsional warping constant (Cw)	12.023 in <sup>6</sup>
Radius of gyration (Ro)	4.087 in
Torsional flexural constant (Beta)	0.956
Unbraced Length (Lu)	33.7 in
Effective Section Properties	
Moment of inertia (Ixe)	24.200 in <sup>4</sup>
Section modulus (Sxe)	4.160 in <sup>3</sup>



### Code Approvals & Performance Standards

- [AISI S100-16 \(2020\) w/S2-20](#) North American Specification for the Design of Cold-Formed Steel Structural Members
  - Direct Strength Method (DSM) utilized for calculating flexural strength
- [AISI S240-15](#) North American Standard for Cold-Formed Steel Structural Framing
  - Section A3 Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
  - Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
  - Section A5 Products - Thickness, shapes, tolerances, identification
- [SDS For ASTM A1003 Steel Framing Products](#) For Interior Framing, Exterior Framing and Clips/Accessories