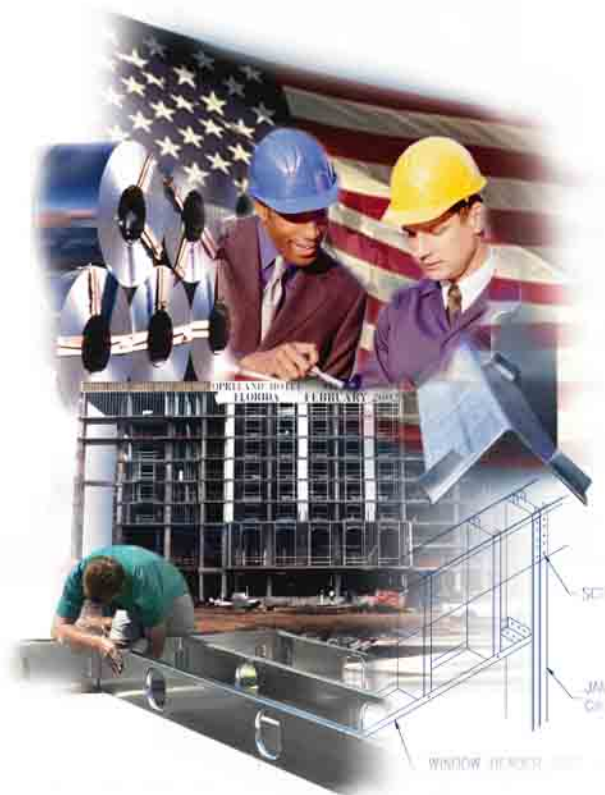


"This is the most cost effective system for non-combustible, low to mid rise structures."

**Mike Whitticar
Enertech Systems
Cleveland, OH**

America's Largest Light Gage Steel Framing Manufacturer



Dietrich TradeReady® Steel Joist System



ABOUT DIETRICH

Dietrich Metal Framing is the largest and only national manufacturer of light gage metal framing products. They offer a complete line of metal framing products including drywall, structural, fire-rated assemblies and the TradeReady® framing line. The TradeReady® line includes the floor, the one-piece header and the Spazzer® bridging and deflection bar. Dietrich also offers prefabricated factory built steel trusses through its joint venture company AEGIS® Metal Framing.

Corporate Headquarters
500 Grant Street/Suite 2226
Pittsburgh, PA 15219
Phone: (412)281.2805



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The place to stop... before the building starts!

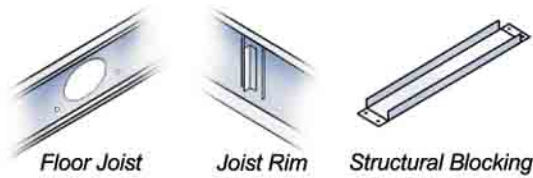
Redefining the way low-rise,
mid-rise and multi-family
structures are built.

TradeReady® STEEL JOIST SYSTEM

Lighter structures, shorter construction cycles, reduced in-place costs and increased square footage density are just a few of the reasons you will want to consider the TradeReady® Steel Joist System on your next project. By utilizing a systems approach to building design, Dietrich provides the design professional with cost effective building solutions by incorporating the latest technological innovations. Let Dietrich Metal Framing, a Worthington Industries Company help you determine if the TradeReady® Steel Joist System is right for your next project.

AN INNOVATIVE ALTERNATIVE

This innovative light gage floor joist framing system is a light-weight cost effective alternative to open web truss, bar joist, engineered lumber, cast in place or hollow core floor assemblies. The TradeReady® Steel Joist System is ideal for low and mid-rise commercial and multi-family construction projects including hotels, motels, apartment complexes, condominiums, assisted living facilities and low-rise office buildings. Used in conjunction with lightweight concrete or other floor sheathing products, the floor system can substantially reduce the overall building weight and design considerations.



THE TradeReady® SYSTEM

The TradeReady® Steel Joist System has three basic components: Steel Floor Joist, Pre Punched Joist Rim and Pre-Cut Structural Blocking. Unlike traditional light gage floor framing, the TradeReady® Steel Joist System provides large extruded openings in the joist to accommodate electrical, mechanical, plumbing and technology lines.



The uniquely designed Joist Rim drastically reduces framing layout by providing pre-punched tabs at either 12, 16, 19.2 or 24 inch on center. The pre-cut structural blocking easily installs to the underside of the joists to prevent rotation. The TradeReady® System is available in a variety of sizes and gages ranging from 7 ¼" - 14" deep web members and 18 - 12 gages. The joist can single span in excess of 33'. Hole sizes range from 4 1/4" x 7", 6 ¼" x 9", 8" round or 10" round based on web member size.

TradeReady® SYSTEM BENEFITS

Lightweight- Steel floor joists are lighter than most floor framing systems and may substantially reduce the overall building weight.

Increased Square Footage Density- A cost effective method to add additional stories and maximize building density.

Spans- Clear spans in excess of 33 feet.

Mechanical Access- Large extruded holes provide substantial mechanical access and greatly reduce floor cavity thickness.

Single Trade Installation- Eliminate wet trades when used in conjunction with alternative floor sheathing products like Viroc.

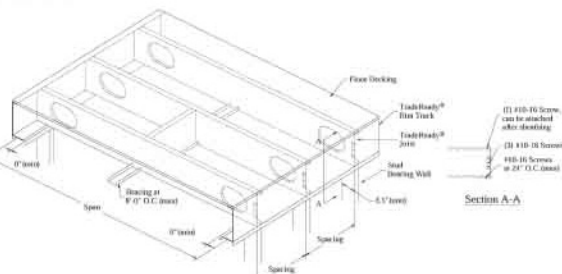
In-place Cost- Steels floors are more economical and represent substantial in place savings.

Readily Available- Available within 1-2 weeks from order placement compared to competing systems that may require months.

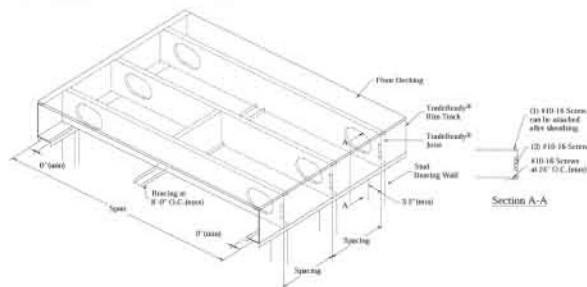
Green Building Product- Steel Floors are made from recycled steel.



Typical TradeReady® Span Table



Typical TradeReady® Span Table



Floor Joist Span Tables

| Joist Member | 15 psf Dead Load and 125 psf Live Load | | | | 40 psf Dead Load and 50 psf Live Load | | | |
|--------------|--|---------|---------|---------|--|---------|---------|---------|
| | TL Deflection = L/240, LL Deflection = L/360 | | | | TL Deflection = L/240, LL Deflection = L/360 | | | |
| | Single Span | | | | Single Span | | | |
| | Spacing (in) o.c. | | | | Spacing (in) o.c. | | | |
| | 12 | 16 | 19.2 | 24 | 12 | 16 | 19.2 | 24 |
| 7.25"TDJ18 | 9' 7" | 7' 3" | 6' 1" | 4' 11" | 12' 7" | 10' 11" | 9' 3" | 7' 6" |
| 7.25"TDJ16 | 11' 10" | 10' 9" | 10' 2" | 9' 4" | 15' 2" | 13' 9" | 13' 0" | 12' 0" |
| 7.25"TDJ14 | 12' 9" | 11' 7" | 10' 11" | 10' 1" | 16' 3" | 14' 9" | 13' 11" | 12' 11" |
| 8"TDJ18 | 10' 7" | 8' 0" | 6' 8" | 5' 5" | 13' 2" | 11' 5" | 10' 3" | 8' 3" |
| 8"TDJ16 | 12' 10" | 11' 8" | 11' 0" | 10' 2" | 16' 5" | 14' 11" | 14' 0" | 12' 9" |
| 8"TDJ14 | 13' 10" | 12' 6" | 11' 9" | 10' 11" | 17' 8" | 16' 0" | 15' 1" | 14' 0" |
| 9.25"TDJ18 | 9' 7" | 7' 3" | 6' 1" | 4' 11" | 14' 4" | 11' 1" | 9' 3" | 7' 6" |
| 9.25"TDJ16 | 14' 6" | 13' 2" | 11' 7" | 9' 4" | 18' 6" | 16' 10" | 15' 8" | 14' 0" |
| 9.25"TDJ14 | 15' 6" | 14' 1" | 13' 3" | 12' 4" | 19' 10" | 18' 0" | 17' 0" | 15' 7" |
| 11.25"TDJ16 | 17' 0" | 14' 9" | 12' 4" | 9' 10" | 21' 8" | 18' 9" | 17' 1" | 15' 4" |
| 11.25"TDJ14 | 18' 3" | 16' 7" | 15' 6" | 13' 10" | 23' 4" | 21' 2" | 19' 4" | 17' 4" |
| 11.25"TDJ12 | 20' 5" | 18' 6" | 17' 5" | 16' 2" | 26' 1" | 23' 8" | 22' 3" | 20' 8" |
| 10"TDW16 | 15' 9" | 13' 10" | 12' 8" | 10' 8" | 20' 0" | 17' 4" | 15' 10" | 14' 1" |
| 10"TDW14 | 16' 11" | 15' 5" | 14' 6" | 13' 5" | 21' 8" | 19' 8" | 18' 6" | 16' 10" |
| 10"TDW12 | 18' 11" | 17' 2" | 16' 2" | 15' 0" | 24' 2" | 21' 11" | 20' 8" | 18' 2" |
| 12"TDW16 | 16' 7" | 14' 2" | 11' 9" | 9' 5" | 20' 8" | 17' 11" | 16' 4" | 14' 7" |
| 12"TDW14 | 19' 8" | 17' 2" | 15' 8" | 14' 0" | 24' 9" | 21' 5" | 19' 6" | 17' 6" |
| 12"TDW12 | 22' 0" | 20' 0" | 18' 10" | 17' 0" | 28' 1" | 25' 6" | 23' 9" | 21' 2" |
| 14"TDW14 | 20' 4" | 17' 8" | 16' 1" | 14' 5" | 25' 5" | 22' 0" | 20' 1" | 17' 11" |
| 14"TDW12 | 24' 10" | 21' 6" | 19' 8" | 17' 7" | 31' 0" | 26' 10" | 24' 6" | 21' 11" |

Notes:

- Spans are based on continuous lateral support of the compression flange.
- Web crippling capacity is based on a minimum bearing length of 3.5". The minimum available TradeReady® rim track thickness is used.
- Recommended bridging is 8"0" on center maximum.
- Fy is 33 ksi for 18 gage, 50 ksi for 16, 14 and 12 gage.
- If an additional point load is located @ the end bearings (e.g. from a wall above), web crippling must be checked separately.
- The minimum bearing stud flange is 1.625". A smaller bearing stud flange may be used upon approval from a Dietrich engineer.
- The joist rim must be installed according to the installation instructions detailed above.
- Rim tab must be attached to outside of joist.
- Spans are not valid if the TradeReady® knockout falls within 0" of the outside bearing.
- TDJ = 1 3/4" flange, TDW = 2" flange.

If you have additional Design questions, please call for our free design guide.

Floor Joist Span Tables

| Joist Member | 15 psf Dead Load and 40 psf Live Load | | | | 15 psf Dead Load and 50 psf Live Load | | | |
|--------------|--|---------|---------|---------|--|---------|---------|---------|
| | TL Deflection = L/240, LL Deflection = L/480 | | | | TL Deflection = L/240, LL Deflection = L/480 | | | |
| | Single Span | | | | Single Span | | | |
| | Spacing (in) o.c. | | | | Spacing (in) o.c. | | | |
| | 12 | 16 | 19.2 | 24 | 12 | 16 | 19.2 | 24 |
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| 7.25"TDJ16 | 15' 9" | 14' 4" | 13' 6" | 12' 6" | 14' 8" | 13' 4" | 12' 6" | 11' 7" |
| 7.25"TDJ14 | 16' 11" | 15' 5" | 14' 6" | 13' 5" | 15' 9" | 14' 3" | 13' 5" | 12' 6" |
| 8"TDJ18 | 15' 11" | 14' 5" | 13' 4" | 11' 11" | 14' 9" | 13' 5" | 12' 3" | 10' 11" |
| 8"TDJ16 | 17' 1" | 15' 6" | 14' 7" | 13' 7" | 15' 10" | 14' 5" | 13' 7" | 12' 7" |
| 8"TDJ14 | 18' 4" | 16' 8" | 15' 8" | 14' 7" | 17' 0" | 15' 6" | 14' 7" | 13' 6" |
| 9.25"TDJ18 | 17' 11" | 15' 10" | 14' 6" | 12' 11" | 16' 7" | 14' 7" | 12' 9" | 10' 3" |
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| 9.25"TDJ14 | 20' 8" | 18' 9" | 17' 8" | 16' 5" | 19' 2" | 17' 5" | 16' 5" | 15' 2" |
| 11.25"TDJ16 | 22' 7" | 20' 6" | 19' 4" | 17' 11" | 21' 0" | 19' 1" | 17' 11" | 16' 8" |
| 11.25"TDJ14 | 24' 4" | 22' 1" | 20' 9" | 19' 3" | 22' 7" | 20' 6" | 19' 3" | 17' 11" |
| 11.25"TDJ12 | 27' 1" | 24' 8" | 23' 2" | 21' 6" | 26' 2" | 22' 10" | 21' 6" | 20' 0" |
| 10"TDW16 | 20' 11" | 19' 0" | 17' 11" | 16' 7" | 19' 5" | 17' 8" | 16' 7" | 15' 5" |
| 10"TDW14 | 22' 6" | 20' 5" | 19' 3" | 17' 10" | 20' 11" | 19' 0" | 17' 10" | 16' 7" |
| 10"TDW12 | 25' 2" | 22' 10" | 21' 6" | 19' 11" | 23' 4" | 21' 2" | 19' 11" | 18' 5" |
| 12"TDW16 | 24' 4" | 22' 1" | 20' 10" | 18' 8" | 22' 7" | 20' 6" | 19' 3" | 17' 2" |
| 12"TDW14 | 26' 2" | 23' 9" | 22' 4" | 20' 9" | 24' 3" | 22' 1" | 20' 9" | 19' 3" |
| 12"TDW12 | 29' 3" | 26' 7" | 25' 0" | 23' 2" | 27' 2" | 24' 8" | 23' 2" | 21' 6" |
| 14"TDW14 | 29' 9" | 27' 0" | 26' 5" | 23' 0" | 27' 7" | 25' 1" | 23' 7" | 21' 2" |
| 14"TDW12 | 33' 3" | 30' 3" | 28' 5" | 26' 5" | 30' 11" | 28' 1" | 26' 5" | 24' 6" |

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