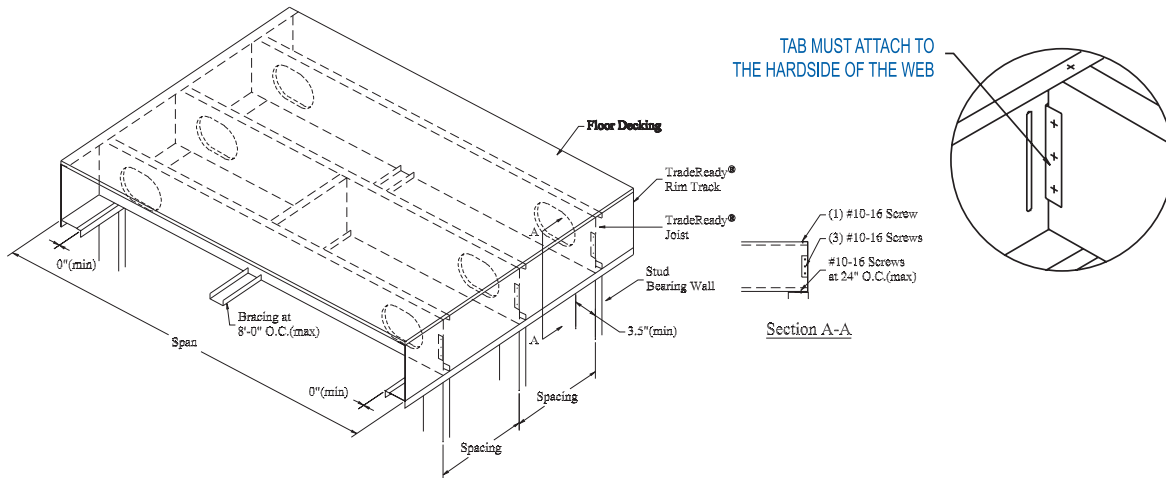


Maximum Spans

The technical information contained in this Guide was prepared to assist professional engineers and architects in the use of the Dietrich TradeReady® Steel Joist System and should be used only with the guidance and judgement of such architect or engineer.

THE TECHNICAL INFORMATION CONTAINED HEREIN IS SUPPLIED SOLELY TO ASSIST IN THE SELECTION AND/OR ANALYSIS OF DIETRICH METAL FRAMING PRODUCTS AND NOT FOR CONSTRUCTION PURPOSES. DIETRICH METAL FRAMING HEREBY DISCLAIMS ANY WARRANTY OR REPRESENTATION EXPRESS OR IMPLIED WITH RESPECT TO THE USE OF THE INFORMATION CONTAINED HEREIN OR ITS USEFULNESS FOR A PARTICULAR PURPOSE OR APPLICATION. DIETRICH METAL FRAMING SHALL IN NO WAY BE DEEMED TO ASSUME ANY PROFESSIONAL RESPONSIBILITY AND HEREBY DISCLAIMS ANY AND ALL SUCH LIABILITY OR OBLIGATION.

TradeReady® Steel Joist Span Tables are to be utilized in conjunction with the notes below.



Span Table Notes:

- 1.) Spans are based on continuous lateral support of the compression flange.
- 2.) Web crippling capacity is based on a minimum bearing length of 3.5".
The minimum available TradeReady® rim track thickness is used.
- 3.) Recommended bridging is 8'0" on center maximum.
- 4.) Fy is 33 ksi for 18 gauge, 50 ksi for 16,14, and 12 gauge.
- 5.) If an additional point load is located @ the end bearings (e.g. from a wall above), web crippling must be checked separately.
- 6.) The minimum bearing stud flange is 1.625".
A smaller bearing stud flange may be used upon approval from a Dietrich Engineer.
- 7.) The joist rim must be installed according to the installation instructions detailed above.
- 8.) Rim tab must be attached to the hard side of the joist.
- 9.) Spans are not valid if any portion of the TradeReady® Rolled Hole falls over a bearing point.
- 10.) TDJ = 1 3/4" flange, TDW = 2" flange.
- 11.) TL = Total Load; LL = Live Load.

Floor Joist Span Tables (0" Minimum Knockout Offset)

Joist Member	10 psf Dead Load and 40 psf Live Load							
	TL Deflection = L/240, LL Deflection = L/360 Single Span				TL Deflection = L/240, LL Deflection = L/480 Single Span			
	Spacing (in) o.c.							
	12	16	19.2	24	12	16	19.2	24
7.25"TDJ18	16' 2"	14' 7"	13' 4"	11' 11"	14' 8"	13' 4"	12' 7"	11' 8"
7.25"TDJ16	17' 4"	15' 9"	14' 10"	13' 9"	15' 9"	14' 4"	13' 6"	12' 6"
7.25"TDJ14	18' 8"	16' 11"	15' 11"	14' 9"	16' 11"	15' 5"	14' 6"	13' 5"
8"TDJ18	17' 6"	15' 4"	14' 0"	12' 6"	15' 11"	14' 5"	13' 7"	12' 6"
8"TDJ16	18' 10"	17' 1"	16' 1"	14' 11"	17' 1"	15' 6"	14' 7"	13' 7"
8"TDJ14	20' 2"	18' 4"	17' 3"	16' 0"	18' 4"	16' 8"	15' 8"	14' 7"
9.25"TDJ18	19' 3"	16' 8"	15' 2"	13' 3"	17' 11"	16' 3"	15' 2"	13' 3"
9.25"TDJ16	21' 2"	19' 3"	18' 1"	16' 10"	19' 3"	17' 6"	16' 5"	15' 3"
9.25"TDJ14	22' 9"	20' 8"	19' 5"	18' 0"	20' 8"	18' 9"	17' 8"	16' 5"
11.25"TDJ16	24' 11"	22' 7"	21' 3"	19' 9"	22' 7"	20' 6"	19' 4"	17' 11"
11.25"TDJ14	26' 9"	24' 4"	22' 10"	21' 3"	24' 4"	22' 1"	20' 9"	19' 3"
11.25"TDJ12	29' 10"	27' 1"	25' 6"	23' 8"	27' 1"	24' 8"	23' 2"	21' 6"
10"TDW16	23' 1"	20' 11"	19' 9"	18' 4"	20' 11"	19' 0"	17' 11"	16' 7"
10"TDW14	24' 9"	22' 6"	21' 2"	19' 8"	22' 6"	20' 5"	19' 3"	17' 10"
10"TDW12	27' 8"	25' 2"	23' 8"	21' 11"	25' 2"	22' 10"	21' 6"	19' 11"
12"TDW16	26' 9"	24' 0"	21' 11"	19' 7"	24' 4"	22' 1"	20' 10"	19' 4"
12"TDW14	28' 10"	26' 2"	24' 7"	22' 10"	26' 2"	23' 9"	22' 4"	20' 9"
12"TDW12	32' 2"	29' 3"	27' 6"	25' 6"	29' 3"	26' 7"	25' 0"	23' 2"
14"TDW14	32' 9"	29' 6"	26' 11"	24' 1"	29' 9"	27' 0"	25' 5"	23' 7"
14"TDW12	36' 7"	33' 3"	31' 4"	29' 1"	33' 3"	30' 3"	28' 5"	26' 5"

*Please refer to span table notes on page 2.1

Floor Joist Span Tables (0" Minimum Knockout Offset)

Joist Member	12 psf Dead Load and 40 psf Live Load							
	TL Deflection = L/240, LL Deflection = L/360 Single Span				TL Deflection = L/240, LL Deflection = L/480 Single Span			
	Spacing (in) o.c.							
	12	16	19.2	24	12	16	19.2	24
7.25"TDJ18	16' 2"	14' 4"	13' 1"	11' 8"	14' 8"	13' 4"	12' 7"	11' 8"
7.25"TDJ16	17' 4"	15' 9"	14' 10"	13' 9"	15' 9"	14' 4"	13' 6"	12' 6"
7.25"TDJ14	18' 8"	16' 11"	15' 11"	14' 9"	16' 11"	15' 5"	14' 6"	13' 5"
8"TDJ18	17' 4"	15' 0"	13' 8"	12' 3"	15' 11"	14' 5"	13' 7"	12' 3"
8"TDJ16	18' 10"	17' 1"	16' 1"	14' 11"	17' 1"	15' 6"	14' 7"	13' 7"
8"TDJ14	20' 2"	18' 4"	17' 3"	16' 0"	18' 4"	16' 8"	15' 8"	14' 7"
9.25"TDJ18	18' 10"	16' 4"	14' 11"	12' 9"	17' 11"	16' 3"	14' 11"	12' 9"
9.25"TDJ16	21' 2"	19' 3"	18' 1"	16' 10"	19' 3"	17' 6"	16' 5"	15' 3"
9.25"TDJ14	22' 9"	20' 8"	19' 5"	18' 0"	20' 8"	18' 9"	17' 8"	16' 5"
11.25"TDJ16	24' 11"	22' 7"	21' 3"	19' 9"	22' 7"	20' 6"	19' 4"	17' 11"
11.25"TDJ14	26' 9"	24' 4"	22' 10"	21' 3"	24' 4"	22' 1"	20' 9"	19' 3"
11.25"TDJ12	29' 10"	27' 1"	25' 6"	23' 8"	27' 1"	24' 8"	23' 2"	21' 6"
10"TDW16	23' 1"	20' 11"	19' 9"	18' 4"	20' 11"	19' 0"	17' 11"	16' 7"
10"TDW14	24' 9"	22' 6"	21' 2"	19' 8"	22' 6"	20' 5"	19' 3"	17' 10"
10"TDW12	27' 8"	25' 2"	23' 8"	21' 11"	25' 2"	22' 10"	21' 6"	19' 11"
12"TDW16	26' 9"	23' 6"	21' 6"	19' 3"	24' 4"	22' 1"	20' 10"	19' 3"
12"TDW14	28' 10"	26' 2"	24' 7"	22' 10"	26' 2"	23' 9"	22' 4"	20' 9"
12"TDW12	32' 2"	29' 3"	27' 6"	25' 6"	29' 3"	26' 7"	25' 0"	23' 2"
14"TDW14	32' 9"	28' 11"	26' 5"	23' 8"	29' 9"	27' 0"	25' 5"	23' 7"
14"TDW12	36' 7"	33' 3"	31' 4"	28' 10"	33' 3"	30' 3"	28' 5"	26' 5"

*Please refer to span table notes on page 2.1

Floor Joist Span Tables (0" Minimum Knockout Offset)

Joist Member	15 psf Dead Load and 40 psf Live Load							
	TL Deflection = L/240, LL Deflection = L/360 Single Span				TL Deflection = L/240, LL Deflection = L/480 Single Span			
	Spacing (in) o.c.							
	12	16	19.2	24	12	16	19.2	24
7.25"TDJ18	16' 1"	13' 11"	12' 9"	11' 4"	14' 8"	13' 4"	12' 7"	11' 4"
7.25"TDJ16	17' 4"	15' 9"	14' 10"	13' 9"	15' 9"	14' 4"	13' 6"	12' 6"
7.25"TDJ14	18' 8"	16' 11"	15' 11"	14' 9"	16' 11"	15' 5"	14' 6"	13' 5"
8"TDJ18	16' 10"	14' 7"	13' 4"	11' 11"	15' 11"	14' 5"	13' 4"	11' 11"
8"TDJ16	18' 10"	17' 1"	16' 1"	14' 11"	17' 1"	15' 6"	14' 7"	13' 7"
8"TDJ14	20' 2"	18' 4"	17' 3"	16' 0"	18' 4"	16' 8"	15' 8"	14' 7"
9.25"TDJ18	18' 4"	15' 10"	14' 6"	12' 1"	17' 11"	15' 10"	14' 6"	12' 1"
9.25"TDJ16	21' 2"	19' 3"	18' 1"	16' 10"	19' 3"	17' 6"	16' 5"	15' 3"
9.25"TDJ14	22' 9"	20' 8"	19' 5"	18' 0"	20' 8"	18' 9"	17' 8"	16' 5"
11.25"TDJ16	24' 11"	22' 7"	21' 3"	19' 7"	22' 7"	20' 6"	19' 4"	17' 11"
11.25"TDJ14	26' 9"	24' 4"	22' 10"	21' 3"	24' 4"	22' 1"	20' 9"	19' 3"
11.25"TDJ12	29' 10"	27' 1"	25' 6"	23' 8"	27' 1"	24' 8"	23' 2"	21' 6"
10"TDW16	23' 1"	20' 11"	19' 9"	18' 1"	20' 11"	19' 0"	17' 11"	16' 7"
10"TDW14	24' 9"	22' 6"	21' 2"	19' 8"	22' 6"	20' 5"	19' 3"	17' 10"
10"TDW12	27' 8"	25' 2"	23' 8"	21' 11"	25' 2"	22' 10"	21' 6"	19' 11"
12"TDW16	26' 5"	22' 11"	20' 11"	18' 8"	24' 4"	22' 1"	20' 10"	18' 8"
12"TDW14	28' 10"	26' 2"	24' 7"	22' 4"	26' 2"	23' 9"	22' 4"	20' 9"
12"TDW12	32' 2"	29' 3"	27' 6"	25' 6"	29' 3"	26' 7"	25' 0"	23' 2"
14"TDW14	32' 6"	28' 2"	25' 8"	23' 0"	29' 9"	27' 0"	25' 5"	23' 0"
14"TDW12	36' 7"	33' 3"	31' 4"	28' 0"	33' 3"	30' 3"	28' 5"	26' 5"

*Please refer to span table notes on page 2.1

SPANS, CRIPPLING & CLIPS

Floor Joist Span Tables (0" Minimum Knockout Offset)

Joist Member	25 psf Dead Load and 40 psf Live Load							
	TL Deflection = L/240, LL Deflection = L/360 Single Span				TL Deflection = L/240, LL Deflection = L/480 Single Span			
	Spacing (in) o.c.							
	12	16	19.2	24	12	16	19.2	24
7.25"TDJ18	14' 10"	12' 10"	11' 8"	10' 3"	14' 8"	12' 10"	11' 8"	10' 3"
7.25"TDJ16	16' 11"	15' 4"	14' 5"	13' 5"	15' 9"	14' 4"	13' 6"	12' 6"
7.25"TDJ14	18' 2"	16' 6"	15' 6"	14' 5"	16' 11"	15' 5"	14' 6"	13' 5"
8"TDJ18	15' 6"	13' 5"	12' 3"	10' 11"	15' 6"	13' 5"	12' 3"	10' 11"
8"TDJ16	18' 4"	16' 8"	15' 8"	14' 6"	17' 1"	15' 6"	14' 7"	13' 7"
8"TDJ14	19' 8"	17' 10"	16' 10"	15' 7"	18' 4"	16' 8"	15' 8"	14' 7"
9.25"TDJ18	16' 10"	14' 7"	12' 9"	10' 3"	16' 10"	14' 7"	12' 9"	10' 3"
9.25"TDJ16	20' 7"	18' 9"	17' 7"	16' 4"	19' 3"	17' 6"	16' 5"	15' 3"
9.25"TDJ14	22' 2"	20' 1"	18' 11"	17' 7"	20' 8"	18' 9"	17' 8"	16' 5"
11.25"TDJ16	24' 3"	22' 0"	20' 2"	18' 0"	22' 7"	20' 6"	19' 4"	17' 11"
11.25"TDJ14	26' 0"	23' 8"	22' 3"	20' 4"	24' 4"	22' 1"	20' 9"	19' 3"
11.25"TDJ12	29' 1"	26' 5"	24' 10"	23' 1"	27' 1"	24' 8"	23' 2"	21' 6"
10"TDW16	22' 5"	20' 4"	18' 7"	16' 8"	20' 11"	19' 0"	17' 11"	16' 7"
10"TDW14	24' 1"	21' 11"	20' 7"	19' 2"	22' 6"	20' 5"	19' 3"	17' 10"
10"TDW12	26' 11"	24' 6"	23' 0"	21' 4"	25' 2"	22' 10"	21' 6"	19' 11"
12"TDW16	24' 4"	21' 1"	19' 3"	17' 2"	24' 4"	21' 1"	19' 3"	17' 2"
12"TDW14	28' 0"	25' 2"	23' 0"	20' 7"	26' 2"	23' 9"	22' 4"	20' 7"
12"TDW12	31' 4"	28' 5"	26' 9"	24' 10"	29' 3"	26' 7"	25' 0"	23' 2"
14"TDW14	29' 11"	25' 11"	23' 8"	21' 2"	29' 9"	25' 11"	23' 8"	21' 2"
14"TDW12	35' 8"	31' 7"	28' 10"	25' 9"	33' 3"	30' 3"	28' 5"	25' 9"

*Please refer to span table notes on page 2.1

Floor Joist Span Tables (0" Minimum Knockout Offset)

Joist Member	40 psf Dead Load and 40 psf Live Load							
	TL Deflection = L/240, LL Deflection = L/360				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
7.25"TDJ18	13' 4"	11' 7"	10' 5"	8' 5"	13' 4"	11' 7"	10' 5"	8' 5"
7.25"TDJ16	15' 9"	14' 4"	13' 6"	12' 6"	15' 9"	14' 4"	13' 6"	12' 6"
7.25"TDJ14	16' 11"	15' 5"	14' 6"	13' 5"	16' 11"	15' 5"	14' 6"	13' 5"
8"TDJ18	14' 0"	12' 1"	11' 1"	9' 3"	14' 0"	12' 1"	11' 1"	9' 3"
8"TDJ16	17' 1"	15' 6"	14' 7"	13' 6"	17' 1"	15' 6"	14' 7"	13' 6"
8"TDJ14	18' 4"	16' 8"	15' 8"	14' 7"	18' 4"	16' 8"	15' 8"	14' 7"
9.25"TDJ18	15' 2"	12' 5"	10' 5"	8' 5"	15' 2"	12' 5"	10' 5"	8' 5"
9.25"TDJ16	19' 3"	17' 6"	16' 5"	14' 10"	19' 3"	17' 6"	16' 5"	14' 10"
9.25"TDJ14	20' 8"	18' 9"	17' 8"	16' 5"	20' 8"	18' 9"	17' 8"	16' 5"
11.25"TDJ16	22' 7"	19' 11"	18' 2"	16' 3"	22' 7"	19' 11"	18' 2"	16' 3"
11.25"TDJ14	24' 4"	22' 1"	20' 6"	18' 4"	24' 4"	22' 1"	20' 6"	18' 4"
11.25"TDJ12	27' 1"	24' 8"	23' 2"	21' 6"	27' 1"	24' 8"	23' 2"	21' 6"
10"TDW16	20' 11"	18' 4"	16' 9"	15' 0"	20' 11"	18' 4"	16' 9"	15' 0"
10"TDW14	22' 6"	20' 5"	19' 3"	17' 10"	22' 6"	20' 5"	19' 3"	17' 10"
10"TDW12	25' 2"	22' 10"	21' 6"	19' 11"	25' 2"	22' 10"	21' 6"	19' 11"
12"TDW16	21' 11"	19' 0"	17' 4"	15' 6"	21' 11"	19' 0"	17' 4"	15' 6"
12"TDW14	26' 2"	22' 8"	20' 9"	18' 6"	26' 2"	22' 8"	20' 9"	18' 6"
12"TDW12	29' 3"	26' 7"	25' 0"	22' 6"	29' 3"	26' 7"	25' 0"	22' 6"
14"TDW14	26' 11"	23' 4"	21' 4"	19' 1"	26' 11"	23' 4"	21' 4"	19' 1"
14"TDW12	32' 11"	28' 6"	26' 0"	23' 3"	32' 11"	28' 6"	26' 0"	23' 3"

*Please refer to span table notes on page 2.1

Floor Joist Span Tables (0" Minimum Knockout Offset)

Joist Member	12 psf Dead Load and 125 psf Live Load							
	TL Deflection = L/240, LL Deflection = L/360				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
7.25"TDJ18	9' 9"	7' 5"	6' 2"	5' 0"	9' 9"	7' 5"	6' 2"	5' 0"
7.25"TDJ16	11' 10"	10' 9"	10' 2"	9' 5"	10' 9"	9' 9"	9' 3"	8' 7"
7.25"TDJ14	12' 9"	11' 7"	10' 11"	10' 1"	11' 7"	10' 6"	9' 11"	9' 2"
8"TDJ18	10' 8"	8' 2"	6' 10"	5' 6"	10' 8"	8' 2"	6' 10"	5' 6"
8"TDJ16	12' 10"	11' 8"	11' 0"	10' 2"	11' 8"	10' 7"	10' 0"	9' 3"
8"TDJ14	13' 10"	12' 6"	11' 9"	10' 11"	12' 6"	11' 5"	10' 8"	9' 11"
9.25"TDJ18	9' 9"	7' 5"	6' 2"	5' 0"	9' 9"	7' 5"	6' 2"	5' 0"
9.25"TDJ16	14' 6"	13' 2"	11' 10"	9' 6"	13' 2"	11' 11"	11' 3"	9' 6"
9.25"TDJ14	15' 6"	14' 1"	13' 3"	12' 4"	14' 1"	12' 10"	12' 1"	11' 2"
11.25"TDJ16	17' 0"	15' 1"	12' 7"	10' 1"	15' 5"	14' 0"	12' 7"	10' 1"
11.25"TDJ14	18' 3"	16' 7"	15' 7"	14' 0"	16' 7"	15' 1"	14' 2"	13' 2"
11.25"TDJ12	20' 5"	18' 6"	17' 5"	16' 2"	18' 6"	16' 10"	15' 10"	14' 8"
10"TDW16	15' 9"	14' 0"	12' 10"	10' 11"	14' 4"	13' 0"	12' 3"	10' 11"
10"TDW14	16' 11"	15' 5"	14' 6"	13' 5"	15' 5"	14' 0"	13' 2"	12' 2"
10"TDW12	18' 11"	17' 2"	16' 2"	15' 0"	17' 2"	15' 7"	14' 8"	13' 7"
12"TDW16	16' 9"	14' 5"	12' 0"	9' 7"	16' 8"	14' 5"	12' 0"	9' 7"
12"TDW14	19' 8"	17' 4"	15' 10"	14' 2"	17' 11"	16' 3"	15' 3"	14' 2"
12"TDW12	22' 0"	20' 0"	18' 10"	17' 2"	20' 0"	18' 2"	17' 1"	15' 10"
14"TDW14	20' 7"	17' 10"	16' 3"	14' 6"	20' 4"	17' 10"	16' 3"	14' 6"
14"TDW12	25' 0"	21' 9"	19' 10"	17' 9"	22' 9"	20' 8"	19' 5"	17' 9"

*Please refer to span table notes on page 2.1