

Steel Joist Institute 42nd Edition Catalog

First Printing – December 2005

Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders

K-Series
LH-Series
DLH-Series
Joist Girders

This document containing the errata to the Steel Joist Institute 42nd Edition Catalog will be periodically updated as needed and posted on the SJI website at www.steeljoist.org. The errata are organized by date in descending order (most recent to furthest past) hence regular users of this document need only review the errata posted since their previous use.

Errata Posted on December 4, 2006

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Approximate Duct Opening Sizes14 **12**

CODE OF STANDARD PRACTICE FOR STEEL JOISTS AND JOIST GIRDERS

Section 2. ~~Joists, Joist Girders and Accessories~~133 revise to
Section 2. **Joists and Accessories**133

TABLE 5.4-1, page 19
Revise table as follows:

TABLE 5.4-1

| U.S. UNITS | | | | | |
|---|-------------------|------------------------|------------------------|---------------------------|-----------------|
| NUMBER OF ROWS OF TOP CHORD BRIDGING** | | | | | |
| Refer to the K-Series Load Table and Specification Section 6 for required bolted diagonal bridging. Distances are Joist Span lengths in feet – See “Definition of Span” preceding Load Table. | | | | | |
| *Section Number | One Row | Two Rows | Three Rows | Four Rows | Five Rows |
| #1 | Up thru 16 | Over 16 thru 24 | Over 24 thru 28 | | |
| #2 | Up thru 17 | Over 17 thru 25 | Over 25 thru 32 | | |
| #3 | Up thru 18 | Over 18 thru 28 | Over 28 thru 38 | Over 38 thru 48 40 | |
| #4 | Up thru 19 | Over 19 thru 28 | Over 28 thru 38 | Over 38 thru 48 | |
| #5 | Up thru 19 | Over 19 thru 29 | Over 29 thru 39 | Over 39 thru 50 | Over 50 thru 52 |
| #6 | Up thru 19 | Over 19 thru 29 | Over 29 thru 39 | Over 39 thru 51 | Over 51 thru 56 |
| #7 | Up thru 20 | Over 20 thru 33 | Over 33 thru 45 | Over 45 thru 58 | Over 58 thru 60 |
| #8 | Up thru 20 | Over 20 thru 33 | Over 33 thru 45 | Over 45 thru 58 | Over 58 thru 60 |
| #9 | Up thru 20 | Over 20 thru 33 | Over 33 thru 46 | Over 46 thru 59 | Over 59 thru 60 |
| #10 | Up thru 20 | Over 20 thru 37 | Over 37 thru 51 | Over 51 thru 60 | |
| #11 | Up thru 20 | Over 20 thru 38 | Over 38 thru 53 | Over 53 thru 60 | |
| #12 | Up thru 20 | Over 20 thru 39 | Over 38 thru 53 | Over 53 thru 60 | |

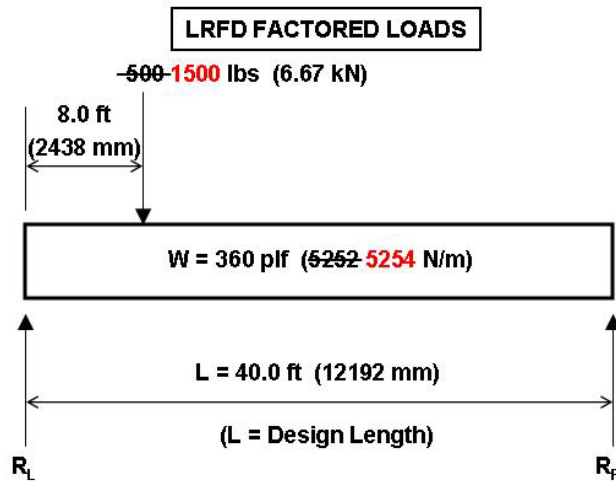
*Last digit(s) of joist designation shown in Load Table

**See Section 5.11 for additional bridging required for uplift design.

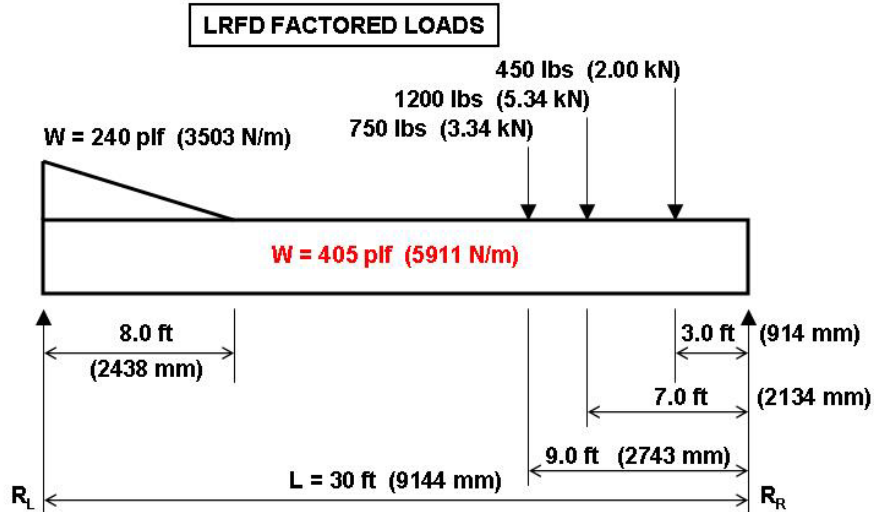
KCS JOISTS, pages 41, 42 and 43

LRFD EXAMPLES

EXAMPLE 1



EXAMPLE 2

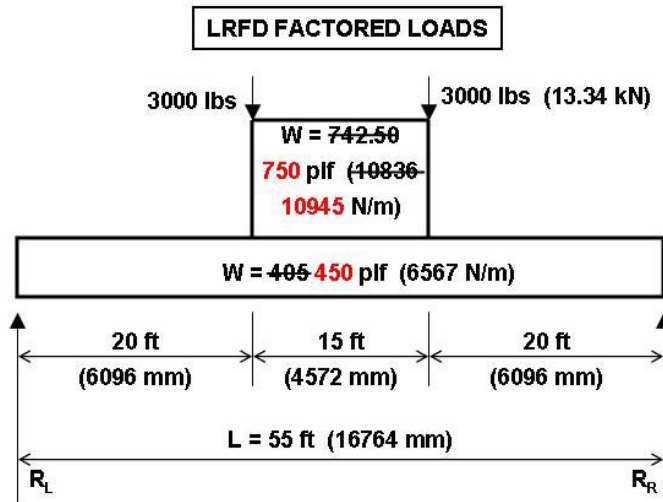


$R = 8850 \text{ lbs (39.38 39.3 kN)}$

Use 22K6 to determine bridging and stability requirements.

Since the maximum factored uniform load of ~~639~~ **645** plf (~~9318~~ **9413** N/m) ($405 \text{ plf (5911 N/m)} + 240 \text{ plf (3503 N/m)}$) does not exceed the maximum KCS Joist uniform load of 825 plf (~~12040~~ **12030** N/m) and a standard KCS Joist can be selected from the load table, a load diagram is not required.

EXAMPLE 3



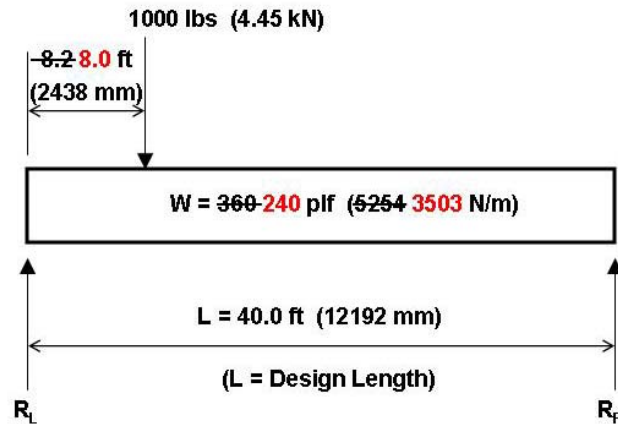
$M = 4365 \text{ in.-kip (492.81 493.2 kN-m)}$

OPTION A: Use double joists each having a minimum **moment capacity** $M = 2183 \text{ in.-kip (246.65 kN-m)}$ and **shear capacity** $R = 10500 \text{ lbs (46.71 kN)}$ and a uniform load of ~~594 plf (8669 N/m)~~ **600 plf (8756 N/m)**.

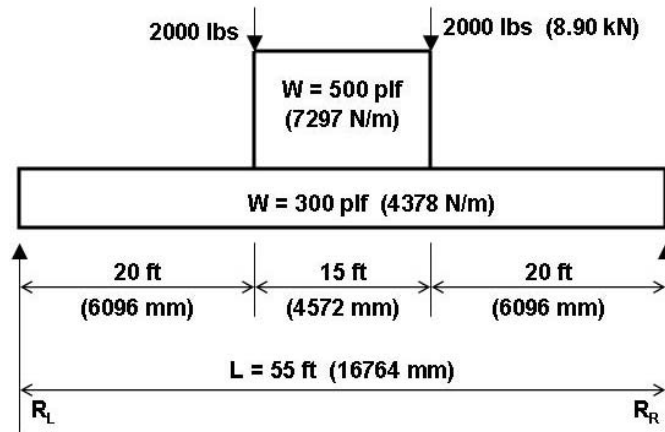
From the LH-Series LRFD Load Table select a 32LH13, $W = 1035 \text{ plf (15.10 kN/m)}$ for a 55 ft. (16764 mm) **clear** span.

ASD EXAMPLES

EXAMPLE 1



EXAMPLE 3 (No change to load diagram)



$M = 2910 \text{ in.-kip}$ ($328.5 \text{ } 328.8 \text{ kN-m}$)

OPTION A: Use double joists each having a minimum **moment capacity** $M = 1455 \text{ in.-kip}$ ($164.3 \text{ } 164.4 \text{ kN-m}$) and **shear capacity** $R = 7000 \text{ lbs}$ (31.14 kN) and a uniform load of 400 plf (5838 N/m).

From the LH-Series ASD Load Table select a 32LH13, $W = 690 \text{ plf}$ (10.06 kN/m) for a 55 ft . (16764 mm) **clear** span.

1003.3 MAXIMUM SLENDERNESS RATIOS, page 84

Top chord end **interior** panels90
 Top chord end panels120