Overview

General Notes:

1 Spans are based on continuous support of compression flange over the full length of the joist.

2 Joist deflection limitations are based upon L/240 for the total load (TL) and L/360 or L/480 for live load (LL).

3 For two equal spans, the listed span is the distance from either end to the center support, with the joist continuous over the center support.

4 Joists must be braced against rotation at all supports.

5 For two equal, continuous span conditions, alternate span live load has been considered.

6 The strength increase due to cold work of forming was incorporated for flexural strength as applicable per AISI S100.

7 The yield stress (33ksi or 50ksi) used to calculate tabulated values are indicated in each table.

8 A 3-1/2" bearing length was used at all support locations in the preparation of these tables. Joist flanges must be fastened to the support.

9 A punchout pattern for ClarkDietrich joists is a 4" long by 1-1/2" high oval.

10 Unpunched joists are available, but must be indicated when ordering.

11 Web punchouts located near a bearing location may need reinforcement.

12 Listed capacities are calculated per AISI S100-16 (2020) w/S2-20. Stud distortional buckling based on an assumed Kϕ= 0.

13 Joist bridging opposite the sheathed flange is recommended at a maximum of 8 ft o.c. when sheathing is applied to only the compression flange.

14 Web punchouts are not considered for shear and web crippling.

15 Deflection checks are computed using unbalanced loads for the two equal span conditions.

16 " e " indicates that the web stiffeners are required at the end support only.

17 " i " indicates that the web stiffeners are required at the interior support only.

18 " a " indicates that the web stiffeners are required at all supports.