

When two or more thicknesses of plate are riveted together in compression members, the outer row of rivets shall not be more than three (3) diameters from the side edge of the plate.

Rivet holes must never be spaced less than two and a half ($2\frac{1}{2}$) diameters from centre to centre: it is preferable that this distance be increased to three (3) diameters when so doing will not cause inconvenience in designing.

All the rivet holes of the respective parts of any structure must be made to exactly coincide, either by drilling the holes full size through the connecting portions, after being put together, or by sub-punching the pieces separately, and afterwards reaming the combined rivet holes to proper size. In all cases the burrs must be removed by slightly countersinking the edges of the holes.

All rivets in splice or tension joints are to be systematically arranged, so that each half of a tension member or splice plate will have the same uncut area on each side of its centre line.

No rivet, excepting those in shoe plates, is to have a less diameter than the thickness of the thickest plate through which it passes, nor in any case less than half ($\frac{1}{2}$) an inch.

Built Members. — The several pieces forming one built member must fit closely together, and when riveted shall be free from twists, bends, or open joints.

Use of Bolts. — The use of bolts instead of rivets is to be avoided whenever practicable.

Lateral Bracing for Plate Girders. — When a span consisting of plate girders is over fifteen (15) feet in length, the adjacent girders are to be braced to each other by diagonal angle irons attached to or near the lower flanges. There are to be, also, light bracing-frames at each end between adjacent girders, so placed as not to interfere with the expansion. When the span is over twenty-five (25) feet in length, the upper flanges of adjacent girders are also to be connected by diagonal angle-iron braces.

In every case the joists are to be dapped at least an inch onto the girders, and every third joist resting on any girder is to be bolted through the upper flange.