

Where two or more thicknesses of plate are riveted together, the outer row of rivets shall, if practicable, not exceed three rivet diameters from the side edge of plate.

Where plates more than 12 in. wide are used in the compression flanges of girders or floor beams, an extra line of rivets, with a pitch of not over 9 inches, shall be driven along each to draw the plates together.

All joint rivet holes shall be so accurately spaced that rivets of the proper size can be passed through all the holes in the joint, after the parts are placed in position, without the use of drift pins.

All splice plates in which the holes are mismatched, either in the plates themselves or with the adjoining chord or flange, shall be matched and the holes reamed to fit before leaving the shop.

No inaccurate or otherwise defective work will be accepted under any circumstances in connection joints of riveted work.

The riveted field connections of floor beams, stringers, posts and struts, must be accurately matched before leaving the shops, and all unmatched holes reamed to fit.

All rivets in splice or tension joints must be symmetrically arranged, so that each half of a tension member or plate will have the same uncut area on each side of its centre line. Whenever practicable, rivets must be machine driven.

41. All bed plates must be of such dimensions, that the greatest pressure upon the masonry shall not exceed 200 pounds to the square inch. All spans shall have at one end nests of turned friction rollers, formed of wrought iron or steel, running between planed surfaces. The rollers shall not be less than 2 inches diameter, and shall be so proportioned that the pressure per lineal inch of iron roller shall not exceed the product of the square root of the diameter of the roller in inches multiplied by 500 pounds ($500 \sqrt{d}$). For steel rollers the pressure per lineal inch of roller shall not exceed the product of the square root of the diameter of the roller in inches multiplied by 600 pounds ($600 \sqrt{d}$). All the bed plates and bearings under fixed and roller ends must be fox-bolted to the masonry.

42. All iron work before leaving the shop shall be thoroughly cleansed from all loose scale and rust, and be given one good coating of red lead paint, mixed and applied as directed by the Engineer.

In riveted work the surfaces coming in contact shall each be painted before being riveted together. Bottoms of bed-plates, bearing plates, and any parts which are not accessible for painting after erection, shall have two coats of paint; the paint shall be a good quality of iron ore paint, subject to approval of the Engineer.

After the structure is erected, the iron work shall be thoroughly and evenly painted with two additional coats of paint, mixed with pure linseed oil, of such colour as may be directed.

All turned and faced surfaces shall be coated with white lead and tallow before being shipped from the shop.

43. The contractor shall furnish all staging and false work, shall erect and adjust all the iron work, and put in place all floor timbers, guards, &c., complete, ready for the rails.

The contractor shall so conduct all his operations as not to interfere with the work of other contractors, or cause any thoroughfare by land or water.

The contractor shall assume all risks of accidents to men or material prior to the acceptance of the finished structure by the Railway Company.

The contractor must also remove all false work, piling and other obstructions, or unsightly material produced by his operations.