

**21—85.10(215) Scale design.** A scale shall be of such materials and construction that (1) it will support a load of its full nominal capacity without developing undue stresses or deflections, (2) it may reasonably be expected to withstand normal usage without undue impairment of accuracy or the correct functioning of parts, and (3) it will be reasonably permanent in adjustment.

**85.10(1) *Stability of indications.*** A scale shall be capable of repeating with reasonable precision its indications and recorded representations. This requirement shall be met irrespective of repeated manipulation of any scale element in a manner duplicating normal usage, including:

- a. Displacement of the indicating elements to the full extent allowed by the construction of the scale,
- b. Repeated operation of a locking device, and
- c. Repeated application or removal of unit weights.

**85.10(2) *Interchange or reversal of parts.*** Parts that may readily be interchanged or reversed in the course of normal usage shall be so constructed that their interchange or reversal will not materially affect the zero-load balance or the performance of the scale. Parts which may be interchanged or reversed in normal field assembly shall be:

- a. So constructed that their interchange or reversal will not affect the performance of the scale, or
- b. So marked as to show their proper positions.

**85.10(3) *Pivots.*** Pivots shall be made of hardened steel, except that agate may be used in prescription scales, and shall be firmly secured in position. Pivot knife-edges shall be sharp and straight, and cone-pivot points shall be sharp.

**85.10(4) *Position of equipment, primary or recording indicating elements (electronic weighing elements).*** A device equipped with a primary or recording element shall be so positioned that its indications may be accurately read and the weighing operations may be observed from some reasonable “customer” position; the permissible distance between the equipment and a reasonable customer position shall be determined in each case upon the basis of individual circumstances, particularly the size and character of the indicating element; a window large enough should be placed in the building and the installation should be so arranged as to afford an unobstructed view of the platform.

This rule is intended to implement Iowa Code section 215.18.

[ARC 7129C, IAB 12/13/23, effective 1/17/24]