

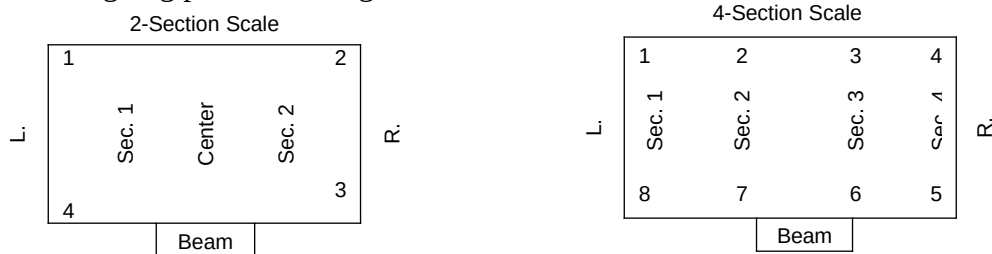


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## Explanation of Terms and Abbreviations

### 1. Test Weight Position (Corners and Sections).

The corners and sections of a scale platform are designated as shown in diagrams below when an observer is standing in the weighing position facing the scale platform.



### 2. SR (Sensitivity Response).

SR is a measure of the sensitiveness of a scale and is defined as the change in load required to change the position of rest of the indicator a definite amount. The term SR does not apply to automatic indicating scales.

### 3. Errors.

If the scale indication exceeds the value of the applied test load (*overregistration*) the error is designated as plus (+). If the scale indication is less than the value of the applied test load (*underregistration*) the error is designated as minus (-).

## Suggestions to Owners of Livestock Scales

The following suggestions and recommendations are offered in the interest of improving maintenance and livestock weighing practices.

#### 1. Visibility.

The weighbeam, dial, or digital instrument should be located so that the weighmaster has a full and unobstructed view of the platform, stock racks and gates.

The weighbeam, dial, or digital instrument should be located so that the weighing will be done in full view of the interested parties.

#### 2. Installation.

Careful installation by a competent scale mechanic will tend to reduce maintenance costs and improve weighing accuracy. Scales are precision devices and require regular maintenance to assure continued accuracy.

Ready access to the scale pit should be provided through the neck of the pit or by an outside entrance.

For a fully electronic load cell scale, access to the weighing elements (load cells) must be provided for the purpose of inspection and maintenance of the weighing elements.

#### 3. Approaches.

Approaches should be level and on the same plane as the scale platform.

#### 4. Scale Platform.

The scale platform should be waterproof. Concrete platforms, scored, or well roughened, are recommended.

Where cleats are used, they should be of metal or sturdy wooden construction in the form of a hinged grid.

Clearance around edges of platform should be not less than ½ inch, and edges should be undercut.

#### 5. Stock Racks.

Stock racks should be of substantial wooden or steel construction, and be firmly anchored to the platform.

Stock racks should have a clearance of at least 3 inches from all adjacent structures and have adequate side protection to prevent interference during the weighing.

Entrance and exit gates on stock racks should swing freely and have positive latches. The preferred location of gates is at the ends of the platform rather than the sides.

#### 6. Maintenance.

The scale should be regularly serviced by a competent scale technician.

The lever system and structural steel in the pit should be kept well painted.

Pivots and bearings should be packed with a protective grease. Periodically this grease should be removed and the pivots and bearings repacked.

Weighbeam notches and poises should be kept clean.

The weighbeam should be protected by a fabric cover when not in use.

#### 7. Testing.

Scales must be tested at least twice a year by a competent scale testing agency.

Adequate provision should be made for access of the testing equipment to the scale.

