

This form must be completed by a Scale Calibration Representative. One form **must** be completed every six months and kept on file at the Plant.



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SCALE CHECK DATA FORM

Scale Purpose: _____

Scale Capacity: _____

1.0 SCALES GENERAL

This Scale Check Data Form outlines the minimum scale/weighing system requirements and tolerances that must be met. This agreement must be completed by qualified technical staff, employed by a scale company or authorized scale manufacturer. The completed agreement must be kept on record at the plant and submitted to the Auditing Engineer at the time of the plant audit to meet the requirements of Section 2.1 of the ACA Audit Check List for Concrete Production Facilities Certification Program.

Scales must be checked and calibrated in accordance with clause 1.4 of this document, or whenever alterations are made to the plant which may affect the weighing accuracy of the scales or whenever the plant is moved.

Note: Once the scale has been calibrated, the computer reading of that scale must be verified as an accurate representation of the digital readout over the range of the test weights.

		PASS	FAIL
1.1	Each scale consisting of a suitable system of levers or load cells which will weigh consistently within the tolerance specified in 1.5, with loads indicated either by a beam with a balance indicator, a full reading dial, or digital readout displaying accuracy in accordance with Clause 1.5.	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Lever system scales so designed that centre of gravity of the gross load always lies within load pivots.	<input type="checkbox"/>	<input type="checkbox"/>
1.3	The following mechanical checks should be done on each weigh hopper: <ul style="list-style-type: none"> - all pivots and bearings - the centre connection - hopper alignment - load cells tight and secure - all areas free of debris - safety rods, chains or cables - all hopper hangers - load cell alignment - all connection links - clean and lubricate (if required) 	<input type="checkbox"/>	<input type="checkbox"/>
	There must be no evidence of burring or wear.		
1.4	Scales are checked and calibrated to specified tolerance of Clause 1.5 once for seasonal or portable plants which only operate at a maximum of six months, twice annually for plants operating greater than six months.	<input type="checkbox"/>	<input type="checkbox"/>
1.5	Each scale accurate to within plus/minus 0.40 percent of scale capacity throughout the range of use. Scale calibrations shall be done at a minimum of two points, one shall be at twenty (20) percent and the second shall be at a minimum of eighty (80) percent of the scale capacity.	<input type="checkbox"/>	<input type="checkbox"/>
1.6	The scale company shall only use test weights having a calibration traceable to the National Bureau of Standards.	<input type="checkbox"/>	<input type="checkbox"/>
1.7	Mass setting devices, such as scale-poisies, pointers, dials, punch cards, etc., capable of being set to 0.1 percent of total capacity of the scale. (No mass setting device is required for a dial scale in a manual plant.).	<input type="checkbox"/>	<input type="checkbox"/>
1.8	A scale check and calibration report or sticker is issued which states that each scale is checked to Clause 1.3 and calibrated to Clause 1.5.	<input type="checkbox"/>	<input type="checkbox"/>

		PASS	FAIL
2.0	BEAM SCALES		
2.1	The beam scale is provided with zero balance beam, balance indicator and separate weighing beam for each ingredient of a batch to be weighed on the same scale.	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Beam poises are corrosion resistant, equipped with positive and accurate holding devices, and capable of being set to the minimum graduated interval which shall not be greater than 0.1 percent of capacity with a clear interval of not less than 0.8 mm (0.03 inches).	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Balance indicators sufficiently sensitive to show movement when mass corresponding to 0.10 percent of scale capacity is placed in the batch hopper at a load equal to or greater than fifty (50) percent of scale capacity. The pointer travel at least five (5) percent of net rated capacity of largest weigh beam or ninety (90) kg (two hundred (200) pounds) whichever is less for underweight, and four (4) percent or forty-five (45) kg (100 pounds) whichever is less for overweight. Provision made for damping oscillation of indicator of pointer.	<input type="checkbox"/>	<input type="checkbox"/>
3.0	LOAD CELL SCALES		
3.1	Load cell scales arranged to transmit the load to one or more cells, directly or through a system of levers in such a way that the cell system registers the entire load accurately on the load-indicating device within the temperature range specified by the manufacturer.	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Load cells should be mounted with the appropriate hardware which will cause the load cell to move freely causing no strain or fatigue.	<input type="checkbox"/>	<input type="checkbox"/>
4.0	DIAL INDICATING SCALES		
4.1	The dial indicators and dial faces protected from dust.	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Dials indicate the load in batches continuously from zero balance to full weighing capacity of scale.	<input type="checkbox"/>	<input type="checkbox"/>
4.3	The clear interval between gradations on the circular reading line of the dial face not less than 1 mm.	<input type="checkbox"/>	<input type="checkbox"/>
5.0	DIGITAL-INDICATING SCALES		
5.1	Equipped with a digital indicator or display protected from dust with numbers large enough for good readability; minimum numerical increment equal to or less than 0.1 percent of scale capacity.	<input type="checkbox"/>	<input type="checkbox"/>

This document shall bear the notation "P" Pass, "F" Fail or "N/A" Not Applicable for each item.

This document shall be signed by the Scale Manufacturer or Scale Company, certifying that the named plant meets all requirements of the ACA Scale Check Data Form.

Ready Mix Producer Company (please print)

Scale/Inspection Company (please print)

Plant Location (Civic Address) (please print)

Scale Company Representative (please print)

Date

Date

Signature of Ready Mix Facility Manager

Signature of Scale Company Representative

The described plant meets all requirements set out as of this date.