

IN-HOUSE PROCEDURE # _____

PROCEDURE FOR VERIFYING RAMMERS

Item:

Rammer

Purpose:

This method provides instructions for checking the critical dimensions and mass of a rammer.

Inspection Equipment Required:

1. Caliper readable to 0.001 in. (0.025 mm) or better
2. Ruler readable to 0.1 in. (1 mm) or better
3. Scale readable to 0.01 lb. (1 g) or better
4. Protractor (for secular faces only)

Tolerance:

Equipment shall meet the dimensional tolerances specified in the applicable test method.

Procedure:

1. Detach the rammer and guide rod from the machine or the guide sleeve. Measure the total mass of the rammer, guide rod, and hardware (everything that falls when compacting soil).
2. Measure the diameter of the circular face using the caliper. If using a sector face, measure the length of one side (radius), and the angle in degrees of the arc using the protractor.
3. Reassemble the rammer. Using the ruler, measure the drop height. For a manual rammer, pull the rammer up until it is in contact with the top of the guide sleeve. Insert a ruler inside the sleeve until it hits the rammer face. Measure to the bottom of the sleeve. For a mechanical rammer, measure the distance from the release point to the end point.
4. Measure the diameters of the vent holes at the top and bottom of the sleeve.
5. Check the results of a mechanical rammer according to ASTM D2168. Mechanical rammers must obtain results for maximum dry density within $\pm 2\%$ of a manual rammer.