

PROCEDURE FOR CALIBRATING, STANDARDIZING OR CHECKING EQUIPMENT

Revised 07/08, 5/11

PROCEDURE #82

Equipment Checked:

Test Method:

10' STRAIGHTEDGE

ASTM E 1703

Purpose:

To provide instructions for checking the trueness of the 10' straightedge.

Inspection Equipment Required:

1. 0.05" & 0.30" Feeler Gauges
2. 0.05" Shims
3. String Line
4. Tape Measure

Tolerance:

Tolerances can be found in the test methods listed above.

Procedure:

1. Measure the straightedge length, width, and height and report the findings to the nearest 0.125" (1/8").
2. Visually inspect the straightedge for damage and report the findings.
3. Verify that the narrow edges of the straightedge are true along the length, position the straightedge on either of the narrow edges.
 - a. Stretch a string line along the upper edge between the ends of the straightedge. Attempt to slide the 0.05" feeler gauge between the upper surface of the straightedge and the string line. Insert a 0.05" shim on each end of the straightedge. The string line should not come in contact with the straightedge for the entire length of the straightedge.
 - b. Repeat Step 4 for the opposite edge of the straightedge. Straightedges with deviations greater than 0.05" along either of the narrow edges shall be taken out of service. Report the findings.
4. Verify that the wide sides of the straightedge are true along the length, position the straightedge on either of the narrow edges. The straightedge should not be positioned on the wide side to perform this check.
 - a. Stretch a string line along either of the sides (near the center) between the ends of the straightedge. Attempt to slide the 0.30" feeler gauge between the side of the straightedge and the string line.
 - b. Repeat Step 7 for the opposite side of the straightedge. Straightedges with gaps greater than 0.30" along either of the wide sides shall be taken out of service. Report the findings.
5. Report any actions taken.