

STEP-BY-STEP INSTRUCTIONS FOR USING PRESS-O-FILM WITH A "DIAL THICKNESS MICROMETER GAGE"

Step 1: Locate a representative site for measurement.

Step 2: Select appropriate grade of Press-O-Film replica tape.

Step 3: Prepare snap gage: clean anvils, adjust zero point to read 8 mils (or, on a metric gage, 150 μm), i.e., minus 2 mils (minus 50 μm), the thickness of the incompressible substrate. (This procedure subtracts the thickness of the plastic substrate automatically from all readings.)

Step 4: Pull a single piece of adhesive-backed printed paper free of the release paper. The Press-O-Film is the 0.4 inch (1 cm) square white plastic film at the center of the adhesive-backed paper. A circle of paper should remain on the release paper.

Step 5: Check film thickness with gage. Film may vary in thickness and maximum limits of profiles cannot exceed thickness of the film coating. Release snap gage (reasonably) gently when making measurement.

Step 6: Apply film to surface to be measured. The adhesive-backed paper will hold it firmly in place.

Step 7: Rub burnishing tool over the round cut-out portion of replica tape, using moderate to firm pressure. The replica tape will become darker when surface is replicated. Make sure that the entire circular area has uniformly darkened.

Step 8: Remove replica and place between anvils of snap gage, making sure replica is centered between anvils. Gage reading is the average maximum peak-to-valley height of the blasted surface (when snap gage is adjusted as in step 3).

Step 9: Confirm that reading is well within the tape's recommended range. Tape is most accurate in mid-range region. *If the measured profile is near the upper or lower end of the tape's range, confirm your reading with a grade more appropriate to the observed profile.*

Rubbing Technique

Use the smoothest surface on the rubbing tool. A firm pressure is desirable, with either circular, or x- and y-direction, rubbing motions. Compress all parts of the film but be careful not to slide the film with respect to the surface by bumping the edges of the circular paper cutout.