

The Pull-Off Adhesion Series

4. Preparing the Dolly and the Coating

To achieve the highest possible pull values from a pull-off adhesion test, it's important to properly prepare both the dolly and the surface before testing.

Once you have selected an appropriate test area or test panel on which to perform the pull test; in order to minimise the risk of an adhesive glue failure - where the glue fails before the coating - carefully abrade the dolly and the surface using sandpaper.

To abrade the dolly: lay sandpaper on a flat surface, rough side up, and pass the dolly across it back and forth. Do not simply rub the dolly with sandpaper in your hands, as this may damage or round the edges of the dolly, reducing the surface area and affecting the test result.

To abrade the surface: lightly pass sandpaper back and forth across the area to be tested, taking care not to damage the coating or cause a significant loss of coating thickness.

To further avoid a glue adhesive failure, clean both surface areas using a suitable solvent to remove any dust or grease.

Now mix the adhesive in accordance to the adhesive manufacturer's instructions, and apply a thin, uniform film over the entire dolly face.

Press the dolly down onto the prepared test surface, applying an even pressure to the dolly, to ensure that the dolly face is parallel to the test surface.

Remove any excess adhesive from around the dolly, and hold the dolly in place until fully cured - using either a dolly magnet or tape. Adhesive cure times are dependent on the glue, as well as the ambient and surface temperatures, so please refer to the manufacturer's instructions for guidance.

For more information and training on the pull-off adhesion method, or Elcometer's range of pull-off adhesion testers, please click on one of the links on-screen or visit our website.