



Technical Bulletin

No. 2101

Roof Coating Adhesion Test Procedure

MuleHide requires an adhesion test survey for all coating projects where a system (NDL) warranty is being requested.

When performing roof coating adhesion tests, MuleHide requires the below information to be provided:

- A minimum of one adhesion test per different roof condition or one test every 4000 sq ft.
 - These include:
 - Patched or repaired areas
 - Coated areas
 - Areas of different exposure
 - On projects 50,000 sq ft or greater, contact the MuleHide Technical Department for number of tests required.

Recommended steps to perform an adhesion test

Prior to performing the test:

- Prepare the surface you will be performing the test on as you would for a final top coat.
 - Clean, dry, prime if needed
- Pre-cut one fabric strip for each test. (1 in. wide by 12 in. long)
- Apply approximately 16 wet mils (1-gallon per square) of the appropriate coating (silicone or acrylic) onto the clean, dry substrate area. Area should be approximately 6" x 12".
- Immediately embed 8" of the pre-cut fabric strip into the wet coating.
 - Allow a minimum of four inches of the fabric to extend past the wet coating.
 - Brush the fabric lightly to ensure no air pockets, voids, or wrinkles.
 - Apply 16 wet mils (1-gallon per square) over the top of the embedded fabric making sure it is completely covered and sandwiched between the two applied coats.
 - Allow the test areas to cure for a minimum of 48 hours before conducting pull test.
 - Adhesion and curing timeframe depend on climate conditions (temperature, humidity, etc.).

Performing the test:

- A fish scale should be used to test the adhesion. Tie a knot in the fabric that was left out of the coating and hook the fish scale into the knot.
- Using the fish scale, pull the fabric strip at a 90-degree angle.
- A minimum of two lbs. of "pull strength" must be observed or registered on the fish scale for the coating adhesion to be considered acceptable. (2lbs per 1 inch of fabric minimum, ideal pull is 2-5lbs per 1 inch of fabric per National Roofing Contractors Association)
- A photo or a short video of the observed "pull strength" of the fish scale is required.
- If the fabric separates from the coating, leaving the coating still adhered to the roof membrane, the test is a "pass".
- If the coating separates from the roof surface, the test is a "fail".

All adhesion tests should be documented using the online Adhesion Test Survey form available at this link: [Adhesion Test Form](#). Documentation should include photos of the cleaned substrate; the wet coating and embedded fabric; and the face/display of the fish scale showing the resistance observed during testing. If a system warranty is requested, it is strongly recommended that all tests be performed in the presence of a MuleHide representative.