

# **Technical Bulletin 1803**

# **Roof Coating Adhesion Test**

### Cleaning:

- 1. Clean test area a minimum of 12" x 12".
  - Application of 115 cleaner and Pressure-washing is preferred.
  - If unable to pressure-wash, use 115 cleaner, scrub the area, and rinse well with water.

#### Test construction:

- 1. Pre-cut several strips of Tietex fabric 1" wide and 12" long.
- 2. Apply approximately 16 wet mils (1 gallon per square) of coating (Silicone, SEBS, or Acrylic) onto the clean dry substrate area should be approximately 6" x 12".
- 3. Immediately embed the Tietex strip into the coating centering it in the coating but leaving 4" of the strip laying loose past the edge of the coating. Do not embed the entire length into the coating. Dry brush the fabric into the coating to ensure complete embedment and leaving no voids, air pockets or wrinkles.
- 4. Apply a second (top) coat of coating at the same application rate as the first coat, making sure the fabric is fully embedded.
- 5. Repeat this procedure for each adhesion test.

#### Precautions:

- 1. The substrate must be clean and dry. Do not perform adhesion tests when ambient or substrate temperatures are below freezing.
- 2. Each test sample shall be allowed to cure a minimum of 4-5 days before testing. Lower temperatures will slow the cure time of the adhesive and may require a longer cure time. Do not allow test area to freeze during testing.

# Performing the test:

- 1. Test the adhesion with a fish scale. Tie a knot in the fabric that was left out of the coating and hook the fish scale into the knot.
- 2. Using the fish scale, pull the fabric strip straight up.
- 3. 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)

# **Determining Results:**

- 1. Conditions indicating test failure:
  - a. If the coating separates from the roof surface, the test is a "fail".
  - b. If any tests fail, repeat the adhesion test using the appropriate primer.
- 2. Conditions indicating test passing:
  - a. If the fabric separates from the coating, leaving the coating still adhered to the roof membrane; the test is a "pass".

#### Documentation of tests performed on a roof:

- 1. All adhesion tests should be documented with photos of the cleaned substrate, the "wet" coating and fabric embedded, and the face or display of the fish scale showing the resistance observed in the test.
- 2. If the project is requesting a system warranty all tests must be performed in the presence of a Mule-Hide Representative.
- 3. Forward results and photographs of all test area results to the Mule-Hide Technical Department for review.

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