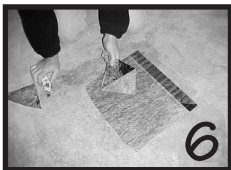
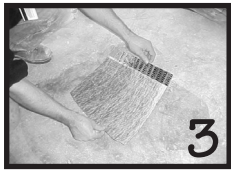
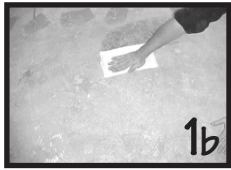
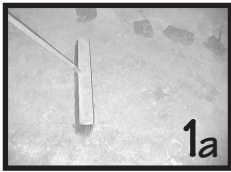


# So You Want To Do A Pull Test?



A Pull Test may be the only way to know if an NAC Membrane System will bond securely to a substrate. Usually, the installer can be enlisted to set up a Pull Test so that the customer, builder, architect, or end-user can see the results and make a determination. A pull test is merely a small installation of membrane over a surface in order to determine if sufficient bonding can be achieved. Questionable surfaces might be those covered with paint, stain, paint over-spray, concrete with curing/release compounds, carpet or vinyl adhesive/cut back, a questionable substrate due to temperature, surface roughness or a substrate composed of unknown materials or metal. NAC Membrane systems require a suitable clean, dry surface for correct bonding; if there is any doubt, a Pull Test is in order.

A Pull Test is easy to do. A small broom or whisk brush and damp paper towels will be needed for surface prep. You will need several 12 inch or so squares of membrane, a small amount of the correct primer (NAC TAC Interior Primer or NS97 Exterior Primer), a 2 or 3 inch wide sponge brush and a trowel.

**STEP 1:** Choose the worst or most questionable substrate area. Sweep the test area (1a), then use a damp paper towel to remove any fine dust (1b). Make sure the floor is flat, without lumps or bumps. Allow the floor to dry completely.

**STEP 2:** Use a sponge brush to apply a small amount of primer to the test area. Only a very thin application is needed. Photo 2 shows the primer in the process of curing. The primer is ready to accept membrane when it is tacky to the touch but does not feel wet to your finger.

**STEP 3:** Remove the white release paper from the back of the membrane and position the membrane on the tacky primer.

**STEP 4:** Use the flat side of the trowel or step on the membrane to embed it.

**STEP 5:** Resist the temptation to pull up an edge of the membrane as NAC TAC primer requires 24 to 48 hours for curing. NS97 will cure more quickly. After waiting the appropriate amount of time, use a sharp knife to make an "X" cut through the membrane and across the diagonal.

**STEP 6:** Try to pull up the membrane, starting at the center of the "X". (Do not pull up from the edges; edges often get dirt pushed under them as people walk by and kick at the patches during the curing time.)

ANSI A118.10 – 1993 specifications call for a bond strength of at least 50 psi. Most installers will know from tugging on the membrane if it is a secure bond.

The Pull-Test shown here was for a Strataflex installation at the SeaTac International Airport in Washington. Two test swatches were done over vinyl adhesive and two over a concrete floor. The primary purpose of this test was to ensure that Strataflex would bond to cut-back adhesive. The two swatches over concrete were done as a control sample.

When considering your application for NAC Products' ECB, Strataflex, SAM<sup>3</sup> and Super SAM 125 Membrane Systems, remember that these membranes can only be bonded as securely as the material they are going over is bonded to the substrate. Membranes may pull loose from the substrate during a test for a variety of reasons. For free technical support, please give us a call at 1.800.633.4622. Product literature is available for download at [www.NACproducts.com](http://www.NACproducts.com).

*Special thanks to NAC Manufacturer's Representative, Joe Sloss for this informative article and its accompanying photographs.*

