



Climate® Field Adhesion Test Procedure

Evaluation of Sealant Adhesion to Concrete and Other Substrates

Purpose

To verify that Climate® Sealants achieve adequate adhesion to jobsite substrates under actual field conditions, particularly when applied to damp or green concrete surfaces.

Reference Standards

- ASTM C1521 – Standard Practice for Evaluating Adhesion of Installed Sealants
- ASTM C1193 – Guide for Use of Joint Sealants
- ASTM C920 – Specification for Elastomeric Joint Sealants

Equipment Required

- Utility knife or razor blade
- Ruler or calipers (1-inch markings)
- Pull tab material (tape or plastic strip)
- Marker or chalk
- Clean rags and approved solvent

Procedure

1. **Prepare Test Joint:** Apply Climate® Sealant to the actual job substrate under representative conditions. cure at least 7 days (longer in cool or arid environments).
2. **Cut Test Area:** Make two parallel cuts through the sealant, 1 inch apart and at least 3 inches long, reaching the substrate.
3. **Create Pull Tab:** At one end, make a perpendicular cut and gently lift the sealant tongue to form a 1-inch tab.
4. **Pull Test:** Pull the tab slowly at a 90° angle to the substrate and observe the failure type:
 - Adhesive failure – bond lost at substrate (unacceptable)

- Cohesive failure – sealant tears internally (acceptable)
- Mixed failure – partial adhesion loss (evaluate acceptability)

5. **Record Results:** Note surface condition, temperature, and humidity. Photograph each test area.

Evaluation Criteria

- **Pass:** ≥90% cohesive or mixed cohesive failure
- **Fail:** >10% adhesive failure – surface preparation or primer required

Recommended Follow-Up

If adhesion is insufficient:

- Confirm substrate cleanliness and dryness
- Re-test after mechanical cleaning or primer use
- Contact Climate Technical Support for primer or surface prep guidance at 844.450.9604

Notes

Field adhesion testing should be repeated whenever substrate type, environmental conditions, or surface treatments change. Results represent field conditions and should be documented for project records.