



# HV Tile Adhesive

**Description:** High-strength towelable adhesive compound designed for bonding ceramic tile to vertical, curved and overhead surfaces and repairing ceramic tile surfaces.

**Intended Use:** Bonding ceramic tile to vertical, curved and overhead surfaces.

**Product features:** **Non-sagging adhesive that will support 4 lbs. per square foot while curing**  
**Fills gaps and joints in crushers prior to pouring backing compounds**  
**Excellent adhesion to metal, ceramic and concrete**  
**Easy to use 1:1 formula**

**Limitations:**

**Typical Physical Properties:**

*Technical data should be considered representative or typical only and should not be used for specification purposes.*

**Cured 7 days @ 75° F**

<b>% Solids by Volume</b>	<b>100</b>
<b>Adhesive Tensile Shear</b>	<b>1,825 psi</b>
<b>Coefficient of Thermal Expansion</b>	<b>14 [(in./in.) x °F] x 10(-6)</b>
<b>Color</b>	<b>Grey</b>
<b>Compressive Strength</b>	<b>11,800 psi</b>
<b>Coverage/lb</b>	<b>76 sq. in./lb.@ 1/4" thick</b>
<b>Cured Density</b>	<b>1.40 gm/cc</b>
<b>Cured Hardness</b>	<b>81D</b>
<b>Cured Shrinkage</b>	<b>0.0010 in./in.</b>
<b>Dielectric Constant</b>	<b>45</b>
<b>Dielectric Strength</b>	<b>320 volts/mils</b>
<b>Flexural Strength</b>	<b>5,400 psi</b>
<b>Functional Cure</b>	<b>8 hours</b>
<b>Mix Ratio by Volume</b>	<b>1:1</b>
<b>Mix Ratio by Weight</b>	<b>1.1:1</b>
<b>Mixed Viscosity</b>	<b>Non-sag putty</b>
<b>Modulus of Elasticity</b>	<b>8.0 psi x 10(5) in.</b>
<b>Pot Life @ 75F</b>	<b>35 minutes</b>
<b>Recoat Time</b>	<b>11-16 hrs.</b>
<b>Solids by Volume</b>	<b>100</b>
<b>Specific Volume</b>	<b>19 cu. in./lb.</b>
<b>Temperature Resistance</b>	<b>200°F</b>
<b>Thermal Conductivity</b>	<b>1.25[(calxcm)/(secxcm(2)x°C</b>

**TESTS CONDUCTED**

- Adhesive Tensile Shear ASTM D 1002
- Cured Hardness Shore D ASTM D 2240
- Coef. of Thermal Expansion ASTM D 696
- Dielectric Constant ASTM D 150
- Dielectric Strength, volts/mil ASTM D 149
- Cure Shrinkage ASTM D 2566
- Flexural Strength ASTM D 790
- Modulus of Elasticity ASTM D 638
- Thermal Conductivity ASTM C 177
- Compressive Strength ASTM D 695

**Surface Preparation:**

1. Thoroughly clean the surface with Devcon® Cleaner Blend 300 to remove all oil, grease and dirt.
  2. Grit blast surface area with 8-40 mesh grit, or grind with a coarse wheel or abrasive disc pad, to create increased surface area for better adhesion (Caution: An abrasive disc pad can only be used provided white metal is revealed). Desired profile is 3-5mil, including defined edges (do not "feather-edge" epoxy).
- Note: For metals exposed to sea water or other salt solution, grit-blast and high-pressure-water-blast the area, then leave overnight to allow any salts in the metal to "sweat" to the surface. Repeat blasting to "sweat out" all soluble salts. Perform chloride contamination test to determine soluble salt content (should be no more than 40ppm).
3. Clean surface again with Devcon® Cleaner Blend 300 to remove all traces of oil, grease, dust or other foreign substances from the grit blasting.
  4. Repair surface as soon as possible to eliminate any changes or surface contaminants.

**WORKING CONDITIONS:** Ideal application temperature is 55°F to 90°F. In cold working conditions, directly heat repair area to 100-110°F prior to applying epoxy and maintain at this temperature during product cure to dry off any moisture,

contamination or solvents, as well as to achieve maximum performance properties.

**Mixing  
Instructions:**

---- It is strongly recommended that full units be mixed, as ratios are pre-measured. ----

1. Add hardener to resin.
2. Mix thoroughly with screwdriver or similar tool (continuously scrape material away from sides and bottom of container) until a uniform, streak-free consistency is obtained.

INTERMEDIATE SIZES (1,2,3 lb. units): Place resin and hardener on a flat, disposable surface such as cardboard, plywood or plastic sheet. Use a trowel or wide-blade tool to mix the material as in Step 2 above.

LARGE SIZES: (25 lb., 30 lb., 50 lb. buckets): Use a T-shaped mixing paddle or a propeller-type Jiffy Mixer Model ES on an electric drill. Thoroughly fold putty by vigorously moving paddle/propeller up and down until a homogenous mix of resin and hardener is attained.

**Application  
Instructions:**

Apply HV Tile Adhesive with either a smooth or notched trowel.

TO APPLY:

1. Apply HV Tile Adhesive to base.
2. Press tile from its center outward to force out excess resin and eliminate air entrapment.
3. Pound tile with a rubber hammer to ensure a close fit.
4. Scrape excess adhesive from tile seams.

ADDITIONAL INFORMATION:

- HV Tile Adhesive has a very high green strength, which means that tiles will not slip during the cure process unless excessive adhesive has been applied or air has become entrapped under the tile.
- Applying epoxy at temperatures below 70°F lengthens functional cure and pot life times. Conversely, applying above 70°F shortens functional cure and pot life.
- HV Tile Adhesive fully cures in 16 hours, at which time it can be machined, drilled or painted.

**Storage:**

Store in a cool, dry place.

**Compliances:**

None

**Chemical  
Resistance:**

*Rating chemical resistance is not necessary for this product.*

**Precautions:**

Please refer to the appropriate safety data sheet (SDS) prior to using this product.

**For technical assistance, please call 1-855-489-7262**

**FOR INDUSTRIAL USE ONLY**

**Warranty:**

ITW Performance Polymers will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

**Disclaimer:**

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Performance Polymers makes no representations or warranties of any kind concerning this data.

**Order  
Information:**

**11489 20 lb.**