# The Strong Company, Inc.
## Profile Mix

**INTENT:** Building back deteriorated structures to original dimensions, providing structural restoration, corrosion protection and a smooth surface for application of epoxy topcoat.

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<table>
<thead>
<tr>
<th>Strong-Seal® Profile Mix is a calcium aluminate, an acid resistant cementitious product, to be used for building back deteriorated substrates to original dimensions providing a smooth surface for applying an epoxy topcoat and shall have the following minimum requirements at 28 days.</th>
</tr>
</thead>
</table>
| **A.** Compressive strength  
  ASTM C109  
  > 8000 psi at 28 days |
| **B.** Tensile strength  
  ASTM C496  
  > 800 psi |
| **C.** Flexural strength  
  ASTM C293  
  > 1200 psi |
| **D.** Shrinkage @ 95% R. H.  
  ASTM C596  
  0% |
| **E.** Bond  
  ASTM C882  
  > 2000 psi |
| **F.** Applied density  
  135 pcf ± 5 |
| **G.** Freeze/Thaw  
  ASTM C666  
  100 cycles, no visible damage |

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<th>All foreign material shall be removed from the manhole wall and bench using a high-pressure water spray (minimum 2200 psi). Loose and protruding brick, mortar, and concrete shall be removed using a mason's hammer, chisel and/or scraper. Fill any large voids with quick setting patching material.</th>
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<td>Active leaks shall be stopped using quick setting, specially formulated mixes according to manufacturer's recommendations. Some leaks may require weep holes to localize the infiltration during the application. After application, the weep holes shall be plugged with the quick setting mix prior to application of the final coat. When severe infiltration exists, drilling may be required to pressure grout using grouting procedures. Manufacturer's recommendations shall be followed when pressure grouting is required.</td>
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</table>

### CURING

Caution should be taken to minimize exposure of applied product to sunlight and air movement. If application of additional coats is to be longer than 15 minutes, the structure shall be covered. At no time should the finished product be exposed to sunlight or air movement for longer than 15 minutes before covering or closing access. In extremely hot and arid climates manhole shall be shaded while reconstruction is in process. In environments where humidity level is below 70%, it shall be necessary to keep finished product damp for the first 72 hours.

The final application shall have a minimum of four (4) hours cure time. Traffic shall be withheld for 12 hours after application is complete. Applicator shall wait a minimum of 24 hours after application of Strong-Seal® Profile Mix before applying epoxy topcoat.

### WEATHER

No application shall be made to frozen surfaces or if freezing is expected to occur within the substrate within 24 hours after application. Precautions shall be taken to keep the mix temperature at time of application below 90 degrees F. Water temperature shall not exceed 80 degrees F. Chill with ice if necessary.

### PRODUCT TESTING

Four 2 inch cubes may be cast each day or from every pallet of product used and shall be properly packaged, labeled and returned to the manufacturer for testing in accordance with the owner's or manufacturer's directions for compression strength per ASTM C109 procedure.