Product Description

TCC Materials® Partial Depth Concrete Patch is ideally suited for placing overlays less than 2” deep. It is also used for adhering pavers to concrete steps and walks, patching and/or leveling concrete surfaces, filling large cracks, and filling cores in masonry block or brick. Application include concrete pavements, bridge decks, industrial floors, concrete parking lots and garage decks. This Pre-blended cement and oven dried sand mixture, when mixed with water, will produce a high strength concrete repair material that is extremely durable in partial depth applications.

Available in:
- 2 to 1 Mix (100521)
- 3 to 1 Mix (102127)

Applicable Standards

Meets the physical requirements for high -early and normal strength concrete of ASTM C 387, “Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete”.

When/Where to Use

- Partial depth repair of concrete pavements
- Parking deck repair & patching
- Bridge deck repair & patching
- Industrial floors
- Precast & Tilt-Up panel
- New slab construction
- Formed concrete work
- Grouting
- Paver Bonding Mortar (see p2)

Advantages

- High Strength
- Durable patching material
- No pea gravel
- Pre-blended mixture
- Shallow depth repairs less than 2”

Typical Yield

80 lb. (36.3 kg) bag will yield approximately 0.7 cubic feet (wet). 39 bags would cover about 1 cubic yard.

Packaging

80 lb. (36.3 kg) bags

Surface Preparation

Concrete repair surfaces should be clean, sound, and free from any materials that may inhibit bond such as oil, asphalt, curing compounds, acids, dirt and loose debris. Roughen surface and remove all unsound concrete. Immediately prior to placement the repair surface shall be thoroughly saturated with no standing water.

Mixing

Place the desired number of bags of TCC Materials® Partial Depth Concrete Patch into a mechanical mixer. Use full bags only. Do not exceed mixer capacity. Approximate clean, potable water required is 5-7 pints per 80 pound bag. Only add additional water as needed to reach desired slump. Mix TCC Materials® Partial Depth Concrete Patch for 3-5 Minutes or until expected consistency is reached.

After the material is placed, follow industry practices for curing concrete patches.

Note: For patches less than 1” deep, it is beneficial to replace part of the mixing water with Akona® Mighty Bond® Concrete Bonding Additive for improved bonding. Add Akona® Mighty Bond® at a rate of 1 part water to 1 part bonding additive.

Application (Patching, Repairing, Grouting)

Fill the area to be repaired with the patching material and finish with a steel trowel or wood float. Do not overwork the material. TCC Materials® Partial Depth Concrete Patch can be trowel or broom finished to create a smooth surface. If the TCC Materials® Partial Depth Concrete Patch is used to repair an area over an existing joint, make sure a new joint is created. (Application continued on page 2.)

Technical Data

<table>
<thead>
<tr>
<th>Tests</th>
<th>Partial Depth Patch 2 to 1 Mix (100521)</th>
<th>Partial Depth Patch 3 to 1 Mix (102127)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength, psi (ASTM C39)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 day</td>
<td>3,110</td>
<td>1,830</td>
</tr>
<tr>
<td>3 day</td>
<td>4,680</td>
<td>2,700</td>
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<td>7 day</td>
<td>6,170</td>
<td>3,860</td>
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<tr>
<td>28 day</td>
<td>7,360</td>
<td>4,750</td>
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</table>

<table>
<thead>
<tr>
<th>Physical Testing (ASTM C387)</th>
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</thead>
<tbody>
<tr>
<td>Water Demand (lb/bag)</td>
</tr>
<tr>
<td>Slump (inches)</td>
</tr>
<tr>
<td>Unit Wgt. (lb/ft³)</td>
</tr>
<tr>
<td>Yield (ft³/bag)</td>
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<tr>
<td>Air (%)</td>
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</tbody>
</table>

Shelf Life

One year in original, unopened bags

Storage Conditions

Store dry at 40-95°F (4°C –35°C). Condition material to 65-75°F before using.

Color

Gray

Batching Method

Per ASTM C387

WARNING: INJURIOUS TO EYES!

KEEP OUT OF REACH OF CHILDREN!

Trowel Finish of Concrete Patch
**Application (Paver Bonding)**

For best results of direct bonding of pavers to slab-on-grade surfaces a gravel bed or other means of drainage should be present below the slab. Slab should be sloped to provide complete drainage at \( \frac{1}{8} \)” per 1’ of surface.

Honor all cold joints and saw-cut joints by keeping joints open and free to move. (Do not lay pavers over joints or allow grout, mortar, or other material into joint cavities. Align paver joints with joints in existing concrete.)

Use 3:1 Partial Depth Concrete Patch (102127). Replace part of the mixing water with Akona Mighty Bond Concrete Bonding Additive for improved bond and performance. Add Akona Mighty Bond at a rate of 1-part water to 1-part bonding additive. Apply mixed mortar to the slab and to the back of each paver to achieve full coverage beneath the paver. Do not allow voids. Grout pavers with 3:1 mix and bonding additive. Clean any residue off paver immediately while it is still wet.

**Warning**

This product contains Portland cement. Contact with cement, freshly mixed concrete, or mortar can cause severe burns. The cementitious materials mixed onsite are alkaline in nature and on contact with water may irritate the eyes and skin. If contact with eyes occurs, flush eyes repeatedly with clean water and see a physician immediately. Do not rub eyes. Wash hands thoroughly after handling or before eating. Do not take internally. This product may contain silica. Inhaled silica dust may cause respiratory or other health problems.

**Warranty**

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, express or implied, including, but not limited to, those including merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that, the seller's liability to the buyer at no point for any particular project shall exceed the total purchase price of said product.