THICK BUILD CONCRETE PATCH & REPAIR

Deep Patch

View More Info for this Product at
www.surecretedesign.com/product/thick-concrete-repair
**DESCRIPTION**

Deep Patch™ is a single component, cement-based patching compound that goes from 1/8 inch – 2 inch (.32 - 5 cm) and up to 4 inches (10 cm) with the addition of # 8 pea gravel. Deep Patch™ requires SureBond (see TDS) to create superior bonding power. It was designed for patching larger spalls in heavy traffic concrete: floors, building ramps, loading docks, and parking lot pavement, and performs well in filling low spots on any horizontal concrete surface.

Deep Patch™ is formulated with specific silicate aggregate sizes to aid in eliminating the common shrinkage cracks associated with traditional concrete patch mixes used for repairs. Due to these aggregate sizes, it does not allow Deep Patch™ to feather edge.

**BENEFITS**
- Heavy Traffic Repairs
- 1/8 Inch to 4 Inch Patching
- Reduce Shrinkage Issues

**SURFACE PREP**

The principles for surface preparation for Deep Patch™ are aligned with cement-based overlays placed on concrete and remain constant; the substrate must be:

1. **Clean**: The surface must be free of dust, dirt, oil, grease, paints, glues, sealers, curing agents, efflorescence, chemical contaminants, rust, algae, mildew and other foreign matter that may serve as a bond breaker.
2. **Cured**: Any concrete must be sufficiently cured to have sufficient hydration, approximately 7 - 14 days depending on temperatures and humidity.
3. **Sound**: No system should be placed upon concrete that is flaking, spalling, or has hibernating spalling.
4. **Profiled**: Proper profile should follow the standard established by the International Concrete Repair Institute (ICRI) Technical Guideline no. 03732 for Concrete Surface Profile (CSP).

The established profile is categorized as CSP-1 through CSP-4. The most common means to properly profile many concrete slabs (especially exterior slabs) is through the use a pressure washer equipped with a turbo-tip and the use of SCR (see SCR TDS).

Some concrete slabs that are hard troweled or that are not sound may require more aggressive profiling through diamond grinding or shot blasting.

**TEMPERATURE / CURE**

1. Air and substrate surface temperatures shall remain between 50°F (10°C) and 90°F (32°C) during and within 48 hours of placement.
2. No precipitation should occur during or within 48 hours of placement.
3. Avoid high heat and / or windy conditions. Attempt to minimize application during such harsh conditions by working during cooler hours. Keep materials shaded prior to mixing, running water until cool, and setting up temporary walls for wind blocks.
4. Interior applications and cool, shaded areas will take significantly longer to cure.
5. This product will cure similar to concrete. Depending on weather conditions, it may achieve initial set within 6 – 8 hours. Like concrete full cure is reached at 28 days.

**QUICK FACTS**

**PRODUCT NAME** Deep Patch™

**PACKAGING**

50 lb. Bag (22.7 kg)

**COVERAGE**

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Coverage</th>
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<tbody>
<tr>
<td>½”</td>
<td>11 ft²</td>
</tr>
<tr>
<td>1”</td>
<td>5.5 ft²</td>
</tr>
<tr>
<td>2” with #8 pea gravel</td>
<td>3.3 ft²</td>
</tr>
<tr>
<td>3” with #8 pea gravel</td>
<td>2.2 ft²</td>
</tr>
<tr>
<td>4” with #8 pea gravel</td>
<td>1.7 ft²</td>
</tr>
</tbody>
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**MIX RATIO / WATER DEMAND**

3 - 4 qt. (3.8 liter) water to (1) 50 lb. bag (22.7 kg)

**CRACK TREATMENT**

Cracks may require treatment: Refer to SCT-22™ Crack and Spall Treatment and SCT-EP™ Epoxy Crack Treatment TDS to evaluate crack as static or structural to set expectation of treatment.

Deep Patch™ may fill large voids created by random cracking, but large or structural cracks have sufficient movement to “telegraph” through Deep Patch™ applications. Bridging construction joints in concrete, is never recommended, as they will also “telegraph” through Deep Patch™ applications.

**MIXING / APPLICATION**

1. Add water, approximately 3 qt. (2.8 liter) to a 5-gal. empty plastic pail (18.9 liter).
2. Slowly introduce Deep Patch™ into the pail with mixer running. Mix with a hand-held concrete mixer, such as an Eibenstock model #EHR 20R or a ½” (12.7 mm) 450 – 600 rpm drill equipped with a cage mixing blade. (Multiple bags may be mixed utilizing a mortar mixer.)
3. Scrape side of pail with a margin trowel to ensure all dry product is incorporated into the wet mix.
4. Continue to mix for a minimum of 1 minute after all ingredients are combined to achieve a lump-free consistency. Additional water may be added up to a total of 4 qt. (3.8 liter) water to 50-pound (22.7 kg) bag.
5. Patches in excess of 2” (5 cm) up to 4” (10 cm) require the introduction of #8 pea gravel (3/8 - ½” [9.5 – 12.7 mm]) at the rate of 10 pounds (4.5 kg) pea gravel to 1 – 50 pound (22.7 kg) bag of Deep Patch™.

**Base Coat**

1. Before applying Deep Patch™, the surface should be saturated surface dry with clean water (SSD or damp, no puddles).
2. Apply SureBond™ according to the TDS

**Deep Level / Patching Coat**

1. While SureBond™ is still wet, apply Deep Level™.
2. Apply Deep Patch™ by trowel or squeegee, ensure product is tightly placed into patched area.
3. If patching requires feathering to an existing smooth surface, the height of deep level should be 3/8" short of desired finish to allow for final topping.

**SUITABILITY SAMPLE**

Always prepare an adequate number of on-site test areas, on the intended substrate to establish aesthetic suitability for products’ intended use.

**CLEAN-UP**

Before Deep Patch™ dries; spills and tools can be cleaned up with water.

**DISPOSAL**

Contact your local government household hazardous waste coordinator for information on disposal of unused product.

**LIMITATIONS**

- For use by trained professionals that have read the complete SDS.
- Deep Patch™ is not designed to feather edge.
- Even though Deep Patch™ is designed for vehicular traffic, it is not designed to be used as a traditional topcoat overlay for smooth or textured designs.

**WARRANTY**

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufacturer/seller’s option. SureCrete Design Products shall not be liable for cost of labor or direct and/or incidental consequential damages.

**WARNING**

**KEEP OUT OF REACH OF CHILDREN.** Inhalation: Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if threshold limit values are unsafe. **Skin Contact:** Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. **Eyes:** Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

**SAFETY DATA SHEETS (SDS)**

The following are links to all available safety data sheets related to this product:

Deep Patch - Safety Data Sheet

**MANUFACTURER PART #**

50 lb. (22.7 kg) SKU # 15103001

**SHELF LIFE**

Under normal conditions: when kept dry and moisture free, out of direct sunlight, the shelf life of an unopened container is (12) months from the date of purchase. Storage must be under roof and off the floor. Avoid temperature extremes. Rotate inventory to maintain product that is within limits.

**TESTING DATA**

**DENSITY**

132 pounds/ft³ (2113 kg/m³)

**COMPRESSIVE STRENGTH - ASTM C-109**

28 Days 5000 PSI (34474 kPa)

**FLEXURAL STRENGTH - ASTM C-348**

28 day 550 PSI (3792 kPa)

**TENSILE STRENGTH - ASTM C-190**

28 day 890 PSI (6136 kPa)

**ABRASION RESISTANCE ASTM C-944**

28 day 890 PSI (6136 kPa)