TECHNICAL DATA SHEET

TOTAL PATCH

Very Rapid-Setting Multi-Purpose Concrete Repair Mortar

DESCRIPTION

Total Patch is a very rapid-setting, multi-purpose concrete repair mortar for concrete floors, highway pavements and other applications requiring high early strength and early resumption of traffic or use. Total Patch is formulated to meet the requirements of ASTM C928, Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs, and AASHTO T260. It incorporates the latest technology, offering superior durability, performance and ease of application without liquid activators for horizontal (featheredge to 4" / 102 mm) and vertical form-and-pour applications.

BENEFITS

- One-component, dry-polymer; just add water
- Easy-to-use, flowable consistency
- Air-entrained for excellent freeze-thaw durability
- Suitable for horizontal and formed vertical applications
- Takes traffic 1 hour after set (at 73 °F / 23 °C)
- Featheredge to 4" (102 mm) without extension

APPLICATION

Surface Preparation: The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance and other surface contaminants. For maximum durability, saw cut the perimeter of the repair 1/8" (3 mm) deeper than the depth of the repair, creating a notched, reinforced edge. Mechanically abrade the surface by an engineer-approved method in accordance with ICRI Guideline 310.2 to a minimum CSP 6. All surfaces to be repaired must be saturated surface-damp (SSD) with no standing water.

Priming/Scrub Coat: Thoroughly clean all exposed reinforcing steel of rust and coat with SpecPrep SB. Prepared concrete must be SSD and primed with a spray or brush coat of SpecPrep SB, with the repair mortar applied wet-on-wet or within the recommended open time (see the SpecPrep SB technical data sheet). Alternatively, apply a scrub coat of properly mixed repair mortar by scrubbing a thin layer into the pre-dampened substrate with a stiff brush, and place the repair mortar immediately, before the bond coat dries.

Mixing: Mix 7.0–9.0 pints (3.3–4.3 L) of clean water (depending on desired consistency) per 50 lb (22.7 kg) bag, using a low-speed drill or mortar mixer. Add the water to the container first, then slowly add the Total Patch powder. For non-DOT applications, up to 9.0 pints (4.3 L) can be used for greater flow. Mix 2–3 minutes. Mix only what can be applied within the setting period.

Depending on the application and area dimensions, Total Patch can be applied from featheredge to 4" (102 mm) without extension. Consult SpecChem Technical Services for further details.

Deep Applications: For DOT and heavy-traffic applications (roadways, parking structures, etc.) over 2" (51 mm), extend Total Patch with clean, SSD, well-graded 3/8" (10 mm) aggregate free of organic material, up to 60% by weight (30 lb / 13.6 kg). Pre-dampen the aggregate before mixing and reduce the total mixing water by the amount of free water in the aggregate. 60% extension adds approximately 0.18 cu ft (5.1 L) to the unit yield. Place thoroughly mixed product within 5–6 minutes.

Placement: Trowel or screed Total Patch firmly into the prepared area, ensuring intimate contact with the bonding surface. Finish level with the surrounding concrete and allow to take an initial set. After the initial

set, when Total Patch is surface-hard, finish by hand troweling. Excessive troweling is not required.

Finishing/Curing: Finish the repair to the desired texture to best match the surrounding concrete. Do not add water to the surface during finishing. Lightly spray SpecChem SpecFilm as a finishing aid on this and any other polymer-modified mortar. Total Patch is self-curing under most conditions.

TECHNICAL DATA INFORMATION

Test data based on 9.0 pints (4.5 qt / 4.3 L) of water.

Set Time at 70 °F (ASTM C266)

Initial set ..... 12 min

Final set..... 15 min

Age	Compressive (C109)	Bond (C882 mod.)	Flexural (C348)
1 hour	3,500 (24.1)	–	–
1 day	5,400 (37.2)	–	–
7 days	6,200 (42.7)	2,245 (15.5)	750 (5.2)
28 days	7,100 (49.0)	–	1,150 (7.9)

Values in psi (MPa).

Length change (C157), air cured..... –0.04%

Length change (C157), water cured..... +0.02%

COMPLIANCE/STANDARDS

- ASTM C928 (Rapid-Hardening Mortar)
- AASHTO T260

PACKAGING

50 lb (22.7 kg) bag

3,000 lb (1,361 kg) super sack

Coverage: approximately 20 sq ft at 1/4" (1.9 m² at 6 mm).

CLEANING

Tools and equipment may be cleaned with water before Total Patch hardens.

SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life. Store in a cool, dry area away from direct sunlight.

LIMITATIONS

Minimum thickness for horizontal repairs subject to heavy or severe traffic is 1/2" (13 mm). Do not retemper after initial mixing. Do not add other cements or additives. Total Patch is fast setting, so clean mixing equipment with water as soon as possible. Use only potable water for mixing.

Application range: 40–90 °F (4–32 °C). Consult SpecChem for special instructions on any application outside this range.

Adverse Weather Application: In adverse temperatures, follow ACI recommendations for hot/cold weather concreting. For optimum results, condition the bagged material overnight to 65–85 °F (18–29 °C).

Cold-weather applications should follow ACI 306. Conditioning the material to 65–85 °F (18–29 °C) before mixing, heating the repair area, using warm mixing water and tenting or insulating the patch after application will increase strength development. Do not use direct, unvented heat on the patch after installation. Do not allow repairs to freeze until the material has reached a minimum compressive strength of 1,000 psi (6.9 MPa).

Caution: Contains portland cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes and get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Safety Data Sheet (SDS), product labels and technical

literature. Please read this information prior to using the product.

WARRANTY

NOTICE – READ CAREFULLY

CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.

Revised 09/30/26