

**TECHNICAL DATA SHEET**

**DESCRIPTION**

Special Patch is a polymer-modified, cementitious, two-component concrete repair mortar for use in thin and thick section concrete patching and overlays. Special Patch is ideal for repairing interior warehouse slabs or exterior concrete pavements.

**USE**

For all horizontal concrete and general repairs (interior and exterior, above and below grade). Ideal for parking deck repairs, ramps and roadways, as well as interior warehouse floors subjected to heavy loads and abrasion.

**FEATURES**

- Excellent abrasion resistance to heavy loads and traffic
- Versatile, easy to trowel consistency for horizontal applications
- Does not form a vapor barrier for durable exterior repairs

**PROPERTIES**

Set Times (ASTM C266) @ 72°F (22°C)

Initial Set: 45 minutes

Final Set: 60 minutes

Flow: 125%

Compressive Strength (ASTM C-09)

1 day: 1500 psi (10.3 MPa)

3 days: 2500 psi (17.2 MPa)

7 days: 4000 psi (27.5 MPa)

28 days: 5000 psi (34.4 MPa)

Slant Shear (ASTM C882)

14 days: 1800 psi (12.4)

Height Change (ASTM C1090)

1 day: +0.01%

3 days: +0.01%

14 days: +0.01%

28 days: +0.01%

**Note:**

The data shown is typical for controlled laboratory conditions. Reasonable variation from these results can be expected due to interlaboratory precision and bias. When testing the field mixed material, other factors such as variations in mixing, water content, temperature and curing conditions should be considered.

**Estimating Guide**

Yield per unit: 0.41 cu. ft. (0.011 cu. m) Coverage: 20 sq. ft. (1.9 sq. m) at ¼ in. (.6 cm) thickness /50 lbs. (22.7 kg) kit

**Packaging**

PRODUCT CODE	PACKAGE	SIZE	
		lbs	kg
139952	Bag and Jug	50	22.67
139951	Pail and Jug	50	22.67

**STORAGE**

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

**Surface Preparation:**

Proper surface preparation is critical. Surfaces must be sound, clean, roughened and absorptive. All loose concrete must be removed until a firm concrete substrate is exposed. For best results, follow the ICRI standards for concrete surface preparation, removing all residue, grease, dirt, oil, etc. from the surfaces to be in contact with the repair material. Remove all previous coatings such as cures, cure and sealers or coatings. Surfaces should be roughened by sandblasting, shotblasting or other mechanical methods. The surface should be cleaned with high pressure water >1500 psi (10.3 MPa) before proceeding. Special Patch will not bond to a dirty or slick, smooth surface. All cracks within the substrate should be properly repaired prior to installation. Cracks that exhibit movement will reflect through the Special Patch. Joints within the concrete should be carried through the Special Patch application to avoid cracking and shear back. The edges of the patches should be saw-cut perpendicular to the surface to a minimum depth of 1/2 in. (13 mm) to avoid feather edging the repair material. All surfaces to be repaired should be in a saturated-surface-dry (SSD) condition with no standing water on the surface.

**Mixing**

Add approximately 7 pints (3.29 L) of Special Patch Liquid into mixing container. Slowly Add Special Patch powder while mixing with a low-speed drill and paddle or suitable mortar mixer. Mix for 2 to 3 minutes to a smooth consistency. Do not mix more than 3 minutes. Add the remaining Special Patch liquid if a more flowable, self-leveling consistency is desired

**TECHNICAL DATA SHEET****Placement:**

Using freshly mixed Special Patch, scrub a thin layer in to the SSD substrate with a stiff fiber brush and place the Special Patch before the scrub coat dries. Trowel the Special Patch into the surface to a minimum thickness of 1/8 in. (0.3 cm) and a maximum of 2 in. (5.1 cm). For applications over 2 in (5.1 cm), Special Patch should be extended 60% by weight with clean, SSD, 3/8 in. (1 cm) pea gravel. Material should be placed within a 20 minute period.

**CURING**

Water cure the treated area for a minimum of one hour or apply an ASTM C-309 Dayton Superior water-based curing membrane.

**CLEAN UP**

Use water when material is wet. Hardened material requires abrasive methods.

**LIMITATIONS****FOR PROFESSIONAL USE ONLY**

When using less than one bag or pail always dry mix the powder and liquid separately prior to each blending together.

DO NOT place at unprotected temperatures below 40°F(5°C) or if the temperature is expected to drop below 40°F(5°C) in the next twenty-four hour period.

Ideal installation temperatures are from 50°F (10°C) to 80°F (27°C).

Cooler temperatures will slow set-time and strength gain.

Hot temperatures will accelerate set time.

In hot weather, follow ACI Committee 305 recommended procedures.

Do not apply over a smooth hard toweled surfaces without first roughening the surface.

DO NOT featheredge.

Minimum thickness for patching is 1/8 in. (0.3 cm).

Do not re-temper the mixed material or use admixtures.

Mixing equipment should be cleaned with water frequently and prior to material hardening.

**PRECAUTIONS****READ SDS PRIOR TO USING PRODUCT**

- Product contains Crystalline Silica and Portland Cement – Avoid breathing dust – Silica may cause serious lung problems
- Use with adequate ventilation

- Wear protective clothing, gloves and eye protection (goggles, safety glasses and/or face shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed.
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements

**MANUFACTURER**

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**WARRANTY**

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

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