

**SINGLE COMPONENT
INTERIOR OR EXTERIOR
PRE-CAST REPAIR MORTAR**

CAST-PATCH

**HIGH STRENGTH
FAST SETTING TIME
HORIZONTAL, VERTICAL AND
OVERHEAD REPAIR**

PRODUCT DESCRIPTION

CAST-PATCH is a one-component concrete repair material specifically designed to repair pre-cast concrete products. **CAST-PATCH** because of its unique design is suitable for a wide range of other applications. It is Portland Cement based with graded silica and proprietary modifiers to enhance strength and durability.

PRODUCT APPLICATION

CAST-PATCH is fast setting trowel grade mortar, allowing it to be shaped by shaving or sanding. It can be used for vertical, overhead and horizontal repairs. Specifically suited for repairs to precast concrete, concrete pipe, curbs, gutters and formed concrete. **CAST-PATCH** is good for interior and exterior applications, including above and below grade.

PRODUCT FEATURES

- Single Component
- May be shaved to shape
- Color is light gray
- Use down to 40° interior or exterior use, above or below grade
- High early strength
- Excellent bond characteristics
- High compressive and flexural strengths
- May be stained or used with Integral Color

PRODUCT TEST RESULTS (Typical)

WORKING TIME: 10-15 Minutes

SET TIME (ASTM C-266):

Initial: 20-30 Minutes Final: 45 Minutes

LENGTH CHANGES (ASTM C-157) Modified per ASTM 928
at 28 days Air Cure: -0.128% Water Cure: 0.064%

Compressive Strength (ASTM C-109, Air Cured)

3 Hours	1 Day	7 Days	28 Days
1700 psi	2750 psi	5550 psi	6400 psi

Flexural Strength (ASTM C-348, Air Cured)

1 Day	7 Days	28 Days
180 psi	480 psi	575 psi

Slant Shear Based (ASTM C-882) Modified per ASTM 928

1 Day	7 Days	28 Days
700 psi	890 psi	1030 psi

SCALING RESISTANCE (ASTM C-672)

25 Cycles 0% Loss

PACKAGING & COVERAGE

CAST-PATCH is packaged in 50 lb. bags with moisture resistant lining. 60 bags per pallet One 50 lb bag of **CAST-PATCH** yields .50 ct. ft. and will cover 50 sq. ft. at 1/8" thickness.

SURFACE PREPARATION

All concrete surfaces must be clean and structurally sound; free of oil, grease, dust, sealers, coatings, release agents, deteriorated concrete, curing compounds, etc. Remove all contaminants mechanically by chipping, shotblasting, grinding or bushhammering. Remove dust by vacuum or blowing with compressed air. All bonding surfaces must be clean and sound, mechanically abraded to 1/8" surface profile and in a saturated, surface dry condition for application of **CAST-PATCH**.

MIXING

CAST-PATCH may be mixed with a heavy duty high speed drill and paddle mixer or in a paddle type mortar mixer for higher volume. Place water in mixing container and add powder slowly while mixing. Mix thoroughly for approx. 2 minutes. Use 4 quarts and 22 ounces of water per 50 lb. bag. **DO NOT MIX** more material than can be placed in 15 minutes. Use cold water to extend working time, if needed. Do not re-temper. **CAST-PATCH** can be pumped. **CAST-PATCH** may be used with **ACRYLIC-BOND** neat or mixed 1 to 1 with water per 50 pounds of powder to increase durability, abrasion resistance and bond strength. The addition of **ACRYLIC-BOND** is recommended when using **CAST-PATCH** in thin, horizontal applications subjected to heavy traffic or wear.

APPLICATION

To ensure proper bonding use a slurry coat of **CAST-PATCH** or use **P-100 PRIMER**. For surfaces with low porosity, mechanical abrasion can be avoided by utilizing **EP-200 EPOXY PRIMER** per installation instructions on the **EP-200 EPOXY PRIMER** literature. For a slurry coat, scrub a thin mixture of **CAST-PATCH** and water into the substrate, making sure to work it into the pores. The repair must be made before the scrub coat of **CAST-PATCH** dries out. **P-100 PRIMER** will provide a stronger more consistent bond.

CONTAINS PORTLAND CEMENT. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush with plenty of water for at least 15 minutes. Consult a physician immediately. Keep out of the reach of children.

CONTAINS SILICA SAND AND FREE SILICA. Do not breathe dust. Avoid inhalation by wearing respirator. Continuous exposure and inhalation may cause silicosis and crystalline silica is classified as a known human carcinogen.

LIMITED WARRANTY

Lyons Manufacturing, Inc. warrants the high quality of its products. However, because of many factors beyond our control in their use, such as job conditions, workmanship, etc., the liability of all parties making and selling this product is expressly limited to the refund of the purchase price or replacement of the Lyons material used. Lyons Manufacturing, Inc. will replace any product proven to have a manufacturing defect, FOB Factory, provided Lyons Manufacturing, Inc. is notified of such defect within one (1) year from the date of shipment from the factory. This warranty is in lieu of all other warranties, express or implied. Lyons Manufacturing, Inc. makes no warranty of suitability of its products for any particular application and sells its products upon the condition that customer shall conduct their own test to determine the suitability of the products for their purposes. Under no circumstances will Lyons Manufacturing, Inc. be liable for economic, special, incidental or consequential damages or losses of any kind.

Apply a smooth, even coat of undiluted **P-100 PRIMER** and let it dry before placing **CAST-PATCH**, **P-100 PRIMER** dries in about an a ½ hour at 70° F, slower in colder temperatures. See PRECAUTIONS for limits on temperature at installation. **P-100 PRIMER** will re-emulsify when wet **CAST-PATCH** comes in contact with it. Placement of any material should be full depth and continuous to avoid cold joints. For final finish, **CAST-PATCH** can be sanded, ground or polished.

PAINT, COATINGS, & COVERINGS

Always follow the directions and restrictions of any paint, coating or covering manufacturers. Pay special attention to moisture content, pH levels and perform required tests. Test areas should be used in all cases to be sure the product is suitable for the specific application at hand including any paint, coating or covering to insure compatibility.

CURING

After finishing, follow proper concrete curing procedures. In adverse weather conditions, follow ACI recommended procedures for hot/cold weather. Wet cure after material is hard for 24 hours or apply a high solids water based curing compound.

USE OF AGGREGATE

Addition of pea gravel may be used for depths over 2" at a ratio not to exceed 30 lbs of pea gravel plus 50 lb bag of **CAST-PATCH**. Do not use limestone aggregate.

PRECAUTIONS

Do not featheredge **CAST-PATCH** as a wearing surface. Do not use below 40°F. Air temperature should not drop below 40°F for the first 2 days of cure. Do not allow material to freeze for 24 hours after application. Always make a trial installation under actual job conditions to be sure you get the desired results before using on larger areas.

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