

**SINGLE COMPONENT
INTERIOR/EXTERIOR
PRE-CAST REPAIR MORTAR
FEATHEREDGE UP TO 2"**



**ENHANCED FORMULA WITH
CORROSION INHIBITORS
FAST SETTING TIME
HORIZONTAL, VERTICAL AND
OVERHEAD REPAIR**

CAST-PATCH

PRODUCT DESCRIPTION

CAST-PATCH is a single 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 APPLICATIONS

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 grey
- Above or Below Grade
- Interior or Exterior Uses
- Use in temperatures down to 40°F
- High Early Strength
- Excellent Bond Characteristics
- May be stained or used with Integral Colors

PACKAGING

CAST-PATCH is packaged in 50 lbs. bags with a moisture resistant lining.

COVERAGE

A bag of **CAST-PATCH** yields .50 cu.ft. and will cover 50 sq. ft. at 1/8" thickness

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 PSI (ASTM C-109, Air Cured)

<u>3 Hours</u>	<u>1 Day</u>	<u>7 Days</u>	<u>28 Days</u>
1700 psi	2750 psi	5550 psi	6400 psi

FLEXURAL STRENGTH PSI (ASTM C-348, Air-Cured)

<u>1 Day</u>	<u>7 Days</u>	<u>28 Days</u>
180 psi	480 psi	580 psi

SLANT SHEAR BASED (ASTM C-882)

Modified per ASTM 928

<u>1 Day</u>	<u>7 Days</u>	<u>28 Days</u>
700 psi	890 psi	1030 psi

SCALING RESISTANCE (ASTM C-672)

25 cycles 0% Loss

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 INSTRUCTIONS

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-1000 EPOXY PRIMER** per installation instructions on the **EP-1000 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.

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.

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.

PAINT, COAT & 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.

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 per one 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 during initial 48 hours of cure.
- DO NOT allow material to freeze for 24 hours after installation.
- Recommended mock up installation under actual jobsite conditions to ensure desired results prior to use on larger areas.
- Contains Portland Cement : Avoid contact with eyes and 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 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. Crystalline silica is classified as a know human carcinogen.

LIMITED WARRANTY

Lyons Manufacturing, Inc. warrants the high quality of its products. However, due to many factors beyond our control during use, such as job conditions, workmanship, etc., the liability of all parties making and selling this product is expressly limited to the refund of purchase price or replacement of the Lyons Manufacturing materials used. Lyons Manufacturing, Inc. will replace any product proven to have a manufacturing defect, FOB Factory, provided Lyons Manufacturing is notified of such defect within one (1) year from the date of shipment. This warranty is lieu of all other warranties, expressed 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 tests to determine the suitability of the product for their specific purposes. Under no circumstances will Lyons Manufacturing, Inc. be liable for economic, special, incidental or consequential damages or losses of any kind.

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