



CIVIL ENGINEERING

EM 5-2 GEL

EPOXY MORTAR - TROWEL GRADE

PILGRIM **EM 5-2 GEL** is a 100% solid, two-component high strength gelled epoxy adhesive. Non-sag consistency for overhead patching, gap-filling, joining irregular shaped materials; and as a binder in epoxy mortars. Moisture insensitive: May be used on dry, damp or wet surfaces.

USES: Concrete construction
Bridges
Culverts
New to old concrete

Crack repair
Tanks
Adhesive for: wood, steel, fiberglas
Grout bolts and dowels

Florida DOT TYPE A,B,F1
Louisiana DOT TYPE I,II,III C
ASTM C-881, Georgia Type 111
Tennessee DOT List 8 & 22



TEST PROPERTIES:

Consistency, sag, in., ASTM C 881	0.0
Deflection Temperature, °F, ASTM D648	121
Gel Time, min., 77°F, ASTM C881	30
Water Absorption, %, ASTM D570	0.2
Compressive Strength, psi, 24 hr., ASTM D695	6700
Compressive Strength, psi, 7 day., ASTM D695	11,400
Bond Strength, psi, GDT-58	683
Slant Shear, psi, ASTM C882	6365

POT LIFE: 20-35 minutes at 72° F.

CAUTION: Pot life is dependent upon material temperature and quantity mixed. The greater the mass the shorter the pot life. Mix only that quantity that can be applied within its pot life.

COVERAGE: 1 gallon neat - 231 cu. in. (see chart over)
1 gallon mixed A & B with 2 gallons aggregate
yields approx. 462 cu. in. of grout.

PACKAGING: 2-gallon, 10 gallon, and 300 and 600 milliliter cartridges. Refer to data sheet on EM 5-2 GEL Cartridge System for complete information.

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EM 5-2 GEL COVERAGES

Thickness (1000 mils = 1in.)	Coverage / gallon No aggregate
1/4" = 250 mils	6.4 sq. ft.
3/16" = 187.50	8.5 sq. ft.
1/8" = 125 mils	12.8 sq. ft.
100 mils	16.0 sq. ft.

Yield : Lineal feet per gallon
Joint height & width in inches

	1/4	1/2	3/4	1
1/4	308			
1/2	154	77		
3/4	102	51	34	
1	77	38	25	19

LIMITATIONS: Do not thin **EM 5-2 GEL**. Solvent will prevent proper cure.

MIXING: Combine A component with B component at the ratio of 1 to 1 by volume. Mix for approximately 3 minutes with a Jiffy mixer (or equivalent) on a low speed (400-600 rpm) drill until uniform color and consistency is obtained. PILGRIM EM 5-2 GEL is designed for application both neat and as a mortar. Proportion of aggregate to mixed epoxy varies with proposed end use - do not exceed 3 parts aggregate to 1 part mixed EM 5-2 GEL.

CAUTION —Aggregate must be oven dried to avoid encapsulation of moisture.

VISCOSITY: Thixotropic gel

COLOR: Gray (mixed)

MIX RATIO: 1 : 1 (A:B) by volume

PREPARATION: Clean substrate, remove laitance, curing compounds, other coatings, oil, grease, rust, waxes, and other bond-inhibiting substances. All surfaces must be clean sound, and free of surface water. Clean by mechanical abrasion methods such as sandblasting. Concrete may be damp or dry.

LIMITATIONS: Pilgrim EM 5-2 GEL produces a vapor barrier. Do not apply to surfaces where transmitted vapor can condense and freeze under adhesive. Minimum application temperature 40°F.

CLEAN-UP: Clean tools and equipment with Pilgrim #5 Cleaner to remove uncured material.

STORAGE: Store inside in tightly closed containers at moderate temperatures; avoid overheating and freezing. Opened containers should be sealed as soon as possible to prevent moisture contamination. Shelf life is two years in original packaging.

HANDLING PRECAUTIONS:

For Industrial Use Only! Warning! May produce skin irritation and on prolonged contact may cause serious skin dermatitis. Skin contact should be avoided by use of protective clothing such as rubber gloves and eye protection. Any skin coming in contact with resin should be washed thoroughly with soap and water. Eye contact should be avoided; should it occur, flush thoroughly with water for at least 15 minutes.

WEAR PROTECTIVE CLOTHING, GOGGLES, GLOVES, AND/OR BARRIER CREAMS.

Consult Material Safety Data Sheets.

PILGRIM WARRANTS ITS PRODUCTS TO BE FREE OF MANUFACTURING DEFECTS AND THAT THEY WILL MEET PILGRIM'S CURRENT PUBLISHED PHYSICAL PROPERTIES WHEN APPLIED WITH PILGRIM'S DIRECTIONS AND TESTED IN ACCORDANCE WITH ASTM AND PILGRIM STANDARDS. THERE ARE NO OTHER WARRANTIES BY PILGRIM OF ANY NATURE WHATSOEVER, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH THIS PRODUCT. PILGRIM SHALL NOT BE LIABLE FOR DAMAGES OF ANY SORT, INCLUDING REMOTE OR CONSEQUENTIAL DAMAGES, RESULTING FROM ANY CLAIMED BREACH OF ANY WARRANTY, WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR FROM ANY OTHER CAUSE WHATSOEVER.