# Perdure EMK

epoxy mortar patch kit



#### DESCRIPTION

Perdure EMK, epoxy mortar patch kit is a fast curing chemical resistant troweled mortar system consisting of 100% solids epoxy resin and blended aggregates which provide heavy-duty protection at 3/16" to 1/4" thickness. The optional aluminum oxide granules may be broadcasted and back rolled into the wet mortar to produce dense, skid-inhibiting finish. Perdure EMK may be used to repair damaged concrete, epoxy resin mortar floors or in some cases as a finished floor system.

## SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared as outlined in Duraamen's Technical Bulletin #1. Specific attention should be paid to the following.

- Concrete Placement
- Curing & Finishing Techniques of the concrete substrate
- Age of concrete
- Previous contamination of the substrate
- Present condition of the substrate
- Moisture vapor emission rate from concrete

The temperature and humidity conditions of the area to receive the flooring system should be checked. An optimum room temperature of 70°F with a minimum slab temperature of 50°F is required for proper cure of the resin flooring system.

## COMPOSITION

Perdure EMK is compressed of 100% solids epoxy resin filled with a variety of graded quartz and silica fillers that are proportioned to create the best design mix for ideal performance.

## **MATERIAL QUANTITIES**

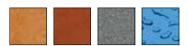
- 1. Guideline System Quantities for 1000ft<sup>2</sup> = 100 to 111 kits @ 1/4"thick OR 72 83 kits at 3/16"
- 2. Kit Quantity and Coverage
  - a. 1.5-quart unit Perdure NE25, fast cure epoxy resin binder (pigmented)
  - b. 25lb blended aggregates
  - c. Optional 1-quart Aluminum oxide (brown, 20 mesh)

Estimated Kit Coverage: 9–10ft<sup>2</sup>at 1/4", 12–14ft<sup>2</sup> at 3/16" (uneven, irregular substrate will reduce coverage rate)

#### INSTALLATION

- 1. Mixing Perdure EMK kit contents
  - a. Stir each component prior to mixing. Mix ratio of epoxy binder is two (2) parts by volume of Part A (resin) with one (1) part by volume of Part B (Hardener).
  - b. Pour Part B hardener (filled pint can) into Part A resin (partially filled gallon can). Mix for three minutes with a low speed electric drill and helical mixer. DO NOT MIX by HAND WITH STIR STICK. Pour mixed resin into empty 5-gallon pail, scraping sides of can and draining all mixed resin.
  - c. Slowly add Blended Aggregate to the premixed Perdure NE25 while mixing with a heavy duty drill and large helical mixer or paddle. Mechanical mortar mixer is recommended for large projects.
  - d. Continue mixing resin/aggregate mortar for 3 to 4 minutes or until aggregate is uniformly wet. Working time of material will be approximately 10–15 minutes depending on temperature of material and substrate.
- 2. Application
  - a. Please mortar mixture on clean, dry dust free and properly prepared surface and spread with flat trowel or screed to a thickness of 3/16" to 1/4" or as required for the project. Mortar may be applied up to 1/2" thickness without adding additional large aggregate such as dry, dust free pea gravel. Empty all contents of the pail after mixing, do not allow mixed mortar to sit in pail or working time will be greatly reduced.
  - b. Finish trowel with a flat steel trowel (recommended 3" X 12"). Use sufficient pressure to compact the surface of the topping.
  - c. Optional aluminum oxide granules for increased non-skid texture. If using aluminum oxide, immediately sprinkle granules carefully into the wet mortar at the desired coverage rate. Back roll surface with a 1/4"nap paint roller (lint free) or use light troweling to gently imbed and wet out the granules

Allow the troweled mortar to cure a minimum 10-12 hours (at 75°F) for light foot traffic, 18–24 hours for light vehicle traffic. Full chemical cure and maximum resistance are achieved in five (5) days. Cooler material and substrate temperatures will lengthen the required cure times. Test small area to confirm hardness before exposing to traffic



düraamen engineered products, inc.

## TECHNICAL DATA

Compressive Strength (ASTM D-695)	13,000psi
Ultimate Tensile Strength (ASTM D-638)	4,200psi
Tensile Elongation (ASTM D-638)	6–8%
Flexural Strength (ASTM D-790)	7,800psi
Flexural Modulus (ASTM D-790)	2.5 X 105
Hardness (ASTM D-2240)	65–85 Shore D

# **CLEAN UP**

Clean skin with soap and water. Tools and equipment should be cleaned with Xylene or Lacquer thinner. Consult MSDS for safety and health precautions.

# AVAILABILITY

Perdure EMK is available throughout the United States and Canada. Contact Düraamen representative in your area for details.

# MAINTENANCE

After completing the application of Perdure EMK, the installer should provide the owner with maintenance instructions. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

Perdure EMK is easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional. Long periods of heavy traffic may cause wear patterns necessitating application of a finish coat.

# **TECHNICAL SERVICE**

Düraamen Engineered Products, Inc. provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces.

## WARRANTY

Information regarding Duraamen products is based upon extensive research provided by the supplier of the raw materials. By making such information available, Duraamen Engineered Products Inc. does not assume any liability beyond express terms of our standard limited material warranty. Duraamen Engineered Products does not warrant the accuracy or completeness of any such information, whether conveyed orally or in writing, but to the best of our knowledge believe it to be accurate. We reserve the right at any time and without notice to update or improve our products and process for the intended use or application. Duraamen Engineered Products (Duraamen) warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed and applied in accordance with recommendations of Duraamen. If any product fails to meet this warranty, the liability of Duraamen may in its discretion refund the price received by Duraamen in lieu of replacing the material. No customer, distributor, or representative of Duraamen is authorized to change or modify the published specifications of this warranty in anyway. In order to obtain replacement eXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THER ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR PURPOSE. DURAAMEN'S OBLIGATIONS SCOST EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

