



4033 PenMend Aliphatic

Description: Rapid Concrete Repair – Rapid Restore Cracks & Spalls

4033 PenMend is a completely Aliphatic, rapid set, high strength medium to low viscosity concrete rapid repair polyurea polymer.

The PenMend 4033 is Low Odor and designed for use as a rapid repair product for concrete when the repair is going to be quickly coated over with PolyUrea/Aspartic or Epoxy coatings and the coating/repair will be exposed to direct sunlight. The PenMend 4033 is a “Non-Shadowing” product in that it will not exude under a top coat when the area is exposed to sunlight. Sunlight can drive out solvent in other products and produce a shadow below the top coat.

Unique Characteristics:

4033 is low in viscosity allowing the product to bond well into the concrete when making repairs.

4033 sets very quickly allowing use of the repair area in a short time.

Another unique characteristic is **“Very Low Odor”** allowing this product to be used in sensitive areas where odor could be a problem. PenMend 4033 has no VOC’s.

Cold Temperatures

The product is unique in that it can repair cracks and spalls of most any size at cool temperatures.

Advantages

- DOES NOT SHADOW THROUGH TOP COATS
- LOW ODOR
- RAPID FLOOR REPAIRS
- COOL CONDITION USE
- SATISFIES OSHA FLOOR FACILITY SAFETY AND SURFACE CONDITIONS
- MEETS USDA REQUIREMENTS
- FUEL RESISTANT
- QUICK BACK-IN-SERVICE TIME
- HIGH STRENGTH & FAST SET

Use Areas

~ALL CONCRETE SPALL AND CRACK REPAIR WARM OR COOL CONDITIONS

General Physical Characteristics

Solids	100%
Gel Time	
Cartridge version –	2 to 4 minutes
Hand Mix version -	>7 min. @ 75F
Shelf Life	1 year
Hardness ASTM D2240	Shore D 72
Mix Ratio	1:1
Tensile ASTM D412	4300
Bond Strength ASTM 882-99	2000 psi
Tear Strength ASTM 624-C	>200 psi
Elongation ASTM D124	6-8%
Processing Temperature	70°F
Usage Temperature Range	10°F - 90°F
Viscosity @ 25°C mixed	130-140 cps
VOC Content g/l	n/a

*Product may be modified for extreme cold use.

Packaging

Fast Version - 21 ounce duplex cartridge kits, 10/case
Slow Version - 2 gallon kits, 10 gallon kits

Preparation:

Concrete must have a minimum 28 day cure prior to application. **Concrete Must Be Dry. Clean the concrete repair area surface and remove all unsound concrete, dust and debris. Prepare surface using a dry diamond blade or a twisted wire wheel for spalls. Cut perimeter of damage with dry diamond blade to form a key-way. Chase and open cracks to provide some depth to the crack to allow for quick traveling of the product deep into the crack. Remove all dust.

Application Bulk:

Mix 4033 at a 1:1 ratio. Use a jiffy mixer or other multi blade mechanical mixer only. No paddle mixers. Mix part A and B mechanically at high speed for approximately 30 seconds. Use mixed product as a primer for the bottom of the repair.



Limitations:

Do not use on wet surfaces or expose part A to moisture. This product is moisture sensitive and should not be applied to wet surfaces. Moisture in the filler sand should be avoided as well as damp conditions in the repair area, moisture can induce swelling. This product is not intended as a joint filler. If used as a joint filler thermal cycles may cause a crack along the sides of the joint. Reflective cracking may occur if such a product repair/fill is coated over showing a crack through a top coat. Product may bond damaged slabs together and may stop movement. Not intended for use where substrate movement is required. Store the duplex cartridge cases out of direct sunlight in a cool location, protect from heat and high environmental temperatures. The product will be considerably faster in warm or hot conditions and slower in cold conditions. Do not use product that is hot. This product is for use by professional applicators only. Wear Protective Clothing and gloves as the product bonds very well to fabrics. Read MSDS before using this product. DOT/Flash Point – Non-flammable Liquid Classification, not regulated. Warranty: See ASTC Polymers, Inc. Warranty data sheet. (2-13) Product data sheets subject to change without notice. © 2010 ASTC Polymers, Inc .