Ply-Krete® Elastomeric Concrete Installation Instructions

1) Product Description

Ply-Krete® is a waterproof, low-viscosity, fast-setting, elastomeric concrete material. This material is user-friendly with minimal downtime making it one of the most convenient nosings available for bridge joints. Because the **Ply-Krete**® is poured-in-place, it may conform to almost any block out. The physical properties of this system reduces the need for expensive and cumbersome steel angles even on high volume, high-speed interstate bridges. **Ply-Krete**® is ideal for new and rehab construction projects. **Ply-Krete**® is designed as a protective nosing material at expansion joint edges in concrete decks and asphalt overlaid decks in abusive environments. It is also designed as a permanent concrete patching material for bridge decks and roadways.

2) Components and Delivery

The components are delivered in units (kits) and packaged as follows:

- The **Ply-Krete**® kit yields 0.52 cu. ft/kit. Each kit consist of 1 can part A, 1 can part B, and 1 bag of blended Aggregate*
- The **Ply-Krete**® cans may be packed in boxes, 3-A and 3-B per case. Aggregate bags may be packed on separate skids
- The **Ply-Primer** is a 1.5 gallon unit; 1 can part A and 1 can part B; yield is approximately 50-75 sq. ft. /gal

Damaged or previously opened containers shall not be used. Bags of aggregate that have become wet at any time shall not be used. Material must be stored in a dry area between 60–95°F. Keep liquid components from freezing.

3) Installation: Ply-Krete®

A. Please contact the Technical Representative at least one week prior to installation to review proper methods and to determine what tools and equipment are required. On larger projects it may be helpful to incorporate specific equipment, as some equipment may require more lead time.

B. Prepare block out area per plans and specifications.

C. Substrate must be clean, dry to touch (<5% moisture), sound, and free of incompatible substrates such as unapproved patching materials, delaminated concrete, salt, oil, or chemical saturation, degraded steel, etc. If the substrate is suspicious, the onsite rep &/ or manufacture shall be notified for recommendations prior to placement.

D. The bottom interface of the **Ply-Krete**® must be placed on a structural member. Any deviations from any of these instructions require manufacturer's approval and recommendations.

E. New concrete should be a minimum of 85% cured (10-14 days for 28 day concrete) prior to application.

F. Sandblast all surfaces against which the **Ply-Krete**® is to be placed. Metalized steel may require only a 'brush-blast' to insure a clean surface. All non-Metalized steel shall be blasted to SSPC-10 (near-white finish). Remove all sand and debris with oil-free compressed air.

G. Be sure the temporary form for the joint opening is set per plans and specifications and ensure a tight fit to prevent elastomeric concrete from leaking under the form. Do not use any form release agents!

H. Prepare the **Ply-Primer** according to directions. Apply with protective gloved hand or brush. The coated area need only be thick enough to not see through. Avoid puddling if possible.

I. Prime all surfaces that are to be in contact with the **Ply-Krete**® elastomeric concrete. Place mixed **Ply-Krete**® immediately after priming, no waiting time is needed.

J. Mix **Ply-Krete**® according to proper ratio. Mix parts A and B together first (approximately ½ - 1 min.) with low speed drill (300-500 rpm's) then add the supplied aggregate and mix thoroughly until uniformly saturated (approximately 1 ½ minutes).

K. Place the mixed elastomeric concrete into the prepared area per plans and specifications. Make sure that it is thoroughly compacted under any steel angles, around any anchors, and within the block out. Trowel flush. Working time of mixed material varies, depending on mass and temperatures.

L. Average placement time of the **Ply-Krete**® material is about 3-5 minutes/kit from beginning of mixing.

M. After cure, remove temporary forms and grind a ¼" bevel at any joint edges.

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Notes:

A. If a faster cure is required, or in very cold applications, please contact your supplier for recommendations
B. Installations should be a minimum of 3° above due point
C. Minimum ambient temperature during installation is 45°F (and rising)
D. The warmer the product the faster the cure time; the opposite is also true
E. Keep unmixed, uncured product from freezing

4) Traffic Ready Time

In placed Ply-Krete® is an ambient cure system and therefore temperature and mass dependent. Preheating or post-heating is not necessary. The following open to traffic time may be used as a guide for the unheated system at the listed ambient temperatures. Please contact us for site-specific recommendations.

95-80°F : 1 - 2 ½ Hours
80-65°F : 2 - 3 ½ Hours
65-45°F : 3 - 4 ½ Hours

Some suggested supplies to have on-site during installation:
Duct tape, ½" heavy-duty low-speed drill w/Mixing paddle, empty mixing pails, flat head screwdriver, utility knife, power cords, 3-way power cord, plastic and/or roofing felt, margin trowels, protective gloves, rags, knee pads, and clean-up solvent of choice. Please keep solvents away from in-place, uncured resins.

Ply-Krete® H-Drill
Suggested Mixing Paddles:
Jiffy or Helical Style

This "Paint" mixing paddle draws in excessive air into mixed A and B components. This unit is not recommended for urethanes.

Helical mixers on low speed reduce air entrapment.