# **VO-500**

Acrylic polymer modified repair compound for vertical and overhead work

VO-500 is supplied in a pre-packaged unit containing an acrylic polymer liquid and a low density powder mix. This unique combination makes VO-500 highly suitable for vertical and overhead concrete and masonry patching and repair. VO-500 has better adhesion, is more waterproof and freeze thaw resistant than standard mortars or stucco. VO-500 will repair concrete block, brick and masonry.

# **Surface Preparation**

Concrete substrate should be structurally sound. Any loose or unsound concrete should be hammered out. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance, or other surface contaminants. Any embedded steel should be cleaned of corrosion and exposed to at least 100% of the circumference. Once cleaned, the exposed metal should be coated with PERMABOND E-300 primer manufactured by Capital Industries, Inc., prior to the application of the VO-500 slurry coat.

#### Mixing

VO-500 is supplied in pre-packaged units. Mix one bag of VO-500 powder to one gallon of VO-500 liquid. Always add the powder to the liquid. A slow speed drill and mixing blade is preferable to hand mixing.

# Priming

All surfaces should be primed with slurry using a stiff mason's brush. The slurry consists of two parts by volume of powder into one part volume of liquid. When substrate temperatures are in excess of 90°F or where the substrate is highly absorbent dampen the area prior to application of the slurry.

# Application

While the slurry is still damp, apply the VO-500 by trowel. The maximum thickness of any one layer of VO-500 will depend on its consistency, location and the profile of the substrate to which it is applied. Typically a vertical layer is excess of three inches is easily achieved, while overhead applications may only sustain one and one half to two inches in any one unsupported application. If forms are to be used, depths in excess of these can be achieved in one application. For deep overhead repairs it is good practice to provide mechanical anchors, studs, etc. Small quantities of VO-500 may be added or held back to enhance troweling consistency.

# VO-500 (CONTINUED)

# **Physical Properties**

@ 17% Liquid	powder ratio, 75° F, 50% RH
Compressive Strength	ASTM C-109 6000 psi @ 28 day
Flexural Strength	ASTM C-348 1000 psi
Slant Shear Bond	AASHTO T-237 2000 psi

#### Curing

VO-500 applications are self-curing.

#### Priming

#### Small Unit

VO-500 liquid VO-500 powder One 1 gallon container One 45 lb. bag

#### Unit

VO-500 liquid	One 5 gallon container
VO-500 powder	Five 45 lb. bags

# Coverage

#### • Small unit yields .55 cubic feet

• Unit yields 2.75 cubic feet

# Cleaning

Clean tools and equipment with water immediately after use.

#### **Precautions**

Do not apply when air or surface temperature is below 45° F. Do not wet cure. Protect VO-500 installations from rainfall prior to final set.