



# ACRYLPAVE

## Acrylic Latex Additive for Cementitious Mortars

### 1. Product Description

a. **Basic Use:** Acrylpave is a water-based, VOC compliant latex designed to be added to portland cement based systems of all types to enhance hardened properties. Through internal reinforcement of the cementitious system, greater bond, flexural, and tensile strengths can be achieved. Acrylpave internally reinforces the cement matrix, thereby giving the system a two way strength mechanism. In addition, Acrylpave can dramatically improve freeze/thaw, scaling, and salt resistance and dampproofs against water ingress.

b. **Features/Benefits:**

- Easy to use as a direct addition to mortars, coatings or toppings.
- Increases flexural, tensile and bond strengths.
- Good for both interior and exterior use.
- Remains stable underwater indefinitely.
- Dramatically reduces the permeability of cementitious surfaces.
- Increases the flexibility of cement based systems.
- Mortar color is unaffected by Acrylpave.

c. **Typical Applications:** Cement/sand mortars, plaster coats, toppings, cement based coatings, repair mortars, bond coats. Acrylpave is also used in Metalcrete's packaged repair mortars including Thinpave, Thickpave and Vertipave. It is also excellent when used with Blockcoat cementitious masonry coating.

d. **Limitations:** Acrylpave should not be used at temperatures below 40°F (4°C). Keep material from freezing in storage. Do not use in ready-mix concrete. Use Metcobond for this application.

e. **Composition:** Acrylpave is a dispersion of acrylic based resins in a water-based carrier.

f. **Color/Appearance:** Acrylpave appears as a milky white liquid in the container. It has no significant effect on the color or appearance of materials to which it is added.

### 2. Packaging

Acrylpave is supplied in 1-gal. (3.8 liter) jugs (4 jugs per case), 5-gal. (18.9 liter) pails, and 55-gal. (208 liter) drums.

### 3. Estimating/Yield

Acrylpave usage will depend on desired latex loading for a particular system. Below are a few examples:

| Application  | Cement               | Sand                 | Peagravel       | Acrylpave               | Yield                        |
|--------------|----------------------|----------------------|-----------------|-------------------------|------------------------------|
| Bond Coat    | 94 lbs.<br>(42.6 Kg) | —                    | —               | 7 gals.<br>(26.5 liter) | 11.5 gal.<br>(43.5 liter)    |
| Mortar       | 94 lbs.<br>(42.6 Kg) | 300 lbs.<br>(136 Kg) | —               | 6 gals.<br>(22.7 liter) | 3 cu. ft.<br>(0.085 cu. m)   |
| Thin Topping | 94 lbs.<br>(42.6 Kg) | 230 lbs.<br>(104 Kg) | 250<br>(113 Kg) | 6 gals.<br>(22.7 liter) | 4.3 cu. ft.<br>(0.122 cu. m) |

Small adjustments in liquid content may be needed to achieve desired consistency. Acrylpave may be diluted 50/50 with water where lower latex contents are desired. Do not dilute with more than 3 parts water to 1 part Acrylpave. The higher the dilution, the lower flexural, bond, and tensile strengths will be.

### 4. Technical Data

a. **Applicable Standards:** ASTM C 1059, Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete (Type II, non re-emulsifiable).

b. **Compressive Strength:** ASTM C 109, 2 in. (50 mm) cubes.

Based on 1 to 3 by weight of cement to sand mortar.

| Age     | Strength           |
|---------|--------------------|
| 1 day   | 1,800 psi (12 MPa) |
| 3 days  | 2,900 psi (20 MPa) |
| 7 days  | 3,800 psi (26 MPa) |
| 28 days | 4,900 psi (34 MPa) |

c. **Flexural Strength:** ASTM C 78, 28 days; 1,200 psi (8.3 MPa).

d. **Bond Strength:** ASTM C 1042, 28 days; 1,400 psi (9.7 MPa).

e. **Solids Content:** 24%

## 5. Directions for Use

a. **Preparation:** Base concrete must be sound and clean. Chip, bushhammer, scabble, chisel, shotblast, or mill damaged surface down to sound concrete. Any oil soaked concrete must be removed. Blow off any loose dust, dirt, and debris. Provide a clean, textured surface free of paint, coatings, or curing compounds. Avoid application over extremely hard-troweled concrete.

b. **Mixing:** Bonding slurries, mortars and toppings may be mixed with a mechanical drill and Metco Jiffy mixing blade or paddle type mortar mixer. Toppings with peagravel can be mixed in drum type concrete mixers. Add Acrylpave (straight or diluted up to a 1 to 3 mixture, Acrylpave to water) to the mixer first, followed by aggregate, if any. Once thoroughly blended, add cement. Mix for 2 to 3 minutes. Adjust consistency by altering liquid content.

c. **Placing:** If not using a separate bonding slurry, brush in some of the mixed material into the surface. Place material with a screed or trowel and bring to proper level.

d. **Finishing:** As material sets, apply a float, broom, trowel or other desired finish. Timing is important to achieve best finish.

e. **Curing/Protection:** Mortars fortified with Acrylpave must be shielded from rapid moisture loss while hardening. Under hot, windy, or dry conditions, cover the area with wet rags or burlap while the patch is setting. Under normal interior conditions, these procedures are not necessary. Systems using Acrylpave will retain adequate moisture in most cases to give proper curing. But in rapid moisture loss environments, Seal N Kure or Metcure curing and sealing compound is recommended.

f. **Maintenance:** Acrylpave surfaces should be cleaned with a Waterzall Concentrate and water solution. Acrylpave enhanced mortars may be coated or sealed with standard concrete products.

## 6. Availability

Acrylpave is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

## 7. Warranty

Acrylpave is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

## 8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



***Metalcrete Industries*** 4133 Payne Avenue • Cleveland, Ohio 44103  
440-526-5600 • 800-526-5602 • FAX 440-526-5601