# **EM-CRYL 600 FORTIFIER**

Acrylic Latex Fortifier For Cement And Gypsum Mixes Interior or Exterior Use

## ADDITIVE BONDING AGENT

## MANUFACTURER:

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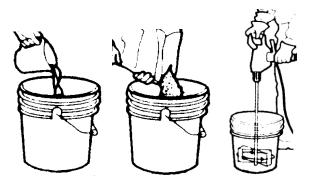
## **PRODUCT DESCRIPTION:**

*EM-CRYL* 600 is a non-reemulsifiable, architectural grade, modified acrylic latex admix for Portland cement and gypsum based mixes. *EM-CRYL* 600 has been formulated to enhance performance by improving the strength, flexibility, adhesion, water resistance and curing properties when added to mixes.

#### **USES**:

*EM-CRYL 600* is the gauging liquid for EMPIRE BLENDED FLOOR ALL and the bonding liquid for EMPIRE BLENDED SEAL MASONRY COATING when applied over dense or previously painted concrete or masonry. It is used in many other EMPIRE BLENDED products such as SURFACE BONDING CEMENT, FOUNDATION COAT and THIN SET, as well as in:

- Repointing mortars
- Bedding mortars for tile, brick, flagstone, etc.
- Pool, pipe and tank lining
- Stucco, thin set and terrazzo
- Thin overlays to patch, level, and resurface existing floors and walls



## ADVANTAGES:

*EM-CRYL 600*, when added to cement and gypsum based mixes:

- Increases bond strength and improves adhesion
- Improves strength, flexibility and hardness
- Improves flexural, tensile and shear bond strength
- Helps reduce shrinkage and improves crack resistance
- Increases water resistance and helps resist moisture penetration
- Increases chemical and abrasion resistance
- Enhances cure, eliminating the need for moist curing
- Improves workability of mix
- Increases weather resistance and frost proof qualities
- After curing, accepts modified cement based paints, latex paints and most water based mastics
- Will not reemulsify or soften even in underwater applications
- Is non-toxic, non-flammable and non-corrosive to steel and metal
- Is unaffected by numerous freeze-thaw cycles after curing
- Can be used inside or outside, on floors or walls, above or below grade
- Is non-staining
- Is unaffected by sunlight
- Is VOC compliant

## **INSTALLATION:**

#### **Surface Preparation:**

All surfaces to receive mixes modified with EM-CRYL 600 must be clean, structurally sound, and free of paint, oil, grease, wax, dirt, mildew, soil, release agents, efflorescence and other foreign matter. All spalled and scaled material must be removed. Very dense or smooth areas may require etching with muriatic acid or RAINBOW DRY ACID CRYSTALS dissolved to appropriate concentration to achieve a surface having the appearance of fine sandpaper. If an acid wash is used, it must be neutralized with copious amounts of water before application of EM-CRYL 600 modified mix. Surfaces to receive material may be damp but should be free of running or standing water.

#### <u>Mixing:</u>

Stir or shake EM-CRYL 600 before use. Thoroughly premix all dry ingredients first. If EM-CRYL 600 is to be used diluted, mix with water first, then with the dry material to ensure proper dispersion throughout the mix. In a clean mixer or container add the dry blended mix to the liquid and stir or blend slowly. When using a drill mixer, the drill should be of sufficient size to turn through the mix at low speed to eliminate overmixing and to avoid the entrapment of air in the mix. Mix for a short time (1-2 minutes) or just until all material is wet down, lump-free and to the desired consistency suitable for the application at hand. Mix thoroughly, but do not overmix, as this will entrap excessive air, reducing strength and adhesion.

#### Placement:

After mixing, promptly place EM-CRYL 600 modified material with a steel trowel. Do not over trowel. The trowel should be kept clean to avoid pulling. Very little pressure should be used when finishing. Lubricate trowel as needed with a 50/50 mix of EM-CRYL 600 and water to prevent wet drag. Clean trowel frequently. For larger areas. а metal straightedge may be used to screed the mix, using a short vibratory stroke while keeping a buildup of material ahead of the screed. Wash hands and equipment with water immediately after use.

#### Bond Coats:

In certain applications, it may be desirable to increase the already high bond strength of a mix modified with *EM-CRYL 600*. If the concrete or masonry to be covered is dense, a brush, spray or roll-on coat of undiluted *EM-CRYL 600* should be used. For rough or spalled areas, a slurry coat of *EM-CRYL 600*, undiluted, mixed with pure Portland cement to the consistency of a batter should be liberally brushed on the area to be covered. In either case, the bond coat should not be allowed to set before the finishing material is applied.

#### Curing:

*EM-CRYL 600* is self-curing under normal conditions; therefore, damp curing is not recommended. Do not use membrane curing compounds or blankets. In hot, dry, sunny or windy conditions a cover of damp burlap or plastic should be used to enhance strength. The surface should be ready for light use in 24-48 hours and heavy traffic in 96 hours. Allow to cure for 7 days in wet areas such as pools.

#### Coverage:

When used as a bonding agent at full strength, 1 gallon will cover approximately 250-300 square feet over dense concrete or masonry, or 150-200 square feet over concrete block or brick.

#### Packaging:

Quarts (12 per case), Gallons (4 per case), 5 Gallon Pails and 55 Gallon Drums

#### Color:

Milky white, clear when dry

EM-CRYL 600 SUGGESTED PROPORTIONS		
EMPIRE BLENDED FLOOR ALL SLURRY COATS FLOOR PATCHING & RESURFACING MAXIMUM BONDING	Use Undiluted	
EMPIRE BLENDED SURFACE BONDING CEMENT EMPIRE BLENDED FOUNDATION COAT TROWEL APPLIED OVERLAYS & TOPPINGS STUCCO & CEMENT PLASTER	Use 1 Part <i>EM-CRYL 600</i> to 2 Parts Water	
EMPIRE BLENDED SEAL MASONRY COATING EMPIRE BLENDED THIN SET EMPIRE BLENDED TILE GROUT EMPIRE BLENDED FLOOR GROUT POINTING MORTARS BRUSH APPLIED COATINGS	Use 1 Part <i>EM-CRYL 600</i> to 3 Parts Water	
The above are suggested starting formulas only under normal conditions. For more critical bonding increase the content of <i>EM-CRYL 600</i> in the mix. If in doubt, apply a test patch.		

## TECHNICAL DATA:

pH	
Water Soluble	
Density	8.7 lbs./gallon

Strength comparisons:

	3 to 1	3 to 1
Sar	nd Cement	Sand Cement
	Mortar	Mortar With
		EM-CRYL 600
Compressive	5775 psi	6400 psi
Flexural	800 psi	1000 psi
Tensile	360 psi	675 psi
Shear Bond	120 psi	440 psi
Impact	. 7 inch lbs	20 inch lbs

## LIMITATIONS:

*EM-CRYL 600* modified mixes should not be applied when temperature is below 45°F or will fall below 45°F within 48 hours. PROTECT FROM FREEZING. Do not use with air-entrained cement or additives.

## CAUTION:

Harmful if swallowed. If swallowed, induce vomiting and call physician immediately. May cause irritation to eves and skin. Avoid contact. In case of skin contact wash affected area with soap and water. In case of eye contact, flush with water for 15 minutes and get prompt medical attention. The use of impervious rubber gloves and goggles is recommended when handling. Use with adequate ventilation and avoid breathing vapors and spray mist. Can cause irritation of the nose, throat and lungs. Keep Out Of Reach Of Children.

## WARRANTY:

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either Empire Blended Products or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.