EXPO 43

Modified Portland Cement-Based Coating & Finish

*Expo 43* is a polymer-modified Portland cement based coating designed for use in thin-section decoration, texturing and weatherproofing applications. It provides aesthetically pleasing surfaces for building finishes, masonry coating and stucco. It may also be used for thin-section patching up to 1/4". EXPO 43 provides excellent adhesion, water resistance and exterior durability. It is available with or without an integral water repellent, depending on intended use as a base material for other coatings or sealers (no water repellent) or as a one step finish (water repellent optional). It is applied by roller, brush or spray.

**APPLICATIONS**

- Colored and Textured Finishes over masonry, concrete, patching compounds and stucco
- Masonry repair and resurfacing
- Weatherproofing sealer, filler and finish

**FEATURES**

**Convenience:** Mixes with water for application by brush, roller or wet-mix pneumatic spray equipment.

**Appearance:** Available in Standard Grey, Natural White and a wide range of custom colors. Color matching is also available. Available in Fine (std), Medium and Coarse textures.

**Compatibility:** EXPO 43’s vapor transmission (breathing) and thermal expansion properties provide compatible, stable, durable coatings. The product has been approved for use on Historic buildings.

**PROPERTIES**

**Composition:** Portland cement with acrylic modifier, select graded aggregates, fillers, pigments, water repellents (optional) and additives.

**Compatible Substrates:** Concrete, Stone, Masonry, Wood, GFRC, Polystyrene Foam
Applications:

1. Surface Preparation: Surface must be clean and free of grease, oil, dirt, crumbling or scaling concrete, coatings and other contaminants or conditions which may hinder adhesion. Pre-dampen surfaces with water to prevent rapid absorption of liquid from coating, which may result in loss of workability. Surfaces should be saturated and surface damp (but not glistening wet) at time of application. Smooth surfaces may require some roughening. Always apply an inconspicuous test patch under actual use conditions to determine aesthetic results and mechanical compatibility prior to large scale application.

2. Mixing and Application: Slowly add water to EXPO 43 powder, mixing at slow speed during addition. A 1/2 HP drill with mud mixing paddle operated at 250-450 rpm is recommended. Avoid mixing speeds and equipment which may tend to whip excessive amounts of air into the mix. Mix for 3 minutes minimum.

Initially, EXPO 43’s integral water repellents (optional) will resist wetting. Continue mixing until cement begins to absorb water, and wets out to a smooth paste. Approximately 1.5 to 1.9 gallons of water are added to each 50-pound pail of EXPO 43, and this level may be adjusted slightly to accommodate individual preferences.

For maximum color consistency, measure water and powder for each mix, and maintain consistent ratio from mix to mix. Mixes for thin patching will require less water. Simply adjust mixes to a smooth, trowelable plaster consistency.

Mix only as much material as you will apply in 20-40 minutes. Do not retemper materials which have partially set, by adding additional water.

EXPO 43 may be applied by brush, roller or wet-mix pneumatic spray equipment. Patching mixes may be applied by trowel. On large projects involving multiple “drops” or work segments, always finish each segment at an inconspicuous “break” such as an expansion joint, ledge or masonry mortar joint. Re-coat time on 2-coat applications is not critical. Do not use integral water repellent formula for first coat of 2-coat installations.

3. Cold Weather/Hot Weather Application: Cold Weather: Minimum temperature for optimum color control is 50°F (10°C). While good mechanical results are obtained at temperatures above 40°F (4°C), color development tends to be lighter at low temperatures. For optimum color control, temperature must be above minimum at time of application, and must be maintained until product has dried thoroughly. Drying time may vary from an hour or two (thin coat, warm and dry weather) to overnight (thick coats, cool and damp conditions). Store EXPO 43 in a heated area until just before use. Do not apply on frozen surfaces. Hot water rinsing of surfaces can help achieve minimum temperatures under marginal conditions. If auxiliary heating is used, do not direct hot exhaust gases at coating. Moderate temperatures and air flows work best, and heated air is preferable to burner exhausts, which are high in CO and CO2.

Hot Weather: Store materials in a cool place, out of direct sun. Dampen surfaces thoroughly with cold water prior to application to reduce suction and slow product drying. Do not thin excessively or retemper with additional water. To improve hot weather workability, shade work areas from direct sun. Lightly mist surfaces or drape dampened burlap to allow a minimum of 2 hours moisture after application.

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>RESULT</th>
<th>COMMENT</th>
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<tbody>
<tr>
<td>Adhesion</td>
<td>&gt;150 PSI</td>
<td>Exceeds ICRI 320.2R guideline (&gt;100 psi)</td>
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<tr>
<td>Weather Resistance</td>
<td>1500 hrs. ASTM G154</td>
<td>No yellowing, excess discoloration, loss of adhesion, chalking</td>
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<tr>
<td>Modulus of Elasticity</td>
<td>Approx. 150,000 psi</td>
<td>Low Modulus, allows stress relief and compatibility</td>
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<tr>
<td>Linear Coefficient of Thermal Expansion</td>
<td>Approx. 5x10^{-6} In/in/°F</td>
<td>Compatible with all stone, concrete, and masonry substrates</td>
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<tr>
<td>Application Temperatures</td>
<td>Min: 50°F Max: 95°F</td>
<td>Applicable under a wide range of conditions</td>
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Coverage: 150 sq.ft. per coat per 50 LB unit
Mix 1.75 gallons water per 50 LB unit
4. **Curing:** Under moderate conditions, **EXPO 43** requires no special curing regimen. In hot, dry, windy weather, misting of **EXPO 43** surfaces with clean water may be required to prevent too-rapid drying. In hot weather in general, and when working with deep colors in particular, it is best to schedule work for cooler early morning hours or when the surface is in the shade, as misting may affect color. In any case, no more than 2 hours moist-curing is required, and moist curing beyond 24 hours is not recommended. Otherwise, **EXPO 43** products require DRY curing. Do not apply when rain or freezing temperatures are expected within 24 hours of application. Full cure is reached in 28 days.

5. **Clean-Up:** Clean tools, sprayers and applicators with water immediately after use. Once dried, **EXPO 43** products adhere tenaciously to tools, equipment, clothing and skin. Keep clean during the course of work by repeated rinsing, if required.

6. **Subsequent Finishes and Treatments:** A popular use for **EXPO 43** products is as a base for other Edison Coatings treatments or finishes, such as **ELASTOWALL 351** waterproof elastomeric wall coatings or **SYSTEM 90-W** Catalytic Breathing Sealer. **Primer #342** may be used as a primer for **ELASTO-WALL 351** over **EXPO 43** applications. **SYSTEM 90-Series** sealers may be applied when **EXPO 43** has dried sufficiently to allow good sealer penetration.

7. **Storage and Handling:** **EXPO 43** products contain Portland Cement and silica sand. Cement may cause burns to eyes or skin. Sand is screened to remove particles in the toxic size range (<270 mesh) but may contain small amounts of fine crystalline silica which should be handled as a toxic dust. Avoid eye and skin contact and use a NIOSH-approved dust mask rated for silica exposure when handling dry material. Read and follow all guidelines as detailed in the Safety Data Sheets supplied with this product.

8. **Storage:** Store dry product in a dry area, off the floor. Keep partially used pails tightly closed. Shelf life in sealed pails is a minimum of 5 years.

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**FOR COMMERCIAL AND INDUSTRIAL USE.**