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POLYMERICA PRODUCT DATA

MasterPiece ETS Epoxy Terrazzo Surfacing

PRODUCT PRESENTATION

MasterPiece Epoxy Terrazzo Surfacing is a decorative, thin-set epoxy surfacing system designed to provide durable, lightweight terrazzo flooring in distinctive, aesthetic patterns.

MasterPiece ETS is installed at a nominal 1/4" to 3/8" thickness consisting of:

- a 100% solids epoxy primer.
- a ground and polished composite of marble, granite, onyx or glass chips, and a 100% solids colored epoxy binder.
- choice of seal coats for specified finish and texture.

MasterPiece Epoxy Terrazzo Surfacing meets or exceeds all NTMA standards, and is available in all standard NTMA plate colors.

PRODUCT FEATURES

- ➔ classic terrazzo design in a durable epoxy matrix
- ➔ quality engineered to outlive the life of the structure
- ➔ sanitary, easily maintained seamless surfacing
- ➔ lightweight design will not compromise multi-story structural load
- ➔ thinset flooring ideal for retrofit, renovation, or resurfacing projects
- ➔ design elements can be enhanced with the addition of pre-cast inlays

USES

MasterPiece ETS is used in architecturally designed high profile areas such as lobbies, offices, and showrooms. Because of its durability, it is specified in high-traffic areas such as transportation terminals, shopping malls, civic buildings, and convention centers.

MasterPiece ETS is commonly installed for its sanitary features in hospitals, schools, restaurants, and facilities that produce cosmetics or pharmaceuticals.

LIMITATIONS

- ➔ substrate must be sound, clean, level to 1/8" in ten feet, properly prepared, and free from hydrostatic pressure and moisture vapor transmission
- ➔ minimum application temperature is 50°F, temperatures below 65°F affect workability and lengthen cure time
- ➔ requires application and finishing by experienced installers
- ➔ chemical resistance can be affected by choice of aggregates

PERFORMANCE CHARACTERISTICS OF SYSTEM

| | |
|---|--------------------------------|
| Compressive Strength @ 7 days (ASTM C-579) | 8,500 psi. |
| Tensile Strength (ASTM C-307) | 2,250 psi. |
| Flexural Strength (ASTM C-580) | 4,500 psi. |
| Bond Strength (ACI 503R) | 350 psi. |
| | concrete fails |
| Thermal Coefficient of Expansion (ASTM D-696) | 0.000025 inch per inch per 0°F |
| Abrasion Resistance (ASTM D-4060) | 19 mg. maximum |
| CS-17 wheel, 1 kg. load,1000 rev. | concrete fractures |
| Thermal Shock Resistance (ASTM C-884) | passes |
| Water Absorption (ASTM C-413) | 0.1% |
| Flammability (ASTM D-635) | Self-extinguishing |
| Impact Resistance (MIL D-3134F) | 16 foot-pounds |
| | concrete fractures |
| Indentation (MIL D-3134F) | No indentation |

PERFORMANCE CHARACTERISTICS OF CURED BINDER

| | |
|--|-------------|
| Compressive Strength @ 7 days (ASTM D-695) | 10,770 psi. |
| Tensile Strength (ASTM D-638) | 3,250 psi. |
| Hardness - Shore D (ASTM D-2240) | 70 - 85 |

CHEMICAL RESISTANCE

| <u>Reagent</u> | <u>Rating</u> | <u>Reagent</u> | <u>Rating</u> |
|-----------------------------|----------------------|----------------------------|----------------------|
| Acetic Acid-5% | R | Lactic Acid-15% | R |
| Acetone | L | Methyl Ethyl Ketone | L |
| Bleach | L | Nitric Acid-10% | R |
| Citric Acid-50% | R | Skydrol | R |
| Crude Oil | R | Sodium Hydroxide-50% | R |
| Diesel Fuel | R | Sulfuric Acid-30% | R |
| Ethylene Glycol | R | Toluene | L |
| Fatty Acids | L | Urea | R |
| Gasoline | R | Vinegar | R |
| Hydrochloric Acid-15% | R | Xylene | L |

R - Recommended for continuous service.

L - Limited recommendation, occasional spills.

This chart is intended as an aid in evaluating the performance of these systems in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions.

No deleterious effects by contaminants listed below after 7-day immersion at room temperature, per ASTM D-1308:

- | | |
|----------------------------|--------------------------|
| 1) Distilled Water | 6) 1.0% soap solution |
| 2) Mineral Water | 7) 10% Sodium Hydroxide |
| 3) Isopropanol | 8) 10% Hydrochloric Acid |
| 4) Ethanol | 9) 30% Sulphuric Acid |
| 5) 2.5% detergent solution | 10) 5% Acetic Acid |

Product data is revised as needed to reflect the most recent technology and field experience. Consult **POLYMERICA** for current printing date of literature.

ESTIMATING & APPLICATION GUIDELINES

| System | Step One | Step Two | Step Three | Step Four |
|--|---------------------------------|---|--------------------------------|--------------------------------|
| | EPS Primer* | ETB Surfacer | ETB Grout | STS Sealer** |
| Mix Ratio | 3A : 1B by volume | 5 gal. ETB - A: 1 gal. ETB - B to 170 - 205 lbs. #1 / #0 chips 12 - 30 lbs. marble dust | 5A : 1B | 1A : 1B |
| Coverage | 250 - 300 ft ² /gal. | 72 - 82 ft ² @ 1/4" 50 - 60 ft ² @ 3/8" | 500 ft ² per gallon | 500 ft ² per gallon |
| Requirements per 1000 ft ² | 4 gallons | 14 kits @ 1/4" 20 kits @ 3/8" | 2 gallons | 2 gallons |
| Pot Life @ 70°F | 20 min. | 25 min. | 20 min. | 20 min. |
| Cure to next step @ 70°F | up to 8 hours maximum | 12 - 18 hrs. | 12 - 18 hrs. | 18 - 24 hours |

*coverage and requirements will vary due to condition of substrate and strip pattern.

**alternate sealers are available: STS-100 or Glisten LS

APPLICATION

- Preparation:** Concrete must be structurally sound and clean. Abrasive blasting is the preferred method. An acid etch, rinsed and neutralized is also acceptable. Consult POLYMERICA Bulletin SP-C for complete details. Set strips according to specifications prior to priming.
- Step One:** Mix primer parts A & B with low speed drill for 2 minutes. Apply with squeegee, cut in with brush. **Do not puddle.** Back-roll with short nap roller. If priming more area than that which can be covered in 8 hours, broadcast fines or silica sand into the wet primer. Allow to fully cure.
- Step Two:** Mix 5 gallons ETB part A with 1 gallon ETB part B for one minute with a low speed drill. Charge mortar mixer or fixed blade Kohl-type mixer with mixed ETB liquids. Add marble chips (and marble dust, if desired). Continue mixing until uniform (approximately 3 minutes). For 'sprinkled' or 'seeded' method, add only enough chips (approximately half) to make a suitable slurry. Screed mix to level. For 'seeded' method, broadcast balance of chips uniformly until desired density is achieved. Finish by hand or power trowel as appropriate. Allow to cure.
- Step Three:** Grind. Clean, rinse, and vacuum. Mix ETB part A and part B as before for grouting. Add marble dust for color or for extra body. Scrape trowel or squeegee to fill all pinholes. Do not leave ridges. Allow to cure.
- Step Four:** Polish with 120 or finer grit stone until all grout is removed. Clean and seal as appropriate.

CARE & MAINTENANCE

MasterPiece Floors must be protected from traffic, chemicals, and abuse during the cure process.

Newly installed floors should be cured a minimum of 18 hours at 65°F before washdowns. Only warm water should be used to clean within the first week. If use of a detergent is necessary in the first week, use only a NON-CHLORINE cleaner dissolved in water. Sanitizing detergents containing chlorine or hypochlorite should not be used for at least 7 days.

Good housekeeping practices and regulated spill removal will prolong the service life of the floor. **MasterPiece Floors** are not self-cleaning nor always non-staining. The following cleaning procedures are recommended weekly or as needed:

Spills must be removed and rinsed at the first opportunity. No spillage should be ignored and allowed to dry or soak into the floor.

Sweep or vacuum loose dirt and debris daily.

Mop or scrub floors weekly or as usage dictates.

Use a neutral detergent, dissolved in water as directed by the manufacturer.

MasterPiece Polymer Surface Cleaner is recommended for general purpose cleaning, however, proper cleaners should be selected for specific spillage residue or stains. Always allow cleaners time to loosen foreign matter. Always adhere to manufacturer's dilution ratio.

If rinsing is required, always keep mop heads and buckets clean; change rinse water frequently to avoid streaking.

Large or heavily soiled areas can be power scrubbed, then rinsed if required.

High luster finishes or sealers can be applied if desired. Follow manufacturer's directions. High speed buffing or spray buffing is generally not required, but can be incorporated in your maintenance program.

Conventional methods are also acceptable for small areas.

Consult NTMA published guidelines for 'Care of Terazzo.'

800.762.1687
www.polymerica.com

COLORS

Available in all standard NTMA plate colors. Custom colors are available with some restrictions.

SAFETY

Material Safety Data Sheets are available from **POLYMERICA** and should be consulted prior to use of the product. These products are intended for use by professionals only. Keep away from children and those not trained in the use and potential hazards involved.

MasterPiece ETB is a two-part epoxy system. Part A contains epoxy resins. Part B contains amine-epoxy adducts. Workers should wear gloves, goggles and body covering clothing when mixing or applying product. Clean up with soap and warm water. Be sure to follow all label and MSDS cautions.

WARRANTY

POLYMERICA warrants its products to conform to its manufacturing standards. **POLYMERICA** will replace or refund the purchase price of non-conforming products at the seller's option; such remedy being exclusive of all others and sole remedy available to the buyer. Buyer hereby expressly waives claim to additional damages. Any claim under this warranty must be made in writing within 7 days of discovery of noncompliance and no later than one year from the date of delivery of product. No representative, distributor or applicator of these products is authorized to modify product data or warranty.

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