

ElastoCrete 212

Water Based Clear PU Sealer



DESCRIPTION • *ElastoCrete 212* is a liquid applied, two component, aliphatic, water-borne, low VOC, low viscosity, aliphatic polyurethane coating for sealing, waterproofing and protecting concrete and masonry surfaces. *ElastoCrete 212*'s unique low viscosity and high dispersion allow it to be more easily absorbed into the surface, thereby forming a thinner film that is more natural looking and is less prone to scratching compared to other resinous coatings, and making it more suitable for decorative applications where a natural appearance is desired.

Thanks to its unique and advanced formulation, *ElastoCrete 212*'s performance properties - hardness, abrasion resistance, chemical resistance, and gloss - are comparable to those of traditional, solvent-borne polyurethane coatings. *ElastoCrete 212* is available in glossy and matte grades.

USES • *ElastoCrete 212* is ideal for decorative applications where a clear, more durable and chemically resistant protective coating than conventional acrylics is sought for protecting terrazzo, concrete, plaster, decorative overlays, natural stone, and other masonry surface. *ElastoCrete 212* may be used as a high performance clear concrete and masonry sealer. *ElastoCrete 212* may also be used as a pigmented base coat and a clear top coat or as a clear, UV-resistant top coat over decorative epoxy flooring.

ElastoCrete 212 is also generally used as a waterproofing, protective, and UV and chemically resistant topcoat for resinous and cementitious surfaces in hospitals, laboratories, retail showrooms, offices, processing plants, workshops and wet areas.

COLORS • *ElastoCrete 212* is available uncolored (milky white) or colored. Please refer to CCC's Resinous Coatings Color Chart.

ADVANTAGES

- ✓ Aesthetically pleasing natural appearance.
- ✓ Oderless and environmentally friendly water borne coating.
- ✓ Easy to apply with roller or brush.
- ✓ UV resistant.
- ✓ May be used as an alternative to concrete sealers and conventional acrylics.
- ✓ Excellent abrasion and chemical resistance.
- ✓ Resistant to staining including tire marks and hot tire pick up.
- ✓ May be applied directly to concrete, no primer is necessary.
- ✓ Weather and corrosion resistant.
- ✓ Available in both high gloss and matte grades.

LIMITATIONS • Never apply to new concrete surfaces before they have been allowed to cure for a minimum of 28 days. *ElastoCrete 212* is only a fine coating; it should not be used to fill cracks or holes in the surface. Do not apply when ambient temperature is below +10°C or above 40°C. Do not apply on wet or damp surfaces. Do not apply if rain is expected in the proceeding 8 hours.

PHYSICAL PROPERTIES

Solid content	50%
Pot Life @ 23°C	
Glossy grade	2:30 hr.
Matte grade	45 min.
Dry Time @ 23°C, 50% RH	
Glossy grade	7.5 hrs.
Matte grade	1.5 hrs.
Physical Appearance	Milky White or Colored
DFT (one coat)	75 micron
VOC (USUPA 24)	< 10 g/L
Tensile Strength (ASTM D 412)	14.2 MPa
Elongation (ASTM D 412)	83.9%
Water Penetration (BS EN 12390 B)	Nil
Pull Off Strength (ASTM D 4541)	1.02 MPa
Tear Strength (ASTM D 624)	21.14 N/mm

STAIN RESISTANCE • *ElastoCrete 212* was tested for stain resistance per ASTM D 1308; adverse effects were recorded as follows:

Test	Observation after		
	15 min.	1 hour	16 hours
Distilled Water (cold)	None	None	None
Distilled Water (hot)	None	None	None
Ethyl Alcohol (50% by vol.)	None	None	None
Vinegar (3% acetic acid)	None	None	None
Alkalai solution (pH 11.5)	None	None	None
Acid solution (pH 2.5)	None	None	None
Soap Solution	None	None	None
Detergent Solution	None	None	None
Lighter Volatile Fluids (Acetone)	None	None	None

Oils & Fats	None	None	None
Ketchup & Mustard	None	None	None
Beverages (Tea & Coffee)	None	None	None
Lubricating Oils & Grease	None	None	None

COVERAGE • Application rate will vary according to surface conditions, application technique and job conditions. Coverage rate is approximately 8 m²/liter at 75 microns DFT for a single layer.

SURFACE PREPARATION • All surfaces should be sound, clean, dry and free from dust, oil, grease, laitance, curing agents, loose particles, wax, tar, mildew, mold, paint, sealers, coatings, and other contaminants. Wet substrates should be sponge dried to remove all free surface water then air dried. Treat oil or grease contamination with degreaser followed by water or steam cleaning. Floor area and the wall up to a height of 200 mm shall be thoroughly cleaned dry and free of dust, loose cement mortar, grease, oil, and other contaminants. Sand blasting or wire brushing is recommended in the case of smooth troweled floors.

New concrete floors: should be at least 28 days old and have a moisture content of less than 5%. The relative humidity at the surface should not be more than 25% as per BS8201:1981. Excessive laitance should be removed by mechanical methods. Dust and other debris should be removed by vacuum cleaning. Any fine cracks or pin holes should be covered with *MortCrete 3000* or other epoxy-based mortar.

Old concrete floors: damaged areas or surface irregularities should be repaired using *MortCrete 3000* or other epoxy-based mortar. All cracks larger than hairline shall be considered as moving and must be repaired with *MortCrete 3000*. All delaminated and splashed areas of concrete shall be repaired prior to application of *ElastoCrete 212* with *MortCrete 3000*. Remove all unsound concrete. Patches shall be flush with the surrounding surface and shall match the texture of existing surfaces.

Epoxy Screeds: high spots or trowel marks should be rubbed down. Remove dust and debris by vacuum cleaning.

MIXING • Lightly stir the contents of the A component (pigmented part) for 2-3 minutes using a jiffy mixing blade attached to a low speed drill (200-300 RPM). Insure that the pigment is thoroughly and

evenly distributed, eliminating any settlement that might have occurred in the container. Pour the contents of the B components (clear part) into the A component container, scraping the sides of the B component container to insure that the entire contents of the container are used. Mix thoroughly to a streak-free color uniformity using a jiffy mixing blade attached to a low speed mixer.

APPLICATION • After mixing, *ElastoCrete 212* should be immediately applied to the dry surface while ensuring a continuous coating of uniform thickness is obtained. A stiff nylon brush or short nap roller is recommended for such application. For faster rates of application use an airless spray. A brush may be used for touch-up and edging work or for areas unsuitable for spray or roller application.

ElastoCrete 212 may be applied directly on concrete and masonry surfaces as a sealer coat. Do not apply subsequent coats until the *ElastoCrete 212* has dried. Two coats are recommended for flooring applications to achieve full protection effect.

Dry times will vary depending on ambient conditions. Water borne systems are sensitive to temperature and humidity changes: higher temperatures will shorten drying time, while higher ambient humidity will prolong drying time.

CLEANING • Tools and equipment must be immediately cleaned with clean water.

STORAGE & SHELF LIFE • Product should be stored at 25°C in dry conditions away from direct sun light. Shelf life is approximately 12 months from date of purchase in original unopened container at specified storage temperature.

SAFETY PRECAUTIONS • DANGER! ACIDIC CONTENT MAY CAUSE SEVERE EYE IRRITATION AND MAY CAUSE BLINDNESS. KEEP AWAY FROM CHILDREN. CORROSIVE. Protective clothes such as coveralls, goggles, respiratory masks, and chemically-resistant aprons and boots should be worn. Application of materials should be under good ventilation. DO NOT TAKE INTERNALLY, MAY BE FATAL IF SWALLOWED. MAY CAUSE CANCER. First aid: Eyes – flush with water and seek medical attention immediately. Do not use any solvents. Ingestions – give several glasses of water or milk and seek medical attention immediately. Contact with skin – wash affected area immediately. Inhalation – move to fresh air.

PACKAGING • 5 and 10 liters kits.

Creative Concrete Concepts

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