COATINGS - INDUSTRIAL FLOOR

Master Format #: 07 18 16

DURALKOTE 500

ULTRA HIGH BUILD EPOXY LINER

EUCLID CHEMICAL

PACKAGING

Light Gray (standard)

2 gal (7.6 L) unit (x2 per case)
Code: TD2380104501

10 gal (37.9 L) unit
Code: TD2380110501

White

2 gal (7.6 L) unit (x2 per case)
Code: TD2380104001

10 gal (7.6 L) unit
Code: TD2380110001

CLEAN UP

Clean tools and application equipment immediately with acetone, xylene, or MEK. Clean spills or drips with the same solvents while still wet. Hardened DURALKOTE 500 will require mechanical abrasion for removal.

SHELF LIFE

2 years in original, properly stored, unopened package

DESCRIPTION

DURALKOTE 500 is a 100% solids, solvent free, low odor epoxy liner system. It is impervious to a wide variety of acids, caustic solutions, oils, grease and many other chemicals. DURALKOTE 500 is particularly resistant to sulfuric acid up to a concentration of 75%. No special precautions are necessary to contain odors or solvents often found in many other liner systems. DURALKOTE 500 is ideal for use as a protection system in the wastewater and chemical industries.

PRODUCT CHARACTERISTICS

PRIMARY APPLICATIONS

- Manholes
- Lift stations
- Headwork
- Sewer pipes
- Grit chambers
- Clarifiers
- Pits
- Walls
- Sumps
- Trenches
- Wastewater and containment areas

FEATURES/BENEFITS

- High build
- Chemical resistance
- Low odor
- Solvent-free
- Resistant to sulfuric acid up to a concentration of 75%

APPEARANCE

DURALKOTE 500 is available in Light Gray and White.

COVERAGE

Liner System	ft²/gal (m²/L)
Duralkote 500, 1st coat	25 (0.61) @ 1/16" (1.6 mm)
Duralkote 500, 2nd coat	12.8 (0.31) @ 1/8" (3.2 mm)
Duralkote 500 w/ 2.5 parts sand	32 (0.79) @ 1/8" (3.2 mm)

Note: Coverage rates are approximate. Actual coverage depends on temperature, texture, and substrate porosity.

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Test Method	Test Property	Values
ASTM D4541	Bond to Damp Concrete, 7 days	Concrete Failure
ASTM D695	Compressive Strength	8,780 psi (60.5 MPa)
ASTM D790	Flexural Strength, 7 days	5,100 psi (35.1 MPa)
N/A	Gel Time, 150 g sample	30 to 40 minutes
N/A	Mix Ratio (A:B by volume)	1:1
ASTM D2240	Shore D Hardness, 7 days	88
ASTM D638	Tensile Elongation, 7 days	3 to 6 %
ASTM D638	Tensile Strength, 7 days	4,200 psi (28.9 MPa)
N/A	VOC Content	≤ 100 g/L

DIRECTIONS FOR USE

Surface Preparation: The surface must be structurally sound, clean and free of grease, oil, curing compounds, soil, dust and other contaminants. See note in "Precautions/Limitations" section if coating is to be placed over old/existing epoxy or urethane coatings. New concrete and masonry must be at least 28 days old. Surface laitance must be removed. Concrete surfaces must be roughened and made absorptive, preferably by mechanical means, and then thoroughly cleaned of all dust and debris. If the surface was prepared by chemical means (acid etching), a water/baking soda or water/ammonia mixture, followed by a clean water rinse, must be used for cleaning, in order to neutralize the substrate. The Concrete Surface Profile (CSP) should be equal to CSP 2-4 in accordance with Guideline 310.2R-2013, published by the International Concrete Repair Institute (ICRI).

Following surface preparation, the strength of the surface can be tested if quantitative results are required by project specifications. An elcometer or similar tensile pull tester may be used in accordance with ASTM C1583, and the tensile pull-off strength should be at least 250 psi (1.7 MPa). After surface preparation, a test section application of the coating system is recommended to confirm good adhesion and compatibility of the coating with the surface, and also to confirm appearance and aesthetics.

When coating steel, all contamination should be removed and the steel surface prepared to a "near white" finish (SSPC SP10) using clean, dry blasting media.

Mixing: Mix DURALKOTE 500 using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 3 minutes each. Combine Part A and Part B in a 1:1 ratio by volume, then mix thoroughly for 3 to 5 minutes. Scrape the bottom and sides of the containers at least once during mixing. Do not scrape bottom or sides of the container once mixing operations have ceased; doing so may result in unmixed resin or hardener being applied to the substrate. Unmixed resin or hardener will not cure properly. Do not aerate the material during mixing. To keep aeration to a minimum, the recommended mixing paddles are #P1 or #P2 as found in ICRI Guideline 320.5R-2014.

To make DURALKOTE 500 mortar, gradually add clean, dry, 60 mesh silica sand to previously mixed DURALKOTE 500 epoxy and mix thoroughly for 3 to 5 minutes. Combine 1 part by volume of mixed DURALKOTE 500 with 2 to 3 parts by volume of 60 mesh silica sand.

Application: Apply properly mixed DURALKOTE 500 using a brush, short nap roller, trowel, or spray to the properly prepared surface. **Roller and Brush:** Apply at a rate up to 100 mils (16 ft^2/gal [0.39 m^2/L]) in one application. **Trowel:** DURALKOTE 500 can be trowel-applied "neat" or mixed with silica sand to make a mortar (see instructions listed in the "Mixing" section above). **Spray:** DURALKOTE 500 can be applied by plural component spray equipment. A 125 mil (1/8", or 3.2 mm) thickness can be applied in one application.

PRECAUTIONS/LIMITATIONS

- Store DURALKOTE 500 indoors, protected from moisture, at temperatures between 50 °F and 90 °F (10 °C and 32 °C)
- Surface and ambient temperature during coating applications should be between 50 °F and 90 °F (10 °C and 32 °C)
- Material temperatures should be at least 50 °F (10 °C) and rising
- Do not apply DURALKOTE 500 if surface temperature is within 5 °F (3 °C) of the dew point in the work area
- Working time and cure time will decrease as the temperature increases, and will increase as the temperature decreases
- Do not thin DURALKOTE 500
- Do not apply DURALKOTE 500 to slabs on grade unless an uninterrupted vapor barrier has been installed under the slab
- Do not apply DURALKOTE 500 if the substrate is subject to excessive moisture vapor drive or hydrostatic pressure
- Although DURALKOTE 500 is chemically resistant, surface staining of the coating may occur after contact with some chemicals.
- DURALKOTE 500 will discolor upon prolonged exposure to ultraviolet light and high-intensity artificial lighting.
- Depending on the condition of the substrate, minor surface defects can appear in the coating when applied. Proper surface prep, patching of substrate imperfections, and priming will ensure a better overall finish.
- If coating over old/existing epoxy or urethane coatings, or if more than 24 hours elapses between coats: sand the previous coat, wipe clean, and proceed with coating operations. If old/existing coatings are peeling, flaking, etc., all unsound material must be removed prior to new coating applications.
- Application of a test area is recommended to confirm final appearance and texture of the system with the end user
- In all cases, consult the product Safety Data Sheet before use