COATINGS - DECORATIVE FLOOR

Master Format #: 09 96 35

EUCO TAMMOSHIELD

WATER-BASED, POLYURETHANE FLOOR COATING

EUCLID CHEMICAL

PACKAGING

Clear Gloss & Matte

5 gal (18.9 L) unit
Code: TD2356505§

1 gal (3.8 L) unit (case of 2)
Code: TD2356101§

Special Colors

5 gal (18.9 L) unit (MTO)
Code: TD2356505§

CLEAN UP

Clean tools and application equipment immediately with water. Clean spills or drips with acetone, xylene, or MEK while still wet. Hardened EUCO TAMMOSHIELD will require mechanical abrasion for removal.

SHELF LIFE

1 year in original, properly stored, unopened package

SPECIFICATIONS/COMPLIANCES

- Complies with all U.S. EPA and local VOC regulations, including OTC, Maricopa County and California (CARB and SCAQMD)

DESCRIPTION

EUCO TAMMOSHIELD is a non-yellowing, two-component water-based aliphatic polyurethane coating that provides a glossy, durable surface to concrete and masonry surfaces. It cures by a true thermoset reaction, providing toughness and chemical resistance that far surpasses that of acrylic or one-component water-based urethane sealers.

PRODUCT CHARACTERISTICS

PRIMARY APPLICATIONS

- Clear protective topcoat for Eucopoxy and Dural epoxy coatings and vinyl chip flooring systems
- Seal coat for Euclid Chemical architectural wall coatings

FEATURES/BENEFITS

- Non-yellowing aliphatic formulation
- No odor
- Excellent abrasion resistance
- Provides a glossy, “wet” look
- Can be used on horizontal or vertical surfaces

APPEARANCE

EUCO TAMMOSHIELD is available in a clear gloss or clear matte finish. Custom colors are available upon request and subject to minimum order quantities.

COVERAGE

Apply at a rate of **300 to 400 ft²/gallon (7.4 to 9.8 m² /L)**

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.
*Material properties @ 75 °F (24 °C)

Test Method	Test Property	Values
N/A	Drying time (73 °F (23 °C), 50% RH)	Tack free . . . . . .4 to 6 hours Light foot traffic . . . . . 8 to 10 hours Full cure . . . . . .24 hours
N/A	Solids (by weight)	56%
N/A	Taber abrasion (CS-17 wheel)	1,000 gram load . . . . . 78 mg weight loss
N/A	Viscosity	500 cp to 800 cp
N/A	VOC content (clear gloss)	≤ 50 g/L
N/A	VOC content (clear matte)	≤ 50 g/L
N/A	Working time	1 to 2 hours

CHEMICAL RESISTANCE

Chemical resistance: Spot Test on EUCO TAMMOSHIELD after 14 day cure (ASTM D1308)

	Result after 4 hours	Result after 24 hours
Acetic Acid, 10%	no effect	slight softening
Ammonium Hydroxide, 10%	no effect	no effect
Bleach, 10%	no effect	no effect
Gasoline	no effect	slight softening
IPA	soft	soft
MEK	soft, blistered	soft, blistered
Sodium Hydroxide, 50%	no effect	no effect
Sulfuric Acid, 10%	no effect	no effect

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) will be determined by the requirements of the epoxy coating applied before the EUCO TAMMOSHIELD application. Allow substrate to dry before coating application. 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).

Do not apply epoxy or urethane coatings if there is excessive moisture in the concrete, or if the moisture vapor emission rate (MVER) is high. Before application of EUCO TAMMOSHIELD, perform either of these tests: **ASTM F2170** - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes, or **ASTM F1869** - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. If the relative humidity is 70% or greater, or the MVER is 3 lbs/1000 ft^2/24 hrs or greater, use a moisture mitigation system such as Dural Aquatight 100 PLUS or Dural Aquatight WB. After surface preparation and moisture testing, a test section application is recommended to confirm good adhesion and compatibility of the coating with the surface, and 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.

EUCO TAMMOSHIELD can not be applied directly to concrete. If an epoxy coating has not been applied, DURAPRIME WB, DURAL EPOXY PRIMER, or another Euclid Chemical epoxy coating must be used to prime concrete in accordance with the information provided on the technical data sheets. Old or existing epoxy coatings should be cleaned and lightly sanded prior to application of EUCO TAMMOSHIELD as a seal coat. After sanding, solvent wipe the surface using acetone.

Mixing: Mix EUCO TAMMOSHIELD using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 1 minute each. Combine all of Part A with all of Part B, then mix thoroughly for 3 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. Allow mixed EUCO TAMMOSHIELD to stand for 10 minutes before use.

Application: EUCO TAMMOSHIELD can be applied as soon as the previously-applied prime coat of epoxy is tack free, but no later than 24 hours after application of the prime coat. If more than 24 hours have elapsed, the epoxy prime coat should be cleaned and lightly sanded prior to application of EUCO TAMMOSHIELD. After sanding, solvent wipe the surface using acetone. Apply EUCO TAMMOSHIELD using short nap roller, foam roller/applicator, brush, or airless sprayer. Redistribute or remove puddles or excess material before it dries. Application over new coats of TAMMSCOAT should be done after the TAMMSCOAT has cured for 24 hours. Application over old/existing TAMMSCOAT should be done after the surface has been thoroughly cleaned and is dry. Tack free time for EUCO TAMMOSHIELD is 4 to 6 hours (at 73 °F (23 °C)). EUCO TAMMOSHIELD requires 8 to 10 hours (at 73 °F (23 °C)) to cure sufficiently for light foot traffic. Complete cure is at 24 hours (at 73 °F (23 °C)).

PRECAUTIONS/LIMITATIONS

- Store EUCO TAMMOSHIELD 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 to 90 °F (10 °C and 32 °C)
- Material temperatures should be at least 50 °F (10 °C) and rising
- Do not apply EUCO TAMMOSHIELD 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 EUCO TAMMOSHIELD
- When a vapor barrier is utilized in on-grade applications of EUCO TAMMOSHIELD, it must be installed directly under the slab
- 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
- EUCO TAMMOSHIELD is not recommended for asphalt surfaces
- Concrete surfaces may darken and give a “wet look” effect after application
- In all cases, consult the product Safety Data Sheet before use