



# Product Specifications

# Tuffide

## Product Benefits

Tuffide is a natural oil-based waterproof exterior wall coating, which uses a special blend of polymerized oils to create a tough weatherproof coating with excellent adhesion and flexibility. Tuffide's **biobased** formula is resistant to mildew, mold and ultraviolet light attack and provides a complete moisture barrier against air and condensation. Tuffide's adhesion and flexibility are designed to withstand structural movement associated with temperature fluctuation. It can be brushed, troweled or sprayed.

## Product Features

Tuffide waterproofs and weatherproofs in just one coat; finished application has a medium gloss. Listed in the USDA BioPreferred<sup>SM</sup> product catalog. Tuffide is rated by the Cool Roof Rating Council (CRRC). Tuffide surface dries, but remains flexible and pliable underneath. Standard colors of Tuffide are White, Light Gray, Concrete Gray, Stone, Sandrock, Silver Gray, Off-White, Black, Galvanized Gray and International Orange. Special colors are available; call factory for more information. Tuffide is available in 5-gallon pails and 55-gallon drums.

## Application

### Recommended for:

Tuffide can be used over many wall surfaces: concrete, concrete block, precast concrete, brick, terra cotta, stucco, steel, aluminum, slate, clay and tile. *Surface to be coated must be stable, moisture-free and dry. New concrete surfaces should be tested for alkalinity and neutralized, or primed with Primer-kote, if necessary, before applying Tuffide. Before coating ANY surface, always do a test patch to check for compatibility, adhesion and soundness.*

### Tools

**Airless spray:** 4000 psi min. ½" hose min. 0.037 inch orifice reversible tip

**Reduction:** Do not reduce

**Brush:** Natural, nylon or polyester bristle

### Approximate Coverage Rates Per Gallon

Apply one coat of Tuffide to a minimum wet film thickness of 25 mils. Square foot per gallon coverage varies with method of application, condition and type of substrate and applicator. A smooth, sound surface may yield approximately 30 to 40 sq. ft. per gallon. A rough, uneven or porous surface may yield approximately 25 to 35 sq. ft. per gallon.

Coverage rates are given in good faith by TKO Waterproof Coatings and should be used as an estimate only. Actual coverage rates will vary due to the individual nature of each application. Therefore, TKO Waterproof Coatings is not responsible for any variance between estimated and actual coverage rates.

### General Application Guidelines

**Special Surface Preparation:** All new concrete must be tested for alkalinity prior to coating. Prime surface with Primer-kote or neutralize prior to coating with Tuffide. To neutralize, use a solution of 10% muriatic acid and water. Rinse surface and allow to dry. If the surface to be coated is chalky, dusty, or if additional adhesion is advisable, Binder-kote should be used. Binder-kote's ability to "tack" provides excellent adhesive qualities for the application of an overall coating. On surfaces which are still chalking and dusting after initial brushing, Binder-kote will "wet" the loose particles and bond them firmly to the substrate. Binder-kote also reduces the porosity of any porous surface to which it is applied. Binder-kote penetrates the dry, porous surface forcing air and moisture out. Binder-kote can be applied with brush, roller or sprayer. It should be coated over as soon as it begins to set, within 10 to 30 minutes after initial application. Average coverage of Binder-kote on highly absorbent surfaces is 200 to 300 sq. ft. per gallon; on low absorbent surfaces, 300 to 400 sq. ft. per gallon. Remove all scale, dirt and loose paint. Be sure surface to be coated is dry and free of oil or alkalinity. Apply a thin, uniform coat.

**Surface Preparation:** Surface to be coated must be dry, never apply Tuffide to a damp surface. Moisture under the coating may cause blisters to form and may lead to premature coating failure. All surfaces should be free of scale, dirt, grease, water, efflorescence, mold, mildew and other foreign material prior to Tuffide application.

**Scale** - clean by scraping, or use mechanical equipment designed for scale removal.

**Efflorescence** - remove by wire brushing or use a 20%-30% solution of muriatic acid.

**Mold and mildew** - remove with bleach or a similar solution. Rinse and let surface dry thoroughly.

**Patching:** Cracks, joints and breaks must be patched with Tuffglass Fabric and Tuff-kote prior to an overall coating application. Tuffglass Fabric is a tightly-woven, flexible, open-weave fiberglass fabric. The fabric is white, only 0.004 inches thick, and has a tensile strength of 80 pounds per inch. It will easily conform to irregular surfaces, and can be cut and overlapped for large areas.

The following method should be used for all patching jobs:

1. Apply a coat of Tuff-kote approximately 15 mils thick around the crack and several inches beyond on both sides.
2. Imbed the Tuffglass Fabric into the Tuff-kote over the crack or joint. Smooth out any wrinkles or bubbles and make sure the fabric is firmly imbedded into the material.
3. Allow the patch to become tacky, approximately one half to one hour (depending on weather conditions). Apply a top coat of the Tuff-kote to completely cover the fabric, again about 15 mils thick. This top coat can be done in conjunction with the overall coating of surrounding areas, or the patch can be completed and the overall coating can be done at a separate time.

**Application:** Tuffide can be brushed, troweled or sprayed. Mix product thoroughly before using. Do not thin. Product warranty is voided if product is altered in any way. Keep lid tightly sealed after opening to prevent skin formation, stir again before each use. If skin forms, remove completely prior to mixing. Apply one thick coat at 25 wet mils. *Always use a wet film gauge to ensure the proper mil thickness has been applied.* Temperature range for application: 40°F to 100°F for air and surface with a maximum relative humidity of 85%. For ease of application, keep material at 72°F to 100°F or heat prior to application, especially when working under cool conditions. Do not apply Tuffide if condensation or dew is present.

**Drying time:** Drying time is very dependent on temperature conditions, application method, location of the coated area, air circulation and movement. Tuffide can be considered "dry" when the coating has skinned over, and a film has developed. Under hot, windy conditions the product will quickly skin over. Cool, damp conditions will slow the dry time considerably. The product can be painted once the initial film has formed, usually within 24 to 48 hours.

**Clean-up:** Clean tools with mineral spirits. Dispose of containers properly.

### Technical Information


Biobased content: minimum 45% (ASTM D 6866-04)  
 Mold, algae, bacteria resistance: No growth  
 Flash point greater than 140° F.  
 Non-toxic when cured.  
 VOC compliant, less than 250 grams per liter.  
 No hazardous disposal requirements. Check with all local, state and federal regulations before disposing.  
 Shelf life: two years in unopened can. Store at 40 to 85° F for maximum in-can stability.  
 Solids contents: 80%.  
 Weight per gallon: 10.8#  
 Fire rating: Class A over non-combustible substrate (ASTM E-84-04).  
 Non-ozone producing. Non-ozone depleting.  
 Biodegradable.

### Cautions

Caution: Combustible. Contains mineral spirits. Keep away from heat and flame. Do not smoke. Avoid contact with eyes and skin and breathing of vapor or spray mist. Do not get in eyes. Do not take internally. Use only with adequate ventilation. Close container after each use. **KEEP OUT OF REACH OF CHILDREN.** See the Material Safety Data Sheet (MSDS) for additional safety information.

### Warranty

Information is given in good faith, to be used as a guide only and does not assure product suitability for an intended purpose or application. Product is guaranteed to be free of defect. Warranty is limited to replacement of that portion of product proven to be defective. For complete warranty information, contact manufacturer.

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance	79.93	Pending
	Thermal Emittance	.830	Pending
	Rated Product ID		0722-0003
	Licensed Manufacturer ID		0722
	Classification		Coatings
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</small>			

**Listed in the USDA BioPreferred<sup>SM</sup> product catalog**