



TF Epoxy Concrete Coating

Two component, 100% solids, solvent free, concrete coating.

Description

TF Epoxy is an interior, two-component epoxy coating. It has excellent adhesion properties to concrete and has superior mechanical properties. This coating is formulated with no solvents, designed as a clear or tinted base coat for decorative flooring. TF Epoxy is designed with chemical and abrasion resistance, hardness, and low flexibility. TF epoxy is not UV stable, and only designed for interior environments.

Where to Use

TF Epoxy is a versatile coating, designed for use on properly prepared concrete substrates. While not limited to specific applications, the following list gives a general guideline for where TF Epoxy is typically installed.

- As a base coat for decorative broadcast media.
- A base coat for garage floors, wash bays, warehouse floors,
- Prime coat for polyaspartic or polyurethane top coat

Features

- Extended working and cure times.
- Easy 2:1 mixing ratios.
- Stable pot life.
- No primer required.
- Easy to apply on horizontal and vertical surfaces.
- Only recommended for interior applications
- Excellent bond strength to properly prepared concrete. See surface preparation section.

Packaging

3-Gallon Kit: 2 Gallons Part A + 1 Gallon Part B
 7.5-Gallon Kit: 5 Gallons Part A + 2.5 Gallons Part B
 15 –Gallon Kit: 2x5 Gallons Part A + 5 Gallons Part B

Yield

Approx. 125-175 ft²/gallon
 (These figures do not allow for surface porosity, profile or wastage)

Shelf Life

Keep lids tightly sealed.
 Components A+B: 6 months in original unopened packaging.
 Store dry between 15 - 30°C (59- 86°F). Do not store in cool environments, and DO NOT FREEZE.
 Avoid storing in humid conditions.
 Epoxies are subject to crystallization when stored for extended periods, or when stored in cooler environments. This process can be reversed.
 Contact Terrafuse Inc. directly if you discover crystallized Part A.
 Do not attempt to mix or install crystallized product.

Application Temperature

10°C (50°F) min. / 30°C (86°F) max.
 (For temperatures outside this range, contact Terrafuse Inc.)
 Product will take much longer to cure at low temperatures.

Cure Time

Usable pot life 10 - 15 min at 20°C (68°F),
 Cure to light foot traffic 24-48 hrs at 20°C (68°F)
 Cure to full traffic 2-4 days at 20°C (68°F)
 Recoat window, maximum 24 hours between coats for proper adhesion.

ASTM Specifications

ASTM D7234	>400 psi
Adhesion to concrete	Concrete Failure
ASTM D4060	
Taber Abrasion C17 Wheel; 1000 cycles	51.7mg loss
ASTM D412	
7 Day Elongation	8.66%
28 Day Elongation	5.14%
ASTM D412	
7 Day Tensile Stress	6276psi
28 Day Tensile Stress	7826psi
ASTM D2240	
Shore D Hardness	78
ASTM D202	
Slip Coefficient	0.5-0.6
ASTM D202	
Slip Coefficient with TF Non Slip Additive	0.9-1.0
ASTM D523	
Gloss 60°	112

Surface Preparation

Concrete surfaces must be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, form oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues frost or any other contaminants which may prohibit a proper bond.

Prepare the surface by using a diamond grinder, shot blaster, or by any other appropriate mechanical means in order to achieve a porous clean surface with a recommended CSP surface profile of 2 or greater, as per ICRI technical guidelines No.03732. Acid washing is not a recommended preparation method. All existing sealers must be removed to allow even penetration and appearance of the coating. It is not recommended to apply TF Epoxy over a previously coated surface. TF Epoxy relies on a highly porous surface to ensure adhesion. Most existing coatings are very dense, and will prevent proper adhesion of the TF Epoxy. It is always recommended to apply TF Epoxy to bare concrete substrates.

Ensure the concrete has a vapor pressure that is at or less than 3 lbs./1000 ft²/24hr. Newly poured concrete may exceed this level, so the user must wait the full 28 days before coating. For information on performing this simple test, and where to obtain the testing equipment, please contact Terrafuse Inc directly.

High vapor pressure can lead to loss of adhesion over time, and it is always recommended to ensure the vapor pressure is within limits.

Mixing

Do not thin with solvents or water. Vigorously shake product before measuring. Measure 2 parts A with 1 part B by volume. Avoid any contamination with water.

Working times will be affected by temperature. Try and ensure product is at room temperature before use. Do not store product in hot, or cold environments before using, as this will greatly alter the curing times.

Warmer temperatures will give shorter working times.

Measure 2 parts A and 1 part B by volume, and add to mix container. Use a low speed hand drill (300-450 rpm) and small mixing paddle suited to the size of mixing container. Avoid high speed mixing. Once mixed, remove from pail and use as soon as practical. Do not let the mixed epoxy sit in the pail once mixed. Do not mix more than can be applied within 20-30 minutes.

Color Tint Additions

Only add tint supplied by Terrafuse Inc., to ensure compatibility and proper reactivity of the final film. Shake tint before use. When using more than 1 container of tint, it is recommended to mix all containers together prior to use in order to achieve a consistent color. Add 200-250mL of tint to every mixed gallon of product. Do not exceed 300mL of tint per mixed gallon. Never pre-tint any of the components. This will alter the critical 2:1 mix ratios of the Part A and Part B. Always be sure to measure the clear A and B components 2:1 by volume first, then add the tint.

Non-Slip Additive

Only add non-slip additives provided by Terrafuse Inc. to ensure compatibility and proper reactivity of the final film. Add 8 ounces (1 cup) of non-slip additive to 1 gallon of mixed material. More or less additive can be used to achieve desired affect.

Application

TF Epoxy can be applied with most standard painting equipment, such as squeegees, rollers, and brushes. Although the TF Epoxy has no solvents, it is recommended to ensure adequate ventilation when applying the product.

If overcoating Terrafuse products, make sure to apply within the recoat window (16 hrs). If outside the recoat window or completing repairs, you must mechanically abrade the surface using a, diamond grind or abrasive blasting. If extensive mechanical preparation is not done, there is a risk of poor adhesion and delamination of the coating.

Safety

TF Epoxy contains chemical ingredients that are considered hazardous. Do not get the product on your skin or eyes, and always ensure adequate ventilation. It is not recommended to spray this product without proper training of the safety techniques required. Always read the container label warning and Safety Data Sheet prior to use.

Clean Up

Clean all tools and equipment with acetone, Xylene or other organic solvent. Wash soiled hands and skin thoroughly in hot soapy water. Once hardened, product can only be removed mechanically. Do not get product on skin, eyes, or clothes.

Disclaimer

This Technical Data Sheet was created as a guide for using and installing TF Epoxy. While we attempted to address most major areas, this sheet cannot cover the entire scope of installation methods and techniques, and all the beneficial properties of our TF Epoxy. Terrafuse Inc. encourages you to contact us directly for any clarifications or specific questions about using this product, or any training requirements you may have.

Warranty

Terrafuse Inc. warrants that all products are free from manufacturing defects within the specified shelf life. The data provided is believed to be reliable and is offered solely for evaluation. Datasheets are updated on a continuous basis and subject to change. Please ensure you have the most recent datasheet by contacting Terrafuse Inc. There is no warranty expressed or implied as related to any issue which is deemed to be a direct result of improper surface preparation or cleaning, application over surfaces which have not reached full cure out, those having excessive rising moisture/vapor or hydrostatic pressure, workmanship or application, or any other cause and effect which is not related to defective material. This warranty is limited to replacement of any Terrafuse Inc. product determined to be defective.