TERRAFUSE™ Flat Finish

TF Flat Finish Concrete Repair Mortar
Two component, fine repair mortar for use on concrete substrates

Description
TF Flat Finish is a rapid curing, very fine concrete repair slurry, designed for use on shallow surface damage of concrete substrates. TF Flat Finish was created as a rapid repair slurry, for preparation of concrete surfaces, before application of a decorative coating. TF Flat Finish is applied as a scratch coat to fill in surface scaling, spalling, hairline cracking, or imperfections. With its rapid curing properties, TF Flat Finish will be ready for grinding in as little as 45 minutes, allowing a top coating to be applied in the same day. TF Flat Finish can be applied horizontally, vertically or overhead, and is intended for thicknesses between a feather edge to approximately 1⁄4".

Where to Use
TF Flat Finish is designed for use on properly prepared concrete substrates. While not limited to specific applications, the following list gives a general guideline for where TF Flat Finish is typically installed.
•Concrete surfaces in need of repair
•Primarily used to prepare surfaces for a top coating
•Minor surface repairs

Features
•Very rapid cure. Ready to grind in under 1 hour.
•Odorless
•Zero VOC's
•No primer required.
•Easy to apply
•Installed up to 1⁄4" thick.
•Easy to mix, no critical mix ratio between powder and Part B activator.

Packaging
Part A - 20lb pail (9.1kgs)
Part B - 1 gallon (3.8L) pail

Yield
Approx. 25-100 ft^2/pail
(These figures account for the variations in surface imperfections.)

Shelf Life
Keep lids tightly sealed.
Components A+B: 6 months in original unopened packaging.
Store dry between 38- 86°F. Protect Part B from freezing.
Avoid storing in humid conditions.

Application Temperature
23°F min. / 95°F max.
(For temperatures outside this range, contact Terrafuse Inc.)

Cure Time
Usable pot life 2-4 min at 68°F
Working time 3-10 min at 68°F
Cure to foot traffic 30-45min at 68°F
Cure to full traffic 40-60min at 68°F

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 prevent a proper bond to the substrate.
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 proper bonding.
Ensure the concrete has a vapor pressure that is at or less than 3 lbs./1000 ft^2/24hr. 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. It is recommended to bring the substrate to a saturated surface dry condition (SSD) before application. This will help the product spread further, and retain its workability for an extended period.

Mixing Ratio
Although no critical mix is required, it is recommended to add approximately 2 parts powder to 1 part liquid by volume. The mixer can adjust ratios to get desired consistency for job site conditions. The best consistency is similar to a wetter pancake batter. The mixture should be very smooth and easy to spread. This product will not self level. The installer should only mix what he is comfortable working with, in 3-10 minutes.

Mixing
Add desired amount of Part B to mix container. Gradually add Part A (powder) and mix for 30 seconds, or until all powders are wetted out. Use a low speed mixing drill (300-450 rpm) and mixing paddle suited to the size of mixing container. Hand mixing is acceptable for smaller batches. It is recommended to make smaller, more frequent mixes, instead of a larger one. Don't mix more than can be placed in 3-10 minutes. The mix consistency can be adjusted according to job requirements, by adding more Part A or Part B at any time during the mixing. Small amounts of Part B will make a large difference in mix consistency. TF Flat Finish will cure quicker in thicker applications. This product is designed to be installed as soon as mixing is finished. Once mixed, remove from container and use as soon as practical. Do not mix more than can be applied within 3-10 minutes.

Application

Apply TF Flat Finish to the substrate using steel trowels or screeds. Do not overwork the product once it begins to set.
Trowel the material back and forth, while moving towards yourself. Press the trowel firmly onto the surface, at a higher angle, to 'scratch' off the excess material. The goal is to fill the imperfections, while not creating build up on the good concrete. This will prevent excessive grinding requirements when doing final prep. Make sure you do not press too hard, or you may pull material out of the voids, leaving imperfections after you are finished. Continue in this manner until all damaged areas are covered. You do not need to cover the entire area if the damage is isolated. Only fill what is necessary.
Approximately 45 mins later (depending on temperature), the area will be ready for the final grind, to bring a smooth, consistent finish, ready for a decorative coating.
After the final cure and grinding of TF Flat Finish, it will be ready to accept a top coating.

Safety

TF Flat Finish contains chemical ingredients that are considered hazardous. Do not get the product on your skin or eyes, and always ensure adequate ventilation. Always read the container label warning and Safety Data Sheet prior to use.

Clean Up

Clean all tools, equipment, and surrounding work area with water while material is still wet. Once hardened, product can only be removed mechanically.

Disclaimer

This Data Sheet was created as a guide for using and installing TF Flat Finish. 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 TF Flat Finish. When engaging in highly technical applications, or projects involving large scale structural restorations, it is advised to seek the recommendations of a structural engineer, specializing in restoration applications. Terrafuse USA Inc. encourages you to contact us directly for any clarifications or specific questions about using this product.

Warranty

Terrafuse USA 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 USA Inc. There is no warranty expressed or implied as related to any issue which is deemed to be a direct result of improper concrete preparation or cleaning, application over concrete which have not reached full cure out, those having excessive hydrostatic pressure, workmanship or application, or any other cause and effect which is not related to defective material. This warranty is limited to potential replacement of any Terrafuse USA Inc. product determined to be defective.

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