



TYFO® CFP FIRE RESISTANT FINISH

The Tyfo CFP Fire Resistant Finish is composed of three Tyfo products: Tyfo VG Primer, Tyfo VG Dash Coat and Tyfo WR-AFP. These products are applied in this order and together form the coating that provides the thermal insulation to the strengthened element. The Tyfo CFP Finish provides up to a 4-hour UL rated assembly tested in accordance with ASTM E119.

The following data sheet provide information on the three components of the protective coating.

ADVANTAGES

UL listed, Design No. N790, N806, N850, X842, X852 and X853.

TYFO® VG PRIMER

DESCRIPTION

Tyfo® VG Primer is the first component of the Tyfo® AFP System and Tyfo® CFP System. It is specially formulated to provide improved bonding between the substrate and Tyfo® VG or Tyfo® WR-AFP.

USE

This material is used in conjunction with the Tyfo® AFP and CFP Systems. Tyfo® VG Primer adheres well to concrete, masonry, FRP, brick, wood, glass, metals, and rigid polystyrene and polyurethane foam.

PACKAGING

One gallon (3.79 L) and 5-gallon (19 L) units.

COVERAGE

Tyfo VG Primer is spray-applied with a coverage rate of 200 sq.ft./1-gal kit and 1,000 sq.ft./5-gal kit.

SHELF LIFE

18 months in the original, unopened package when kept in a dry area above freezing.

STORAGE CONDITIONS

Store units in a dry area above 32°F (0°C) away from flames. Plastic tarping is recommended. Avoid freezing.

HOW TO USE THE TYFO® VG PRIMER

SURFACE PREPARATION

Surface should be free of excess dust, debris, oils and greases.

APPLICATION

Apply Tyfo® VG Primer within 72 hours of the FRP application. If the FRP has cured for over 72 hours, then scuff sand prior to the VG Primer application.

LIMITATIONS

Tyfo® VG Primer will flash cure above 90°F (32°C). Do not install above 90°F (32°C).

Material Properties	
Property	Typical Test Value
Appearance	Milky, white liquid
Odor	Mild acrylic odor
Solids Content, %	47 +\ -0.5
pH (when packed)	9.3 - 10.2
Specific Gravity	1.059
Lbs./Gal.	8.8
Freeze/Thaw Stability	5 cycles
Minimum Film-Formation Temperature	50°F - 54°F (10°C - 12°C)

CAUTION!

CLEANUP

Tools may be cleaned with water. Clean promptly after use. Dried or hardened material is difficult to remove. Pour the contaminated water over suitable absorbents to dry then dispose of in approved waste containers.

HAZARDS

Consult the Safety Data Sheets (SDS) for associated hazards. SDS will be supplied upon request.

Consult safety data sheet (SDS) for more information. For industrial use only.

TYFO® VG DASH COAT

DESCRIPTION

Tyfo® VG Dash Coat is the second component of the Tyfo® AFP System and Tyfo® CFP System.

USE

Tyfo® VG Dash Coat is used to promote the adhesion of the Tyfo® VG or WR-AFP layers. (See Tyfo® VG and Tyfo® WR-AFP Data Sheet for additional information).

COVERAGE

Approximately 900 ft² per bag. Application to cover roughly 70% of surface area at 1/16" thickness.

PACKAGING

48 lbs. per bag.

SHELF LIFE

12 months in properly stored conditions.

STORAGE CONDITIONS

Store bags in dry place, palletized off the ground. Cover with polyethylene sheeting to protect from moisture.

HOW TO USE THE TYFO® VG DASH COAT

INSTALLATION

The Tyfo system is to be installed by FyfeFRP LLC trained and certified applicators in accordance with the FyfeFRP LLC quality control manual, project specifications and design requirements.

APPLICATION

- The Tyfo® VG Dash Coat shall be spray-applied within 30 minutes of applying the Tyfo® VG Primer. VG Primer must not dry prior to applying Dash Coat. If dry, re-apply and immediately proceed with VG Dash Coat.
- Spray material in a non-continuous spatter pattern leaving up to 30% of the application area exposed.
- Allow the Tyfo® VG Dash Coat to dry to light gray before applying the Tyfo® VG or WR-AFP layer.

LIMITATIONS

Minimum application temperature of the material is 40°F (4°C).

MATERIAL PROPERTIES

Property	Typical Test Value
Color	Gray
Pot Life	-30 minutes

CAUTION!

CLEANUP

Tools may be cleaned with water. Clean promptly after use. Dried or hardened material is difficult to remove. Pour the contaminated water over suitable absorbents to dry then dispose of in approved waste containers.

HAZARDS

Consult the Safety Data Sheets (SDS) for associated hazards. SDS will be supplied upon request.

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(SDS) for more information.
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TYFO® WR-AFP

DESCRIPTION

Tyfo® WR-AFP is the final component of the Tyfo® CFP System. The Tyfo® CFP System consists of Tyfo® VG Primer, Tyfo® VG Dash Coat and Tyfo® WR-AFP. The Tyfo® CFP System is specially formulated to provide a 1 to 4-hour UL-rated assembly per ASTM E119.

USE

Tyfo® WR-AFP is used in conjunction with the Tyfo® CFP System where higher fire ratings are required.

ADVANTAGES

- ASTM E84 Class 1/Class A Rated Assembly (UL-Listed Design No. BWSZ.R15357)

COVERAGE

Approximately 22 ft² per bag at a thickness of 0.75". Thickness may vary based on design. Applicator to allow for waste and overspray.

PACKAGING

43 lbs. per bag.

SHELF LIFE

12 months in the original, unopened package when kept in a dry area above freezing.

STORAGE CONDITIONS

Store units in a dry area above 32°F (0°C). Plastic tarping is recommended. Avoid freezing.

Consult safety data sheet (SDS) for more information.
For industrial use only.

HOW TO USE THE TYFO® WR-AFP

SURFACE PREPARATION

Surface should be free of excess dust, debris, oils and greases.

MIXING

Mix with clean water until uniformly blended, typically 5-7 minutes. Recommended mix ratio is 1 part WR-AFP to 1.25 parts water. Apply immediately.

APPLICATION

Spray-apply the Tyfo® WR-AFP over the Tyfo® VG Dash Coat to achieve the minimum thickness. If multiple lifts are required, subsequent lifts are applied 4 - 6 hours after the previous lift, or when the surface has achieved sufficient strength to support additional lifts. Tyfo® WR-AFP may be trowel-finished to achieve the desired texture.

WORKING TIME

Tyfo® WR-AFP has a short working time of approximately 20 minutes at normal ambient temperatures between 60° to 80°F (16° to 27°C). Do not mix more than can be spray-applied within this time. If material begins to harden, it should be discarded.

Epoxy Material Properties

Property	ASTM Method	Typical Test Value
Dry Density, lb./cu. ft. (min. avg.)		28.6
Compressive Strength, lb./sq. ft.	E761	18,288
Bond Strength, lb./sq. ft.	E736	1,641
Combustibility	E136	Passes, Non-comb.
Surface Flame Spread Smoke Developed	E84	0 0
Corrosion of Steel	E937	Passed

¹ Testing temperature: 73°F (23°C).

² Adhesion strength dependent on surface preparation and substrate thickness. Cure schedule: 7 days at 73°F (23°C).

CAUTION!

CLEANUP

Clean tools and equipment with water before the material hardens. Dry material may be swept or vacuumed up. Dispose in accordance with local disposal regulations.

HAZARDS

Consult the Safety Data Sheets (SDS) for associated hazards. SDS will be supplied upon request.

Statement of Responsibility: The technical information and application advice in this publication is based on the present state of our best scientific and practical knowledge. As the nature of the information herein is general, no assumption can be made as to the product's suitability for a particular use or application, and no warranty as to its accuracy, reliability or completeness, either expressed or implied, is given other than those required by State legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use. Field service, where provided, does not constitute supervisory responsibility. Suggestions made by the FyfeFRP LLC, either verbally or in writing, may be followed, modified or rejected by the owner, engineer or contractor since they, and not the FyfeFRP LLC, are responsible for carrying out procedure appropriate to a specific application.