

BONFORT TECHNICAL DOCUMENT

BFT-601E Water Based Epoxy Primer

Two-component, low-VOC, room-temperature curing epoxy primer for roof coating and construction substrates

TECHNICAL DATA SHEET

BFT-601E Water Based Epoxy Primer

Two-component, low-VOC, room-temperature curing epoxy primer for roof coating and construction substrates

PRODUCT DESCRIPTION

BFT-601E is a two-component waterborne epoxy primer system formulated with Epoxy-Water emulsion Part A and Epoxy-Water curing agent Part B. It is designed for substrate penetration, adhesion promotion, surface consolidation and damp-substrate priming before compatible waterproofing, roof coating, flooring and anti-corrosion coating systems.

Code	BFT-601E
Product Name	Water Based Epoxy Primer
Material Type	Two-component waterborne epoxy
Color	Part A: milky white liquid; Part B: clear to translucent liquid; mixed film dries clear to slightly amber
Mixing Ratio	Part A : Part B = 1 : 2 by weight. Add clean water 0-20% only when required for substrate porosity or spray viscosity.
Primary Function	Penetrating adhesive primer, damp-substrate sealer and surface consolidator for compatible coating systems

FEATURES / BENEFITS

- Low-VOC, water-based epoxy chemistry for professional U.S. commercial and industrial applications.
- Fast hardness development with practical recoat window under normal jobsite conditions.
- Penetrates porous substrates and improves adhesion of compatible acrylic, silicone, polyurethane, MS and epoxy coating systems.
- Excellent adhesion to properly prepared concrete, masonry, cement mortar, wood and selected aged roofing substrates after compatibility testing.
- Good abrasion, chemical, scrubbing and salt-spray resistance after full cure.
- Non-combustible, non-explosive and non-hazardous for transportation; tools may be cleaned with water before cure.

TYPICAL USES

- Primer for waterborne epoxy floor coating systems and protective coating build-ups.
- Adhesion primer for cool roof coating restoration systems over approved substrates.
- Surface consolidation for concrete, masonry, cement mortar and grout repairs.
- Primer/sealer for prepared metal, wood, modified bitumen, BUR, aged EPDM and other aged roof surfaces where field compatibility is confirmed.
- Penetration primer or adhesive modifier for compatible waterborne epoxy dispersion systems.

TECHNICAL DATA - TYPICAL PROPERTIES

Property	Test Method / Condition	Typical Value
Non-volatile Content - Part A	ASTM D2369	50.0 +/- 1% by weight
Non-volatile Content - Part B	ASTM D2369	20 +/- 2% by weight
VOC Content, mixed system	ASTM D2369	< 25 g/L, excluding water (typical target)
Viscosity, mixed	Brookfield, 75°F (24°C)	800-1,200 cP before optional water adjustment
Specific Gravity, mixed	Calculated / QC	1.05 +/- 0.05 g/cc
Pot Life	75°F (24°C), 50% RH	45-60 minutes
Tack-free / Dry Time	75°F (24°C), 50% RH	1-3 hours at 4-8 mils WFT
Recommended Recoat Time	Jobsite dependent	4-8 hours; recoat within 24 hours or abrade if contaminated
Recommended Wet Film Thickness	Field application	4-8 mils per coat
Coverage, smooth/non-porous surfaces	Field application	250-450 ft ² /gal depending on profile and porosity
Coverage, rough or porous surfaces	Field application	100-250 ft ² /gal depending on absorption
Minimum Application Temperature	Substrate/ambient	50°F (10°C) and rising
Service Readiness	Typical	Allow full cure before heavy exposure or immersion conditions

Note: Technical values are representative targets for product positioning and should be confirmed by current QC test results and SDS before final publication or customer submittal.



BONFORT TECHNICAL DOCUMENT

BFT-601E Water Based Epoxy Primer

TECHNICAL DATA SHEET CONTENT

APPLICATION INSTRUCTIONS

Surface Preparation	Substrate must be clean, dry to damp but free of standing water, structurally sound and free of oil, grease, dust, laitance, loose coating, rust scale and other contaminants.
Mixing	Pre-mix each component. Add Part A into Part B at 1:2 by weight and mix mechanically at low speed until uniform. Add clean water slowly only if needed, up to 20% maximum by weight of mixed A+B.
Application Method	Apply by airless spray, conventional spray, brush, roller, trowel or squeegee depending on substrate and coating system requirements.
Application Rate	Apply uniformly at 4-8 mils wet film thickness. Porous substrates may require a higher application rate or a second coat.
Recoat	Allow primer to become tack-free before applying the next coating. Protect primed surfaces from rain, condensation, dust and contamination before recoat.
Cleanup	Clean tools and equipment with water immediately after use and before the material cures.

SUBSTRATE COMPATIBILITY

- Concrete, masonry, cement mortar, grout repairs and other mineral substrates.
- Prepared wood and selected building panels used in approved coating assemblies.
- Prepared metal for corrosion-protection coating systems where adhesion is verified.
- Aged BUR, modified bitumen, EPDM, polyurethane and other roofing surfaces when cleaned, sound and confirmed by adhesion/compatibility test.
- Not intended for direct application over standing water, frost, uncured asphalt mastic, silicone contamination or structurally unsound substrates.

PACKAGING, STORAGE AND TRANSPORTATION

Packaging	Factory-matched two-component kits. Bulk package reference: Part A 10 kg plastic pail; Part B 20 kg plastic pail.
Shelf Life	12 months from date of manufacture when stored in original unopened containers.
Storage Conditions	Store tightly closed in a dry, well-ventilated area between 40°F and 95°F (5°C-35°C). Protect from freezing and direct heat.
Transportation	Not classified as dangerous goods for transport. Protect containers from impact and freezing during shipment.
Freezing Notice	Do not use product that has been frozen unless approved by technical service after inspection and remixing.

ENVIRONMENTAL, HEALTH AND SAFETY

- For complete handling, toxicology, transportation and disposal information, read the current Safety Data Sheet before use.
- Professional use only. Wear appropriate PPE, including gloves, eye protection and protective clothing.
- Use with adequate ventilation. Avoid inhalation of spray mist and avoid contact with eyes and skin.
- Keep containers tightly closed when not in use. Keep out of reach of children. Do not ingest.
- Although water-based, mixed epoxy components may cause skin or respiratory irritation in sensitive individuals.

LIMITATIONS

- Do not apply on substrates with standing water, frost, ice, loose debris, oil, grease or active moisture pressure.
- Do not dilute beyond the recommended maximum, as excessive water can reduce film build, hardness and adhesion.
- Application results depend on substrate condition, surface profile, porosity, ambient temperature, humidity, mixing accuracy and curing conditions.
- Perform a field adhesion and compatibility test on unknown, aged, contaminated or critical substrates before full application.
- Not for continuous immersion service unless confirmed by a complete system specification.

LEGAL DISCLAIMER

Prior to use, all applicators shall review the current BFT-601E Technical Data Sheet, Safety Data Sheet and product label instructions. Product selection, surface preparation, jobsite condition assessment and application risk are the responsibility of the contractor, applicator and project owner. Published information is based on typical laboratory and field experience and is provided for reference only. Actual performance may vary depending on site conditions, substrate type and application methods. No warranty of merchantability or fitness for a particular purpose is implied. Contact BONFORT technical service for current product information before final specification.