

## BONFORT TECHNICAL DOCUMENT

## BFT-607P Cool Roof Coating

Two-component, fiber-reinforced, high-solids reflective roof coating for waterproof roof restoration

## TECHNICAL DATA SHEET

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## PRODUCT DESCRIPTION

BFT-607P is a two-component, fiber-reinforced cool roof coating formulated with a bio-based polyol Part A and polymeric MDI Part B. It is designed to form a seamless, thick-film, impact-resistant and highly reflective waterproofing membrane for restoration of properly prepared commercial and industrial roof substrates.

|                         |                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Code</b>             | BFT-607P                                                                                                                                             |
| <b>Product Name</b>     | Cool Roof Coating                                                                                                                                    |
| <b>Material Type</b>    | Two-component fiber-reinforced polyurethane / polyurea-modified cool roof coating                                                                    |
| <b>Color</b>            | Part A: white or custom cool-roof color; Part B: brown/amber resin component; cured film: white reflective membrane unless custom color is specified |
| <b>Main Components</b>  | Part A: bio-based castor oil polyol, hydrated gypsum, titanium dioxide, glass fiber and functional fillers. Part B: polymeric MDI resin.             |
| <b>Mixing Ratio</b>     | Part A : Part B = 4 : 1 by weight (80 parts Part A to 20 parts Part B). Use full matched kits whenever possible.                                     |
| <b>Primary Function</b> | High-build waterproof roof coating, cool roof restoration membrane and substrate protection layer for approved roof assemblies                       |

## FEATURES / BENEFITS

- High-solids, solvent-free formulation designed for low odor, low shrinkage and high film build in professional roof restoration work.
- Fiber-reinforced body provides excellent sag resistance, impact resistance and crack-bridging support on properly prepared substrates.
- Designed for single high-build application on many roof restoration projects where substrate condition and specification allow.
- High initial solar reflectance and thermal emittance help reduce roof surface temperature and support cool-roof design objectives.
- Strong adhesion to properly prepared metal, concrete, asphaltic roofing, single-ply membranes, wood and selected existing coatings after compatibility testing.
- Continuous waterproof membrane with strong resistance to standing water exposure, sea water splash, hot/cold water and many common petrochemical exposures after cure.

## TYPICAL USES

- Restorative waterproofing and reflective coating for low-slope commercial and industrial roofs.
- Cool roof coating for prepared metal, concrete, modified bitumen, BUR, asphaltic roof surfaces and mineral cap sheet.
- Restoration coating for aged acrylic, polyurethane, cementitious coatings and selected single-ply membranes such as TPO, PVC, CSPE and EPDM after field adhesion testing.
- Detail coating around curbs, parapets, penetrations, seams and transitions when used with approved reinforcement or system accessories.
- Protective membrane for roofs requiring high-build, low-sag and impact-resistant coating performance.

## TECHNICAL DATA - TYPICAL PROPERTIES

| Property                       | Test Method / Condition   | Typical Value                                                                    |
|--------------------------------|---------------------------|----------------------------------------------------------------------------------|
| Mix Ratio by Weight            | QC / jobsite kit ratio    | Part A : Part B = 4 : 1                                                          |
| Solids Content                 | ASTM D2369                | 100% solids, solvent-free (typical target)                                       |
| VOC Content                    | ASTM D2369 / ASTM D3960   | < 10 g/L, excluding exempt compounds (typical target)                            |
| Pot Life                       | 75°F (24°C), 50% RH       | 35-45 minutes; decreases in hot weather                                          |
| Tack-free / Initial Cure       | 70-75°F (21-24°C), 50% RH | 12-24 hours depending on film thickness and conditions                           |
| Full Cure                      | 70-75°F (21-24°C), 50% RH | 24-36 hours typical                                                              |
| Recommended Wet Film Thickness | Field application         | 30-60 mils per coat; higher build possible by specification                      |
| Coverage Rate                  | Field application         | Approx. 25-50 ft <sup>2</sup> /gal depending on film build, profile and porosity |
| Tensile Strength               | ASTM D412                 | Approx. 950 psi typical target                                                   |
| Elongation at Break            | ASTM D412                 | 25-65% typical target                                                            |
| Pull-off Adhesion to Steel     | ASTM D4541                | >= 1,000 psi with cohesive failure on properly prepared steel                    |
| Water Absorption               | ASTM D570                 | <= 0.30% typical target                                                          |
| Perm Rating                    | ASTM D1653                | Approx. 4-5 perms at 30-50 mils DFT                                              |
| Continuous Heat Resistance     | Service exposure          | Up to 212°F (100°C) after full cure                                              |
| Minimum Service Temperature    | Service exposure          | -40°F (-40°C) typical target                                                     |

## COOL ROOF / ENERGY PERFORMANCE

| Cool Roof Property            | Test Method / Condition        | Typical Value                        |
|-------------------------------|--------------------------------|--------------------------------------|
| Initial Solar Reflectance     | ASTM C1549 / CRRRC method      | 0.87 typical target, white           |
| Aged Solar Reflectance        | CRRRC aged / rapid-aged method | 0.72 typical target, white           |
| Initial Thermal Emittance     | ASTM C1371                     | 0.90 typical target                  |
| Aged Thermal Emittance        | ASTM C1371                     | 0.88 typical target                  |
| Solar Reflectance Index (SRI) | ASTM E1980                     | Initial 111 / aged 87 typical target |

Note: Values are representative product-positioning targets and should be confirmed by current QC, SDS and third-party test reports before formal certification, warranty submittal or code-compliance claim.

## BONFORT TECHNICAL DOCUMENT

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## TECHNICAL DATA SHEET CONTENT



## APPLICATION INSTRUCTIONS

|                      |                                                                                                                                                                                                                                |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface Preparation  | Substrate must be clean, dry, tight and structurally sound. Remove loose coating, dust, oil, grease, moisture blisters, rust scale and contaminants. Repair open seams, cracks, penetrations and damaged areas before coating. |
| Moisture / Pull Test | Conduct adhesion pull testing on aged, unknown or contaminated substrates before full application. Do not apply over trapped moisture or active leaks.                                                                         |
| Mixing               | Pre-mix Part A thoroughly at low speed for at least 5 minutes, scraping sides and bottom. Add full Part B while mixing and continue mixing 4-6 minutes until fully uniform. Avoid high-speed mixing that entrains air.         |
| Application Method   | Apply by notched squeegee, roller, brush or approved spray equipment. Back-roll immediately to distribute fibers and achieve uniform film build.                                                                               |
| Application Rate     | Apply at the specified wet film thickness and verify with a wet-film gauge. Rough, porous or irregular substrates require additional material.                                                                                 |
| Curing / Recoat      | Allow coating to cure until tack-free before foot traffic or additional coating. Clean and dry surface is required for recoat or tie-in work.                                                                                  |
| Cleanup              | Clean tools with approved cleaner before material cures. Cured material must be removed mechanically.                                                                                                                          |

## SUBSTRATE COMPATIBILITY

- Acrylic and cementitious coatings, metal, mineral cap sheet, asphaltic roof surfaces, concrete, BUR and modified bitumen.
- Single-ply membranes including TPO, PVC, CSPE and EPDM when cleaned, aged, sound and confirmed by adhesion testing.
- Wood, plywood, selected existing paints and coating systems when compatible and structurally sound.
- Primer may be required on dusty, porous, chalky, oxidized or difficult substrates.

## PACKAGING, STORAGE AND TRANSPORTATION

|                     |                                                                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging           | Two-component matched kits. Example label configuration: Part A pail and Part B metal can.                                                                           |
| Net Weight / Volume | Part A: project-size pail; Part B: 5 kg / approx. 4.17 L (1.1 US gal) resin can. Final package sizes may be customized by market.                                    |
| Shelf Life          | 24 months for unopened containers when stored correctly; remix Part A thoroughly if stored for more than 6 months.                                                   |
| Storage Conditions  | Store tightly closed in a cool, dry, well-ventilated place. Protect from freezing, direct heat and moisture. Part B must be protected from atmospheric moisture.     |
| Transportation      | Transport as non-hazardous general cargo where permitted by local regulation and SDS classification. Prevent container damage and moisture exposure during shipment. |

## ENVIRONMENTAL, HEALTH AND SAFETY

- For complete handling, toxicology, transportation and disposal information, read the current Safety Data Sheet before use.
- Professional use only. Wear chemical-resistant gloves, safety glasses or goggles and protective clothing.
- Part B contains isocyanate chemistry; avoid moisture contamination and direct contact with skin, eyes and respiratory tract.
- Keep containers tightly closed when not in use. Keep out of reach of children. Do not ingest.

## LIMITATIONS

- Do not apply over wet, frozen, contaminated, unsound or actively leaking substrates.
- Do not split factory kits unless an approved weighing procedure is used; incorrect ratio can reduce cure, adhesion and performance.
- Cure time and pot life are strongly affected by temperature, humidity, film thickness, batch size and substrate temperature.
- Cool roof values vary by color, surface texture, soiling, weathering and maintenance.

## LEGAL DISCLAIMER

Prior to use, applicators shall review the current BFT-607P Technical Data Sheet, SDS and label instructions. Product selection, substrate preparation, system design and jobsite application risk are the responsibility of the contractor, applicator and project owner. Published data are typical reference values only; actual performance may vary with substrate, conditions, mixing and application. Contact BONFORT technical service for current information before final specification or customer submittal.