

BONFORT TECHNICAL DOCUMENT

BFT-600FB PVC 60 mil Feltback Roof Membrane

Single-ply thermoplastic PVC membrane with polyester scrim reinforcement and 3 oz polyester felt backing

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BFT-600FB is a 60 mil (1.5 mm) thermoplastic PVC roof membrane engineered for low-slope commercial roofing, retrofit recover and detail flashing applications. The membrane combines a reinforced PVC core, factory anti-soiling top surface and lightweight 3 oz polyester felt backing to support fast installation, reliable hot-air welding and strong puncture resistance.

This U.S.-market PDS highlights performance values commonly reviewed by contractors, specifiers and distributors, including ASTM D4434 Type III requirements, puncture resistance, dimensional stability, weld strength, weathering and cool roof reflectance.



Code	BFT-600FB
Product Name	PVC 60 mil Feltback Roof Membrane
Material Type	Single-ply thermoplastic PVC membrane with internal polyester scrim and 3 oz/yd ² polyester felt backing
Color	Top: EnergySmart White / Reflective Gray / Tan; Bottom: Dark Gray felt backing
Nominal Thickness	60 mil (1.5 mm); Type III design with 24 mil typical thickness above scrim
Standard Roll Size	10 ft x 100 ft (3 m x 30 m); approx. 345 lbs (156 kg) per roll; 9 rolls per pallet
Primary Use	Mechanically attached, adhered or retrofitted single-ply PVC roof assemblies for commercial low-slope roofs

FEATURES / BENEFITS

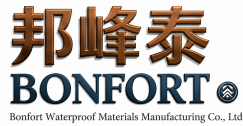
- High-strength polyester scrim reinforced core designed to exceed ASTM D4434 Type III minimum performance thresholds.
- Factory anti-soiling lacquer top surface helps reduce dirt pickup and supports high solar reflectance for cool roof projects.
- 3 oz felt backing cushions irregular substrates and may reduce the need for a separate cover board in approved recover assemblies.
- Hot-air weldable seams with strong weld integrity; weld failure is designed to occur in the membrane rather than at the seam.
- Lightweight feltback construction provides easier roll handling compared with heavier feltback membranes while retaining puncture resistance.
- Formulated with UV stabilizers and flame-retardant package for exposed roof service when used in approved assemblies.

TYPICAL USES

- New construction single-ply PVC roofing systems for low-slope commercial roofs.
- Reroof and retrofit projects over approved existing roof substrates after inspection and compatibility review.
- Mechanically fastened in-seam disc and batten double-weld systems; adhered full-bond systems with compatible PVC adhesive.
- Parapet walls, curbs, drains, metal flashings, rooftop accessory detailing and field seam construction.
- Compatible substrates may include steel deck, concrete, wood structural panels, existing single-ply roof membranes, modified bitumen and BUR with primer/treatment as required.

TECHNICAL DATA - PRODUCT INFORMATION

Item	Test Method / Basis	Typical Value
Nominal Overall Thickness	ASTM D751	60 mil (1.5 mm)
Minimum Thickness	ASTM D4434 Type III	45 mil minimum
Thickness Above Scrim	ASTM D7635	24 mil typical; 16 mil minimum requirement
Felt Backing Weight	Weight measurement	3 oz/yd ² (101 g/m ²) lightweight polyester felt
Reinforcement	Product design	High-strength polyester scrim
Recycled Content	Manufacturer formulation	9% pre-consumer PVC scrap; 1% post-consumer recycled polymer
Storage / Shelf Life	Unopened pallet	No stated expiration when properly sheltered, covered and stored upright



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TECHNICAL DATA SHEET CONTENT

Property	Test Method	Typical Value / Requirement
Tensile Strength, Grab MD & CMD	ASTM D751	315 lbf (1400 N) typical; ASTM Type III min. 200 lbf
Tear Strength, Tongue Tear	ASTM D751	50 lbf (222 N) typical; ASTM Type III min. 45 lbf
Elongation at Break, MD & CMD	ASTM D751	22% typical; ASTM Type III min. 15%
Static Puncture Resistance	ASTM D5602	Pass @ 33 lbf (15 kg); enhanced QC target pass @ 35 lbf
Dynamic Puncture Resistance	ASTM D5635	Pass @ 20 J; enhanced QC target pass @ 22 J
Linear Dimensional Change	ASTM D1204 / D4434	<= 0.20% typical after 176°F / 6 hr oven; max. 0.5%
Water Immersion Weight Change	ASTM D570	<= +/-2.0% typical; ASTM Type III max. +/-3.0%
Low Temperature Flexibility	ASTM D2136	Pass @ -40°F (-40°C), no cracking
Seam Weld Strength	ASTM D751	>= 75% of parent membrane tensile strength; membrane rupture mode

AGING, WEATHERING AND COOL ROOF PERFORMANCE

Property	Test Method	Typical Value
Heat Aging Retention - Breaking Strength	ASTM D751 / D3045	>= 92% of original typical; ASTM requirement >= 90%
Heat Aging Retention - Elongation	ASTM D751 / D3045	>= 94% of original typical; ASTM requirement >= 90%
Accelerated UV Weathering	ASTM G154	No cracking / crazing at 7x magnification after 5,000 hours
Solar Reflectance - EnergySmart White	ASTM C1549 / ASTM D7897	0.87 initial typical; 0.74 three-year aged target
Thermal Emittance - EnergySmart White	ASTM C1371	0.91 initial; 0.90 three-year aged target
Solar Reflectance Index - White	ASTM E1980	Initial SRI 110 typical; 3-year aged SRI 91 target
Reflective Gray / Tan Options	ASTM C1549 / C1371 / E1980	Reflective Gray SRI approx. 90 initial / 80 aged; Tan SRI approx. 88 initial / 78 aged

Note: Values shown are typical laboratory/QC targets for product positioning and submittal use. Confirm final published values with current production testing, third-party reports and project-specific roof assembly approvals before code, warranty or certification claims.

INSTALLATION INFORMATION

Application Methods	Mechanically fastened in-seam disc systems, in-seam batten double-weld systems, and adhered systems with compatible PVC adhesives.
Welding	Hot-air welded seams using automatic welding equipment. Typical welding-air temperature range: 1100-1200°F; verify settings by test welds.
Seam Overlap	Minimum field seam overlap: 1.5 in (38 mm), or as required by project specification and approved assembly.
Environmental Limits	Ambient air: 41°F-120°F (5°C-48°C). Substrate surface: 0°F-120°F (-17°C-48°C). Relative humidity: 80% max.
Surface Condition	Clean, dry, structurally sound, free of oil, frost, mold, loose debris and incompatible contaminants. Repair defects before installation.
Compatibility	Asphalt-based substrates require bleed-blocking primer or approved separation layer to prevent discoloration and plasticizer interaction.

STORAGE, MAINTENANCE AND LIMITATIONS

- Store rolls upright on pallets and fully covered with breathable canvas tarpaulins; avoid unvented polyethylene covers that trap moisture.
- Protect from roll shifting, roll-end impact, direct long-term sunlight and heat sources above 90°F (32°C) during storage and transport.
- Inspect seams, flashings, drains, termination details and penetration sealants twice per year and after severe wind or hail events.
- Not intended for continuous heavy pedestrian traffic without dedicated walkway protection; not for submerged tanks or permanent ponding service.
- Do not install when rain, hail or snow is forecast within 24 hours after installation, or when substrate and weather conditions prevent proper welding.

ENVIRONMENTAL, HEALTH AND SAFETY / LEGAL DISCLAIMER

For complete handling, transport and disposal information, refer to the current Safety Data Sheet. Professional roofing applicator use only. Prior to use, installers shall review the current BFT-600FB PDS, SDS and product label instructions. Product selection, substrate condition assessment, roof assembly design, code compliance, installation method and jobsite risk are the responsibility of the contractor, designer and building owner. Published values are typical reference values and may vary with production, test method, equipment and field conditions. Contact BONFORT technical service for current data before final specification or customer submittal.