

BONFORT TECHNICAL DOCUMENT

BFT-600PVC-R PVC Roof Membrane

60 mil (1.5 mm) polyester reinforced PVC thermoplastic single-ply roof membrane

TECHNICAL DATA SHEET

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BFT-600PVC-R is a reinforced 60 mil PVC roof membrane designed for mechanically fastened, RhinoBond-style and adhered single-ply roofing systems. The membrane uses a polyester scrim reinforced core, factory anti-soiling surface coating and heat-weldable seam technology to deliver dimensional stability, puncture resistance and cool-roof performance for low-slope commercial applications.

This U.S.-market Technical Data Sheet summarizes test values commonly reviewed by contractors, consultants and distributors, with emphasis on ASTM D4434 Type III expectations, weld strength, puncture resistance, weathering durability and solar/thermal roof performance. Values shown are representative QC / laboratory values intended for product positioning and technical submittal formatting.



Code	BFT-600PVC-R
Product Name	PVC Roof Membrane
Material Type	Single-ply thermoplastic PVC membrane with internal polyester scrim reinforcement and factory-applied anti-soiling lacquer top surface
Colors	Top: Cool White / Reflective Gray / Tan; Bottom: Gray
Nominal Thickness	60 mil (1.5 mm); bareback PVC membrane profile intended for fastened and adhered systems
Standard Roll Sizes	10 ft x 100 ft (3 m x 30 m), approx. 343 lbs (156 kg), 8 rolls/pallet; 5 ft x 100 ft (1.5 m x 30 m), approx. 172 lbs (78 kg), 12 rolls/pallet
Primary Systems	Mechanically fastened, induction-weld attachment, and fully adhered roof membrane assemblies for low-slope commercial roofing

FEATURES / BENEFITS

- Polyester reinforced PVC membrane engineered to meet or exceed core ASTM D4434 Type III performance thresholds for single-ply roofing membranes.
- Factory anti-soiling lacquer coating supports long-term reflectance retention and a cleaner roof surface appearance in exposed service.
- Hot-air welded seams create a monolithic waterproof layer and are designed so seam failure occurs in the membrane rather than in the weld.
- High puncture resistance, low thermal shrinkage and balanced tensile / tear properties support reliable field handling and wind-uplift system design.
- Cool-roof color options provide strong solar reflectance, thermal emittance and SRI values to support energy-conscious building design.
- Formulated for UV exposure, low-temperature flexibility and durability in a wide range of commercial roofing climates.

TYPICAL USES

- New construction and reroof / recover low-slope commercial roof assemblies.
- Mechanically fastened field sheets using in-seam disc or batten attachment systems.
- Induction-weld fastening systems and adhered assemblies using approved PVC membrane adhesives.
- Parapets, flashings, rooftop penetrations, accessory details and photovoltaic support roof substrates.
- Approved roof decks may include metal, concrete, wood structural panels, approved insulation boards and properly prepared compatible recover substrates.

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TECHNICAL DATA SHEET CONTENT

TECHNICAL DATA - PRODUCT INFORMATION

Item	Test Method / Basis	Typical Value
Chemical Base	Product design	Thermoplastic PVC membrane with UV stabilizers, flame retardants and polyester scrim reinforcement
Nominal Overall Thickness	ASTM D751	60 mil (1.5 mm) nominal
Minimum Thickness	ASTM D4434 Type III	45 mil minimum requirement
Thickness Above Scrim	ASTM D7635	25 mil typical; exceeds 16 mil minimum requirement
Reinforcement	Product design	Polyester scrim reinforcement
Recycled Content	Manufacturer formulation	9% pre-consumer; 1% post-consumer recycled content
Storage Shelf Life	Unopened rolls	No mandatory expiration under proper covered storage; recommended installation within 5 years of manufacture

TECHNICAL DATA - PHYSICAL / MECHANICAL PERFORMANCE

Property	Test Method	Typical Value / Requirement
Tensile Strength, Grab MD / CMD	ASTM D751	310 lbf (1379 N) / 210 lbf (934 N) typical; ASTM Type III min. 200 lbf
Elongation at Break, MD / CMD	ASTM D751	20% / 20% typical; ASTM Type III min. 15% / 15%
Tear Strength, MD / CMD	ASTM D751 Elmendorf	48 lbf (213 N) typical; ASTM Type III min. 45 lbf
Seam Strength	ASTM D751	>= 75% of original membrane strength; membrane rupture mode
Static Puncture Resistance	ASTM D5602	Pass @ 33 lbf (15 kg); QC target pass @ 35 lbf
Dynamic Puncture Resistance	ASTM D5635	Pass @ 20 J (14.7 ft-lbf); QC target pass @ 22 J
Linear Dimensional Change	ASTM D1204	<= 0.20% typical; ASTM Type III max. 0.50%
Low Temperature Flexibility	ASTM D2136	Pass @ -40°F (-40°C); no cracking
Water Absorption, 24 h	ASTM D570	<= 2.0% weight change typical
Heat Aging Retention	ASTM D3045	Tensile >= 92% of original; elongation >= 93% of original
Accelerated UV Weathering	ASTM G154	10,000 h exposure profile; no cracking, no crazing, negligible discoloration at 5,000 h inspection

COOL ROOF PERFORMANCE

Color	Test Standard	Typical Value
Cool White	ASTM C1549 / C1371 / E1980	Solar Reflectance: 0.86 initial / 0.76 aged; Thermal Emittance: 0.90 initial / 0.90 aged; SRI: 109 initial / 95 aged
Reflective Gray	ASTM C1549 / C1371 / E1980	Solar Reflectance: 0.73 initial / 0.66 aged; Thermal Emittance: 0.89 initial / 0.88 aged; SRI: 90 initial / 81 aged
Tan	ASTM C1549 / C1371 / E1980	Solar Reflectance: 0.66 initial / 0.59 aged; Thermal Emittance: 0.89 initial / 0.88 aged; SRI: 89 initial / 79 aged

INSTALLATION / STORAGE / LIMITATIONS

Installation Methods	Mechanically fastened, induction-weld attachment, or adhered systems using approved PVC adhesives and accessories.
Welding	Hot-air weld seams on clean, dry overlaps. Verify welding temperature and travel speed by test weld; inspect seams after cooling with a seam probe.
Surface Prep	Substrate must be structurally sound, clean, dry and free of dust, oil, grease, frost, mold, loose coatings and incompatible residues. Unknown substrates require compatibility testing.
Storage	Store rolls on pallets under breathable covers in a dry, ventilated area. Avoid direct long-term sun, standing water and non-breathable polyethylene tarps that trap condensation.
Limitations	Not intended for heavy continuous traffic without walkway protection; not intended for permanent immersion or prolonged ponding conditions without proper roof drainage design.
Approvals / Submittals	Use this sheet as a formatting-ready technical submittal. Verify current project-specific approval status, code listings and warranty terms with BONFORT before final bid or permit submission.

ENVIRONMENTAL, HEALTH AND SAFETY / LEGAL DISCLAIMER

For complete handling, transportation and disposal information, refer to the current Safety Data Sheet. Professional roofing applicator use only. Prior to use, installers shall review the current BFT-600PVC-R Technical Data Sheet, Safety Data Sheet and project specifications. Product selection, roof assembly design, code compliance, substrate evaluation, installation method and jobsite risk remain the responsibility of the contractor, consultant and building owner. Technical values are representative laboratory or quality-control values and may vary with production lot, test method and field conditions. Confirm final published values and any certification claims with current BONFORT documentation before customer release or formal submittal.