

Technical Services

Product: FTR SBS Poly 3.7 Base Sheet
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FTR SBS Poly 3.7 SBS Base Sheet Application Guidelines

Introduction

FTR SBS Poly 3.7 Base Sheet - when used as a vapor retarder, base ply or mid-ply - must be applied in accordance with installation procedures listed in [FiberTite Roof Systems Specifications](#).

The information contained herein is intended for general purposes only and is not all-inclusive. Refer to the Product Data Sheet (PDS), Safety Data Sheet (SDS) and FTR detail drawings located on FiberTite.com for additional information.

General tips and guidelines for successful installation of FiberTite SBS Poly 3.7 Base Sheet:

- FTR SBS Poly 3.7 Base Sheet may be applied in either FTR SBS Adhesive, hot asphalt, or torched over approved substrates.
- FTR SBS Poly 3.7 Base Sheet will perform as a venting base sheet when installed in FTR SBS Adhesive (ribbon application)
- Rolls shall be stored upright in a clean, dry location elevated off the ground or roof surface and protected from the weather to prevent damage.
- Rolls of FTR SBS Poly 3.7 Base Sheet shall be stored at a nominal temperature of 65°F (18°C) to 80°F (27°C) for ease of installation.
- FTR SBS Adhesive shall be stored at temperatures between 65°F and 80°F (10°C and 27°C) for optimum flow characteristics.
 - » Ambient temperature must be 40°F (4°C) and rising for the application of Cold Adhered base sheets.
- Substrate(s) must be clean, dry and free of any foreign debris or moisture.
- Approved substrates include:
 - » Structural Concrete
 - » Cellular Lightweight Insulating Concrete
 - » Approved gypsum cover boards and thermal barriers

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Pre-installation/Preparation

Tools & Equipment:

To the professional roofer, the importance of proper tools is understood. However, the following is a brief recap of the necessary tools for applying FTR SBS Poly 3.7 Base Sheet:

for Cold Adhesive Application

- ¼" Notched or serrated squeegee
- Adhesive cart
- Drop spreader (ribbon applied)

for Hot Asphalt Application

- Appropriate asphalt heating, handling and application equipment
- Mop size no less than 32 ounces

for Torch Application

- U.L. listed torch designed specifically for the application of modified bitumen membrane
 - » U.L. listed high-pressure hose
 - » U.L. listed regulator
- Single or multi-nozzle, hand-held propane roof torches
- Multi-nozzle carts "dragon wagons" (optional)
- Propane tank with pressure gauge.

Use an appropriate length field torch and high-pressure hose for applying the field roof membrane, and a "detail" torch for accomplishing flashing details.

General Tools (all applications)

- Fully charged (minimum 20 lb) ABC-type fire extinguisher
 - » One per each operating torch and the appropriate number of fire extinguishers at the kettle area if hot asphalt is used
- Hot air welding equipment (sealing side and end laps)
- Roofer's hooked & straight blade knife.
- Roofer's trowel with bevelled edges and rounded tip (allows smoothing of details without cutting or marking the membrane)
- Roof broom
- 50 lb. (22.7kg) linoleum roller or weighted foam-covered lawn roller
- Roofers' hand tools

Roof Conditions/Substrate Preparation:

Substrates to receive the new roof system must be firmly attached, smooth, dry, clean and free of sharp projections and depressions. Substrates requiring priming must be primed with ASTM D41 approved asphalt primer and be allowed to completely dry. Substrates must provide positive drainage. Roof insulation must be tapered to drains.

Safety

Improper application practices using hot asphalt and/or an open flame roofing torch, may cause physical injury to the applicator or damage to the property. Always follow OSHA and NRCA safety regulations.

Application Guidelines

Application in FTR SBS Adhesive:

Unroll FTR SBS Poly 3.7 Base Sheet and allow to relax. This will aid in a flat uniform application – re-roll prior to application.

- FTR SBS Poly 3.7 Base Sheet shall be installed starting at the low point of the roof deck.
- FTR SBS Poly 3.7 Base Sheet shall be side lapped, a minimum of 3 inches, and properly shingled to shed water.

For full adhesive coverage*:

1. Apply FTR SBS Adhesive in full coverage with a ¼-inch notched or serrated squeegee directly to the substrate. Application rate shall be 50-65 ft²/gal (1.2-1.6 m²/L). Coverage rates may vary over irregular surfaces.
2. Immediately place the roofing membrane into the freshly applied FTR SBS Adhesive. Do not allow the adhesive to skin over.
3. Utilize a weighted roller on the membrane surface to ensure full contact.
4. Heat seal the side laps and head laps after base plies are installed using torch or hot air welding equipment.
5. Utilize a minimum 3-inch side laps and 6-inch end laps. Cut a dog ear angle at the end laps on overlapping selvage edges.
6. Utilize a clean trowel, apply pressure to top seal T-Laps immediately following seam application.
7. Repeat the adhesive application procedure for the next roll/sheet base ply.
8. Stagger end laps a minimum 3 feet from the end laps of the adjoining base ply.

* For vapor barrier applications, the FTR SBS Adhesive may be applied in 0.5 to 0.75-inch wide beads in a maximum 12-inch on center ribbon pattern.

For ribbon application of adhesive (vapor barrier applications):

1. Unroll FTR SBS Poly 3.7 Base Sheet as described above. Follow start-point, lapping and shingling guidelines as listed.
2. Prepare adhesive cart / drop spreader by drilling 0.75-inch (19 mm) holes at specified ribbon spacing. (Maximum 12-inch o.c. ribbon pattern)
3. Cut 6-in wide (153 mm) strips of scrap base sheet to be placed between 12 feet and 24 feet (3.6 meters and 7.3 meters) within the run of adhesive ribbons to create a horizontal break and allow for cross venting of moisture.
4. Pour FTR SBS Adhesive into the adhesive drop spreader.
5. Position and turn the adhesive cart over and begin walking in the direction the rolls of FTR SBS Poly 3.7 Base Sheet will be installed.
6. Ensure ribbon widths are between 0.5 inches and 0.75 inches (13 mm and 19 mm) wide.

Application Guidelines (continued)

Application in FTR SBS Adhesive (continued):

Ribbon application (continued):

7. Remove the pre-positioned 6 inches (153 mm) strips of scrap base sheet.
8. Immediately place the roofing membrane into the freshly applied FTR SBS Adhesive. Do not allow the adhesive to skin over.
9. Broom the membrane into place and then roll with a 50 lb. (23 kg) linoleum roller to ensure adhesive ribbons are spread to a nominal 2.5 inches (64 mm) width.
10. Utilize a weighted roller on the membrane surface to ensure full contact.
11. Heat seal the side laps and head laps after base plies are installed using torch or hot air welding equipment.
12. Utilize a minimum 3-inch side laps and 6-inch end laps. Cut a dog ear angle at the end laps on overlapping selvage edges.
13. Utilize a clean trowel, apply pressure to top seal T-Laps immediately following seam application.
14. Repeat the adhesive application procedure for the next roll/sheet base ply.
15. Stagger end laps a minimum 3 feet from the end laps of the adjoining base ply.

Application in Hot Asphalt:

Unroll FTR SBS Poly 3.7 Base Sheet and allow to relax. This will aid in a flat uniform application - re-roll prior to application.

- FTR SBS Poly 3.7 Base Sheet shall be installed starting at the low point of the roof deck.
 - FTR SBS Poly 3.7 Base Sheet shall be side lapped, a minimum of 3 inches, and properly shingled to shed water.
1. Apply Hot Asphalt in full coverage directly to the substrate.
 2. Apply directly behind the (asphalt) applicator a solid mopping at a rate of 25 lbs. per 100 ft². Bitumen must be heated and applied within temperature guidelines as set forth by NRCA and recommended by FiberTite, according to type and grade. [fig 1]

fig 1 - NRCA guidelines regarding heating and slope restrictions for mopping grade roof asphalt

ASTM D312 Type	Mopping Temperature	Heating Temperature	Maximum Slope
Type III	425° ± 25° F	500° F	≤ 1°
Type IV	425° ± 25° F	500° F	≤ 3°

Note: FiberTite recommends Type IV asphalt for interply moppings regardless of slope.

3. When using hot asphalt adhesive to seal laps, a continuous bleed-out of adhesive should be present along with all membrane side laps and head laps.

Application Guidelines (continued)

Application in Hot Asphalt (continued):

4. When heat welding side and end laps, heat weld laps after base plies are installed.
5. Utilize a minimum 3-inch side laps and 6-inch end laps. Cut a dog ear angle at the end laps on overlapping selvage edges.
6. Utilize a clean trowel, apply pressure to top seal T-Laps immediately following seam application.
7. Repeat the asphalt application procedure for the next roll/sheet base ply.
8. Stagger end laps a minimum 3 feet from the end laps of the adjoining base ply.
9. Fully bond the "second" base ply (if applicable) in the same manner as the first ply.
10. Stagger side laps of the second base ply a minimum 12 inches from the side laps of the underlying base ply.
11. Stagger end laps of the second base ply a minimum 3 feet from the end laps of the underlying base ply.

Torch Application:

Unroll FTR SBS Poly 3.7 Base Sheet and allow to relax. This will aid in a flat uniform application - re-roll prior to application.

- FTR SBS Poly 3.7 Base Sheet shall be installed starting at the low point of the roof deck.
 - FTR SBS Poly 3.7 Base Sheet shall be side lapped, a minimum of 3 inches, and properly shingled to shed water.
1. Proper torching, in an "L" pattern, assures uniform 0.25 inches to 0.5 inches compound and flow at laps and adequate heat across the coil
 2. Do not overheat to expose or compromise the reinforcement.
 3. Utilize a minimum 3-inch side laps and 6-inch end laps. Cut a dog ear angle at the end laps on overlapping selvage edges.
 4. Utilize a clean trowel, apply pressure to top seal T-Laps immediately following seam application.
 5. Repeat the torch application procedure for the next roll/sheet covering any head laps or side laps as required.
 6. Stagger end laps a minimum 3 feet from the end laps of the adjoining base ply.
 7. Fully bond the "second" base ply (if applicable) in the same manner as the first ply
 8. Stagger side laps of the second base ply a minimum 12 inches from the side laps of the underlying base ply
 9. Stagger end laps of the second base ply a minimum 3 feet from the end laps of the underlying base ply



Technical Services

FiberTite® Roof Systems
FiberTite Product Guidelines

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FiberTite FTR SBS Poly 3.7 SBS Base Sheet

Technical Support

Support Documentation:

[NRCA Recommended Practices for Controlling Asphalt Fume Exposures](#)

[OSHA guidelines for hot asphalt fumes](#)

[IARC Monograph - bitumen and bitumen emissions \(hazard risk assessment\)](#)

References:

[FTR SBS Poly 3.7 Base Sheet Product Data Sheet](#)

[FTR SBS Adhesive Product Data Sheet](#)

[FiberTite Construction Details](#)

For more information, or to contact a FiberTite Roofing specialist, visit www.FiberTite.com



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