



## PROPERTIES

**COLOR:**

Aluminum with Black Butyl Adhesive

**COMPOSITION:**

Butyl rubber adhesive with a 12µ polyester / 25µ aluminum / 12µ polyester protective laminate facing.

**SERVICE TEMPERATURE:**

(Temperature at membrane surface)  
-67° F to 284° F (-55° to 140° C)

**APPLICATION TEMPERATURE:**

40° F to 115° F (5° to 45° C)

**STANDARD ROLL SIZE**

39.4 in. x 49.2 ft (1 m x 15 m) or 162 ft<sup>2</sup> (15 m<sup>2</sup>)

4 in x 49.2 ft (100mm x 15 m) (On request)

**TOTAL FILM THICKNESS:**

47 + / - 4 mils (1.2 +/- 0.1mm) nominal  
Butyl adhesive + facing

**TENSILE STRENGTH (ASTM D 1000)**

Tensile Strength > 34 lbf/in (60 N/cm)  
Elongation >40% (adhesive)

**WATER VAPOR PERMEANCE (ASTM E 96)**

< 0.00 perms (tested at 38°C, 90% RH, Procedure E)

**OVERLAP ADHESION: (ASTM D 1000)**

> 5 lb/in. width (> 0.9 N/mm) at 73°F (23°C)

**SURFACE BURNING CHARACTERISTICS (ASTM E 84)**

Flame Spread: 25  
Smoke Developed: 60  
Applied to 1/4 inch (6.4 mm) inorganic reinforced cement board. The flame spread may vary at different product thicknesses and/or when applied over other surfaces.

Meets Class A Fire Rating for Exterior Applications. Flame Spread <25, Smoke developed <450.

**LIMITATIONS**

Not intended for direct burial applications.

Membrane should not be left exposed to UV for more than 6 Months. Cover with jacketing as specified.

Membrane is not to be used for banding or mechanical fastening. Standard fastening of insulation is required.

Visit us on the web at [www.fosterproducts.com](http://www.fosterproducts.com)

**H.B. Fuller Construction Products Inc.**

1105 South Frontenac St o Aurora, IL 60504 o 800-832-9002 o fax 800-952-2368

## Vapor Barrier Jacketing

**Foster Butylar™ NXT** is a self-sealing, aluminum butyl membrane. It is comprised of a high-performance black butyl adhesive on a PET/AL/PET laminate film for very low vapor permeance and protection against punctures and environmental damage. The black butyl adhesive is free of any bitumen or asphalt compounds and contains built in reinforcement for added strength. It is available in 4" (100 mm) and 39.4" (1.0 m) widths.

**Foster Butylar™ NXT** is used to provide a protective moisture and vapor barrier film over cold and cryogenic piping and equipment insulation applications. It may be used over thermal insulation including cellular glass, polyurethane, polyisocyanurate, phenolic, polystyrene, rigid fiberglass and others.

**Foster Butylar™ NXT** provides a factory-controlled film thickness and fast, labor saving application. The membrane compound is elastomeric allowing for expansion and contraction of the insulation system. It is self-healing and forms a strong bond at overlaps without the need for torches or heaters.

**Foster Butylar™ NXT** is marked with logos on the facing to assist in lining up the material and reduce wrinkling during application and facilitate onsite quality assurance.

**Foster Butylar™ NXT** does not contain halogenated materials and has very low leachable chlorides by ASTM C 871 testing. < 50ppm.

**STORAGE:**

Store below 100°F (38°C) out of direct sunlight for extended periods. Short term field storage, keep covered or in ventilated container.

Store rolls vertically for best results. If stored horizontally do not allow excessive weight to damage packaging or rolls.

For cold weather applications store above 60°F (15°C) for 24 hours before use for best results.

Do not apply to damp, frosty or contaminated surfaces.

For application by skilled professionals only.

™ Trademark of H.B. Fuller Construction Products Inc.

# APPLICATION GUIDE FOR FOSTER® BUTYLAR™ NXT

## PREPARATION

Insulation must be properly secured in place per insulation manufactures instructions. Remove any loose insulation, dust or other contaminants. Prime dusty insulation with Foster 85-45 Fos-Stik™ Adhesive to improve adhesion of Butylar NXT. Ensure insulation is dry and free of frost or condensation. Blistering of sheet may occur if wrap is applied over wet insulation.

## APPLICATION

Butylar NXT™ is best applied by cigarette wrapping. Cut membrane to desired length. Ensure length includes a minimum 2" (50 mm) overlap. Start by positioning the membrane such that the finished overlap will allow for water to drain over and not into the lap. Peel back six to twelve inches of the release liner taking care not to allow any exposed adhesive to touch itself. Firmly press exposed edge of sheet in place and continue removing release liner and smoothing sheet to substrate. Avoid wrinkling.

All longitudinal and circumferential seams must be overlapped a minimum of 2" (50 mm). Ensure complete contact at the laps and to the substrate using a roller, squeegee or firm pressure throughout. Stagger laps of subsequent pieces. When Butylar NXT is applied to the insulation in the shop, finish butted up seams in the field using 4" (100 mm) wide Butylar NXT tape strips evenly spaced over the joint and wrapping all the way around the pipe overlapping a minimum of 2". Any fish mouths or wrinkles in the sheet shall be slit to allow for smoothing and wrapped with a 4" (100mm) strip that covers the entire seam with a minimum 2" (50 mm) overlap.

All penetrations, insulation supports, valves, expansion and contraction joints and other protrusions must be properly flashed to ensure complete seal between the protrusion and the membrane's polymer film. Foster ElastiSeal™ Sealant, 95-88 may be flashed directly over the Butylar NXT facing. Consult engineer's application instructions for recommendation on proper flashing.

Use 4" (100 mm) wide Butylar NXT to spiral wrap elbows or cut gores using appropriate templates. Overlap all seams by 50%. If a mastic is preferred to cover elbows or fittings adjacent to Butylar NXT membrane do so by extending the mastic and reinforcing mesh a minimum of 2" over the Butylar NXT facing. Where white, solvent based mastics are desired, such as Foster Monolar Mastic 60-38 or 60-90, tape terminations of sheet membrane with an acrylic PSA tape to cover the exposed cut ends. This will prevent bleed through. Mastic and reinforcing mesh should be extended at least 2" past edge of PSA tape onto membrane facing.

On exterior applications, Butylar NXT must be protected from the sun within a maximum of 6 months exposure. It is recommended jacketing be applied as soon as possible to protect the membrane from damage.

On low temperature applications for best results the membrane should be stored, until used, at or above 70°F (21°C). Ensure the insulation and membrane are free from frost or condensation. Ensure good adhesion of the membrane at the overlap. A heat gun and roller may be used to warm the sheet on the overlap for improved adhesion if necessary. Caution must be used to avoid damaging the facing on the sheet.

Repair damaged sheet by cutting out the damaged section and patching it with new membrane over the empty section, overlapping the existing sheet by a minimum of 2" all the way around the repaired area and taking care to ensure water shedding over the laps.

## CUSTOMER SERVICE: 800-832-9002

**IMPORTANT:** H.B. Fuller Construction Products Inc. warrants that each of its products will be manufactured in accordance with the specifications in effect on the date of manufacture. WE MAKE NO OTHER WARRANTIES AND EXPRESSLY DISCLAIM ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a product fails to meet this limited warranty, purchaser's sole and exclusive remedy is replacement of the product or, at our option, refund of the purchase price. OUR ACCEPTANCE OF ANY ORDERS FOR THE PRODUCT IS EXPRESSLY CONDITIONAL UPON PURCHASER'S ASSENT TO THE TERMS ON THE APPLICABLE INVOICE.

**ADEQUATE TESTS:** The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The warranted shelf life of our products is twelve months from date of shipment to the original purchaser or as otherwise provided on the certificate of analysis.

**For professional use only. Keep out of reach of children.  
Consult Safety Data Sheet and product label for further information.**