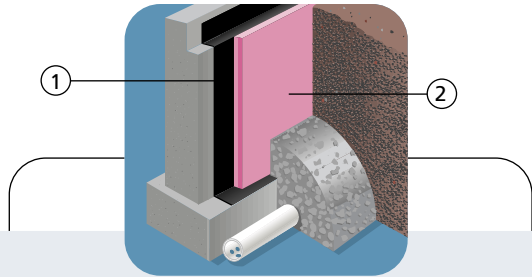




TUFF-N-DRI® is North America's #1 brand of waterproofing for new basements. Its reliable performance has been keeping basements leak-free since 1983.



TUFF-N-DRI® features a hard-working two-part system that delivers leading water protection. 1) A flexible waterproofing membrane is spray-applied to seamlessly bridge foundation settling cracks and seal out water penetration. 2) A quality foundation board protects the membrane, insulates basement walls, reduces interior condensation and channels water to the drainage system.

TUFF-N-DRI® SYSTEM APPLICATION

Installed by experts. TUFF-N-DRI Waterproofing System is installed only by select waterproofing contractors. These contractors undergo extensive training and are monitored for quality performance to insure the highest quality application.

Surface preparation. The wall surface should be smooth and monolithic. Remove loose aggregate and sharp protrusions from the wall. Voids, spalled areas and exposed aggregate should be patched with a suitable mastic before spraying. TUFF-N-DRI membrane does not require any priming or special preparation.

System application. TUFF-N-DRI membrane is sprayed evenly over the entire foundation wall. The foundation board is applied over the waterproofing membrane as it cures.

TUFF-N-DRI Waterproofing System can be applied when ambient temperatures are as low as 20°F, allowing for fewer construction delays. TUFF-N-DRI membrane may be applied on poured concrete and block foundations. On poured concrete basements, TUFF-N-DRI can be applied as soon as the forms are removed, and on block basements, as soon as the mortar is dry.

Foundation board performance. TUFF-N-DRI's foundation board keeps foundation wall temperatures closer to the air temperature of the basement, which helps reduce condensation. Reduced condensation

ensures less humid, more comfortable basement space. The placement of the foundation board on the wall's exterior also helps reduce the risk of damage due to freeze/thaw cycles, particularly if the foundation board is extended to the sill plate.

In addition, the foundation board protects TUFF-N-DRI membrane from damage during backfilling or damage from other construction trades. The compressibility of the foundation board will also absorb moderate soil expansion and help protect the basement wall.

To assist drainage, the foundation board should extend to the footing and connect through gravel or channels to a functioning perimeter drainage system. The foundation board is required for all warranted TUFF-N-DRI Waterproofing System installations.

Model Energy Code. Computer analysis of home energy use indicates that a considerable portion of a typical home's energy loss comes from heated, uninsulated basements. By installing the foundation board to the sill plate, the entire basement wall is insulated, and energy efficiency is maximized. Many states have adopted the Model Energy Code. Because TUFF-N-DRI's foundation board provides insulating performance, it assists with compliance to this code.



Environmentally responsible. TUFF-N-DRI membrane uses a non-flammable, water-based carrier that meets VOC regulations in all 50 U.S. states. It has been thoroughly tested by independent labs using Federal EPA standards for leaching. The results prove that no harmful leaching of the TUFF-N-DRI membrane occurs.

Availability and cost. TUFF-N-DRI Waterproofing System is competitively priced and available through your select waterproofing contractor. For details, contact your local select waterproofing contractor, call 800-DRY-BSMT or visit www.TUFF-N-DRI.com.

SPECIFICATIONS



Your local select waterproofing contractor

MEMBRANE PROPERTIES

Type Polymer-enhanced asphalt liquid-applied membrane

Color Black

Solids 61 (percent by weight)

Density 8.1 lbs/gal

Application Airless spray

Application Temperature Minimum 20° F

Cure Time 16-24 hrs

Thickness 60 mils (wet)¹

Adhesion to Concrete	<i>Results</i> Exceeds	<i>Method</i> ASTM C-836
Elongation	<i>Results</i> 800%	<i>Method</i> ASTM D-412
Low Temperature Flexibility	<i>Results</i> Flexible to -10° F	<i>Method</i> See ²
Crack Bridging Ability	<i>Results</i> Exceed 10 Cycles to 1/8 in. at -15° F	<i>Method</i> ASTM C-836
Water Vapor Permeance	<i>Results</i> 0.08 perms for 40-mil dry coating (grains/sf/hr)	<i>Method</i> ASTM E-96 Dry Method
Liquid Water Absorption	<i>Results</i> 0.3% (wt.)	<i>Method</i> ASTM D-1228 ³
Resistance to Degradation in Soil	<i>Results</i> Good	<i>Method</i> ASTM E-154
Mold Growth and Bacterial Attack	<i>Results</i> No Degradation	<i>Methods</i> ASTM D-3273, ASTM D-3274
Resistance to Hydrostatic Head (ft. of water)	<i>Results</i> Could not generate hydrostatic pressure	<i>Method</i> See ⁴

1. Membrane cures (dries) to 40 mils. 2. Bend waterproofing compound around 1 in. mandrel. 3. 72-hour water soak 1" x 2" x 0.40" samples of waterproofing compound.
4. When foundation board was applied to TUFF-N-DRI the water drained away at a faster rate than the surrounding soil percolated, eliminating any hydrostatic build-up.

BOARD PROPERTIES

Type Pink unfaced rigid fiber glass board

Board Size	4' x 8'	4' x 4'		
Board Thickness	3/4"	1-3/16"	2-3/8"	
Drainage ability (Hydraulic gradient of 1.0)				
<i>Board Thickness</i>	3/4"	1-3/16"	2-3/8"	
<i>Gallons/Hour/Lineal Foot</i>	74	118	237	
Thermal Resistance				
<i>Board Thickness</i>	3/4"	1-3/16"	2-3/8"	
<i>Resistance</i>	R-3.1	R-5.0	R-10.1	
Foundation Board Compression Properties¹				
<i>Compression Pressure lbs./sq. ft.</i>		200	400	600
<i>% Compression 3/4", 1-3/16", 2-3/8"</i>		4%	8%	11%
<i>Depth These Pressures are Found Clay²</i>		4'	8'	12'
<i>Depth These Pressures are Found Wet Sand³</i>		10'	20'	30'

At 65% compression, foundation board has the drainage capabilities of coarse sand. 1. For depths greater than above, please consult a TUFF-N-DRI Technical Manager at 800-DRY-BSMT.
2. Angle of Repose of 25° Density of 120 lbs./cu.ft. 3. Angle of Repose of 46° Density of 122 lbs./cu.ft.