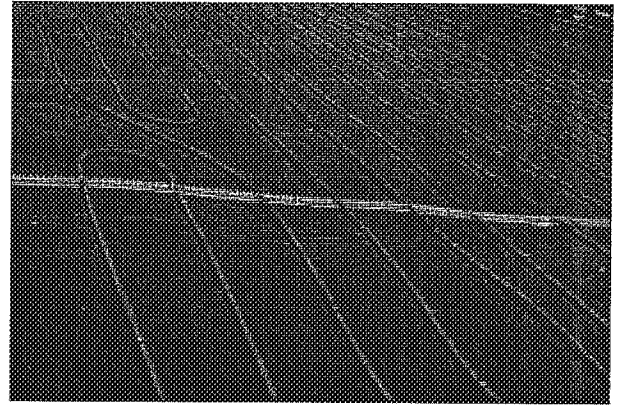


# THE BARRIER

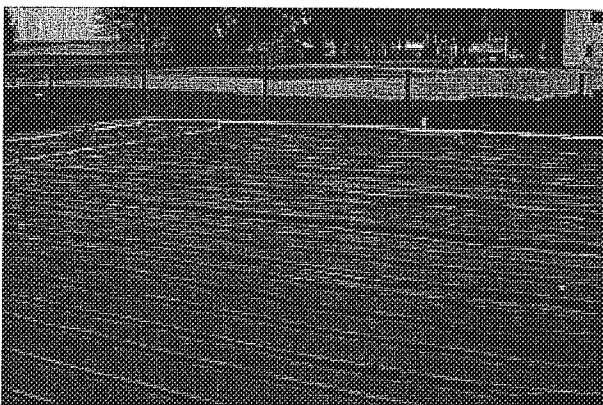
The Barrier Under Concrete Insulation has been voted the #1 material for under concrete applications in the North America. It's ease of use, high-performance values, and cost effectiveness have made this product the most sought after material in the underground insulation industry today.



As you know, there are two key components regarding underground insulation materials. Its ability to resist heat / cold transfer, and its ability to resist or stop moisture flow in its various transmittal forms.

## R-Value vs. K-Value

What is the difference between these two types of measurements? As this pertains directly to the heat / cold transfer rates - being knowledgeable of these two different values is of great importance to both you and your customers. It's common knowledge that R-Value refers to a materials ability to resist the flow of hot or cold air from one environment to another. The key aspect of this is the direct reference to "resisting the flow of air". Have you dug a hole lately? How much air escaped that hole? None - maybe if you're lucky some oil - but still - no air. So if there is no underground airflow, what does R-Value have to do with an underground insulation? Nothing - underground insulation is most effectively measured by its K-Value Standards.



Simply put - K-Value refers to a materials ability to resist Thermal Conductivity transmission from one environment to another when that material is utilized in a subterranean environment. With no airflow to measure - K-Value is the definitive measurement standard in determining a materials underground insulation value. It measures a materials ability to stop the heat and cold flow conducted from one side of a material to the opposite side.

While the above performance numbers are extremely impressive - as you know - there are two parts to an effective underground insulation product. The second key aspect is a materials Water Permeability. Without an excellent moisture and vapor barrier in an underground insulation material - its K-Value is meaningless.



**The Barrier's ability to resist water transmission of all forms is remarkable - in fact, it's perfect. Tested to the standards of ASTM E96 Procedure B (standard test for water vapor transmission), The Barrier Permeance results were 0.000 grains / hr(2) in. Hg. Its Permeability test results were no less astounding - also testing to 0.000 grains-in. / hr ft(2) in. Hg. Simply put NO moisture travels through this material. In fact - testing certification engineers were so shocked by its effectiveness - they asked to put the material to an additional test - the ICBO Standpipe Water Pressure Test. This test follows the procedures of ICBO Sections 4.6.1 and 4.6.2. To quote: "This product meets or exceeds the ICBO conditions for acceptance. At the end of 24 hours, there was no indication that any water had dripped from the underside of the specimens. A 3.5" head of water (rather than the required 2.0" head for 24hrs.) was employed, with the same results after a period of 96 hours". Quite simply - this material completely eliminates any form of moisture transmission in an underground application.**



**Is there anything comparable on the market to The Barrier Under Concrete insulation? No. Foam sheet suppliers will talk about R-Values and "trapping air" in their sheets. Doesn't it stand to reason if you can trap air - you can also trap water? Most knowledgeable professionals would prefer to eliminate water. Foil material salesmen will try to sell you on the reflectivity and insulation values of their foil products - but they omit the fact that the lime in cement will degrade the aluminum facing of their material - and leave only half of the original material for insulation purposes. And the last time analyzed - the sun was not shining underground - so the "reflectivity" aspect is - excuse the pun - nothing but hot air.**

**The Barrier material comes in the standard size of 48" wide x 60 lineal feet in length - yielding 240 square feet per roll.**

**In addition to the high-performance characteristics and the standards this product is setting in the underground insulation market, it also has the following advantages as well:**

- 1. There is a 1" lip running the lineal length (60') of the material with a 1" double-faced tape adhesive. This patented self-sealing feature allows for extreme ease of use and NO SEAMS.**
- 2. The material is flexible. You can walk on the material without cracking or breaking. Try that with foam board products.**
- 3. The core component is an extruded (not block molded) EPS with surface facing skin - and heavy-duty 3mil polyvinyl film laminated to EACH side.**
- 4. The product is light-weight, and can ship via UPS or common carrier anywhere in the world.**



For purchasing or any further information, please contact your local distributor or Northwest Ohio Foam Products directly at 1-419-335-4850 or e-mail to [wr@nofp.com](mailto:wr@nofp.com). We will be more than happy to assist in your cost-effective upgrade to the #1 underground insulation on the market today.

## Quick Q and A

### How about Heat / Cold Migration?

The Barrier™ provides excellent resistance to the transfer of heat and cold energy. By utilizing an extruded EPS foam for our core component, the material effectively creates an “igloo” effect. Think of it this way. Have you ever poured hot coffee or an ice-cold beverage in a thin foam cup? What happens? You’re able to hold that scalding cup of coffee or that freezing cup of ice in your hand without feeling the effects of the contents. A normal foam cup is 1/16” thick—can you imagine how well a foam cored component that is 6-16” (3/8”) thick will work? It goes without saying—it works extremely well—as laboratory testing has shown. As shown on the test data—The Barrier™ has a K-Value of .019. This means it eliminates 99.981% of the heat and cold transfer that occurs in an underground insulation application.

### How About Moisture Transfer?

The other critical area for an underground insulation material is its ability to stop all forms of moisture transfer. Because we’ve used an extruded EPS—we can laminate the heavy-duty polyethylene film to both sides. This combination of extruded foam and heavy film completely stops—100%- of any and all forms of moisture transfer.

### Why is The Barrier™ the fastest growing underground insulation?

The barrier is the hottest product on the market today for a couple of simple reasons. (1) IT WORKS BETTER THAN ALL OTHER MATERIALS (2) Cost-effective (3) Ease of use. No other single application material is a thermal barrier, a vapor barrier, and a moisture barrier all in one. Blueboard? NO. Blueboard is a rigid material that cracks and breaks everytime it’s walked upon. Once this happens—you’ve effectively eliminated the whole purpose of the product—you might as well use nothing. Can you walk on the flexible Barrier™ - YES! Does blueboard stop 100% of thermal, vapor, and moisture transfer? Definitely not. Does The Barrier™? YES!!! 99.981% of the thermal transfer and 100% of the moisture transfer. This material is formulated for performance.



The Barrier™ Fact Sheet  
How to install The Barrier™

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