

## **Architectural Specification: Barrier™, BarrierXT®, BarrierX5®, BarrierHL™, XBoard™ Under Concrete Insulating System**

### **SECTION 07210 - BUILDING INSULATION**

#### **PART 1 – GENERAL**

##### **1.1 SUMMARY**

A. This Section includes the following:

**Barrier™ Under Concrete Insulating System** rolls / XBoard™ sheets are unrolled / laid on top of a prepared grade or existing slab using the self-sealing double stick tape and overlapping flange maintaining a thermal break that is consistent with the thickness of the insulation core.

##### **1.2 SUBMITTALS**

A. SYSTEM PERFORMANCE

1. Architectural Testing 79323.01-116-25:

a. Thermal Resistance of the **Barrier™, BarrierXT®, BarrierX5®, BarrierHL™, XBoard™** Insulating System.

2. Density: 10 psi (Barrier™, BarrierXT®, BarrierX5®), 25 psi (BarrierHL™ & XBoard™)

3. Submit shop drawings showing locations of all penetrations.

##### **1.3 QUALITY ASSURANCE**

A. AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM):

1. C518 Standard Test for Steady State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.

2. E96 Standard Test Methods for Water Vapor Transmission of Materials.

3. C303 Standard Test Method for Dimensions and Density of Preformed Block and Board-Type Thermal Insulation

4. D1621 - 10 Standard Test Method for Compressive Properties Of Rigid Cellular Plastics

##### **1.4 DELIVERY, STORAGE, AND HANDLING**

A. Deliver **Barrier™** product family rolls / sheets to project site in original wrapping. Clearly labeled with identification of manufacturer and product name visible.

B. Store **Barrier™** rolls / sheets, in original packaging protected from weather, moisture and soiling.

##### **1.5 WARRANTY**

A. NOFP Incorporated warrants at the date of delivery to the original purchaser, its products to be free from defects in materials and workmanship during normal use according to good construction practices.

#### **PART 2 – PRODUCTS**

##### **2.1 MANUFACTURERS**

Available Manufacturers: Subject to compliance with requirements specified herein, the following manufacturer and product is identified:

A. **Barrier™, BarrierXT® , BarrierX5® , BarrierHL™, XBoard™** Insulating System

NOFP, Inc.  
725 Enterprise Ave.  
Wauseon, OH 43567  
419-335-4850  
www.thebarrier.com

## 2.2 ROLL / Sheet CONSTRUCTION

A. **Barrier™** insulating rolls shall be constructed of a recycled EPS foam core. Rolls shall be factory laminated on two (2) sides with 51" wide polymeric film providing a 0.07 perm rating and a factory applied taped edge.

1. Size: 48" wide by 64' long providing 256 sqft of coverage for Barrier™, BarrierXT® , BarrierX5® and BarrierHL™ -48" x 96' at 384 sqft
2. Thickness: Barrier™ 0.375", BarrierXT® 0.75", BarrierX5® 1.25", BarrierHL™ 0.25".

B. **XBoard™** insulating sheets shall be constructed of a 2 lb. density EPS foam core. Sheet shall be factory laminated on two (2) sides with 51" wide polymeric film providing less than 1 perm rating and a factory applied taped edge.

1. Size: 48" wide by 96" long providing 32 sqft of coverage
2. Thickness: XBoard™ 2.38"

## PART 3 – EXECUTION

### 3.1 EXAMINATION

A. Grade Preparation:

1. Examine grade surface for compliance with requirements for installation tolerances and other conditions affecting performance of insulating rolls.
2. Examine grade for levelness and protrusions. If grade is not level make necessary adjustments to insure rolls are installed level across the grade surface for proper concrete placement.

### 3.2 INSTALLATION

- A. Install white film facing upwards to insure that double stick tape edge and flange are on top.
- B. Base material should be as level as possible, with all debris removed. Level and tamp or roll granular base.
- C. Unwind The Barrier™ roll with tape edge up and white side up, then lay flat on base material, with longest dimension parallel with the direction of the pour.
- D. Cut to length required — or roll up the footer form if desired to insulate the slab completely from heat and cold migration.
- E. Lay next roll down always starting from the same side to insure that flange always overlaps factory applied double stick tape edge. Peel away white tape backer-compress overlap flange firmly on taped edge. It is important to make sure rolls are butted tightly together to create a gapless seam when you compress together the double-faced adhesive tab.
- F. Four foot edges, damaged film, and any cutouts should be seamed or repaired with appropriate seaming tape.

- G. Secure material to grade by means of generally accepted construction techniques to minimize movement of material during concrete placement and curing.

### **3.3 CLEANING**

Remove scraps of EPS and EPS beads and all other materials associated with this installation.