

## **FREEZE-THAW RESISTANCE OF 60-MILS LIQUID BOOT® SPRAY-APPLIED VAPOR BARRIER**

### **EXECUTIVE SUMMARY**

Depending on the climate in which LIQUID BOOT® 60-mils vapor barrier is installed, it may be exposed to freeze-thaw cycles. In this case, the membrane must be able to resist failure. To test its strength, a sample was submitted to the National Testing Standard. The sample consisted of three 6" × 6" specimens of black polymer coated steel plates were submitted for testing. They were exposed to 100 cycles of freezing and thawing in accordance with ASTM A-742, section 9.7. During the freezing cycle, each sample was taken to 0°F.

After 100 cycles, the specimen exhibited no spalling, disbondment, or other visual changes, according to the National Testing Standards Report No. 24645. Therefore, liquid boot could be exposed to similar cycles environmentally. The extent of cycles would not be nearly as large as in the lab, so the level of risk is reduced. Therefore, LIQUID BOOT® 60-mils vapor barrier meets the criterion set forth in ASTM A-742 for Freeze-Thaw resistance.

### **ATTACHMENT**

National Testing Standards Inc Report No. 24645. Dated February 10, 1993.



**NATIONAL TESTING STANDARDS INC.**  
RESEARCH AND TESTING LABORATORIES

Report No. 24645

February 10, 1993

Client: L.B.I. Technologies, Inc.  
695 Town Center Dr., Suite 620  
Costa Mesa, CA 92626

Reference: Mr. Paul Dooley

Subject: Freeze-Thaw Resistance of Elastomeric Coated Plates.

Sample Description:

The Client submitted three 6" x 6" specimens of black polymer coated steel plates.

Request:

Expose the submitted specimens to the Freeze-Thaw Resistance Test of ASTM A-742.

Method:

The samples were exposed to 100 cycles of freezing and thawing in accordance with the procedures set forth in ASTM A-742, section 9.7.

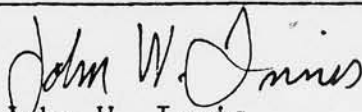
Results:

After 100 cycles the submitted samples exhibited no spalling, disbondment, or other visual change, in the coating.

Conclusion:

The submitted samples meet the criterion set forth in ASTM A-742 for Freeze-Thaw resistance.

NATIONAL TESTING STANDARDS

by   
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SAMPLES TAKEN  
TO 0° F PER  
TEST METHOD