

## **Laboratory Report SI0030SC.04.08**

**Termite Resistance Testing  
of  
Colphene™ ICF  
and  
Sopraseal™ LM 200 T**

**Prepared for:  
Soprema Canada  
1640 rue Haggerty  
Drummondville, (Quebec) J2C 5P8  
Canada**

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April 22, 2008**

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**CLIENT INFORMATION:** Soprema Canada  
1640 rue Haggerty  
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c/o: Vincent Boisvert

**TRINITY|ERD PROJECT:** 2008.S10030SC

**SAMPLES:** **COLPHENE™ ICF** is a self-adhesive waterproofing membrane dedicated to the waterproofing of Insulated Concrete Forms (ICF) foundations. It is composed of SBS modified bitumen and a polyethylene woven complex.

**SOPRASEAL™ LM 200 T** is a water-based single component, rubberized liquid product used as a trowel grade air/vapor barrier or as an insulation adhesive. It can be used on most building materials, including masonry, concrete, wood and gypsum boards and rigid or semi-rigid thermal insulation boards (including polystyrene).

**SAMPLE DELIVERY:** The named client arranged for shipment of said materials to TRINITY | ERD's laboratory for testing.

**TEST DATE(S):** February through April 2008

**TRINITY|ERD STAFF:** Charles Phillips, Larry Good

**PROPERTIES:** Termite Resistance

**REFERENCES:** Texas A&M University Procedure – *Termite Resistance Testing*, Professor Roger E. Gold; Center for Urban and Structural Pest Management, Department of Entomology, Texas A&M University, June, 2000.

**EQUIPMENT:** Petri dishes, soil, termites, sealant, Thermotron, microscope, yellow pine wood

**Formosan Termites** were provided by the University of Florida, Department of Entomology.

**Eastern Subterranean Termites** were acquired locally near Trinity|ERD's South Carolina laboratory.

**I. TERMITE RESISTANCE TESTING:**

**I.1 Specimen Preparation:**

**I.1.1** Ten specimens were prepared for each of the products tested. Sopraseal was applied to release paper to a thickness of 2.8 to 3.5 mm and allowed to cure for 24 hours at 50°C before the paper was removed. Colphene and Sopraseal were then sealed on top of open Petri dishes containing a sample of untreated yellow pine measuring 75x75x3 mm moistened with 2 ml of deionized water. On top of the membranes a second Petri dish was sealed containing 10 grams of soil and one set of termites. For the dishes containing Formosan termites, 100 termites were used and for the Petri dishes containing local termites, as many as could be acquired were divided evenly among the test specimens.



**Prepared Specimens**



**Prepared Specimens, Underside**

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1.2 Procedure:

1.2.1 The specimens placed into a controlled chamber at 99% relative humidity and 80°F for a period of 25 days. The Petri dishes were then removed and the soil and termites were washed free of the test samples. The surface of the membranes was examined with a microscope at 35X to determine whether the termites had made any attempt to penetrate the surface of the test samples.

1.3 Results:

Table 1: Test Results			
Specimen	Criteria	Results	Pass/Fail
Colphene ICF	No Evidence of excavation or penetration by termites	No evidence of excavation by termites, visually or under 35X magnification	Pass
Sopraseal LM 200 T	No Evidence of excavation or penetration by termites	Penetration noted on Day 21, termites found in underside Petri dish  Additional penetration for other specimens noted on Day 25 both visually and under 35X magnification	Fail



**Termites over Colphene ICF**





**Termite penetration through Sopraseal LM 200 T (Top Side View)**



**Termite penetration through Sopraseal LM 200 T (Underside View)**

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**2. COMMENTS / OBSERVATIONS:**

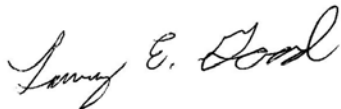
- 2.1 The test procedure utilized for this study was based on an outline by the Department of Entomology at Texas A&M University, with modification to include an impetus or motivation for the termites to pass through the membrane; namely the southern yellow pine 'bait'.
- 2.2 The following membranes are of the same formulation and construction as Colphene ICF and are equal or thicker materials. It is our professional opinion that the termite resistance for Colphene ICF resulting from this study would be mirrored for these alternate membranes.
- Soprema Colphene 3000
  - Resisto Foundation/ICF Waterproofing Membrane
  - Resisto Basic Waterproofing Membrane

**3. CONCLUSIONS:**

- 3.1 TRINITY|ERD has tested Soprema Colphene ICF and Sopraseal LM 200 T for termite resistance in accordance with the test procedure outline by the Department of Entomology at Texas A&M University, with modifications outlined herein. Results can be found in Section I herein.
- 3.1.1 Review of test results indicates that Sopraseal LM 200 T does not provide for termite resistance within the scope of this study. By the same standard, Colphene ICF does provide for termite resistance.

Please contact our offices with any questions.

Sincerely,  
TRINITY | ERD



Larry Good  
Laboratory Quality Manager



Robert Nieminen, P.E.  
Vice President  
Florida Reg. No. 59166

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