Laboratory Report S10030SC.04.08-R2-1

Termite Resistance Testing

of

Colphene™ ICF

Prepared for:

Soprema Canada
1688 Jean-Berchmans-Michaud
Drummondville (Québec) J2C 8E9
Canada
c/o: François Paquette

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Revision 2:

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CLIENT INFORMATION: Soprema Canada
1688 Jean-Berchmans-Michaud
Drummondville (Québec) J2C 8E9
Canada
c/o: François Paquette

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.

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

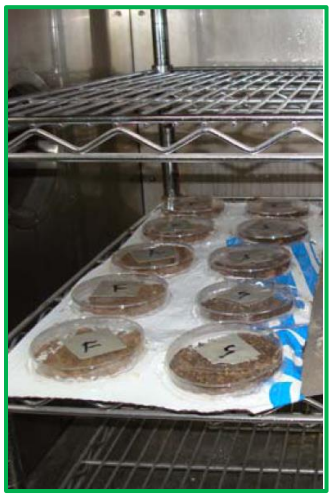
Formosan Termites were provided by the University of Florida, Department of Entomology.

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

1. TERMITE RESISTANCE TESTING:

1.1 Specimen Preparation:

1.1.1 Ten specimens were prepared. Colphene ICF was 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

1.2 Procedure:

1.2.1 The specimens were 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**

Termites over Colphene ICF

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
- "NUDURA" Brand Waterproofing Membrane

2.2.1 It is our professional opinion that the termite resistance for any private labeled membrane having the same formulation and equal or greater thickness to Colphene ICF would be mirrored for these alternate membranes.

3. CONCLUSIONS:

3.1 TRINITY|ERD has tested Soprema Colphene ICF 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 1 herein.

3.1.1 Review of test results indicates that Colphene ICF provides for termite resistance within the scope of this study.

Please contact our offices with any questions.

TRINITY | ERD

Charles Phillips
Project Technician

Robert Nieminen, P.E.
Vice President

REPORT HISTORY:

Date	Event	Notes	Authorized By:
04/22/2008	Report Issued	For client review	RN
07/16/2009	Revision 1	Include reference to private label membranes	RN
09/16/2016	Revision 2	Separate report for each product	RN