



Evaluation #

200823-I

Safety & Buildings Division
201 West Washington Avenue
P.O. Box 2658
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Wisconsin Building Products Evaluation

Material

Ceramic Cover CC SYS 100 (CC-100)
Spray-On Insulation Coating

Manufacturer

Envirotrol, Inc.
2594 Flat Shoals RD.
Conyers, GA 30013

SCOPE OF EVALUATION

GENERAL: This report evaluates the use of Ceramic Cover CC SYS 100 (CC-100), manufactured by Envirotrol, Inc., for use in wood frame, new and existing construction. Ceramic Cover CC SYS 100 (CC-100) was evaluated in accordance with the fire safety requirements and thermal performance, for the codes listed below.

The **Comm** requirements below in accordance with the current **Wisconsin Uniform Dwelling Code for 1- and 2-family dwellings:**

- **Foam Plastic Material:** Ceramic Cover CC SYS 100 (CC-100) thermal insulation was evaluated in accordance with the fire safety requirements of **s. Comm 21.11**.
- **Thermal Performance:** Ceramic Cover CC SYS 100 (CC-100) thermal insulation was evaluated in accordance with the thermal performance requirements of **Subchapter VI, ss. Comm 22.20, 22.21, 22.23, 22.25, 22.27, 22.28, and 22.31**.

The **IBC** requirements below in accordance with the current **Wisconsin Amended ICC Code:**

- **Foam Plastic:** Ceramic Cover CC SYS 100 (CC-100) thermal insulation was evaluated in accordance with the fire safety requirements of **ss. IBC 2603.1, 2603.2, 2603.3 and s. IBC 2603.4**.
- **Thermal Performance:** Ceramic Cover CC SYS 100 (CC-100) thermal insulation was evaluated in accordance with the thermal performance requirements of **s. Comm 63.0600**

DESCRIPTION AND USE

Ceramic Cover CC SYS 100 (CC-100) is an Acrylic latex, amorphous silica filled coating designed for exterior/interior (not for immersion), use where design/operation temperature does not exceed 350 degrees F.

TESTS AND RESULTS

The tests and results listed below cover the **Wisconsin Uniform Dwelling Code (UDC), (for 1- and 2-family dwellings)** and the current **Wisconsin Amended 2006 IBC Code** requirements:

Surfacing burning characteristics testing in accordance with **ASTM E84** was conducted on Ceramic Cover CC SYS 100 (CC-100) applied in a thickness of 0.25-inch. The results of the test indicated a Flame Spread Index of 5 and a Smoke Development Index of 5. Testing was conducted at Southwest Research Institute, SwRI PROJECT NO. 01.03048.01.023A[1], Revised Date: December 8, 1999.

Thermal conductivity testing in accordance with **ASTM C518** was conducted on Ceramic Cover CC SYS 100 (CC-100). The results of the tests are as follows:

MACHINE MEASURED THICKNESS	THERMAL CONDUCTIVITY		THERMAL RESISITIVITY	
	K	C	(R)	R/INCH
0.170	0.388	2.28	0.439	2.58
0.120	0.316	2.63	0.380	3.13
0.110	0.288	2.62	0.382	3.47
0.340	0.491	1.44	0.694	2.04

THINEST MEASURED THICKNESS	THERMAL CONDUCTIVITY		THERMAL RESISITIVITY	
	K	C	(R)	R/INCH
0.058	0.045	0.78	1.28	22.2
0.058	0.074	1.27	0.786	13.5
0.075	0.134	1.79	0.560	7.46

- K Is the thermal conductivity reported as if it were a 1” thick sample.
- C Is the thermal conductivity based on actual thickness.
- R Is thermal resistivity based on actual thickness.
- R/INCH Is the thermal resistivity as if it were 1” thick.

Testing in accordance with ASTM E96 was also submitted.

The tests are on file with the department.

LIMITATIONS OF APPROVAL

The limitations below are in accordance with the current **Wisconsin Uniform Dwelling Code (UDC), (for 1 & 2 family dwellings)** and the current **Wisconsin Amended ICC Code**:

General: Ceramic Cover CC SYS 100 (CC-100) insulation product **is approved** for installation in existing residential and commercial construction.

The Ceramic Cover CC SYS 100 (CC-100) shall be installed per the manufacturer’s installation recomdations, and by certified applicators.

The **Comm** limitation requirements below are in accordance with the current **Wisconsin Uniform Dwelling Code (UDC), for 1- & 2-family dwellings**:

- **Foam Plastic:** Ceramic Cover CC SYS 100 (CC-100) insulation product shall be separated from the building interior with a thermal barrier as required by **s. Comm 21.11 (1)**.

- **Thermal Performance:** Ceramic Cover CC SYS 100 (CC-100) insulation product shall meet the thermal performance requirements of **Subchapter VI, ss. Comm 22.20, 22.21, 22.23, 22.25, 22.27, 22.28, and 22.31**. Calculations shall be signed, sealed and submitted in accordance with **s. Comm 22.31** as appropriate.

The **IBC** limitations below are in accordance with the current **Wisconsin Amended IBC 2006 Code**:

Foam Plastic: Ceramic Cover CC SYS 100 (CC-100) insulation product shall be separated from the building interior with a thermal barrier as required by **s. IBC 2603.4**.

- **Thermal Performance:** Ceramic Cover CC SYS 100 (CC-100) insulation product shall meet the thermal performance requirements of **s. Comm 63.0102(2)(b)**, and **(c)**. Calculations shall be signed, sealed and submitted in accordance with **s. Comm 63.0102** as appropriate

Note: This product may not be used in a plenum space per the flame spread index and smoke development index test results listed above based on 2006 IMC 602.2.1., unless the requirements of IMC 602.2.1.5 are addressed, and any other foam plastic requirements per IBC Chapter 26 are met.

This approval will be valid through December 31, 2013, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The product approval is applicable to projects approved under the current edition of the applicable codes. This approval may be void for project approvals made under future applicable editions. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:

Approval Date: April 2, 2009

By: _____

Lee E. Finley, Jr.
Product & Material Review
Integrated Services Bureau