



200 LARKIN CENTER
September 18, 2009

The Dow Chemical Company
Midland, Michigan 48674

Michael Beaton
ICC Evaluation Services, Inc.
5360 Workman Mill Road
Whitter, CA 90601

**DOW RESPONSE TO PROPOSED CHANGES TO ICC-ES ACCEPTANCE CRITERIA
AC-38**

Mr. Beaton,

After review of the proposed changes to AC-38, I offer the following suggestions for your consideration:

It is important to include a statement either in the scope or in the definition section of the AC to clarify that both types water resistive barriers completely cover the exterior wall they are protecting from water penetration. This clarification will avoid the chance that a material would be used incorrectly in small strips to tape joints of various sheathings that have not been tested and do not perform as WRB's. Below is a suggestion for wording:

1.3.1 Water-resistive barrier: For theSection 1402.1 of the UBC. All water resistive barriers shall completely cover the exterior wall assembly they are protecting from water penetration.

Also for clarification we propose the following modification to the proposed change to 3.3.5:

3.3.5 For self adhered polymeric-based barriers, reports shall be submitted.....

I look forward to further discussion at the October ICC-ES AC hearing.

Thanks so much!

Sincerely,

A handwritten signature in cursive script that reads "Joann E. Surma".

Joann Surma
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RE: ICC-ES Evaluation Committee Agenda Item 11, *Proposed Revisions to the Acceptance Criteria for Water-resistive Barriers*, Subject AC-38-1009-R1

Dear Mr. Beaton,

I am writing to comment on the proposed revisions to AC38 Acceptance Criteria for Water-Resistive Barriers.

Although I believe it would be preferable to have a separate acceptance criteria for self-adhered water resistive barriers rather than add them to AC-38, my comments on this proposal are addressed in this statement.

Staff has specifically requested comments pertaining to the determination of acceptable substrates for testing of self-adhered membranes. I believe the following guidance should be used:

- (1) The use of representative substrates should be allowed with limitations. For example a test with a specific OSB can represent OSB as a category, but not all wood sheathing. For example testing with OSB would not represent plywood.
- (2) Substrates with proprietary coatings or facing materials should be treated as separate substrates and should be tested individually.

This guidance is in alignment with section 5.3.2 of AAMA-711-07

In addition to the areas solicited for comment by staff, I have the following comments:

- Section 2.2: Installation instructions for self-adhered materials should also include information on appropriate application temperature limits. I suggest the following revision.

2.2 Installation Instructions: Installation instructions shall be submitted. The instructions shall include requirements that the barrier be installed horizontally on vertical walls, with the upper layer lapped over the lower layer not less than 2 inches (51 mm), and that where vertical joints occur, the barrier shall be lapped not less than 6 inches (152 mm) and must include the maximum exposure time permitted by the manufacturer. If the material is to be evaluated as an air barrier material in addition to a water-

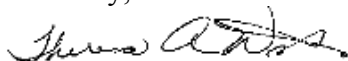
resistive barrier, installation instructions shall identify specific installation provisions for air barrier material applications. If the material is self-adhering, instructions shall include details for substrate preparation, appropriate application temperatures, use of primers and membrane application.

- Section 3.3.5: This section describes the application of AAMA 711 to the evaluation of these materials. It requires testing in accordance with AAMA 711 Section 5.5 for elevated temperature exposure. AAMA 711 Section 5.5.3 allows for three levels of temperature exposure. The acceptance criteria should require that the temperature level chosen for compliance be stated in the evaluation report.
- Section 3.3.2: This section details water-resistance requirements for water-resistive barriers. In the event that the barrier is punctured by building fasteners or other penetrations, water will be able to pass through the membrane unless it is self-sealing. For water-resistive barriers that are not classified as Grade D barriers, this could lead to unacceptable moisture entrapment behind the membrane. Thus, the acceptance criteria should add the following to Section 3.3.2:

For self-adhering polymeric-based barriers that do not qualify as Grade D barriers, products shall be tested for self-sealing around nails and fasteners in accordance to testing described in Section 5.2 of AAMA 711.
- Section 3.3.5 & Table 3: Per AAMA 711 Section 6.7, peel adhesion must be measured at the acceptable application temperatures claimed by the manufacturer. This requirement should be added to the requirements set forth in proposed Section 3.3.5 and Table 3.
- Table 3: Self-Adhered membranes, rather than just adhered membranes should be specified in the Test Requirement and Note below.
- Table 3, note: Peel adhesion to all substrates should be tested under control and the exposure conditions in AAMA 711. Substrates not listed in AAMA 711 should not be exempted from being tested under exposure conditions as the note currently states.

Thank you for your time in considering my comments.

Sincerely,



Theresa A. Weston
DuPont Building Innovations