

**Air Barrier Association of America**  
**Process for Approval of Water-Resistive Barriers (WRBs)**  
**July 10, 2012 Revision 1.0**

**1.0 Overview**

This document defines the requirements and outlines the process for a *water-resistive barrier manufacturer* to have a material reviewed and listed as a *water-resistive barrier* by Air Barrier Association of America (ABAA). Once the required supporting documents, test reports and performance requirements outlined in this document are received, reviewed and approved by ABAA, the material shall be listed on the ABAA web-site and in the applicable ABAA Master Specification as a material which provides the function of a *water-resistive barrier*.

**2.0 Objective**

To provide a consistent and documented evaluation process of materials which prove the function of a *water-resistive barrier* set forth by ABAA.

**3.0 Definitions:**

**Accredited laboratory:**

A testing laboratory and their physical location that has been accredited by IAS (International Accreditation Service Inc), A2LA (American Association for Laboratory Accreditation) or SCC (Standards Council of Canada) to perform the required test method.

**Water-resistive barrier accessory:**

Products used in conjunction with *water-resistive* barriers that are designated to maintain water tightness by sealing the interfaces between adjacent materials, sealing penetrations and around window/door openings.

**Water-resistive barrier (WRB):**

A material that is intended to resist liquid water that has penetrated a cladding system and provide sufficient water vapor transmission to enable drying.

**Water-resistive barrier manufacturer:**

A company or corporation that either manufactures and/or sells a *water-resistive barrier* material manufactured for them.

**Environmental separator:**

Elements of a building that separate the controlled interior environment from the uncontrolled exterior environment, or that separate spaces within a building that have dissimilar environments.

**Service life:**

Period of time during which the *water-resistive barrier* material or any of its accessories performs without unforeseen costs or disruption for maintenance or repair.

## 4.0 Mandatory Compliance Schedule

- 4.1 All *water-resistive* barriers shall meet the requirements of 6.0 and the appropriate material-specific table in 7.0 of the Air Barrier Association of America 'Process for Approval of Water-Resistive Barriers'. Once all requirements have been met and approved by the ABAA, the material will be listed on the ABAA website and the appropriate Master Specification.
- 4.2 *Water-resistive barriers* which were historically evaluated in accordance with ICC-ES AC38, shall demonstrate compliance with ASTM E 2556/E 2556M-09 by January 1, 2013. In the event that the required documentation is not received by the deadline, the product will be removed from the ABAA website listing until documentation has been received and approved.

## 5.0 Required Documentation

Manufacturers shall submit the following documentation to ABAA for review:

- 5.1 **Application Form:** An application form shall be completed by the manufacturer for each material they declare meets the minimum requirements set by ABAA for a *water-resistive barrier* material.
- 5.2 **Non-disclosure Agreement and Licensing Agreement**  
A completed and signed non-disclosure agreement and licensing agreement shall be completed by manufacturer and ABAA prior to beginning evaluation process.
- 5.2. **Submission of Product Samples**  
The manufacturer will submit three material samples, minimum size of 1 square foot (0.1 square meters).

### 5.3. Supporting Documentation

The manufacturer shall provide the following documentation for each product and accessory:

- i. Product data sheet for the material,
- ii. Tested thickness for their material,
- iii. Manufacturer guide specification for the product,
- iv. Installation instructions that include information on:
  1. substrate preparation,
  2. sequence and technique for installation,
  3. material compatibility listing,
  4. listing of approved sealants, and
  5. chemical resistance.
- v. Installation Instructions/Guidelines – The document shall contain information relating to the following:
  1. A list of substrates that the material can be installed on and specifically list any material where the manufacturer does not recommend their material be installed upon,
  2. General Installation techniques and sequencing of wall assembly components as they relate to the *water-resistive* barrier installation which will be placed in appropriate ABAA master specification, and
  3. Material compatibility/chemical resistance – shall include information on sealants, adhesives, primers, etc.
- vi. Service temperature range of installed product,
- vii. Marketing material with the technical data sheet for the product at time of evaluation,
- viii. Material Safety Data Sheet,
- ix. Maximum allowed UV exposure, and
- x. Manufacturer's logo electronically in vector format (.eps or .ai).

## 6.0 Water-Resistive Barrier Evaluation Criteria

### 6.1 Performance Requirements

All *water-resistive barriers* shall complete testing as specified in one of the material-specific tables in 7.0. Testing to ASTM E 96 shall be conducted by an *accredited laboratory* and **complete** test reports shall be submitted to ABAA for approval.

**6.2 Test Report Requirements**

Test reports shall be submitted to ABAA, shall include all the requirements in the reporting section of the standard and the following information:

- i. Name and location of laboratory performing the tests and the accreditation agency for the laboratory,
- ii. A statement stating they were conducted to the specific standard without being modified,
- iii. Date test(s) are conducted,
- iv. Water-resistive barrier manufacturer name, address, production facility address and product designation,
- v. Type (type I or II) and name of the material and other material description,
- vi. Lot number, date code or other material lot identification,
- vii. Material sampling procedure used,
- viii. Description of the specimen preparation,
- ix. Size of specimens used for each test (length, width and thickness),
- x. The results of the test shall be expressed in the units listed in the appropriate table in this document.

**7.0 Required Tests by Water-Resistive Barrier Type**

**7.1 Flexible Sheet Water-Resistive Barriers**

| Product Property      | Material Type | Test Standard                                 | Test Standard Title   | Unit                                 | Requirement         |                     |  |
|-----------------------|---------------|---|---|--------------------------------------|---------------------|---------------------|--|
|                       |               |   |   |                                      | Min                 | Max                 |  |
| All                   | All types     | ASTM E2556 / E2556M - 09                      | Standard Specification for Vapor Permeable Flexible Sheet Water-Resistive Barriers Intended for Mechanical Attachment | As in test standard                  | As in test standard | As in test standard |  |
|                       |               | <b>OR</b>                                     |   |                                      |                     |                     |  |
|                       |               | ICC-ES AC38                                   | Acceptance Criteria For Water-Resistive Barriers  | -                                    | Pass                |                     |  |
| Water Vapor Permeance | All types     | ASTM E96/E96M-05 (Water or Desiccant Method)* | Test Methods for Water Vapor Transmission of Materials  | Perms<br>(ng/(Pa·s·m <sup>2</sup> )) | 5<br>(286)          | -                   |  |

**\* The method of ASTM E96 (water or desiccant method) that was not completed as part of ICC-ES AC38 or ASTM E2556 shall be completed.**

## 8.0 ABAA Product Review Process

### 8.1 Document Verification

All submittal documentation will be reviewed to the ABAA Material Verification Form for completeness and compliance to requirements when received from the manufacturer.

The ABAA office will correspond with the manufacturer in regards to clarification or missing items once the initial review is complete.

Upon receipt and review of the submitted information, it will be documented and organized by the ABAA office who will provide a review of the documentation submitted and provide comments back in an itemized checklist.

Technical completeness and consistency review will consist of the following:

- i. Review of requirements for completeness,
- ii. Review of test data from reports,
- iii. Review of supporting documentation ,and
- iv. Review of specifications, installation instructions and product limitations

Once the technical review has been completed, an itemized checklist with comments will be forwarded to the manufacturer outlining approval, disapproval or requests for further information or clarification from the manufacturer.

### 8.2 Processing Time

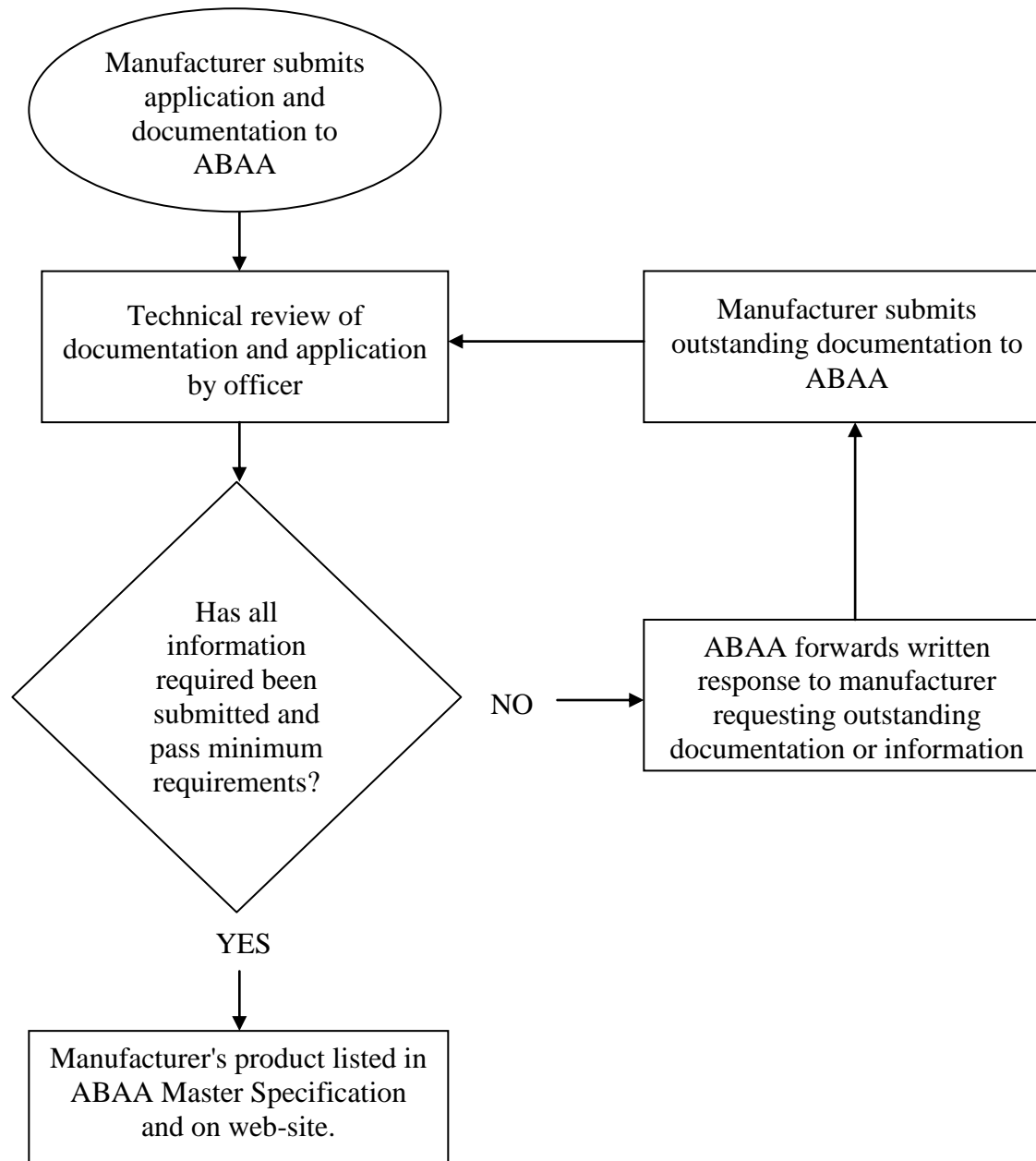
From date of receipt of materials, an initial completeness / submittal checklist will be reviewed within three weeks of the receipt of the final documentation required.

If no further information is required, a technical review will be completed by the ABAA office in three weeks.

The completeness and consistency review by the ABAA office shall be completed within ten weeks from the date of receipt from the ABAA office.

A written response by ABAA will be submitted to the manufacturer within one week of the review

8.3 ABAA Approval Process Flow Chart for Evaluation of Water-Resistive Barriers



## 8.4 Manufacturer Licensing

Once the *water-resistive barrier manufacturer* has submitted all of the required documentation and ABAA has deemed the Approval Process to be complete and the 'Manufacturer Licensee Agreement' has been signed, the product will be listed in the 'ABAA Master Specification for Water-Resistive Barriers' and on the ABAA web-site.

By being a licensed manufacturer, the manufacturer would be able to promote themselves as such with the trademarked resources that ABAA has available.

On-going maintenance of the licensing would be outlined in their licensing agreement which would include such items as:

- i. Maintaining professionalism,
- ii. Submission of test results and documentation when product changes occur,
- iii. Internal ABAA audit every three years that would review manufacturer's documentation,
- iv. Compliance to the license agreement,
- v. Amendment to the requirements listed in this document, and
- vi. Use of trademark

The renewal of the license would occur on a yearly basis which may include the following:

- i. Payment of fees
- ii. Declaration / confirmation of *water-resistive barrier* materials.