

# FOUR PERFORMANCE REQUIREMENTS FOR A STRONGER AIR BARRIER SPECIFICATION

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The air barrier technology used in today's construction and mandated by the **International Energy Conservation Code** (IECC) is firmly grounded in science. That database of knowledge continues to grow at an astounding rate. Research efforts by the **Air Barrier Association of America** (ABAA) are presented at every **ABAA Conference**, and you will be astounded by how much research and testing that ABAA has been conducting to ensure better knowledge for all.

Currently, some air barrier systems are being marketed as having passed only the air barrier part of the testing (**ASTM E2357** - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies) and pay little to no attention to the other architectural performance attributes, such as crack bridging, water resistance, adhesion to a substrate and Fastener Sealability, which when successfully passed, results in an ABAA Evaluated Assembly.

**So, what I'm asking you to consider is an upgrade of performance requirements for a better and stronger air barrier specification. Here are my suggestions for ensuring the best possible air barrier performance for your project:**

air barrier  
**abaa**  
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- 1.** Require that the air barrier system be an **ABAA Evaluated Assembly**.
- 2.** Require that the applicator be both Manufacturer approved and ABAA Certified. Why? We have many untrained firms jumping into this business; do you really want your project to be the training job for the subcontractor? According to the **ABAA website**, there are 1200 Certified Applicators nationwide.
- 3.** Research selections for both your Continuous Insulation and Air Barrier choices to confirm that both products are indeed **NFPA-285** Compliant. Too often these Sections are written as a stand-alone and they are not. They must match up and perhaps the easiest way to do this is to choose three suppliers that manufacture both an air barrier and their own insulation.
- 4.** Wind Resistance Requirements: This would be specific to your geographical region, which is important in many areas, but critical in a hurricane or special wind territories. Our industry requires wind performance testing for low slope roofs and for windows, but not air barriers. Air Barrier performance varies by manufacturer. As a Consultant, I am aware of manufacturers whose air barrier assembly was tested, steel studs 16" OC with exterior gypsum sheathing and went up to an equivalent 190 mph wind (**ASTM E330**), and at that point, there was a structural failure, but the air barrier was still intact. If you're in a hurricane zone, you may wish to consider this type of performance. My suggestion is that your specifications reflect some type of wind resistance based on an ASTM E2357 (specimen 2) assembly with the ASTM E330 testing protocol.

Performance requirements for a proper air barrier specification are vital. The above is four of my suggestions as to how you can elevate and upgrade your specs. Should you have any questions or comments, **thank you for reading.**