

Frequently Asked Questions

How does AeroBarrier work?

AeroBarrier is an interior applied air sealing system that seals building envelope leaks up to 1/2". The waterborne sealant is aerosolized and injected into a pressurized home. The sealant is self-guided to the edges of visible and invisible leaks to create a seal by accumulating across the leak surface. The sealant is applied within 60-90 minutes and dries quickly, before system cleanup is complete. This ensures construction can resume shortly after the process is complete with little to no impact on standard construction schedules. The AeroBarrier system measures envelope leakage in real-time, enabling the system to dial-in specific air leakage requirements with precision and consistent results.

LEAKS & SEALANT

What size leaks will this seal?

AeroBarrier seals holes as large as 1/2", and as tiny as a human hair. Aerosol sealing is extremely effective at sealing narrow gaps and extremely small holes that are typically not cost-effective to seal manually, or that are missed using manual sealing techniques.

How is leakage measured?

The AeroBarrier system uses a modified blower door to measure envelope leakage during the process. The blower door is calibrated to meet ASTM Standard E779, E1554, CGSB-149.10-M86, EN 13829, ATTMA Technical Standard 1, NFPA 2001, RESNET and USACE.

What is a modified blower door?

AeroBarrier modifies its blower door by adding a heater onto the fan. This allows the system to achieve optimal room temperature and humidity during the sealing process, allowing more sealant to be sprayed into the space for a faster, more efficient sealing process.

What's in the actual material being sprayed?

The AeroBarrier sealant is based on a waterborne acrylic that has been used as a fluid-applied permeable air barrier for many years. The sealant is GREENGUARD Gold certified and has been tested according to various ASTM standards and NFPA 285 for fire spread, smoke production, adhesion, antifungal properties, and tensile strength. The sealant is ultra-low VOC and has no off-gassing.

Is your sealant formula safe?

Our formula is a water-soluble organic compound and is proven safe. The sealant is ultra-low VOC and because it is inert there is no chemical reaction needed to form a seal meaning there is no off-gassing. With more than 150,000 projects sealed to date, we've helped hospitals, surgery centers, schools, and public buildings make sure their air is clean, healthy and comfortable – and saved them energy and money in the process. In fact, our sealant is GreenGuard Gold Certified, meeting the stricter certification requirements used in schools and healthcare facilities.

BUILDING TIGHTNESS REQUIREMENTS

How tight can AeroBarrier actually seal a home?

AeroBarrier has sealed houses to as low as 0.19 ACH50. But the value is in the system's ability to allow builders to seal a home to as tight as it is designed for. AeroBarrier can meet any IECC, Passive House, LEED, Well Standard, ENERGY STAR or Net Zero requirement.

I heard too tight of a home is actually a bad thing.

A home that is too tight can be a bad thing if the space isn't designed for that level of tightness. The popular saying "build tight, ventilate right" applies here and works both ways. Building tight without proper ventilation could cause issues with indoor air quality (IAQ) in the space. On the flip side, a leaky home with proper ventilation could cause the mechanical system to not work as it is designed. Because AeroBarrier can dial in the desired tightness of the space it removes the guesswork and ensures that the home is only as tight as the space for which it is designed.

APPLICATION

How large of a space (square footage) can this be used?

AeroBarrier has been used in apartments as small as 500 sq ft and in homes over 10,000 sq ft. As long as the space can be pressurized, it can typically be sealed. Additional blower doors can be added to increase the pressure in larger spaces.

At what stage of construction can AeroBarrier be applied?

AeroBarrier may be applied at any time between rough-in and prior to occupancy. Although, the ideal time to apply AeroBarrier is rough-in or post-drywall. Other factors that affect install is the build process (i.e. vented or unvented attics) and the site's climate zone.

What surfaces need to be protected?

If AeroBarrier is applied at rough-in or right after drywall is installed, there is very minimal preparation required. Vertical surfaces like walls, doors and windows require no covering. All designed openings, such as ducts, electrical and plumbing, need to be covered prior to sealing. All finished horizontal surfaces need to be covered.

What happens if any of the sealant were to accidentally get on something?

AeroBarrier can be cleaned off surfaces. We recommend using a standard citrus based cleaner as soon as possible.

Is it safe to breathe during application?

No. During application, if a technician has to enter the space while it is being sealed, they wear personal protective equipment (PPE). After the sealing is complete, the area is safe to enter without protective gear within 20 to 30 minutes.

How long does it take to apply?

The entire AeroBarrier process, from setup to completion, takes approximately four-hours for a typical single-family home. When targeting reduced envelope leakage levels of Passive House or ZERH, additional time may be required.

How many workers does a typical AeroBarrier job require?

The AeroBarrier system is typically run with a two-person crew. One is responsible for monitoring and setting up the computer and AeroBarrier system, while the other support with seal preparation, cleanup and other tasks throughout the seal.

How long after the sealing process can work resume in the space?

The area needs to be aired out for 30 minutes after the sealing is complete. This is done by opening doors and windows while running the fan. During this time, the sealing equipment and coverings are removed.

EFFICACY & PURCHASE

What is the lifecycle of the product, or how long does the tight seal last?

Third-party lab testing reveals AeroBarrier withstands a simulated 50-year durability test, with little or no seal degradation. Click here to see the durability test results.

Can AeroBarrier be used as a vapor barrier?

No, the AeroBarrier sealant is considered vapor open, allowing water vapor to pass through the sealant. AeroBarrier is not a primary air or vapor barrier.

Can AeroBarrier air sealing be performed in cold weather?

The AeroBarrier process requires temperature control and pressurizing the areas to be sealed. The ideal condition is an outdoor temperature of $\geq 40^{\circ}\text{F}$. Sealing can be done below 40°F but may require additional steps for site preparation.

Where is AeroBarrier available?

AeroBarrier is available in most cities throughout North America. We are actively expanding our Dealer network. Click here to find a local installer.

How much does AeroBarrier cost?

Cost depends on the construction phase and targeted air tightness levels. Once we have your job specifications, we provide a written quote within 24 hours. Click here to schedule a time to speak with an AeroBarrier representative.