# AEROBARRIER

**Breakthrough Envelope Sealing Technology** 

### What Is It

Building upon proven technology invented by the U.S. Department of Energy (DOE) over 20 years ago, *AeroBarrier* is a cutting edge envelope sealing system that simultaneously measures and seals building envelope air leaks.

### **Key Benefits**

- Meet the most aggressive air leakage standards
- Meet passive house air tightness standards
- Achieve air tightness requirements in less time and without costly delays
- Eliminate noise and odor complaints by simultaneously sealing exterior and interior walls
- Comply with ASTM E2357, ASTM E2178, and NFPA 285

## **Applications**







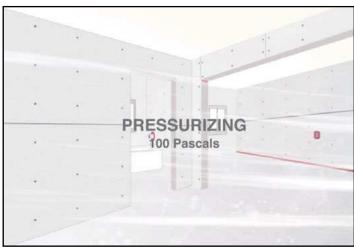
Visit www.cascadeaerobarrier.com to learn more



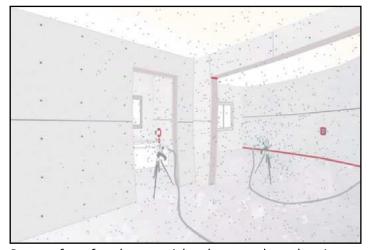
## **How It Works**



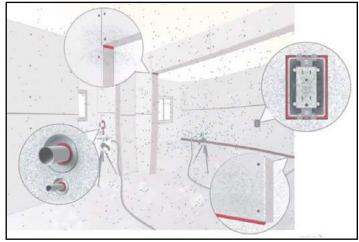
Temporarily block windows and doors; cover electrical receptacles and switches; protect finished surfaces.



Pressurize the space and its air leakage with a computer-controlled atomization system.



Spray a fog of sealant particles that travels to the air gaps and holes.



Allow the particles to build up around any gaps and holes to seal leakage areas without coating surfaces.

## <u>Technical Details</u>

AeroBarrier is a single-component, high performance, synthetic, permeable, aerosol-applied sealant that performs as an air barrier around ceilings, walls, floors, doors, windows, and electrical and plumbing fixtures. It is UV-stable, seamless, monolithic, and can be applied over a wide range of temperatures. AeroBarrier offers a 10-year product warranty and certified results.

- · Process can start as soon as building can be pressurized
- Seals up to 1/2" and as small as a human hair
- Service temperature: intermittent exposure up to 240°F
- Tack free time: <60 min GreenGuard certified
- · Low VOC content: meets LEED requirements
- Color: sandstone grey







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#### **FAQ**

#### Is the sealant safe to use inside the home?

Yes, the AeroBarrier system uses a commercially available sealant. The sealant is GreenGuard Gold Certified, meaning that it meets the stricter certification requirements for us in schools and healthcare facilities.

#### How much will this tighten the house?

AeroBarrier can meet whatever tightness requirements the space was designed to handle. The AeroBarrier technology provides real-time air tightness readings and allows the process to be stopped at any time once the required tightness is reached.

#### What size leaks will this seal?

The AeroBarrier process will seal gaps up to 1/2" wide and as small as a human hair. Aerosol sealing is very effective at sealing narrow gaps and extremely small holes that are typically not cost-effective or are missed when sealed manually. In general, the larger the leak the longer it will take to seal.

#### How long does the process take?

The sealing process for a 2,000 sq. ft. house typically takes one to two hours, depending on initial tightness. Additional time is required for setup and cleanup.

#### What does the sealant look like after it is applied?

The sealant looks like grey caulk. Once it dries it can be painted.

#### How long after the sealing process can you work in the house?

The space needs to be aired out for 30 minutes after sealing. This is done by opening windows and running the fan. Work in the space can continue as soon as the sealing equipment is removed.

#### How much will the house be pressurized?

A blower door is used to pressurize the space to about 100 Pascals - about twice the pressure used for a standard blower door test. The higher pressure helps reduce the sealing time without damaging the house. In some cases, lower application pressure (~75 Pa) will be considered to prevent over pressurizing attic entrances or other large openings.

#### What surfaces need to be protected?

During rough-in stage, minimal preparation is required. Electrical outlets, plumbing penetrations, bathroom/kitchen vents, etc should be covered. The sealant will not stick to vertical surfaces, so there is no need to cover windows or walls.

After rough-in, the sealing will produce a thin layer of sealant on horizontal surfaces that can be removed with everyday household cleaners. Any finished horizontal surfaces need to be covered and any large intentional openings (e.g. exhaust fan ducts) need to be covered manually.

#### Can the sealing be performed in cold weather?

Although the sealing equipment can heat the air used for pressurizing the space, thereare practical limits to aerosol sealing when it comes to weather conditions. In very cold conditions, there is concern that the sealant may freeze during application. So, an outdoor temperature of 40°F or higher is the most appropriate. Temperatures below 40°F may require additional steps.

#### **Have More Questions? Contact Us:**



