

51 DECKER DRIVE
MIDDLETOWN, NY 10940
TOLL FREE: +1 (844) 883-7852

www.bet-na.net



BUILDING ENVELOPE TESTING LABORATORY

Company Guide

WWW.BET-NA.NET



Testing Laboratory Facility Guide

About Us

Building Envelope Testing LLC (BET) is a NY-based independent testing lab and field testing agency with a full fenestration and building envelope testing facility in Middletown, NY. We build and calibrate our own equipment and instruments to NIST or other nationally traceable standards. We provide testing for new construction projects, retrofit projects and leak investigations.





Welcome

Our facility, located in Middletown, NY, houses our lab team specializing in the full range of mockup, energy and custom evaluations. We welcome company visits, and provide demonstrations, hands-on education, and hospitality to foster strong relations with our clients and partners.



Welcome

What We Do

Field Testing



Our field team conducts on-site testing from DC to Boston, mainly servicing the NYC metro-area. We offer testing to meet ASTM, AAMA and NAFS standards in new and existing buildings, as well as leak investigation and envelope upgrade evaluations. Notable jobs include the Freedom Tower, One Times Square, LaGuardia Airport and the NJ Capitol

Lab Testing



Our lab is a full service facility providing air, water, structural (A/W/S) and thermal testing. We have a 12x13 test wall to perform A/W/S to NAFS and AAMA 101, as well as a spectrum of other standards. We have full-scale mockup capacity with two outdoor locations capable of performing two-story mockups up to 50 feet long.

Some services we provide include:

- ASTM E 281, E 330, E 331
- AAMA 501.1, 501.5, 501.7, 501.9
- Building Maintenance Unit Tie-Offs
- Window Limit Arms for Child Fall Safety
- Material testing and analysis
- Air barrier testing
- And many other tests.

Energy Evaluation



Whether you're trying to save on air conditioning costs, or looking to meet growing sustainability standards in energy use, we can provide hard numbers on where your building envelope can be improved for energy efficiency. We offer everything from heat flux, thermography evaluation, air leakage and blower door testing.

Lab Testing

Mockup Testing



BET offers full-scale mockup testing for a wide range of building systems, including windows, curtainwall, windowwall, and composite wall systems. Our expertise lies in the functional testing of rainscreen and cavity wall systems, ensuring they meet the highest performance standards.

We believe the most successful projects are those where the mockup closely simulates the actual construction to be implemented on-site. To achieve this, we recommend involving individual contractors in the performance mockup (PMU) process, as they will be performing the same work in the field. This approach not only helps reduce mockup costs but also provides valuable coordination experience for the project team.

NAFS Testing



The North American Fenestration Standard (previously AAMA 101) is the North American specification for rating windows. This is critical for complying with the International Building Code (IBC) for domestic manufacturers and overseas suppliers. BET can help you unravel the intricacies of certification testing, whether you make aluminum, polymer windows or facade systems. We can assist you with the most reasonable approach to a certification system for your company. Please contact us if you're interested in NAFS certification.

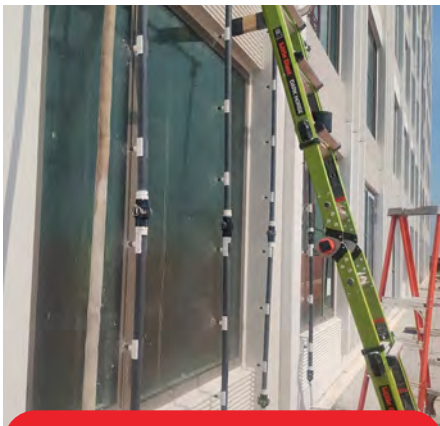
Our Services



AAMA 501.1

AAMA 501.1

This test evaluates the water infiltration resistance of fenestration products such as windows, doors, and curtain walls under simulated wind-driven rain conditions. During the test, the product is subjected to a pressurized water spray while also being exposed to a simulated wind load to replicate real-world weather conditions. The goal is to assess the product's ability to prevent water leakage when exposed to both water and wind pressure, ensuring that it maintains its weather-tightness and performance under expected environmental stresses.



AAMA 502/503

AAMA 502/503

These standards help ensure that windows, doors, and other building components perform as expected under actual field conditions. The tests evaluate whether the fenestration product prevents water infiltration when exposed to rain or other sources of moisture. The assembly is subjected to a pressurized water stream to simulate wind-driven rain, and the test measures whether any water leaks through the product. The product is also subjected to simulated wind pressure to ensure it can withstand the loads it might encounter during storms or other high-pressure conditions. This helps confirm the product's ability to resist forces that could cause deformation, failure, or air leakage.



ASTM E 488

ASTM E 488

The ASTM E 488 test is a standard method used to determine the pull-out strength of anchors in concrete, masonry, or other materials. This test involves applying a tensile load to a concrete anchor or fastener and measuring its ability to resist the applied force without failure. The anchor is subjected to increasing load until it either pulls out of the material or reaches the maximum resistance, and the test provides data on the anchor's capacity to hold under specific conditions. ASTM E 488 is commonly used for evaluating the performance of anchors used in construction applications, ensuring that they meet the required safety and structural performance standards for secure and reliable fastening in concrete or masonry materials.

Our Services

AAMA 501.2

A procedure used to evaluate the structural performance of fenestration products by testing their ability to withstand wind pressure. In this test, the product is subjected to a cyclic loading of air pressure to simulate the forces it would encounter during high wind events, such as storms. The test measures the product's deflection under pressure, its ability to resist deformation, and its overall structural integrity. The goal is to ensure that the fenestration product can safely endure expected wind loads without compromising its performance, safety, or durability.



AAMA 501.2

Blower Door Testing

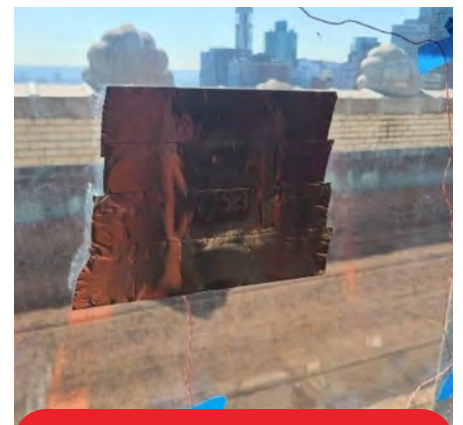
A blower door test is a diagnostic procedure used to measure the air tightness of a building and identify sources of air leakage. During the test, a large fan is mounted in an exterior doorframe to pressurize or depressurize the building, creating a pressure differential between the inside and outside. This differential causes air to flow through any gaps, cracks, or leaks in the building envelope, which are then detected and quantified. The test helps pinpoint areas where energy is being lost due to uncontrolled air infiltration.



Blower Door Testing

Heat Flux

A heat flux evaluation is used to measure the rate of heat transfer through a building material or assembly, such as walls, roofs, or windows. The evaluation typically involves placing sensors or heat flux transducers on the surface of the material to monitor the amount of heat passing through it over time. By analyzing the data, the evaluation provides insight into the thermal performance of the material, including its insulation properties and energy efficiency. Heat flux evaluations are often used to aid in the design of energy-efficient buildings and ensuring compliance with building codes and energy standards.



Heat Flux

Our Facilities



Our business is located on a 13 acre farm in several renovated historic structures. We have the capacity to for indoor and outdoor mockup testing, hosting large visiting corporate groups, and workspace for longer term projects.



Our lab is part of a historic 1847 barn which has inspired the construction of newer developments.



Our brick rainscreen.



Our test wall.

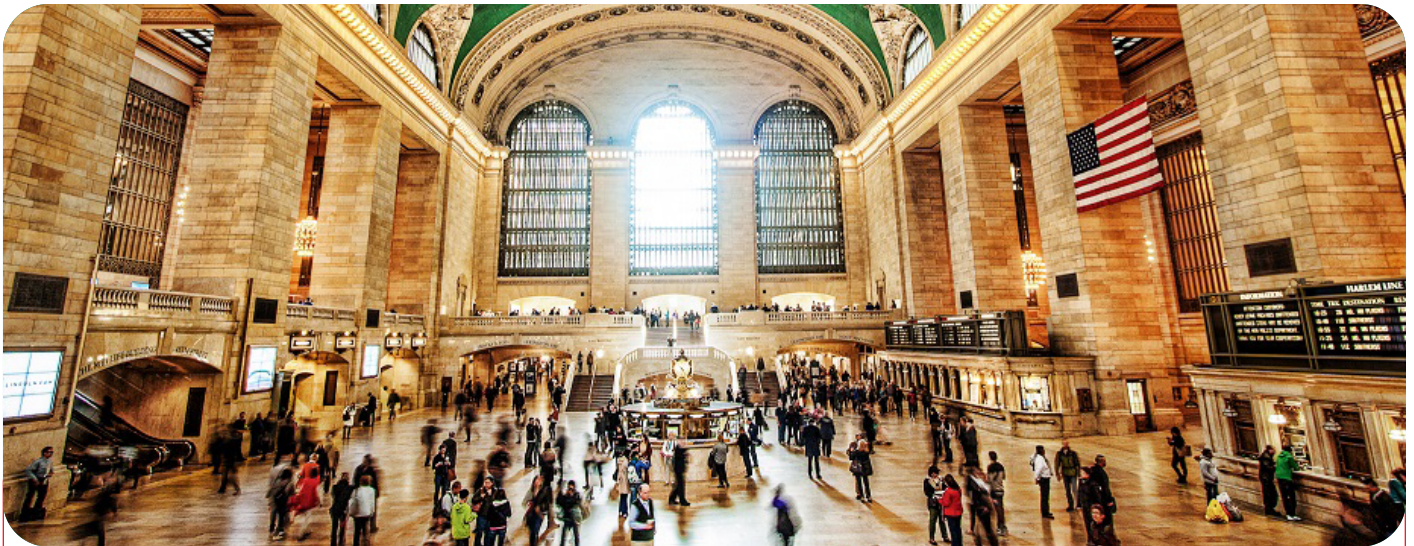


Our shop can accommodate hands-on demonstrations of air barrier systems for educating visiting companies.



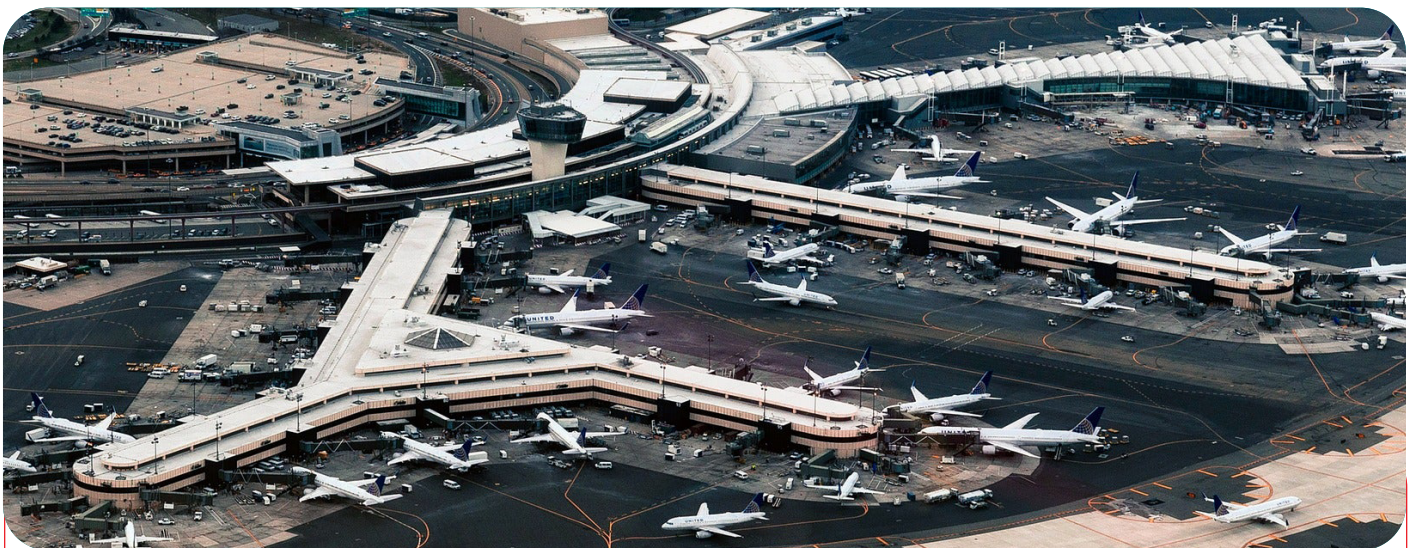
Our outdoor mockup slab capable of supporting two-story mockups up to 50 feet long.

How to get here



MTA Metro-North Railroad via Grand Central Station and **ShortLine Hudson via Port Authority Bus Terminal** are the most practical public transport to our facility. Take the train to **Beacon Station**, or the bus to the **Railroad Ave** stop in Middletown, where BET will provide a shuttle to our facility (1.5-2 hours total).

TRAIN/BUS

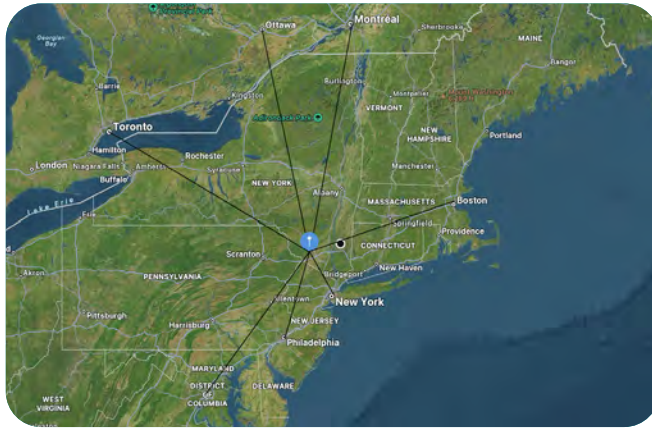




Newark International Airport (EWR) is the ideal airport to take into our area when visiting our facility, as it avoids NYC traffic. **John F. Kennedy International Airport (JFK)** is a great alternative to fly in or out of if you have additional business in NYC. From there, head to either Grand Central Station or Port Authority. There are closer airports (SFW, HPN), but the flight paths may be less desirable.

PLANE

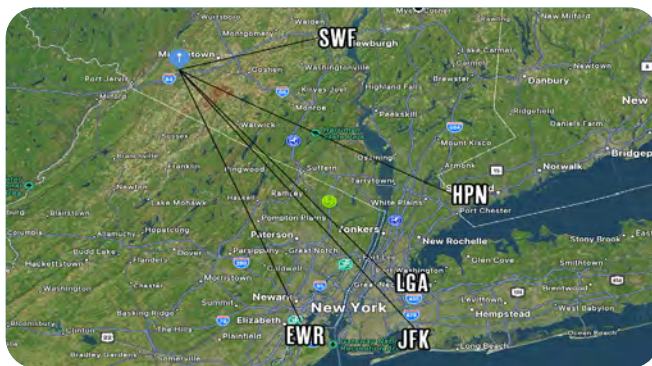
How to get here



Major Cities ▼



		
New York	1:45	79 mi.
Philadelphia	2:40	163 mi.
Boston	3:30	227 mi.
Washington	4:45	296 mi.
Montreal	5:00	334 mi.
Ottawa	5:50	387 mi.
Toronto	6:40	438 mi.

Airports ▼



		
Newark International Airport (EWR)	82 mi.	1:25
John F. Kennedy International Airport (JFK)	94 mi.	1:50

Where to Stay



Residence Inn Middletown Goshen

- ① Amid shopping plazas and casual eateries, this informal all-suite hotel is 2 miles from I-84.
- \$ | ★★★
- 📍 57 Tower Dr, Middletown, NY 10941 | 14 mi. / 21 min
- 📞 +1 (845) 467-6455
- 🌐 <https://www.marriott.com>



La Quinta Inn & Suites by Wyndham-Middletown

- ① This hotel features cable TV in every room. The Middletown Train Station is a short walk.
- \$ | ★★
- 📍 551 NY-211 E, Middletown, NY 10941 | 14 mi. / 21 min
- 📞 +1 (845) 673-5788
- 🌐 www.wyndhamhotels.com



Stagecoach Inn

- ① A restored 18th-century building on lush grounds 4 minutes by foot from the Harness Racing Museum & Hall of Fame.
- \$\$ | ★★★★★
- 📍 268 Main St, Goshen, NY 10924 | 15 mi. / 26 min
- 📞 +1 (845) 294-5526
- 🌐 www.stagecoachny.com



Inn at Stony Creek

- ① Located one block from Montreal's Convention Center and minutes away from the world famous underground city.
- \$\$ | ★★★
- 📍 34 Spantown Rd, Warwick, NY 10990 | 18 mi. / 30 min
- 📞 (514) 398 9999
- 🌐 www.innstonycreek.com

Eating Out



The Sugarhouse at Finding Home Farms

- ① Coffee, waffles, lunch, brunch, pastries and more.
Cafe | \$\$
- 📍 140 Eatontown Rd, Middletown, NY 10940 | 2 mi. / 4 min
- 📞 +1 (845) 355-4335
- 🌐 www.findinghomefarms.com



Bottoms Up Restaurant and Pub

- ① Casual, warm seafood and steak dishes.
Traditional American | \$\$
- 📍 1965 NY-284, Slate Hill, NY 10973 | 7 mi. / 11 min
- 📞 +1 (845) 355-2886
- 🌐 <http://bottomsuppub.com/>



Cugino's

- ① Our favorite Italian place around!
Italian | \$\$
- 📍 2376 US-6, Middletown, NY 10940 | 4 mi. / 7 min
- 📞 +1 (845) 355-3535
- 🌐 <http://www.cuginos.net/>



El Real Mexican Restaurant

- ① Great Mexican fare in an energetic ambiance.
Mexican | \$\$
- 📍 2920 US-6, Slate Hill, NY 10973 | 7 mi. / 11 min
- 📞 +1 (845) 697-5147

Things to do



Warwick Drive-In Theatre

- ① Old-school drive-in theater showing current popular films on 3 screens.
- 📍 5 Warwick Turnpike, Warwick, NY 10990 22 mi / 33 min
- ☎ +1 (845) 986-4440
- 🌐 <http://www.warwickdrivein.com/>



Legoland New York Resort

- ① A theme park in Goshen, NY with 7 Lego themed lands and attractions made of or resembling legos.
- 📍 1 Legoland Blvd, Goshen, NY 10924 16 mi. / 27 min
- ☎ +1 (845) 410-0290
- 🌐 <https://www.legoland.com/new-york/>



Hawk's Nest

- ① A scenic mountain peak. More of a drive-by location, it is known for its picturesque views between Port Jervis and Hancock.
- 📍 Deerpark, NY 12780 | 15 mi. / 25 min
- 🌐 <https://www.atlasobscura.com/places/hawks-nest-highway>



Harness Racing Museum & Hall of Fame

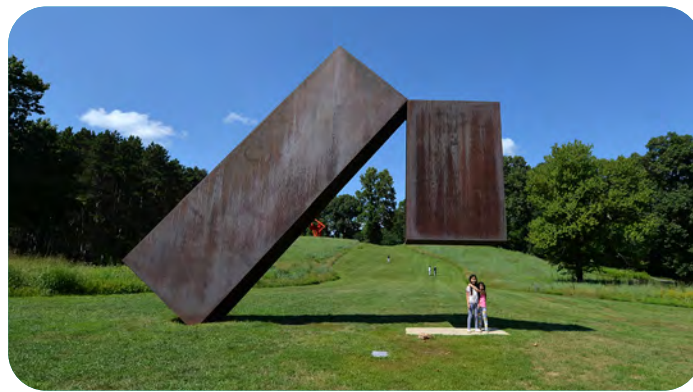
- ① Exhibits devoted to the history of the racing sport are joined by a hall of fame & a gift shop.
- 📍 240 Main St, Goshen, NY 10924 | 27 Km (16.7 mi.) / 30 min
- ☎ +1 (845) 294-6330
- 🌐 <http://harnessmuseum.com/>

Things to do



Brotherhood, America's Oldest Winery

- ① Quaint winery dating to 1839 offering tasting flights & guided tours of the underground cellars.
- 📍 100 Brotherhood Plaza Dr, Washingtonville, NY 10992 | 32 mi. / 38 min
- ☎ +1 (845) 496-3661
- 🌐 <http://www.brotherhood-winery.com/>



Storm King Art Center

- ① 500-acre open-air sculpture park, open seasonally, with tram tours, bike rentals & a cafe.
- 📍 1 Museum Rd, New Windsor, NY 12553 | 35 mi. / 43 min
- ☎ +1 (845) 534-3115
- 🌐 www.thursdaysmontreal.com



Minnewaska State Park

- ① Waterfalls, 3 sky lakes & 25 mi. of footpaths for hiking & biking, plus rock climbing.
- 📍 5281 Route 44-55, Kerhonkson, NY 12446 | 38 mi. / 52 min
- ☎ +1 (845) 255-0752
- 🌐 <https://parks.ny.gov/parks/minnewaska/details.aspx>



The Reserve Bar

- ① Homage to the roaring twenties with a twist of secrecy. Step into a bygone era where every transaction tells a story and every cocktail whispers a secret.
- 📍 20 Front St, Port Jervis, NY 12771 | 11 mi. / 18 min
- ☎ +1 (845) 672-3289
- 🌐 <https://www.thereservebarry.com/>

Check out our interactive Google Map of our area
for more things to do and places to eat!

