2ND QUARTER NEWSLETTER

2024

air barrier abaa association of america

BUILDING ENCLOSURE CONFERENCE 2024 Award Winners

Air Barrier QAP Award Winners

ABG Caulking & Waterproofing of Morristown
Brant Freeman & Associates, LLC
Standard Waterproofing
J.P. Larsen, Inc.
Jaco Waterproofing
Spray Foam Technologies of KY
Bradleigh Applications, Inc.
AlCal Specialty Contracting, Inc.
Summit Insulation & Contracting

Peter Spafford Award Winners

Royals Commercial of Maryland, LLC
Summit Insulation & Contracting

Leadership Award

Julie Szabo

Staff Recognition Award

Shaun Cole

Board of Directors Years of Service Award

Russell Snow
Robert Aird

Wagdy Anis Award of Dedication

Terry Brennan

Fellowship Award

Lance E Robson Jr.

2024

Thank You!

Conference Speakers, Sponsors, Exhibitors and Attendees

air barrier abaa association of america

BUILDING ENCLOSURE CONFERENCE 2024

SAVE THE DATE

BUILDING ENCLOSURE CONFERENCE 2025

DENVER, COLORADO I MAY 6-7, 2025

GREETINGS
from the Chairs

Thank you again to all those that attended, presented, sponsored and/or organized the recent ABAA conference!

Not only were the presentations informative and thought-provoking, but we saw great interactions around the tradeshow tabletops and during our networking events. In turn, we have received multiple compliments and considerable amounts of positive feedback regarding the proceedings, and it was truly wonderful to see so many first-time and repeat participants!

We also want to congratulate all our Contractor Award Winners – their hard work and dedication to excellence is a model for all involved in the building enclosure industry.

We would like to recognize and thank the recipients of our Board of Directors Years of Service Award, Russell Snow and Robert Aird. Over the last 12 years, they have guided ABAA with their wisdom, knowledge and expertise with air barriers and the building envelope. We look forward to their new roles volunteering with ABAA and their continued guidance.

ABAA's highest award of recognition, the Wagdy Anis Award, was presented to Terry Brennan, for his mentorship, leadership and setting the standard for volunteer excellence.

Lastly, we would congratulate Lance E. Robson Jr, for being voted a Fellow of ABAA. Thank you for your time, leadership and commitment to ABAA over the years.

As always, we can't thank our volunteers enough, especially the Chairs of our various Committees and Leaders of Ad Hoc groups, for donating their time and making a difference. We look forward to continuing the positive momentum that was set forth at the Conference and wish everyone a great summer!

SARAH K. FLOCK, NCARB, BECxP, CxA+BE
Co-Chair – ABAA | Co-Chair – ABAA Research Committee
Principal – Raths, Raths & Johnson, Inc.

MR. ANDREW DUNLAP, AIA, CDT, LEED AP, NCARB
Co-Chair – ABAA | Co-Chair – ABAA Research Committee
Principal – SmithGroup

air barrier
abaa
association of
america

We want your feedback!

Have some feedback for us? We would love to hear it!

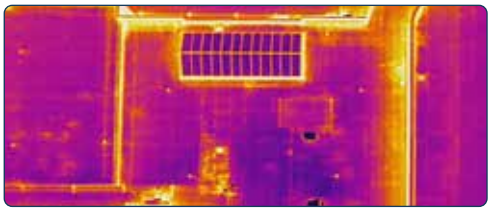
hhowell@airbarrier.org

FEATURE ARTICLE

Air Barriers, Vapor Retarders and the Roof In Between

By Andrea Wagner Watts, Building Science Education Manager, GAF

Originally published in SprayFoam Magazine.



Buildings are designed to keep the outside weather out and the inside space conditioned in a desired way. This is done with control layers designed to stop the uncontrolled movement of water, air, heat, and moisture vapor. In order to be effective, they must be continuous on all six sides of the building enclosure – including the roof. The control layers may look a bit different on the roof than they do on the walls, but they are still needed to prevent the uncontrolled infiltration of water, air, heat, and vapor into the conditioned space. This includes the incorporation of air and/or vapor barriers into the roof assembly.

Uncontrolled air movement is a problem for two reasons: energy loss and moisture. According to "The Hidden Science of High-Performance Building Assemblies," uncontrolled air movement accounts for 10-40 percent of heat gain or loss in our buildings (Environmental Building News, November 2012). This means additional energy must be used to maintain a constant interior temperature within the building, regardless of the climate zone in which it is located. The International Energy Conservation Code (IECC) now requires continuous air barriers on all sides of a building to reduce this unnecessary energy usage...

Read more: https://bit.ly/3xxnRAp

Requirements to Hard Roller Self-Adhered Air Barrier Materials

air barrier abaa association of america

Unadhered Membrane to Substrate

Fishmouths, Tunnel Blisters, and Wrinkles

Why is It Important to Hard Roller Self-adhered Membranes?

Products like self-adhered membranes (permeable or non-permeable) for the field of the wall, thru-wall flashing (TWF), window flashing transition membranes, self-adhering stainless steel and other materials that rely on an adhesive bond have excellent adhesive properties, provided that they are properly applied.

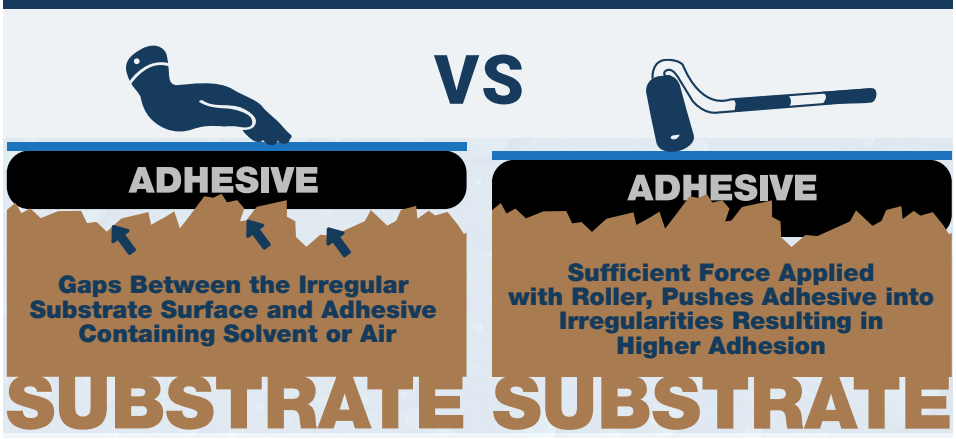
The manufacturers' literature clearly states that these products must be hard rolled onto the substrate with a hard rubber roller or a steel roller.

The use of the application technique called "hand pressing", using the back of a knife or a straight edge is not acceptable and does not allow the development of full adhesion. Figure 3 below illustrates this point.

Figure 3

Hand Pressed and Patted Down vs. A Rolled Version of Each Material

Surface profile of substrate and ensuring adhesion into the valleys.



What happens?

The air barrier membrane may not adhere as intended. The lack of full adhesion can be exhibited by wrinkles, "tunnel blisters", unadhered membrane to the substrate, or lap seam loss of adhesion to the underlying sheet.

Why does this occur?

The pressure sensitive adhesives used with these products are thermoplastic by design. Thermoplastics are deformable by heat and/or pressure. Hard rolling of these materials allows them to be pushed/deformed into both the high points and valleys of the substrate ensuring a very high percentage of adhesion. Hand pressing of these materials only allows adhesion to the top of the irregularities of the substrate, while hard rolling of the material allows the adhesive to be forced into the valleys of the substrate.

What Should you do?

- Ensure you have a variety of sizes of hand rollers for the main membrane areas, but also window flashing and transition membranes
- Ensure that you use your full body weight to press the material firmly in place
- Hard roller the material within a short period after the installation

Full Body Weight Applied

Small Roller for Details

123%

ROLLED VS HAND PRESSED INCREASE

Butyl on exterior gypsum unprimed

How much of a difference does it make?

Here are peel adhesion test results utilizing test method ASTM D903 for rubberized asphalt and butyl membranes as an example of the difference it makes.

Material Type	Hand Pressed vs Rolled
Rubberized asphalt on stainless steel sheet metal	Rolled had a 64.8% increase in adhesion over hand pressed
Butyl on stainless sheet metal	Rolled had a 63.8% increase in adhesion over hand pressed
Rubberized asphalt on exterior gypsum unprimed	Rolled had a 689.1% increase over hand pressed (had a peel adhesion of 7.97psi vs 1.01psi)
Butyl on exterior gypsum unprimed	Rolled had a 123% increase over hand pressed

Conclusions

To ensure long-term adhesion and to prevent the potential for fish mouths, proper rolling is required, whether or not a primer is required by the manufacturer.

A hand pressed material may appear to be properly installed at first, but in a short time, it will debond from the substrate and wrinkle.

This is a requirement of all manufacturers that produce these materials. Project specifications and contract documents refer to meeting those specific instructions.

ABAA Roller Provided to Accredited Contractors

Hard rolling ensures a very high percentage of adhesion

air barrier
abaa
association of
america

Attention BEC, CSI, AIA, and IIBEC Chapters

Be a part of our ongoing educational partnerships for premier building enclosure education!

Discover a range of AIA accredited educational opportunities with ABAA, tailored to fit your learning preferences. We offer diverse formats, from convenient virtual sessions, to engaging face-to-face educational symposiums, to our acclaimed Air Barrier Rodeo, where theory meets hands-on practice for a truly enriching experience.

ABAA's Commitment

- Curate Expert Education Programs
- Coordinate Top Speakers & Topics
- Cover Speaker Travel Expenses
- Promote Extensively to Industry Stakeholders
- Assist with Sponsorship & Provide Attendee Resources
- Manage AIA Reporting & Post-Event Survey

Host Organization's Role

- Secure Venue & Provide Food
- Handle Registration & Local Promotion

ABAA's flexible partnerships recognize the diverse resources and leadership capacities across chapters and organizations.

E: tamara@airbarrier.org
P: 339-206-1142

ABAA RE-ELECTED BOARD MEMBERS

Adam Ugliuzza
Sustainable Building Partners

Andrea Wagner Watts
GAF

Andrew Dunlap
SmithGroup

Sarah Flock
Raths, Raths & Johnson, Inc.

Matt Nelson
ECO Commissions

Election of New Directors

Matt Nelson
Tesa Tape

Guy Long
Prosoco

Keith Nelson
DuPont

LEARNING UNIT CAFE IS OPEN

Order From the Menu

Sample our Learning Unit Café, an online menu of our most requested air barrier courses that any architectural firm, BEC, CSI, or AIA chapter can schedule at their convenience.

The menu consists of both Live and On-demand presentations and all are 1 LU/HSW, and many are GBCI.

» ORDER NOW

Have an Article Idea?

Do you have an article or idea in mind? Publishing an article can be a great way to advance your career and create new opportunities.

We pair ABAA Members with ABAA Mentors that will advise you on your article, and verify technical details.

You have skills and knowledge others are trying to obtain. We are looking to assist with articles on a wide range of air/moisture barrier topics, from absolute beginner to highly technical. Contact us to get started!

Contact Louise at:
lhardman@airbarrier.org

abaa EDUCATION

AIA Continuing Education Provider

abaa EDUCATION Nourishment for the Mind

MENU

WiFi Free

ORDER ONLINE NOW • ORDER ONLINE NOW • ORDER ONLINE NOW

MAIN COURSE

Oh No! What Did I Miss? How to Properly Specify an Air Barrier
By: Ryan Dalgleish, CSI, CAE

The Big Disconnect: The Importance of Wall to Roof Connections for Your Air Barrier
By: Ryan Dalgleish, CSI, CAE

TAKE-OUT

Specifying Air Barriers to Achieve Airtightness
By: Laverne Dalgleish, ABAA Executive Director

Game Plan to Getting Air Barriers Right
By: Brian Stroik, ACIG, Performance Excellence & Quality Consultant, Chair of the ABAA, Past Chair – BEC National

"By Others" – The Elusive Subcontractor Responsible for Transitions + GBCI
By: Andrew Dunlap, AIA, CDT, LEED AP, NCARB, Principal, SmithGroup, Inc.

**On-demand Presentations 24/7*

Please Proceed with Caution: Ensure Your Building Enclosure is Sustainable and Performs
By: Brian Stroik, ACIG, Performance Excellence & Quality Consultant, Chair of the ABAA, Past Chair – BEC National

Trust, but Verify - QC for your Air Barriers
By: Ryan Dalgleish, CSI, CAE

New Tools to Help Drive Decisions in your Air Barrier Specifications
By: Ryan Dalgleish, CSI, CAE

Air Barrier Material Testing – Why Peanut Butter is Good for a Sandwich, but NOT for your Air Barrier
By: Laverne Dalgleish, ABAA Executive Director

DESSERT

Certified Air Barrier Specialist (CABS) LAUNCH WEBINAR
By Roy Schauffele, FCSI, CCPR, FABAA, CABS

**On-demand Presentation 24/7*

WWW.AIRBARRIER.ORG

CEUs On-Demand

Through-Wall Flashings and Transition Membranes: Selection & Installation
» REGISTER: bit.ly/45rkGqU

Building Enclosure Control Layer Fundamentals
» REGISTER: bit.ly/3z17HAn

Designing Walls for Control of Air, Water, Thermal and Vapor
» REGISTER: bit.ly/4cn4PMp

A Risk Management Strategy for Air Barrier Installation – the ABAA QAP, a Tech Talk with ABAA
» REGISTER: bit.ly/4csy4xT

Cracking: Why Buildings Move
» REGISTER: bit.ly/4b2fuLn

Failure is Not An Option: Air Barrier Continuity Strategies for Storefront & Curtain Wall Systems
» REGISTER: bit.ly/3RC4ihH

Is Your Organization Getting All the Education Benefits ABAA Has to Offer?

2024 Progress | *On Continuing Education Provided to the Industry*

28

HOSTED ABAA WEBINARS

With topics ranging from commercial spray foam, wall systems, managing condensation, whole building airtightness, air leakage control, Insulated structutal sheathing.

2

PRESENTED AT 2 MAJOR CONFERENCES

Spray Foam 2024, CSI Southwest Region Conference

6

JOINT EDUCATIONAL EVENTS

Including partners: IIBEC Chicago, AIA East and Central Kentucky, CSI Milwaukee, CSI Chicago, BEC and CSI Minnesota, BEC AIA Salt Lake City

3

ABAA CONTRACTOR WEBINARS

Topics included: Review of Store Front Details, Expansion Joints Details and Strategies, Quality Assurance Program Updates

JANUARY TO JUNE

ATTENDEES	EVENTS	CONTINUING EDUCATION UNITS
10,519	55	12,492

689 COMPANIES IN 2023 WE HAD OUR LARGEST MEMBERSHIP EVER, AGAIN!

652

QAP Registered & Audited Projects
(Increase of 73 over 2022)

21,890

Continuing Education Units in 2023 (Increase of 4,623 over 2022)

20,073

Attendance
(Increase of 4,459 over 2022)

2,705

Registered QAP Installers
increase of 180 over 2022

ABAA in Action I Live Events

Enjoy our presentations and visit the ABAA booth

Private Training for Contractor in California

Thank you to Accurate Firestop for the opportunity to train your team!

Upcoming ABAA Education

June 27	Protect your Assets the WUI Way **Register: bit.ly/45sBuOq**
July 11	Continuous Insulation Compared Within Eight Steel Stud Wall Assemblies **Register: bit.ly/4b6BFAe**
July 18	The Dynamics of the Seal – Experiences, Insights & Anecdotes from 5-yrs of Installing Aerosol-Based Air Sealing Technology around the Northeast US **Register: bit.ly/4b35P7p**
July 25	Development of Non-Destructive and Non-Invasive Techniques for Assessing Building Envelope Performance: Air Leakage and High Moisture **Register: bit.ly/3VsLHFM**
August 1	Invisible Improvement: Air Tightening an Office in a Historic Timber Pier **Register: bit.ly/4cp3S6r**
August 22	Fire-rated Expansion Joints **Register: bit.ly/45pBgYd**
Sept 5	Weather Resistive Barriers used in Exterior Wall Construction – Focus on Fire Testing to NFPA 285 **Register: bit.ly/4epSfOo**
Sept 19	Wood Structural Panels as an Air Barrier **Register: bit.ly/3KKeuB2**

Upcoming Certification Training

Self Adhered and Fluid Applied Training

August 20-22	Online
October 8-10	Online
November 5-7	Online
December 3-5	Online

Whole Building Airtightness Training

September 16-20	Seattle

Field Auditor Training

October 29-31	Online

Sprayed Polyurethane Foam Installer Training

Fall Virtual Course

E-mail **training@airbarrier.org** if interested to attend

abaa EDUCATION

QAP FEATURE PROJECT

University of Michigan Ruthven

This historic renovation project included AVB of masonry back up walls that transitioned to numerous dissimilar materials at or below various exterior facade types including terracotta, stone, metal panels, glazing systems, and roofing. Coordination, communication, and precise execution were key to the project's success for IS1, and affected sub trades.

Architect: HED Associates

General Contractor: Barton Malow

Accredited Contractor: Industrial Services Inc

Air Barrier Installers: Cody Wilson, Jake Jarvis, TJ Martolock, Rick Morais

Building (sq. ft.): 100,000 **Air Barrier (sq. ft.):** 36,700
Location: Ann Arbor, MI **Type:** New Middle School

See more process photos

Quickly Calculate Cost

We have a simple QAP calculator, try it out!
airbarrier.org/qap/qap-calculator

Showcase Your Project

Your QAP project could be featured here!
Contact Louise at: Lhardman@airbarrier.org

ABAA QAP [Quality Assurance Program]

Learn how to make QAP part of your success story in 2024. We have outlined what it takes, the many benefits, and how much it costs to mitigate risk for a variety of building type and sizes.

Brochure **Landing Page**