

air barrier

abaa

association of
america

**EDUCATION
AT THE **HIGHEST**
TECHNICAL LEVEL**

Air/Moisture out. Confidence in.

www.airbarrier.org



**AIR BARRIER EDUCATION FOR
THE CONSTRUCTION INDUSTRY**

WHO IS ABAA?

The Air Barrier Association of America (ABAA) is a national, not-for-profit trade association that consists of a wide cross section of stakeholders in the building enclosure industry. Their membership includes manufacturers, architects, engineers, trade contractors, researchers, testing & audit agencies, consultants and building owners.

ABAA is the national voice of the air barrier industry and has raised the level of quality in the industry through a Quality Assurance Program and offers premier training, certification, product evaluations, contractor accreditation and site quality control audits. ABAA is active in the areas of research, education, standards development, building codes and technical resources for the air barrier industry.

The ABAA Quality Assurance Program is a risk management quality assurance program that addresses the potential issues before and during the installation process. The installation is performed by individuals and companies that are educated and have the experience to properly install air barriers, while having 3rd party auditors do quality control.

SPECIFICATIONS

STRATEGIC LIAISON

RESEARCH

COMMUNICATION

OUTREACH

TRAINING

STANDARDS

QUALITY ASSURANCE

CERTIFICATION

BUILDING CODES

GUIDELINES

TECHNICAL

MATERIAL EVALUATIONS

THE VOICE

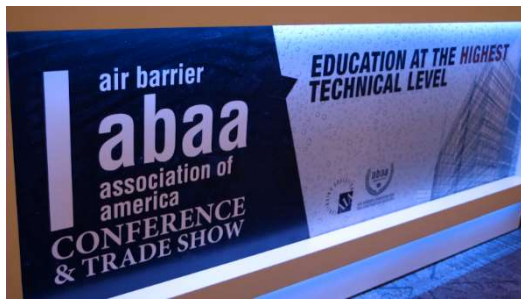
EDUCATION

PUBLICATIONS

ABAA EDUCATION

One of the founding cornerstones of the Air Barrier Association of America is education. ABAA provides education to all stakeholders in the construction industry including architects, general contractors, construction managers, sub-trades, manufacturers and consultants. ABAA offers a variety of educational formats that includes online education, face-to-face lunch and learns, educational workshops, and on-demand webinars. We also offer half-day and full-day educational events, including our Air Barrier Rodeo which combines theory and actual hands-on application of air barriers.

The Air Barrier Association of America also hosts an annual conference and trade show. It is the only conference in the world that focuses on air barriers and building airtightness. This conference provides two full days of comprehensive learning tracks specific to design professionals, consultants, general contractors, subcontractors, and others interested in the air barrier industry.



All of these programs are registered with the American Institute of Architects (AIA) for continuing education credits that are HSW-eligible. A number is also registered with Green Building Certification Institute (GBCI) for continuing professional education and the International Code Council (ICC) Education Provider Program. AIA learning credits and GBCI credits are available for these presentations ONLY when delivered by an ABAA-approved speaker in person.



WHO HAVE WE DONE JOINT PRESENTATIONS WITH?

ABAA has worked with a variety of associations and organizations over the years and most recently with a variety of chapters across the U.S. including the American Institute of Architects (AIA), Committee on the Environment (COTE), Construction Specifications Institute (CSI), International Masonry Institute (IMI), the Association of General Contractors (AGC), Internal Code Council (ICC) and Building Enclosure Council (BEC).

Here is a list of some of the organizations we have worked with:

- AIA Eastern New York
- AIA Oregon; COTE
- AIA San Diego
- AIA Santa Clare Valley
- AIA Syracuse
- AIA/AGC Little Rock
- AIA/BEC Philadelphia
- AIA/BEC Salt Lake City
- AIA/BEC San Francisco
- AIA/BEC Tampa Bay
- AIA/CSI Orlando
- BEC Boston
- BEC Charleston
- BEC Cleveland
- BEC Colorado
- BEC Detroit
- BEC Houston
- BEC Iowa
- BEC Jacksonville
- BEC Las Vegas
- BEC Minnesota
- BEC Portland
- BEC Research Triangle
- BEC Salt Lake City
- BEC Seattle
- BEC Spokane
- BEC Springfield
- BEC St. Louis
- BEC Washington, DC
- BEC Wisconsin
- BEC/IMI Baltimore/DC
- BEC/IMI Chicago
- BEC/IMI Kansas City CSI Charlotte
- CSI Chattanooga
- CSI Dallas
- CSI DC Metropolitan Chapter



WHAT DO PEOPLE THINK OF THE EDUCATION?

Based on a survey from 2018, here are the ratings:

- Importance of Topics Presented: 9.25 / 10
- Speaker Abilities: 9.10 / 10
- Quality of Speaker Presentations: 9.05 / 10
- Would you Recommend Education to others: 96 %
- Would you Attend Another Event by ABAA: 95 %

We wanted to thank you and ABAA for hosting a great ABAA Symposium on Tuesday. You **were truly awesome and better than we expected**. We continue to receive complements from our attendees about your symposium. It is awesome for the BECs to have such great support from ABAA. You are a **wonderful asset to the AEC community**; we hope that all of the professional education that you provide will continue to help everyone to better understand building science so they can design and construct higher performing and better energy efficient buildings. Keep up the great work and thank you again for your generosity!

Cheryl Smith AIA, LEED-AP
Principal
Cope Linder Architects

I think this might be the best CEU I personally have attended in last 30 years for Architecture and constructions license requirements and AIA CEU's; so, I have been probable 350-400 CEU courses varying from 1 hour to 24 hours in 3 days. What a demonstration to ABAA for actually accomplishing and disseminating its educational objective; well done.

Larry Dickie, AIA, CPC
St. Petersburg College
Facilities Project Coordinator

HOW TO PARTNER WITH ABAA?

Thank you for an **excellent program today**. Architects **need to get educated on air barriers and many other building science topics**. I sometimes tell people I manage remedial education for architects, helping them to learn things they should have been taught in school but weren't!

Most importantly, I would like to work with you, AIASF, and AIA California Council to get this information out to design teams in the state. I'm working with AIACC on how to get their members up to speed to meet California's.

Thanks again for today's good work.

Bill Burke, Architect, LEED BD&C | Energy Centers Building Enclosure Coordinator
Pacific Gas and Electric Company

ABAA is very flexible in how they work with other organizations because we realize the capabilities from chapter to chapter or organization to an organization will differ depending on the resources of the volunteer leadership.

A "typical" arrangement we have had is the following:

What Host Organization Provides or Helps with:

1. Securing a venue.
2. Planning for food for the day.
3. Handling registration.
4. Helping to promote the event locally.

What ABAA will do:

1. Put together an education program.
2. Coordinate speakers and topics.
3. Make travel arrangements for the speaking group and cover all expenses.
4. Promote the event to our local members and our database of industry stakeholders (email, social media, phone calls).
5. Help source sponsorship if needed (we would reach out to our members).
6. Provide educational booklets, USBs with technical resources, and other attendee take aways.
7. Handle all AIA reporting.
8. Conduct a post-event survey and share it with speakers and host organizations.

What we have done in the past to help out if there was not enough volunteer effort from the host organization or they did not have the tools to organize it:

1. Set up event registration using Eventbrite.
2. Source out a location.
3. Make arrangements for food, AV, etc.

In regard to financials, which is always a question, anything on our list is completely free and any support we provide is covered. What most chapters do is charge an attendee fee and offer sponsorship (some do, some don't). The sponsorships are typically funded by manufacturers and would include providing them with a tabletop display, recognition at the event, and any other benefits that the host organization would like to offer them. The attendee fees and sponsorship is used to cover the food, venue, and direct seminar expenses. The host chapter or organization keeps the profit to help further its goals. In the case where we collect the event registrations, we would pay the direct bills and then send the remaining profit to you.

Based on our experience, it is a pretty seamless process, and we are here to support it in any way we can.

How can this joint education provide value to your association members:

- Provide high-level education that typically is not available locally.
- Receive unbiased 3rd party education.
- A chance to network with individuals that have been involved in the industry for decades.
- Take away resources for continuous learning and reference.
- Receive AIA credits that are HSW eligible.
- Receive GBCI credits.

How can this joint education provide value to your chapter or organization?

- Keep all the profit from the event.
- Provide higher level education to your membership.
- Potentially gain more members.

WHAT ARE THE STEPS TO GET STARTED?

- 1 Host Organization to Suggest some Dates
- 2 ABAA to Verify Speaker Availability
- 3 ABAA to Suggest Education Program Based on Speakers
- 4 Agree on Finalized Program
- 5 Outline Responsibilities for Each Organization
- 6 Execute Plan and Promote

COURSE LISTING

Course Summary Information

PRESENTATION	DESCRIPTION	CREDITS
Achieving a High-Performance Air Barrier System	Review of important design considerations, how to properly detail critical interfaces, key items to include in your specifications, and the proper installation techniques, quality control, and testing parameters for a variety of air barrier systems.	1.0 or 1.5 CEU/HSW
Air Barrier Material Evaluations & Testing: Why Peanut Butter is Good for a Sandwich, but NOT for Your Air Barrier	As the air and water-resistive barrier industry has grown over the past decade, new materials have come on the market. These materials have a short track record, but should you shy away from using them? This presentation shows how you can sort out the different materials and how you can get help in choosing the right one for your project.	1.0 or 1.5 CEU/HSW 1.0 GBCI
Air & Vapor Considerations in Prefab Construction	Review the top considerations when designing, constructing, and installing prefab cold-formed metal stud panel construction regarding air/vapor barrier systems through several case studies.	1.0 or 1.5 CEU/HSW
The Big Disconnect: The Importance of Wall-to-Roof Connections for your Air Barrier	Review of air barrier considerations for roof-to-wall connections.	1.0 CEU/HSW 1.0 GBCI
Building Enclosure Architectural Details – Conveying Construction Drawing Clarity	Review basic concepts of building science and how drawings can be improved to create beautiful, sustainable structures that function properly by conveying clarity on building enclosure details at critical transition points.	1.0 CEU/HSW
Building Science	Review of key performance requirements and definitions of Air Barrier materials, assemblies, and systems. Introduction to the concept of building as a system and the physics behind heat, air, and moisture flow. Dispel some of the myths of building airtightness and air barriers.	1.0 CEU/HSW

PRESENTATION	DESCRIPTION	CREDITS
<p>“By Others” – That Elusive Sub Contractor Responsible for Transitions</p>	<p>Review of transition details that can impact the building enclosure from an energy and moisture standpoint and review logical issues and options available to achieve proper details.</p>	<p>1.0 or 1.5 CEU/HSW 1.0 GBCI</p>
<p>Game Plan to Getting Air Barriers Right</p>	<p>Review how having an industry-recognized knowledgeable individual in air barriers, as well as an enclosure quality program, can mitigate your building enclosure risk and assist you in providing the owner with a durable, sustainable building facade.</p>	<p>1.0 CEU/HSW</p>
<p>Groundhog Day: Recurring Field Installation Issues with Air Barriers</p>	<p>Discussion on the role of the quality assurance audit, point out what to look for, and provide real-life examples that can help you identify installation issues on your project.</p>	<p>1.0 CEU/HSW</p>
<p>Leak-free Enclosure Process for Construction Managers & General Contractors</p>	<p>Review how to ensure the construction of high-performing enclosures by means of Case Studies from projects around the country. Discuss the process that can be put into specifications to endure durable, sustainable, and high-performing enclosures.</p>	<p>1.0 CEU/HSW</p>
<p>Mission Impossible: Air Barrier Connections</p>	<p>Gain an understanding of how poor transitions can result in reduced energy efficiency, as well as increase the risk of water infiltration and condensation. Learn how transitions impact building enclosure performance and how compatibility issues impact the options available for good transitions.</p>	<p>1.0 CEU/HSW 1.0 GBCI</p>
<p>New Tools to Help Drive Decisions in Your Air Barrier Specifications</p>	<p>Review of new tools in choosing different levels of airtightness and the potential energy savings and reduction in moisture transport. Discuss new research done on air barrier adhesion to the substrates and the effect of different penetrations through the air barrier</p>	<p>1.0 or 1.5 CEU/HSW 1.0 GBCI</p>
<p>Oh No! What Did I Miss? How to Properly Specify an Air Barrier System</p>	<p>The importance of a proper specification cannot be understated, and a well-articulated document will ensure that the owner is provided with materials, performance, and quality. A review of key specification language to include in your project specifications, along with code requirements and material testing.</p>	<p>1.0 CEU/HSW 1.0 GBCI</p>

PRESENTATION	DESCRIPTION	CREDITS
<p>Please Proceed with Caution: Ensure your Building is Sustainable and Performs</p>	<p>Review of critical aspects of design, sample details, and the process of using pre-construction meetings, mock-ups, and various test methods to verify performance.</p>	<p>1.0 CEU/HSW 1.0 GBCI</p>
<p>Setting the Standards for Whole Building Testing</p>	<p>The accuracy of a whole building test is dependent on the qualification of the personnel conducting the test. Review the training & certification program for air leakage technicians developed by the ABAA and how using these qualified individuals can contribute to significant energy savings and moisture control.</p>	<p>1.0 CEU/HSW</p>
<p>A Sticky Subject – Adhesion of Air and Water Resistive Barrier Materials</p>	<p>Review of 15 years’ worth of research on how well various air barrier materials stick to substrates in the field and what expected number for performance requirements could be used as a baseline.</p>	<p>1.0 CEU/HSW 1.0 GBCI</p>
<p>Through Wall Flashings Compatibility, Sustainability and Performance</p>	<p>Review of performance criteria for through-wall flashings and attributes to commonly used flashing materials, along with understanding compatibility issues with the other wall components and steps to designing resilient flashing systems.</p>	<p>1.0 CEU/HSW 1.0 GBCI</p>
<p>Trust, but Verify – Quality Control for your Air Barriers</p>	<p>Review the myriad of ways quality assurance and quality control can be implemented to ensure a successful project. Performance mock-ups, ASTM test methods, visual inspection methods, and common installation issues will be studied utilizing site photos and case studies.</p>	<p>1.0 CEU/HSW</p>
<p>Understanding Difficult, Critical Transitions of Air, Vapor and Moisture Barriers</p>	<p>Difficult critical transitions will be analyzed to better understand the reasoning and sequencing needed to prevent project constructability issues and potential rework in the field. Detailed drawings and corresponding construction photos will be studied.</p>	<p>1.0 or 1.5 CEU/HSW</p>

<p>It's Not Raining - Why Is My Roof Leaking?</p>	<p>This presentation explores the various ways moisture moves in a building beyond just bulk water entry, challenging the reliance on Perm ratings alone. It will highlight common misconceptions and reveal how thousands of gallons of water can infiltrate the building envelope.</p>	<p>1.0 CEU/HSW</p>
<p>Failure Is Not an Option: Air Barrier Continuity Strategies for Storefront & Curtain Wall Systems</p>	<p>This presentation examines common building failures in wall-to-window connections for curtain walls and storefronts. It reviews key construction details to ensure airtight, watertight, and thermally protected assemblies, with real-life examples of errors and solutions.</p>	<p>1.0 or 1.5 CEU/HSW</p>
<p>Whole Building Testing Is Coming: Do Not Fear It</p>	<p>This presentation will debunk common myths about whole building airtightness testing, walk through a typical test, and offer solutions for meeting performance requirements. It will also highlight the ABAA training and certification program and what sets it apart in the industry.</p>	<p>1.0 CEU/HSW</p>
<p>Building Enclosure Pre-Construction Meeting</p>	<p>This presentation emphasizes the role of pre-construction meetings in quality assurance and risk management for building enclosures. It explores how these meetings set clear expectations, address potential issues, and foster collaboration to prevent delays and construction problems.</p>	<p>1.0 CEU/HSW</p>
<p>Cracking Why Buildings Move: Absorbing Thermal Loads with Movement Joints</p>	<p>This course explores the importance of building movement joints, their types, and their role in maintaining air and water control layers. It will highlight common failures, best practices for design & installation, and a case study demonstrating the consequences of improper joint implementation.</p>	<p>1.0 CEU/HSW</p>
<p>Why of Commissioning: A Look at the Process & How It Can Mitigate Risk</p>	<p>Buildings leak, but a well-executed Building Enclosure Commissioning (BECx) process helps mitigate risks and ensures durable, efficient structures. This course will cover the BECx process, including quality assurance, system performance verification, and owner training.</p>	<p>1.0 CEU/HSW</p>
<p>Intro to Commissioning: Taming the Wild, Wild West</p>	<p>Building Enclosure Commissioning (BECx) is often seen as added cost and complexity, but misconceptions about its value persist across the industry. This course clarifies the BECx process, its benefits, and how proper implementation reduces risks while ensuring leak-free, efficient, and sustainable buildings.</p>	<p>1.0 CEU/HSW</p>

<p>Project Experiences With (or Without) Flashings</p>	<p>Flashings play a critical role in directing water out of exterior wall cavities, yet improper installation often leads to leaks. This presentation examines real-world cases of flashing failures and highlights best practices for proper installation.</p>	<p>1.0 CEU/HSW</p>
<p>Providing Owners What They Really Want: Leak-Free Enclosures</p>	<p>This course explores how to create clear, concise, and effective performance specifications to ensure buildings meet owner expectations. It will cover strategies to maximize design and construction success while reducing risks, ultimately delivering leak-free high-performing buildings.</p>	<p>1.0 CEU/HSW</p>

Detailed Course Information with Learning Objectives

Achieving a High-Performance Air Barrier System

Air Barriers are an extremely important component of a high-performance building enclosure system. For the most part, these systems are non-maintainable components and repairs can typically only be made with the removal of the exterior cladding system. To ensure a performing system, proper design, detailing, and ultimately the proper installation of these systems are extremely important. You have one chance to get it right. Come learn about important design considerations, how to properly detail critical interfaces, key items to include in your specifications, proper installation techniques, quality control, and testing parameters for a variety of air barrier systems in use today.

Learning Objectives

- Discuss how air barriers are part of a high-performance building and how they control air and moisture movement, improve insulation performance and reduce the energy needs of buildings.
- Review key design considerations, critical interfaces for continuity, material performance requirements, and specification language for the proper design and selection of the air barrier assembly.
- Identify the typical installation requirements of a variety of air barrier materials and assemblies and common installation issues observed in the field.
- Discuss the importance of proper construction sequencing, coordination of sub-trades, testing and inspection criteria, how to identify installation defects and remedial action required during the construction phase.

Air Barrier Material Evaluations and Testing: Why Peanut Butter is Good for a Sandwich, but NOT for Your Air Barrier

Air barrier technology has been around for decades, but the use of air and water-resistive barrier material in buildings is fairly new. Some air and water-resistive barrier materials have been used in other applications for years and now are being used for the air and water control layer. Now that the application has changed, does the material still perform in the new application?

As the air and water-resistive barrier industry has grown over the past decade, new materials have come on the market. These materials have a short track record, but should you shy away from using them? This presentation shows how you can sort out the different materials and how you can get help in choosing the right one for your project.

Learning Objectives

- Describe why material properties matter for green buildings, specifically to air barriers and other building enclosure components.

- Explain the key requirements for air barrier materials to function and reduce energy use in buildings over the long term.
- Determine key material properties and material testing that is needed for air barriers to ensure long-term energy performance and protection of embodied energy of other building enclosure components.
- Explain the process of material testing and requirements to meet language and requirements in ASHRAE 90.1, IECC, and state energy codes.

Air & Vapor Barrier Considerations with Prefab Construction

This presentation will discuss the top considerations when designing, constructing, and installing prefab cold-formed metal stud panel construction with regard to air/vapor barrier systems. From initial design considerations of the AVB system to the final completion. The presentations will be based on several case studies which we will dive into what is needed to be discussed early in the initial planning stages, construction tolerances, installation techniques, travel and storage concerns, as well as installation tips to make sure that the installation as a whole is able to be properly detailed every step of the way.

Learning Objectives

- Identify AVB considerations and properly choose a system that will work with the specific design challenges of the CFMF panels.
- Learn how to identify and prevent constructability issues during the design, detailing, and installation phases of the prefab CFMF panels.
- Be able to review the fabrication process and understand the AVB concerns and how to mitigate issues during the process.
- Apply the understanding of the prefabrication process and AVB installation concerns to the field during the site observation review.

The Big Disconnect - The Importance of Wall-to-Roof Connections for the Air Barrier

As more states, jurisdictions, and the design community require air barriers, the issue of connecting the wall air barrier assembly to other building assemblies, such as below-grade, window systems and roofs needs to be completely understood in order to design and construct a functioning building enclosure.

One of the most often missed or not well-executed details is the connection between the wall air barrier and roof assembly. With a myriad of roof systems, wall configurations, and the growing number of wall air barrier products, it can be difficult to navigate the process in regard to what systems work best with each other and the chemical compatibility of these systems.

This presentation will focus on things to consider from a design standpoint, along with practical approaches to ensuring a robust connection is constructed and executed.

Learning Objectives

- Understand why the roof/wall air barrier intersection is critical to building performance in regard to moisture management and air leakage control and common design and field errors.
- Become aware of compatibility issues related to wall and roof air barrier components for the myriad of air barrier and roofing assemblies that exist on the market today.
- Identify pre-construction coordination items to review and allocation of responsibilities to sub-trades for the proper execution of the connection.
- Review requirements for detailing the roof/wall interface and the sequence of construction for the most common roof/wall air barrier connections.

Building Enclosure Architectural Details - Conveying Construction Drawing Clarity

Designing an air-tight, water-tight, and energy-efficient building requires an understanding of the anatomy of the entire building enclosure in order to build structures that will perform as intended. A lack of understanding of these concepts translates into poor and incomplete architectural details, gaps in design information, and exterior wall components that cannot be properly installed, leading to contractors “figuring it out on the field.” This presentation will touch upon basic concepts of building science and how drawings can be improved to create beautiful, sustainable structures that function properly, by conveying clarity on building enclosure details at foundation-to-wall, roof-to-wall, window-to-wall, penetrations, and at dissimilar material transition points.

Learning Objectives

- Understand the importance of building enclosure architectural details and the consequences of not including necessary details as part of construction documents.
- Learn what exterior wall envelope details must be provided according to the code and best practices for meeting the code.
- Understand Building Science effects on architectural design.
- Understand how materials and sequencing can play into the constructability of a design.

Building Science

The concept of building science is to help us understand how our buildings work as systems and how the physics of heat, air, and moisture flows need to be understood in order to design and construct a high-performance building that will be energy efficient, durable, and sustainable. This presentation will review how heat, air and moisture function and provide insight into how we can control these flows to ensure optimal building performance.

Learning Objectives

- Understand some of the myths in regard to vapor, air, and thermal transfer.
- Identify the concept of “Building as a System” and how the building enclosure relates to this.
- Explain the forces of moisture, air, and heat flow, as applicable to a building.
- Define how to control these forces effectively to save energy and reduce the risk of moisture damage.

“By Others” – That Elusive Sub-Contractor Responsible for Transitions

An in-depth look at the environmental separators for the roof, wall, and below-grade assemblies in regard to water control, air leakage control, thermal performance, and vapor control.

Critical details that typically cause building performance-related issues will be focused on the two largest failures of building enclosures: roof-to-wall connections and wall-to-window connections specific to curtain-wall systems. A step-by-step look at each critical detail regarding the sequence of construction and the various connections to ensure airtight/watertight and thermally protected details. Real-life photos and job conditions will bring the realities of the construction process to show typical errors found and how they can be addressed correctly.

Learning Objectives

- Articulate how transitions impact building enclosure performance through real-life experiences in regard to energy loss, building performance, and the sustainability of the system.
- Correctly identify and prioritize critical details during the construction document phase to ensure an integrated approach is taken to heat, air, water, and vapor control.
- Assess each detail regarding the impacts of the 4 control layers and understand the various options for designing details for a variety of roof, wall, and window assemblies.
- Through the use of real-life case studies and photos, plan out the proper sequence of construction and identify quality control methods in construction document review to provide corrective action.

Game Plan to Getting Air Barriers Right

A billion dollars are spent each year by construction managers, trade partners, manufacturers, and insurance companies due to water and moisture issues in the building enclosure. We know this is an issue, it has been for decades, yet every year there is more litigation regarding building enclosure failures. Join us to learn how having an industry-recognized knowledgeable individual in air barriers and an enclosure quality program can mitigate your building enclosure risk and assist you in providing the owner with a durable, sustainable building facade. Industry organizations have training programs, credentialing programs, and guidance resources to help you assemble the right team to build air barriers right!

Learning Objectives

- Understand why airtightness is essential for durable and sustainable building enclosures.
- Provide information on how to be recognized by building professionals as knowledgeable in air barriers.
- Provide a repeatable quality process using examples from ABAA's Quality Assurance Program.
- Provide examples of how a building using knowledgeable people and an enclosure quality process can help provide energy-efficient and sustainable buildings.
- Understand industry expectations and educational resources.

Groundhog Day: Recurring Field Installation Issues with Air Barriers

Everyone knows that air barriers are important, they know what they do and that they need to be installed correctly. We have heard it for 20 years and no longer need a presentation to remind us of that. With that being said, how do we give them a chance of success?

One of the most common risk management strategies used is a robust quality assurance program in the specifications that requires certified contractors, trained and certified installers, evaluated materials, and on-site third-party audits. This presentation will discuss the role of quality assurance audits and point out what to look for when doing site observation and quality control. It will also provide real-life examples that can help you identify installation issues on your project, what caused them, and what corrective action can be taken.

Learning Objectives

- Assess how site quality assurance audits, field observation, and site quality control fit into overall quality assurance and risk management strategy.
- Determine the responsibilities of all building enclosure stakeholders to coordinate and execute a plan for a quality installation.
- Identify typical issues found in the installation process and what caused these for a variety of air barrier systems by visual inspection.
- Using job site photos, demonstrate the physical testing that can be done on a variety of air barrier systems.

Leak-Free Enclosure Process for Construction Managers & General Contractors

Hundreds of Millions of Dollars are spent every year by construction managers, trade partners, and insurance companies in litigation and for repairing the water and moisture damage caused by construction defects in the Building Enclosure. WHY? We know this is an issue, it has been for decades, so is there a way to ensure the construction of high-performing enclosures, the answer is YES!!! This presentation will use actual Case Studies from projects around the country to discuss a process that can be put into

specifications to ensure Durable, Sustainable, and High Performing Enclosures. This process has been practiced for over 20 years and is based upon the industry-leading processes of NIBS Guideline 3 and the current ASTM BECx documents.

Learning Objectives

- Discuss the importance of Detail and Specifications Review.
- Discuss Pre-Construction Meetings to ensure the successful installation of materials in a timely manner.
- Discuss the importance of Functionally Tested Mock-ups (through various real-life examples).
- How to transfer the lessons learned from the mock-up to the Tradesmen about to work on your enclosure.
- Review the importance of on-site 3rd party inspection of installed materials and the importance in Situ Testing for Validation of installation.

Mission Impossible: Air Barrier Connections

This presentation will help you gain an understanding of how poor transitions can result in reduced energy efficiency, as well as increase the risk of water infiltration and condensation. Learn how transitions impact building enclosure performance and how compatibility issues impact the options available for good transitions.

Learning Objectives

- Become aware of the compatibility issues between the building enclosure air barrier components.
- Demonstrate ways to reduce the risk of water and air infiltration at transitions.
- Review and discuss the areas with the highest potential for air and water issues.
- Understand how the air barrier components transition.

New Tools to Help Drive Decisions in Your Air Barrier Specifications

The presentation will review some of the new tools available in regard to specifying different levels of building airtightness above code-mandated minimums. These tools help assess the energy reduction from base levels of building airtightness and the corresponding financial savings, along with quantification of the impact airtightness has on moisture movement transported by air leakage.

A look into research conducted on adhesion values for various air barrier materials will be reviewed to aid the specification writer (if providing a minimum adhesion value for materials that rely on adhesion)

Thirdly, information on the ABAA Quality Assurance Program: How to specify the program properly and exactly what the program entails. Included in this will be a review of the top field-related issues that are found during the ABAA site audit process.

Learning Objectives

- Through a review of the air barrier calculator, determine the energy and financial savings obtained by a higher level of airtightness and how it impacts the project specifications.
- Analyze the results of adhesion testing of various products on various substrates to assist in identifying potential minimum targets in specifications.
- Define requirements for quality assurance and control and typical downfalls of the specification language.
- Determine key field installation issues for various air barrier products and how specifications can provide further clarity.

Oh No! What Did I Miss? How to Properly Specify an Air Barrier System

Design and Construction documents are one of the first steps towards achieving an effective layer of airtightness to manage moisture and air movement. The importance of a proper specification cannot be understated, and a well-articulated document will ensure that the owner is provided with materials, performance, and quality.

The presentation will review some of the considerations and language that should be reviewed prior to developing a specification and will outline code requirements, performance requirements, what can be done for quality and ensuring material selection meets the intent of the design, and for crucial coordination with other components of the enclosure.

Learning Objectives

- Through a review of the code language of IECC 2015 and ASHRAE 90.1, determine the code compliance options for air barriers and requirements for materials, assemblies, and whole building airtightness.
- Understand the various test methods for air barrier materials and assemblies as it relates to air, water, fire, and other key requirements.
- Analyze the other control functions for a wall assembly and determine if the air barrier also provides vapor control or water resistance.
- Identify key language for 3-part specification to articulate performance standards, execution, and quality requirements.
- Define requirements for quality assurance and control and typical downfalls of the specification language.

Please Proceed with Caution: Ensure your Building Enclosure is Sustainable and Performs

Using sound building science principles, understand some of the important construction details for the continuity of the air barrier and how this understanding can help drive design decisions to properly choose the building enclosure components and systems.

Once the details are done and the construction starts, a number of critical steps need to be taken in regard to site quality control, construction sequencing, and a deliberate and well-executed site quality control program inclusive of pre-construction meetings, field testing, and observation. Learning from real-life examples of both good and bad, the top issues are addressed to provide realistic and actionable strategies to improve long-term building performance.

Learning Objectives

- Acquire knowledge of the requirements of green construction codes such as ASHRAE 189.1-2013 and the code compliance method of either whole building airtightness testing or building enclosure commissioning.
- Acquire knowledge of how design and installation can impact the overall effectiveness of the insulation layer can lead to loss of energy efficiency of the overall building enclosure and impact to building's sustainability.
- Describe the proper installation and site quality assurance/control for the building's air tightness layer to ensure maximum energy efficiency, along with the sustainability of the building enclosure components to protect the embodied energy of these components.
- Explain the various test methods for commissioning the building enclosure to meet state energy codes or green construction codes that can confirm air leakage results of air barriers that were originally modeled during the integrated design process.

Setting the Standards for Whole Building Testing

Air leakage in buildings has been shown for years to be a significant percentage of energy costs for buildings. Over the last few years air leakage has been recognized as contributing to moisture problems in buildings with potentially thousands of gallons of water being carried into the building envelope by air leakage. Whole building testing has been an option in the International Codes and in ASHRAE standard 90.1 for some time, but now individual states are understanding the benefits of conducting a whole building blower door test as it is the only test to determine the installed performance of an air barrier system. The accuracy of a whole building test is dependent on the qualification of the personnel conducting a test. The Air Barrier Association of America developed a training and certification program for Blower Door Technicians. While the training program has already been launched, the certification program is set to start in July of 2023. This session covers the work leading up to the training and certification program development and provides an overview of both the training program and the ISO 17024 certification program.

Learning Objectives

- Determine the need for an updated whole-building test method.

- Provide an overview of the Blower Door Technician training program.
- Outline the reasons for a certification program.
- Explain the benefits of an ISO 17024 certification process.
- Relate the benefits of airtight buildings.

A Sticky Subject - Adhesion of Air and Water Resistive Barrier Materials

Air and water resistive barriers need to withstand the loads imposed on them by wind effect, stack effect, and mechanical pressurization/depressurization. If the material is held in place by adhesion, the adhesion value must be greater than the combination of those three forces. What about the long-term durability of the adhesive? Should you consider the material properly installed if the pull adhesion value at the time of installation is greater than the combined forces?

The presentation will review independent research on 15 years of field tests of various air barrier materials on various substrates on real-life construction sites. This will show how it differs from laboratory testing and what one can expect to be base standards for adhesion to either provide guidance in specifications or as a quality control tool for site observation.

Learning Objectives

- Identify the performance requirements identified in ASHRAE 90.1-2016 in regard to air barriers and the requirements to withstand positive and negative loads due to stack, wind, and mechanical pressures.
- Become acquainted with requirements of air leakage verification as identified in ASHRAE 90.1-2016 and the periodic field inspections required on the air barrier during the construction process.
- Interpret what adhesive values means regarding on-site quality control of various air barrier materials.
- Compare the values of adhesion between various air barrier materials to help with design decisions to ensure the airtightness layer does not become compromised.

Through Wall Flashings Compatibility, Sustainability & Performance

With all the myriad of building enclosure components and materials, there is a significant risk to ensure that all materials are compatible and work together as a system. An important part of a water control strategy for your walls requires integration of the air barrier, water-resistive barrier, insulation, and other related components, including through-wall flashing. Not all assemblies work together and there are specific steps needed to ensure proper water drainage. This presentation will provide an overview of all flashing choices that can be selected and specified and provide information on how to make product selections and what materials are not compatible with a system. Real-life examples of various systems and transitions will provide attendees with an understanding of the successful construction of these components.

Learning Objectives

- Acquire knowledge of the various components of each type of flashing and their effects on sustainability and life cycle costs.
- Define how to specify through-wall flashings to avoid chemical compatibility issues that may impact how well the air barrier performs and integrate with the insulation to provide maximum energy efficiency without a breach in the airtightness/thermal layer.
- Specify the performance characteristics of different types of cavity wall materials and how to create a resilient flashing system.
- Identify necessary accessories for through-wall flashing and challenges of installation and integration with other building enclosure components.

Trust, but Verify – Quality Control for your Air Barriers

Today's building construction must overcome complex building materials, multi-layer construction/multiple trades, a thinner construction, limited on-the-job training, higher expectations, tight schedules, and the pressure to keep the cost as low as possible. In the past, building systems were simpler with fewer layers. That is no longer the case.

One way to help ensure a successful project is to incorporate some form of quality assurance and quality control. Quality assurance can be achieved by incorporating a quality management system for the air barrier sub-trade. Quality control can be implemented before the first square foot of the air barrier is installed and then throughout the installation process.

Learning Objectives

- Identify how to specify and use a variety of performance mock-ups to confirm design intent, sequencing, material compatibility, and standards of installation acceptance.
- Demonstrate various ASTM test methods for assembly air permeance, rain penetration, adhesion, density, and thickness testing procedures.
- Define key visual inspection methods used during the construction process for various air barrier materials utilizing site photos and proper corrective action.
- List the top five field related installation issues found during site quality control audits using site photos and case studies to evaluate the installation of the air barrier application.

Understanding Difficult Critical Transitions of Air, Vapor & Moisture Barriers

As the air and water-resistive barrier industry has grown over the past decade, new materials have come on the market. These materials have a short track record, but should you shy away from using them? This presentation shows how you can sort out the different materials and how you can get help in choosing the right one for your project.

Learning Objectives

- Describe why material properties matter for green buildings, specifically to air barriers and other building enclosure components.
- Explain the key requirements for air barrier materials to function and reduce energy use in buildings over the long term.
- Determine key material properties and material testing that is needed for air barriers to ensure long-term energy performance and protection of embodied energy of other building enclosure components
- Explain the process of material testing and requirements to meet language and requirements in ASHRAE 90.1, IECC and state energy codes.

It's Not Raining: Why Is My Roof Leaking?

Roof leaks and even water in wall assemblies is not good for the building. The first reaction is let's fix the leak, but then you realize that it is not raining. If there is no rain, you should not get bulk water entry. We overlook the real reason for water in building assemblies because we do not consider all means of moisture transport. Many people jump to the conclusion that the material used as a water resistive barrier does not have a high enough Perm rating. This presentation will cover all the ways that moisture moves in a building, show you why you should not rely on the Perm rating of a single material and show you where you will get thousands of gallons of water into the building envelope.

Learning Objectives

- Determine how moisture moves in building envelopes
- List top two reasons why moisture shows up in buildings
- Explain why water vapor transmission rate is overrated
- Discuss why moisture problems in buildings will grow

Failure Is Not an Option: Air Barrier Continuity Strategies for Storefront & Curtain Wall Systems

Critical details that typically cause building performance related issues will be focused on one of the largest failures of building enclosures: wall to window connections specific to curtain wall systems and storefronts. A step-by-step look at each critical detail in regards to sequence of construction process to show typical errors found and how those errors can be addressed correctly.

Learning Objectives

- Assess how site quality assurance audits, field observation and site quality control fit into an overall quality assurance and risk management strategy. Explain the key requirements for air barrier materials to function and reduce energy use in buildings over the long term.

- Determine responsibilities of all building enclosure stakeholders to coordinate and execute a plan for quality installation.
- Identify typical issues found in the installation process and what caused these for a variety of air barrier systems by visual inspection.
- Through the use of jobsite photos, demonstrate the physical testing that can be done on a variety of air barrier systems.

Whole Building Testing is Coming: Do Not Fear It

An airtight building plays an important role in reducing greenhouse gas emissions, moving the industry to Net Zero Passive Building construction. Airtightness is now also being recognized for more than energy savings. It is key to moisture management, proper operation of mechanical equipment, mechanical equipment sizing, and indoor air quality.

The question from many people is how do I know my building is airtight? The answer is whole building airtightness testing. ABAA members were the driving force in the development of the latest test method ASTM E3158, Standard Test Method for Measuring the Air Leakage Rate of a Large or Multizone Building. Additionally, in 2022 ABAA launched a training and certification program for Blower Door Technicians to help support the industry adoption of whole building airtightness testing. This webinar will dispel many of the myths around whole building airtightness testing, walk the attendee through a typical test, and provide guidance on what to do if the building does not meet airtightness performance requirements for the project. The webinar will also provide an overview of the ABAA training and certification program and why this program is set apart from some of the current industry training.

Learning Objectives

- Summarize the benefits of WBAT and industry standards
- Explain the WBAT procedure
- Investigate solutions for successful testing
- Describe the ABAA WBAP Training and Certification

Building Enclosure Pre-Construction Meeting

A pre-construction meeting is a crucial part of the construction process which should be specified and outlined in several sections of the project manual as part of the quality assurance specification. It is paramount to coordinate pre-construction meetings with team members on the building project, as this establishes expectations upfront for the installation and subsequent warranties of the components of the building enclosure. By having a pre-construction meeting prior to the commencement of field operations, the owner, design team, general contractor, sub-contractors, and manufacturers are presented with the opportunity to discuss and resolve issues the various trades might encounter during the construction process. It is the intent of this presentation to explain the foundation of a building enclosure pre-

construction meeting and to help foster a collaborative approach to information sharing that will minimize construction problems, delays, and manage risks.

Learning Objectives

- Understand where in the specifications the pre-construction meeting should be specified and what divisions should be referenced
- Understand what trades should be present and why.
- Understand how to coordinate the building enclosure components and why it's important to coordinate them.
- Understand how to resolve compatibility and installation issues that may arise out of a preconstruction meeting.
- Understand what specific details to look for and why they should be discussed at the preconstruction meeting.

Cracking Why Buildings Move: Absorbing Thermal Loads with Movement Joints

Building movement will happen whether or not we want it to. If we do not account for where movement will occur, during design and construction, the building will find its own way to move.

This course will cover why building movement joints are needed, the difference between various types of joints, how expansion joints should provide continuity of the air and water control layers, as well as samples of what failures can occur. We will also review a case study showing failures which can happen when expansion joints are not designed and installed.

Learning Objectives

- Review best practices for location of expansion joints on building enclosures.
- Identify the difference between expansion, control, and isolation joints.
- Investigate building failures caused by poor expansion joint design and lack thereof, and premature failure due to improper installation.
- Cover the causes of sealant failure, and the importance of proper joint design and how it can dictate performance.

Why of Commissioning: A Look at the Process & How It Can Mitigate Risk

Let's face it, buildings leak! Owners and contractors battle these leaks for months and even years after substantial completion. A properly implemented and executed Building Enclosure Commissioning (BECx) process mitigates risks resulting in sustainable efficient structures. The elements of the building enclosure have evolved and become complex systems. This has changed the design and construction of these "skins". So why is commissioning a plausible solution to these challenges? Well, simply put it provides a proven and tried practice which offers guidance and structure to the complex industry of Building Enclosures.

This course will cover the BECx process intended to define the project expectations, focus on quality assurance, quality control, verification of system performance, owner training, and maintenance guidance. We will discuss building enclosure commissioning and how commissioning provides a successful trifecta scenario for the owner, design team and construction team.

Learning Objectives

- Review the purpose and benefits of Building Enclosure Commissioning (BECx) and define the roles of the Owner, Architect, Commissioning Consultant, and Contractor.
- Discuss the formal BECx processes developed by the National Institute of Building Science, ASTM, ASHRAE, and ISO, and how these standards and guidelines are quickly being recognized and adopted by institutions and organizations.
- Review why codes are recommending and requiring the implementation of exterior wall envelope detailing as part of design drawings and construction documents.
- Discuss how to implement the BECx process throughout the life-cycle of the building, including design review, constructability review, testing matrix, mockup construction and testing, preconstruction meeting, inspections, and a post-construction maintenance matrix.

Intro to Commissioning: Taming the Wild, Wild West

Building enclosure commissioning (BECx) has been deemed additional work and added cost by many. The unfortunate realization is that many haven't had the opportunity to work with a Building Enclosure Commissioning Process Provider (BECxP) who was brought in at the right time, for the right reason, and by the right party. Owners who hire commissioning professionals may not fully understand the process. The contractors see it as an additional process that requires them to fill out forms, attend more meetings, submit and resubmit submittals, the list goes on and on. In addition, the design team typically does not understand or realize the value this additional resource can bring to the design team in the design phase. These perceptions have been plaguing the construction industry for the last couple of decades and have given commissioning a bad name or resulted in nonstandard implementation of the commissioning process.

To tame the wild, wild west, we must first have a clear understanding of the BECx steps and process, and identify the key role of the BECx consultant, the Owner, as well as the Design and Construction Team. This course is intended to introduce the BECx process, and to educate Owners, Design Teams, and Construction Teams on the benefits, and the step-by-step process which can reduce risks. Giving owners leak-free, efficient, and sustainable buildings.

Learning Objectives

- Understand what Building Enclosure Commissioning (BECx) entails and summarize the primary steps of the process.
- Learn the benefits of BECx and how it can benefit the project team, reduce risks, improve durability and performance, improve design, and how it can reduce long-term costs.
- Describe the step-by-step path of building enclosure commissioning, who participates, and how the process ensures the Owner's Project Requirements (OPR) are met and exceeded.

- Identify the key role of the BECx consultant, their experience level, depth of knowledge, and what they do and don't do as part of the process.

Project Experiences With (or Without) Flashings

Today's construction projects use hundreds of not thousands of different materials and products on the enclosure. One of the most crucial is "that Little L" often seen at the bottom of the wall, or just above a window. Flashings are instrumental in removing water from our exterior wall cavities and must be installed properly to function. This presentation will review numerous national projects relating to issues and water leaks from improperly installed flashings.

Learning Objectives

- Review some of the common masonry through-wall flashing materials in the market today
- Understand how masonry through flashings can affect other material performance if installed wrong
- Review the need (and location) for continuous flashings at grade for masonry and metal panels
- Review case studies demonstrating improperly installed flashings causing Owner and Contractor frustration and rework.

Providing Owners What They Really Want: Leak-Free Enclosures

Building owners are continually perplexed with new buildings that do not perform as expected. They acquire a design and construction team to build their vision, their dream, yet many times they are left with buildings that leak, lack performance, or require continual maintenance from day one. Our industry is challenged to provide owners with a building that meets their project requirements and perform as they directed. Unfortunately, lawsuits and insurance claims are continually part of the construction process as the result of falling short of the owners' expectations and requirements.

In this course we will dive into how to produce and provide performance specifications that meet the owners' expectations, maximize the success of the design and construction teams, and reduces risks for all three parties of the design team (owner, architect, & construction team). We will discuss how to provide a performance specification that is clear, concise and comprehensive yet simple and targeted to achieve what the owner really wants – a leak free building that performs!!

Learning Objectives

- How building enclosure failures are a billion-dollar annual industry and the reason why the industry needs performance specifications that define performance, functional, and technical requirements
- Understanding the owners' directives and properly executing the owner's project requirements as part of the performance specifications

- Maximize success by writing clear, concise and comprehensive performance specifications with high performing and sustainable building enclosures in mind
- Maximize success by writing clear, concise and comprehensive performance specifications with high performing and sustainable building enclosures in mind Define construction performance requirements within the specification to mitigate risk, ensure quality assurance / quality control processes and attain the defined directives of the owner's project requirements

AIR BARRIER RODEO

Experience the Air Barrier Rodeo!

This half-day or full-day hands-on workshop focuses on building airtightness from design to installation and testing. This interactive session is ideal for installers, contractors, and architects looking to improve their understanding and application of air barrier systems.

Participants will work in teams to install various air barrier products – including self-adhered membranes, fluid-applied membranes, mechanically fastened membranes, and insulating board stock – while integrating with other systems like window glazing, penetrations, and masonry anchors. Experts will guide the process, providing real-world experience and best practices.

Customize your experience by including one or more CEU presentations. Gain practical knowledge and industry-leading air barrier expertise.

This is an excellent educational experience and one of the most sought-after programs we offer.

”

IF YOU CARE ABOUT FACADES
AND THE BUILDING ENVELOPE
YOU NEED TO BE HERE!

”

From one of our attendees.

**IN A POST EVENT
SURVEY, 100%
OF PEOPLE
INDICATED
THEY WOULD
RECOMMEND
THIS EVENT TO
OTHERS AND
100% WOULD
COME TO
ANOTHER EVENT
LIKE THIS.**

Some Photos of Air Barrier Rodeos



 air barrier rodeo 

APPROVED SPEAKERS



LAVERNE DALGLEISH

ABAA Executive Director
Principal of Building Professionals
Executive Director of the National Air Barrier Association
Chair - ULC S700 Committee on Thermal Performance in the Built Environment
Chair - ISO TC163 SC03 Thermal insulation materials, products and systems
Chair - Building Envelope Task Group for Standing Committee on Energy Efficiency

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Mr. Laverne Dalglish is the Executive Director of the Air Barrier Association of America (ABAA). As such, he works to champion energy conservation in buildings while educating the building owners and designers about the benefits of energy conservation such as durability, comfort, reduced maintenance, reduced HVAC equipment costs, and the positive impact on the environment.

Mr. Dalglish travels North America to educate building owners and designers on the benefits of effective and working air barrier systems in buildings. This education mission includes working with standards development organizations, training and education groups, government policy departments, and quality assurance program developers for the construction industry. Mr. Dalglish is the Secretariat of two ISO Committees, ISO TC61 SC10 Cellular Plastics and ISO TC163 SC3 Thermal Insulation Products. He is also Chair of the ULC Thermal Performance in the Building Environment Standards Committee.

Mr. Dalglish was the key developer of the ABAA Quality Assurance Program for the installation of air barrier systems in buildings. This program is based on ISO 9000 and ISO 12576-2 but brings the ISO requirements together with practical applications for the air barrier industry.



BRIAN STROIK, CABS, FABAA

ABAA Executive Committee Member
ABAA Board Member
ABAA Past-Chair

Performance Excellence & Quality Consultant,
American Contractors Insurance Group
Building Enclosure Council Past Chair

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Brian Stroik is a recognized industry leader in the construction of energy-efficient, sustainable, and durable buildings.

Brian is involved with key industry organizations – For three years, he served as Chair of the Air Barrier Association of America (ABAA), and he's been voted for two years to the Board of Directors for the Building Enclosure Technology and Environmental Council (BETEC), has obtained certifications as a Certified Air Barrier Specialist (CABS) and Construction Risk and Insurance Specialist (CRIS) and is currently a Performance Excellence & Quality Consultant for American Contractors Insurance Group, a company that focuses on Quality in Construction for some of the largest construction companies in the United States.

Brian is a frequent speaker on the subjects of Commissioning the building enclosure (BECx), Quality in construction, and mock-ups / first-run studies. Brian has also chaired numerous speaker sessions at national conferences and hosted roundtable discussions. He holds the following industry positions and affiliations:

- Past Chair, Air Barrier Association of America (ABAA): Past Chair Research Committee
- ABAA Executive Committee
- ABAA Board Member
- Past Chair, National Building Enclosure Council (NBEC)
- Advisory Board Member, Building Enclosure Technology and Environmental Council (BETEC a Council of the National Institute of Building Sciences – NIBS), Washington, DC
- Founder and Chair, Building Enclosure Council of Wisconsin (BEC-WI)
- Voting member of ASTM E06 – Building Performance
- Senior Member, American Society of Quality (ASQ)
- Certified, American Society for Healthcare Engineering (ASHE)

White papers by Mr. Stroik on the subjects of building energy efficiency and building enclosure design, among others, have been published in *The Journal of Energy Efficiency & Reliability*, *The Journal of Building Enclosure Design* and *SprayFoam Magazine*.



ANDREW DUNLAP, AIA, CDT, LEED AP, NCARB

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ABAA Executive Committee Member
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ABAA Research Committee, Co-Chair
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Andrew Dunlap's primary work experience is focused on the analysis and development of building enclosure systems including wall cladding assemblies, air/water barrier systems, roofing, skylights, fenestration systems, and waterproofing. Specializing in the energy and hygrothermal analysis of wall, fenestration, and roof systems; his work extends from evaluating existing buildings, investigating problem buildings, revitalizing historic structures, to the design and consultation of new and specialty facades.

Andrew received his Bachelor of Architecture, Bachelor of Science in Mathematics, and Master of Architecture degrees from the University of Detroit Mercy. He provides presentations to several industry organizations on a regular basis and is published in numerous industry periodicals and journals. He is active in the design and construction community and currently holds positions within the following organizations.

- American Institute of Architects (AIA) – AIA Detroit Chapter Vice President
- Air Barrier Association of America (ABAA) – Board Member
- Air Barrier Association of America (ABAA) – Co-chair
- Air Barrier Association of America (ABAA) – Research Committee Co-Chair
- ASTM E 06.55 Performance of Building Enclosures – Subcommittee Secretary
- ASTM E 06.41 Air Leakage and Ventilation Performance – Voting Member
- ASTM D 08 Roofing and Waterproofing - Member
- Building Enclosure Council Greater Detroit – Past Chair
- University of Detroit Mercy Architectural Engineering Board of Advisors

Andrew's work focuses on providing energy efficient buildings and he regularly participates in the development and refinement of exterior enclosure designs to exceed energy related goals. Project responsibilities include the collection of detailed building information, investigation and analysis of existing conditions, computerized thermal analysis (WUFI, THERM, WINDOW and other specialized software packages), formulation of remediation options, preparation of construction documents for remediation, and construction contract administration including field observation and system testing. This work often includes performing field air and water tests as part of forensic investigations or used to validate installed conditions.



CRAIG WETMORE, CSI, CDT, EBS, FABAA

ABAA Board Member
Co-Chair of the ABAA Marketing Committee
Co-Chair of the ABAA Nominating Committee
Executive Committee Second Vice-Chair of the ABAA

York Flashings – President

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Craig Wetmore, the President of York Manufacturing, has over 30 years of experience in the construction industry. He has a concentrated knowledge in through-wall flashings, moisture management, transitions, and wall components. Craig is active in building community where he is a member of CSI, RCI, USGBC, ASTM and the ABAA. He served as President of the Maine CSI Chapter; he is the co-chairperson of the ABAA's Marketing Committee, co-chairperson of the ABAA's nominating committee, serves Flashings and Terminations task group and serves as a director on the executive board of the ABAA.

Craig works with architectural firms, engineering firms, installers, general contractors, AIA chapters, Building Enclosure Councils, and CSI chapters in the discussions of flashing and building science. His efforts center on wall flashings compatibility with air barriers and insulation products, lifecycle costs, transition materials, and installation advice on all different types of flashings.

Craig and the York team have developed many new products to solve the issues that are encountered in constructing the building envelope. Craig is an Executive Bourbon Steward and runs the Spec ME organization, which sole purpose is to raise funds for charity.



RYAN DALGLEISH

ABAA Chief Operating Officer

President – Manitoba Building Envelope Council

Certified Adult Education Specialist

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Ryan Dalglish has been involved in building envelopes and building performance areas of construction in both the commercial and residential sectors for over 25 years.

Ryan is a trainer and facilitator, as well as having performed a number of management roles for over 2 decades. He is also actively involved in research, training development and delivery, certification management, and helping industries increase their professionalism. Ryan acts in the position of Chief Operating Officer for the Air Barrier Association of America.

Ryan obtained credentials in Adult Education, Leadership, and Organizational Excellence from the University of Manitoba and has been mentored and trained by some of the best building scientists in the world. Ryan is a certified Net Zero building instructor, teaches master builder courses to builders across the country, and is a frequent speaker at various technical presentations dealing with the building enclosures to various building official associations, city departments, and chapters of the Building Enclosure Councils, American Institute of Architects, Construction Specifications Institute and a number of local home builder associations.

Ryan frequently publishes papers for design and construction magazines such as the Journal of Building Enclosure and Design, Construct Canada, RCI Interface, Coating Pro Magazine and Spray Foam Professional to name a few.



COREY ZUSSMAN, AIA, NCARB, ALA, RBEC, RRC, REWC, RWC, RRO, CDT, CQM, CxA+BE, BECxP, CABS, LEED AP BD+C

Level 1 Thermographer
ABAA Quality Assurance Program Committee member
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As a forensic architect registered in several states, Corey Zussman has practiced in the construction industry for more than 30 years. He specializes in building envelope, restoration, preservation, life safety, and interior finishes. While working on an average of 50-75 projects a year, Corey conducts constructability reviews, pre-installation meetings, comprehensive envelope meetings, and construction observations.

He has also become known for providing educational opportunities throughout the industry and has produced more than 150 “lessons learned” papers. Topics include building envelope and life safety concerns and enable Corey to proactively address issues during design review, pre-construction, and construction. In addition, he has several industry articles about building envelope and life safety topics and is also a frequent presenter at local and national conferences and associations.



MELISSA PAYNE, BECxP, CxA+BE, CDT

Building Enclosures – Construction Management Specialist
Level II Building Science Thermographer
Past Chair: Building Enclosure Council – Ozarks Regional Chapter
ISO Technical Committee 163
IBEC Building Enclosure Commissioning Certification Committee
Midwest Enclosure Consulting, LLC

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Melissa Payne is a subject matter expert for Midwest Enclosure Consulting, LLC where she serves as a national Building Enclosure Construction Management Specialist. She specializes in assisting construction manager/general contractors with QA/QC practices and is focused in the construction of high-performance leak-free structures. Prior to her work as a Manager of Enclosure Solutions Systems for Tremco CPG, Melissa provided building envelope commissioning and consulting services, and conducted forensic investigations as a building enclosure consultant. She has also been an owner's representative for a municipal utility company where she managed the maintenance, restoration and construction of over 150 structures.

Melissa possesses a strong foundation in industry standards related to building enclosure commissioning processes, building science, performance testing, and building envelope construction. As a Level II Building Science Thermographer, she actively uses thermography in the study of building enclosure failures and performance testing. Her owner representative, consulting and commissioning experience, forensic work, and manufacturer internal consultant involvement gives her an encompassing perspective of the construction industry. Currently working with owners, architects, engineers, designers, construction manager/general contractors, and enclosure trades to promote the integrity and performance of building enclosures.



KEITH NELSON, NCARB, AIA, CDT, BCXP

ABAA Board Member

Commercial Application Technology Leader
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Keith Nelson brings over 20 years of professional experience to technical and complex building enclosure design and failure investigations. He is a Licensed Architect in the District of Columbia, Georgia, Maryland, Texas, and Virginia. He is also an ASHRAE Certified Building Commissioning Professional. Mr. Nelson earned his Bachelor of Science in Environmental Design and Bachelor of Architecture from Ball State University. Keith is a consultant to the ASHRAE 90.1 Building Envelope Subcommittee and a current member of ASHRAE 160 Hygrothermal Analysis Technical Committee. He participates in ASTM E06.55 Performance of Buildings and ASTM E06.41 Air Barriers. Mr. Nelson provides training nationally on the topics of Building Science & Building Enclosures, coauthored the Building Enclosure Commissioning chapter of The Building Commissioning Handbook (3rd Ed.) from the BCxA, and was co-chair and co-editor of ASTM STP 1615 "Whole Building Air Leakage: Testing and Building Performance Impacts." He is the father of three amazing girls, a fan of Star Wars, and husband to a wife he does not deserve.



LEE DURSTON

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Lee has been in the building enclosure industry since 2001. During this time he has overseen and completed hundreds of projects in forensic, design, construction administration, construction observation, and quality control for both new construction and existing building projects. One of the areas he has specialized in is air tightness of buildings and how to verify their performance. Lee is a contributing author for the USACE Air Leakage Tightness requirements and Testing Protocol and contributed to the ABAA effort which created ASTM E3158 Standard Test Method for Measuring the Air Leakage Rate of a Large or Multizone Building.



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ABAA Board Member

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Mr. Posenecker is the senior principal and regional facilities manager for Terracon Consultants. He is a registered engineer in the State of Texas. His experience includes the design, construction, testing and forensic investigation of building envelope systems. Previously, he was an Estimating Manager with Chamberlin Roofing and Waterproofing from 2005 through 2015, Project Manager for Advanced Environmental Concepts from 1997 through 2005, an Engineering Team Leader at Southern Company Services from 1987 through 1997, and a Senior Engineer with Bechtel Power from 1982 to 1987. Throughout his career, Mr. Posenecker has participated in a wide variety of projects associated with the building envelope that include containment systems for commercial nuclear power plants; noise control systems for commercial and institutional projects; and waterproofing for commercial high-rise office and multi-family buildings, medical and educational institutional projects, and large concrete structural projects. Mr. Posenecker specializes in waterproofing and cladding systems associated with the building envelope. He is an active member in several professional organizations including the Austin Building Enclosure Council (BEC), National Institute of Buildings Sciences (NIBS), part of the executive committee for the National Building Enclosure Council and a member of the International Concrete Restoration Institute (ICRI).



ADAM UGLIUZZA, P.E

ABAA Board Member
Co-Chair of Whole Building Airtightness Tasks Group
Co-Chair of Transitions, Terminations and Flashings Task Group

DIRECTOR OF ENCLOSURES
Sustainable Building Partners

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Adam brings 16 years of engineering experience focusing on building science and the building enclosure construction industry. Discipline expertise includes building enclosure consulting and commissioning services for new and existing construction, in addition to forensic investigations to determine root cause of building performance issues. He also brings industry leading expertise in large building whole building airtightness testing, which is at the forefront of high-performance building construction. Adam continues to work on projects across the United States and abroad providing professional building enclosure consultation in both the residential and commercial space for all types of construction, ranging from multi-family wood/timber framed buildings to high performance institutional/healthcare facilities to high-rise construction. Through this experience, Adam brings a unique approach to building enclosure consulting and testing, concentrating on enclosure interface coordination in design and construction phases of the project that overlays a holistic approach, critical to achieving high performance building construction; the goal to help ensure all the materials, systems, and assemblies are properly connected to provide continuous environmental control. His extensive testing knowledge allows him to be deliberate and methodical in his approach to interweaving functional testing to verify performance. Adam is also active in many industry associations including Air Barrier Association of America (ABAA), Passive House Institute US (PHIUS), Construction Owners Association of America (COAA), United States Green Building Council (USGBC), etc. and has co-authored numerous technical papers, guidelines and standards; fundamental to an industry leading professional.



DENALI JONES P.E

TECHNICAL DIRECTOR
Air Barrier Association of America

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Denali is an engineer focused on building enclosures for his entire career. After working for a manufacturer he transitioned into consulting, working for one of the leading building science firms in North America for over a decade. Denali's work focused on finding practical and performance driven solutions to complex enclosure problems, ranging from high-rise office towers to hospitals, multifamily, manufacturing facilities, and everything in between.

He has extensive experience in all aspects of enclosure design, including roofing, glazing systems, horizontal waterproofing, below grade waterproofing, air barriers, and rainscreen wall assemblies with just about any type of cladding. Denali also is an industry leading expert in whole-building air leakage testing, having helped develop several test standards and code language around testing requirements. He was instrumental in developing ABAA's whole-building air leakage testing training program and is the lead instructor for this program. Denali serves as the technical director for ABAA, focusing on driving the adoption and advancement of air barriers both at a committee level as well as providing support for ABAA members in answering technical questions or delivering presentations and training.



air barrier

abaa

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