Air Barrier Quality Assurance Program
Poorly installed weather resistive air barrier resulted in major rework and over 75% of construction defects are due to water intrusion, air leakage, and poor workmanship.

An installation error was noted by a QAP auditor during a routine quality control site visit. The flaw was quickly rectified (no rework or change order required) thus avoiding possible moisture and air intrusion after the cladding was installed.
QAP contractors are trained, accredited, and have signed agreements with ABAA to follow installation guidelines and correct deficiencies. They must meet bonding/insurance requirements, employ ABAA certified installers, and possess the equipment to install and test their work.

QAP installers are trained and certified by ABAA. To qualify they must have a minimum of 3,000 hours of documented work experience in air barrier/water resistive barrier installation. Typically, certified installers work for QAP accredited contractors.

ABAA has tested over 100 manufacturer air barrier WRB assemblies that were tested in accordance with ASTM E2357 and many other stringent evaluation criteria. By specifying evaluated materials, design professionals can limit their liability and be assured that materials will meet and exceed stated specifications.

Each day, certified installers are required to document the installation process, inspect, and fix deficiencies. The reports are submitted to the construction site QA office and, in turn, provided to the general contractor and design professional.

ABAA field auditors confirm compliance with project specifications, manufacturer installation guidelines, and ABAA Site Quality Assurance Program. Auditors review substrate preparation, compatible materials, applications, and repair procedures. Audit findings are distributed to the: owner, architect, manufacturer, GC and accredited contractor.

Upon audit completion, the final report, including a photo log, is submitted to the ABAA Site Quality Assurance Program office for a final review by seasoned building science professionals. Thereafter, it is filed and distributed to the owner, architect, manufacturer, GC, and accredited contractor.
For a fraction of the overall building cost, you can ensure PROPER DESIGN, PROPER MATERIALS, and PROPER INSTALLATION for the most difficult to maintain component of your building: the wall assembly and air barrier system.

\[\text{QAP cost compared to overall construction cost}\]

### Strip Mall
- Building Cost: $6,390,000
- ABAA Wall Area: 11,348 sf
- QAP Investment: $4,964
- Audits: 2
- % of Job Cost: .08%

### Small Hotel
- Building Cost: $17,280,000
- ABAA Wall Area: 17,280 sf
- QAP Investment: $5,468
- Audits: 2
- % of Job Cost: .03%

### Medium Office
- Building Cost: $24,334,400
- ABAA Wall Area: 10,975 sf
- QAP Investment: $4,932
- Audits: 2
- % of Job Cost: .02%

### Large Hotel
- Building Cost: $65,594,884
- ABAA Wall Area: 33,849 sf
- QAP Investment: $6,877
- Audits: 2
- % of Job Cost: .01%

### Secondary School
- Building Cost: $51,037,800
- ABAA Wall Area: 27,040 sf
- QAP Investment: $6,298
- Audits: 2
- % of Job Cost: .01%

### Large Office
- Building Cost: $276,224,400
- ABAA Wall Area: 64,480 sf
- QAP Investment: $11,480
- Audits: 3
- % of Job Cost: .004%

*References*
- Pricing from blog entry: https://www.levelset.com/blog/commercial-construction-cost-per-square-foot
- Wall area based on DOE prototypes
- QAP costs based on QAP Calculator
- Audits determined by ABAA wall area
Building Quality, Reducing Risk, and Mitigating Moisture:
QAP is a job site program that ensures proper materials, installation, and inspection of the air and moisture barrier system.

How does QAP help me?

- **Architects**
  Manages risk, offers 3rd party impartial resource, and provides owner a high-performance building

- **Building Consultants**
  Partner on proper installation, quality control integration, opportunity to perform services for the ABAA

- **General Contractors**
  Reduces rework, minimizes risk of moisture claims, and offers highly trained contractors

- **Building Owner**
  Protects your investment, maximizes energy savings, and reduces operating costs for the life of the building

- **Installation Contractors**
  Offers first class impartial training programs setting you apart from the competition

- **Manufacturer**
  Ensures installation by qualified trades, monitors installation, and reduces field rep visits
QAP by the Numbers

18,000
QAP Specified Projects

2,200
Certified and Registered Installers

76 Million
Sq. Ft. of QAP Audited Air Barrier installation

5,600
Audits 2019 YTD

107
Certified Products

ZERO
Reported Air Barrier Assembly Claims

What are the Next Steps?

Add the following phrasing to your Division 7 specification to include the Quality Assurance Program (QAP):

QAP SPECIFICATION LANGUAGE

Installer Qualification: Use accredited contractor, certified installers, evaluated materials, and third-party field quality control audits

Manufacturer Qualification: Use ABAA evaluated materials from a single manufacturer regularly engaged in air barrier material manufacture. Use secondary materials approved in writing by primary material manufacturer

Visit www.airbarrier.org/qap-overview