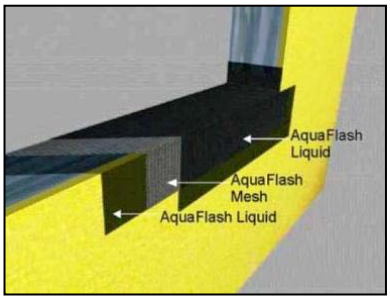
AquaFlash®/Backstop® NT Air Barrier System Case Study



Dryvit's AquaFlash/Backstop NT First Line of Defense for Fort Bragg Barracks

The United States Army Corps of Engineers is the most stringent organization in the U.S. when it comes to upholding air-tightness standards in building design and construction. A requirement of 0.25 cubic feet per minute per square foot of building enclosure, at a pressure differential of 75 Pascals (0.25 CFM/Ft2@75Pa), is part of the Department of Defense's ambitious plan for increased energy efficiency throughout its installations. Consequently, when time came to construct the Special Operation Forces Transient Enlisted Unaccompanied Personnel Housing (SOF TEUPH) Barracks at Fort Bragg, NC, the Corps turned to Dryvit Systems, Inc.

Project Name:
Special Operations Forces Barracks
Fort Bragg, NC

Architect:
Burgess & Niple
Cleveland, OH

Dryvit System:
Outsulation Plus MD

General Contractor:
Archer-Western, a division of Walsh Construction
Chicago, IL

Dryvit Applicator:
Precision Walls
Raleigh, NC

AquaFlash/Backstop NT Air Barrier System Benefits:

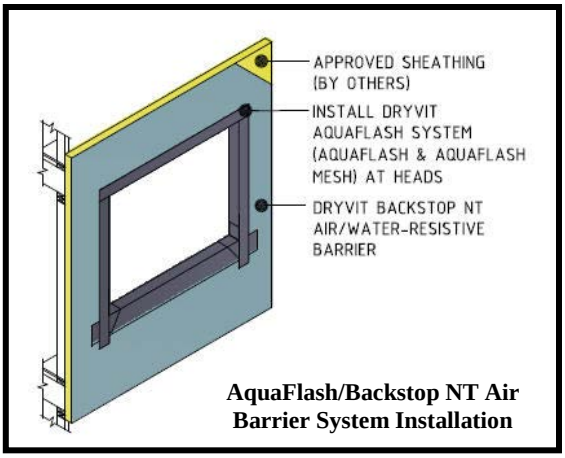
- Improves durability of building shell
- Saves energy
- Increases comfort for occupants
- Barrier to airborne pollutants
- Reduces size of HVAC unit
- Lowers operating costs up to 30-40% heating, 10-15% cooling

Learn more about AquaFlash and Backtop NT

Dryvit's AquaFlash/Backstop NT Air Barrier System is an Air Barrier Association of America (ABAA) evaluated material and is the perfect solution to meet the air-tightness standard set by the US Army Corps of Engineers. As defined by ABAA, an air barrier is "an assembly of materials that control the unintended movement of air into and out of a building enclosure." The Corps Engineering and Construction Bulletin #2012-13 notes that without such a barrier, "the energy required to heat, cool and maintain humidity control in buildings is increased significantly

due to uncontrolled air transfer through the enclosure." Architects of record, Burgess & Niple oversaw the design and construction of the barrack's building enclosure and Lee Durston of Seattle-based BCRA, utilized 273,000 square feet of Dryvit's AquaFlash fluid-applied flashing and Backstop NT air and water-resistive barrier. This resulted in a new level of performance for air-tightness, with the SOF TEUPH barracks testing at 0.17 CFM/ft² @75 Pascals. Senior Research Scientist, Dr. Alexander Zhivov of the Corps' Energy Research Laboratory commented, "the outstanding performance of the SOF TEUPH barracks at Fort Bragg demonstrates that the thoughtful design and conscientious application can result in higher performance buildings."

Air-tightness mission accomplished.



AquaFlash/Backstop NT Air Barrier System Installation

Landing this immense project was also a major win for North Carolina applicator Precision Walls. AquaFlash/Backstop NT Air Barrier System is "incredibly versatile", according to Precision Walls' Brian Stancil, and "allowed us to capture the entire project; eliminating a second, sheet type barrier originally intended for use behind the first floor masonry." As a result, continued Stancil, "the increased productivity gained from the fluid-applied products made a real difference in our bottom-line." Archer-Western Construction project manager, David Stuart, made similar observations stating that, "the use of a single air barrier system with a single contractor saved time, money and contract administration; a win for our company and our client."

The SOF TEUPH Barracks at Fort Bragg, NC is an excellent example of how the use of Dryvit's innovative AquaFlash/Backstop NT air barrier assembly can help building owners, designers and constructors realize the many benefits of an air-tight enclosure.

For more information about AquaFlash and Backstop NT, or any of the systems and products sold by Dryvit Systems, Inc., call Technical Services at 1-800-556-7752 ext. 9 or visit us on the web at **www.dryvit.com**.

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