WALLTITE®
Insulating Air Barrier System

Towson University – College of Liberal Arts Building

Architectural rendering of CLA, Phases 1 and 2.

Towson, MD: Towson University broke ground in 2007 for a 250,000 square foot College of Liberal Arts (CLA) building to be built in a phased construction schedule. This project represents the university's first entirely new academic building in 30 years with a focus to complement the university's historic structures while setting the standard for future projects with a sustainable, 21st-century design.

Anchored by two large open atriums, the building will house general purpose classrooms and computer labs for classes containing between 25 and 90 students. The building will also contain faculty and departmental offices, meeting rooms, study lounges and a small café. There will also be much-needed specialization space to support the Psychology Department, including an animal vivarium, research space, observation rooms, and a children's clinic.

Phase 1 was completed in fall 2009, and is now in use, while Phase 2 is scheduled for completion in fall 2011. The $72 million Phase 2 encompasses the construction of a 193,000 square foot building which will connect to Phase 1's 100,000 square foot structure to complete the CLA building project. The general contractor, located in Baltimore, is Whiting-Turner Contracting Company. The building is slated to open with a USGBC LEED Silver Certification.

Project Profile

BASF
We create chemistry

Construction Team Point of View

OWNER

University of Maryland – Mark Behrens, Project Manager

- The scope of work for the rainscreen wall assembly was the responsibility of the masonry contractor who worked closely with the insulating air barrier system contractor to resolve detailing issues during the wall assembly construction mock up.
- A wall assembly mock up worked well for our project and believe that such a practice is appropriate for high performance building envelope system projects.
- Technical support from BASF was integral in advancing the knowledge of the construction team with rainscreen wall assembly technology.
- A smaller population of insulating air barrier system contractors was of some concern for us on our publicly funded project although the experience, knowledge, and trained skill level of our contractor was exhibited in their work.

Towson University – David Mayhew, Director of Architecture, Engineering and Construction

- The integrity of the building envelope performance was paramount among programming considerations for new construction.
- Our existing campus buildings have experienced water intrusion issues so moisture management of the building envelope had to be met head on. Additionally, thermal performance of the building envelope contributes directly to building energy efficiency, which ultimately relates to long term operational costs for the university.
- The university's commitment to sustainability with this building to achieve USGBC LEED Silver Certification would be aided by planning for a high performance building envelope incorporating the spray polyurethane foam insulating air barrier system.

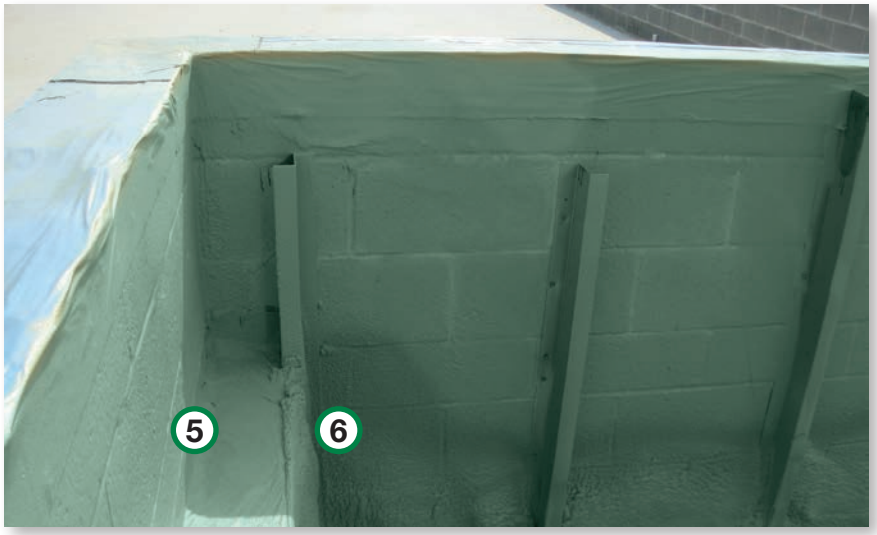
Stages of Construction:

1. WALLTITE application in progress.
2. Parapet transition membranes preparation in advance of WALLTITE.
3. Head and end dam transition membranes will provide continuous seal with WALLTITE at windows.
4. Completed WALLTITE application ready for masonry staging.

Construction Team Point of View

Burt Hill, Washington, DC
David Capelli, Project Architect
Nicole Gerke, Quality Control Architect

- A full size wall assembly mock up is a pre-construction element that our firm strongly believes in and was pursued for Phase 1 of the project. Through this mock up process, assembly details may be refined and optimized for performance and constructability. What the construction team learned on the mock up was then applied to both Phases 1 and 2 of the project.
- Once detailing of the masonry rainscreen system was resolved, construction progressed without the cost of wall assembly delays or setbacks.
- The WALLTITE® insulating air barrier system delivered an ease of constructability to the project benefiting all trades involved on the wall assembly.
- The WALLTITE closed-cell spray-applied polyurethane foam rainscreen system reduces the requirement of multiple trade functions to perform repetitive stage applications on the building envelope wall assembly.
- The experienced gained with the WALLTITE application on Phase 1 (roughly half the size of Phase 2) allowed for Phase 2 to go up in the same amount of time as Phase 1, enclosing the building ahead of schedule and placing the project ahead of schedule.
- WALLTITE is clearly the more desirable insulation option over rigid board stock providing seamless application, assuring the energy efficient approach of continuous insulation (CI) called for in the International Energy Construction Code.
- The high insulation value of WALLTITE provided for a minimal thickness to meet demanding energy efficiency goals while providing for design flexibility of the wall assembly.
- The self-flashing nature of WALLTITE eliminates the potential for water intrusion at wall assembly penetrations, while providing for insulating air and moisture barrier performance throughout the building envelope wall.
- WALLTITE will ultimately contribute to the energy efficiency of the project and contribute to the project metric of being LEED Silver Certified.
- New projects in our office with rainscreen wall systems will certainly be considered candidates for the WALLTITE insulating air barrier systems.



5. WALLTITE self-adhering to parapet transition membrane forming continuous air and moisture barrier.
6. WALLTITE provides an R-value of 6.7/inch, with a permeability of .91 for this 2 inch application.

Construction Team Point of View

Insulating Air Barrier System Contractor – Royals Commercial Services, Millersville, MD Landon Royals, Owner/Contractor

- The 20’ X 30’ rainscreen wall assembly mock up constructed for the project incorporating all wall system components permitted assembly details to be refined for use on Phases 1 and 2.
- The construction team found the WALLTITE insulating air barrier system accommodated the performance and aesthetic detail requirements of the rainscreen wall assembly simplifying many transition conditions among the trades.
- We worked closely with the mason on the brick veneer rainscreen wall assembly to facilitate staging and application of collateral elements at head, end dam, and parapet conditions.
- The teamwork approach aided the construction schedule through shared scaffolding permitting each trade to efficiently accomplish their scope of work.
- Metal wall framing, windows, sheathing, transition membranes, brick ties, WALLTITE insulating air barrier system, brick veneer installation … a straightforward, high performance building envelope, rainscreen solution.

The WALLTITE Insulating Air Barrier System meets the requirements of the International Construction Code (ICC) International Building Code (IBC) and the Air Barrier Association of America (ABAA) as documented through testing under: NFPA 285 – Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components; NFPA 286 – Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; ASTM E 2178 – Standard Test Method for Air Permeance of Building Materials; and ASTM E 2357 – Standard Test Method for Determining Air Leakage of Air Barrier Assemblies. System performance and applications may be referenced in ICC Evaluation Service Report, ESR-2642.

WALLTITE minimizes the potential for thermal bridging contributing to the energy efficiency of this rainscreen wall assembly.

CONTRACTORS

1-888-900-FOAM

BASF Corporation
1703 Crosspoint Avenue
Houston, TX 77054
Fax: 713-383-4592
www.spf.basf.com
spfinfo@basf.com
1703-25613.2

BASF
We create chemistry