SCIENCE. SERVICE. SOLUTIONS.

CARLISLE COATINGS & WATERPROOFING

PROJECT PROFILE

Turkish American Community Center, Lanham, MD

Old World Architecture Meets New World Technology

Old world architecture meets new world technology in the newly developed Turkish American Community Center located on 15 acres in Lanham, Maryland. When complete, the $100 million complex will include a main cultural center with an exhibition hall; a private amphitheater with seating for 200; five gift shops; a computer lab and library; and a 350-vehicle underground parking facility.

The grounds will also be home to a traditional Turkish bath area and guest house with picnic grounds and pond surrounded by Turkish gardens. In addition, visitors can use the athletic fields or enjoy a cup of Turkish coffee at the large coffee house. The main attraction of the cultural center will be a Mosque serving 700 people that will be open to all. Also on the grounds will be a small residential development as well as administrative offices.

While it evokes images of classical Ottoman architecture, the cultural center promises to endure for decades to come thanks to top-notch construction experts and state-of-the-art products manufactured to ensure that each of the five buildings are water tight and energy efficient.

Groundbreaking for the campus occurred in September 2013 and over the following weeks construction crews excavated a hole to accommodate the 250,000-square-foot underground parking garage, poured the foundation and erected walls. Once walls and foundation were cured, CHU Contracting, Inc. went to work installing the waterproofing and air barrier membranes.

CHU Contracting, Inc. is a commercial roofing, wall panel and waterproofing contractor serving the metropolitan Washington, D.C. area since 1998. The company won the bid for various waterproofing, roofing and sheet metal work on buildings throughout the campus.

“We were called in once the walls were cured to waterproof them before backfilling,” said Brian Yi, CHU project manager. “We used CCW MiraDRI 861 Self-Adhering Waterproofing Membrane, and after the lid went on, we began waterproofing the parking deck with the CCW-500R system. After all buildings were erected, we went back in and installed CCW MiraDRAIN 6000 Drainage Composite and finally the Insulfoam insulation.”

Turkish American Community Center at a glance

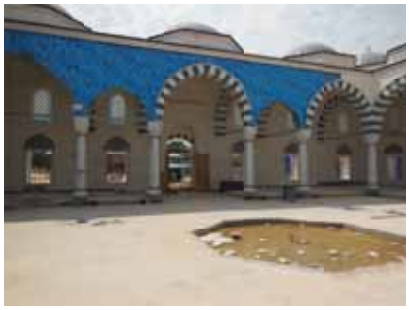
Location:
Lanham, MD

General Contractor:
Balfour Beatty

Carlisle Coatings & Waterproofing Contractor:
CHU Contracting, Inc. Chantilly, VA

Carlisle Coatings & Waterproofing Products:

- MiraPly™-V
- CCW-500R
- CCW MiraDRI® 861
- CCW MIraDRAIN® 6000
- CCW-705
- Fire Resist 705VP
- Fire Resist Barritech VP
- Insulfoam EPS Insulation



Carlisle Coatings & Waterproofing
900 Hensley Lane | Wylie, TX 75098 | 800.527.7092 | **www.carlisleccw.com**

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Carlisle Coatings and Waterproofing (CCW) MiraDRI 861 is a self-adhering waterproofing membrane designed for cold temperature applications. CCW-500R hot-applied waterproofing membrane is a single-component, rubberized asphalt compound that forms a flexible, thick waterproofing membrane. CCW MiraDRAIN 6000 offers high-flow, high-compressive strength for vertical single-sided subsurface drainage applications designed for use over CCW waterproofing membranes. Insulfoam, another division of Carlisle Construction Materials, is the largest manufacturer of expanded polystyrene (EPS) in North America.

"We had used the CCW-500R before on a 340,000-square-foot structure and our first experience with MiraDRI 861 was on this project," Yi said. "We went through a boatload of both because this is a massive structure."

Yi said his crew also installed CCW's MiraPLY-V on the foundation walls for the parking structure as well as the fellowship hall. This was their first experience using the product.

MiraPLY-V is a blindside waterproofing product that combines two proven technologies of a TPO membrane and butyl rubber adhesive to provide a one-step compression seal gasket that combats shifting and soil separation from the foundation wall.

"We chose the MiraPLY system because there was a zero property line and we couldn't encroach on neighboring structures," Yi said. "It was easier to install than I originally thought but our representative, Cindy Nunn, and the CCW tech services team was there to baby us along until the guys got the hang of installing the system. All of the seams needed to be taped, but my guys were used to rolling seams since they have done a lot of Carlisle SynTec single-ply roofing installations. We found the MiraPLY system was similar and really simple. You just hang it up there, peel it off and you're done."

Once the waterproofing was complete, CHU began installing 50,000 square feet of CCW Fire Resist 705VP on the exterior walls of the Turkish bath. In addition, their crew sprayed Fire Resist Barritech VP onto the exterior walls and dome of the 20,875-square-foot Mosque.

Fire Resist 705VP is a self-adhered, vapor-permeable sheet membrane that features a polyester facer and acrylic adhesive that acts as an air and weather barrier while allowing the wall assembly to breathe.

Fire Resist Barritech VP is a fluid-applied, vapor-permeable membrane that can be applied over concrete block, poured concrete, exterior gypsum sheathing, plywood, OSB and many other common building materials. Its higher film thickness and flexible elastic properties enable the Fire Resist Barritech VP to bridge cracks and seal around penetrations, creating a continuous, monolithic air and weather barrier.

James Yoo, CHU project supervisor, said this was his first experience using both products.

"We started in January applying the 705VP and the product itself was good," he said. "It is somewhat rigid compared to other membranes so it's easy to handle. The Barritech VP was put on the dome during the summer and we had no issues. There were some concerns going from concrete to CMU, but we followed CCW details and made it flush with the walls. Both products worked out pretty well and I would use again if specified."

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