The 280-unit Union Wharf apartment complex overlooks the Inner Harbor of the Patapsco River in the trendy and historic area of Fell’s Point in Baltimore. The $45 million project by Bozzuto Development Company, incorporates a range of green and modern features including an 150-foot infinity edge pool, fitness and yoga center as well as a cyber cafe.

Scheduled for completion in July 2013, the Union Wharf development complements its historical surroundings and is walking distance to restaurants, bars, parks, museums, theatres and art galleries.

The Challenge

Situated on a wharf in the heart of Baltimore, the four storey complex presented a number of challenges which encouraged contractors, including local Icynene spray foam contractors ACRI Insulation, to think outside the box to ensure the building was constructed as envisioned and on schedule.

Being located in a historic area, the site had very limited access for contractors and their vehicles could enter. Additionally, due to the lack of site access, parking was at a minimum.

The lack of available on-site space also meant that storage space for building materials was at a premium. This lack of storage space urged contractors to think of new ways to bring their materials onto the site and maintain open access channels for other contractors working on the site. Additionally, there was a priority for job site safety at all times for contractors and site visitors.

The large project’s inclusion of sustainable materials meant that a durable and energy efficient insulation material was required to ensure that excessive energy consumption was minimized and that all tenants and owners within the building were comfortable.

In addition to the site’s space restrictions, the construction company wanted to ensure they stuck to their well-timed construction schedule so contractors had to accommodate to a tight schedule.

A durable and energy efficient insulation material was required to minimize excessive energy consumption and ensure occupant comfort.
The Solution
In addressing the multiple challenges that contractors faced, innovation flourished. Floating barges docked in Baltimore’s Inner Wharf were made available to contractors to place their construction trailers freeing up the limited space available. Additionally, the use of portable equipment devices allowing for the movement of construction materials from one floor to the next made sure that the various contractors working on the complex had the ability to bring the materials they needed without obstructions.

With the limited space available, the construction company used an 150-foot tower crane to bring materials and equipment into the building. Use of the crane helped ensure there were minimal delays during construction. For any materials that required protection from the cold Baltimore winter nights, temporary heater boxes were fabricated on site to keep the materials warm.

Occupant comfort was top of mind for the construction company as was energy efficiency. The Union Wharf complex had a number of energy efficient and green features including spray foam insulation. Local spray foam contractor ACRI Insulation was recruited to install both Icynene Classic™ and Icynene MD-C-200 into the 280-apartment complex. More than 50 sets of foam was used throughout the complex and ACRI Insulation contractors ensured that job-site safety was maintained both during the spray application and 24 hours after application.

While both of these insulation materials provide thermal comfort and air sealing, they individually offered additional benefits for both the designers and the homeowners. Icynene Classic™ offers tenants and homeowners excellent sound absorption properties ensuring a quieter home without disturbance from neighbors or outside traffic. Icynene MD-C-200, a rigid medium-density product, contributes to wall racking strength and can reject bulk water from penetrating the building envelope. This rigid spray foam also supports improved indoor air quality by blocking air infiltration and mass transfer of moisture that may cause mold.

The Result
With an expected July 2013 completion date, the Union Wharf development is set to be a shining example of modern, sustainable living in Baltimore. The project is on track to achieve LEED Silver accreditation for its green initiatives and has been accepted in Maryland’s Voluntary Cleanup Program.

Footnotes:
1 Bozzuto Development Company http://www.bozzuto.com/services/construction/our-work/255
Additional information from:

Icynene Inc. would like to thank Bozzuto Development Company and Icynene contractor, ACRI Insulation for their assistance with this document.

For further information, contact your local licensed Icynene dealer.