PROJECT SPOTLIGHT

AVENON BAY – AVA HIGHLINE

LOCATION
New York, NY

APPLICATOR
Pyramid Floor Covering
Port Washington, NY

OWNER
Avalon Bay Communities;
Arlington, VA

GENERAL CONTRACTOR
Avalon Bay Communities;
Arlington, VA

ARCHITECT
SLCE, Schuman, Lichtenstein, Claman, Elson;
New York, NY
By any measure, Avalon Bay Communities’ new condominium project located on New York City’s West 28th Street is a huge project. Named AVA Highline, the project encompasses 590,000 square feet of flooring across 31 floors. The AVA Highline is a luxury apartment complex designed and built by one of the nation’s leading property developer and managers. It is the epitome of city living. Located blocks from public transportation, the Chelsea Piers and Hudson River Park, the building allows its residents the opportunity to live amongst West Chelsea’s galleries, eclectic restaurants, and exciting clubs and bars. Its namesake, the New York City Highline, can be seen out of the building’s east-facing windows.

On site, the property offers retail, garage parking with valet service, a 14th floor roof deck and outdoor patio with fire pit and barbecues. Before the AVA Highline could offer access to these amenities it needed to solve an interesting, and sticky challenge.

Designed by SLCE, Schuman, Lichtenstein, Claman, Efron, most of Avalon Bay’s finished flooring would be vinyl plank resilient flooring, with carpeting in bedrooms. And, since the flooring finishes require adhesives, Avalon Bay Communities needed to address alkali-related moisture problems.

"When modern water-based flooring adhesives are applied directly to portland cement-based substrates, it can create an alkaline condition that is incompatible with the adhesives wreaking havoc on flooring finishes. It is a major problem in the floor-finishing business," said David Whiteman, Technical Sales Representative with LATICRETE SUPERCAP. "The LATICRETE SUPERCAP System, however, can avoid these issues."

LATICRETE SUPERCAP is a calcium-aluminate based product and has a more neutral pH, as opposed to a portland cement with a high pH. The LATICRETE SUPERCAP System actually creates an alkali buffer between the concrete slab and the adhesives greatly reducing the risk of a flooring failure. This proven system is a LEED-contributing, UL GREENGUARD Gold Certified, low-alkali, self-leveling, cement-based technology that is applied with a computer-controlled mobile blending unit delivering perfectly flat floors.

Another important factor when using the LATICRETE SUPERCAP System is the reduction of the water/cement ratio by the concrete contractor. Typically, when a contractor steel trowel finishes a concrete slab, they traditionally mix additional water to create a cream on the top surface that enables easier troweling and a smooth finish. But, this process also tends to trap higher levels of moisture into the slab. The shiny “burnished” surface seals the pores of the concrete and prevents moisture from leaving the slab.

"Using LATICRETE SUPERCAP over a rough-screed floor, is the perfect way to apply the underlayment," said Stephen DeGaray of Pyramid Floor Covering, the project’s flooring contractor. "It is an elegant solution. AVA Highline got flat floors and could use adhesives as soon as the floors dried."

Once Pyramid Floor Covering began the job of installing LATICRETE SUPERCAP, it took the company about a year to finish the 590,000 square foot, 31-floor project. Every week, Pyramid Floor Covering would arrive at the worksite with its specially designed LATICRETE SUPERCAP pump truck. The pump truck is a computerized mobile blending unit that mixes LATICRETE SUPERCAP SC5000 Concentrate, water, and locally-processed sand at the worksite in a perfectly blended combination. Mixing occurs at street level within the pump truck, no unsealed material or silica dust enters the building. Pyramid Floor Covering pumped the flooring material into the building using a hard pipe that could extend up to the building’s 31st floor. During a typical application, Pyramid Floor Covering was able to apply 20,000 square feet of LATICRETE SUPERCAP at a depth of $\frac{1}{8}$" an inch.

"As far as we’re concerned, the LATICRETE SUPERCAP recommended solution was exactly on-target. Flooring covering installations went without a hitch, and the building’s floors’ degree of level and flatness exceeded our specifications," said David Whiteman.

"This was one for the record books," remarks DeGaray.

"The LATICRETE team worked with Avalon Bay Communities to create a solution that avoided high moisture and alkali-related problems. The solution required Avalon Bay Communities to bullfloat the floors during installation and leave the concrete in rough-screed condition. LATICRETE SUPERCAP was then applied directly to the rough concrete. This approach avoided the issue of excess water because a cream was not necessary to create a smooth surface. LATICRETE SUPERCAP provided a completely smooth surface. It’s called the Next Generation Slab!™"

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