

Project Profile



Levelrock® Quik-Top™ Floor Underlayment

Type of Application

Multi-Family Construction

Project

The Flats at Union Row

Location

Washington, D.C.

Product(s)

LEVELROCK® Quik-Top™ Floor Underlayment
LEVELROCK™ Floor Underlayment Concrete Primer

LEVELROCK Applicator

East Coast Poured Floors



LEVELROCK® QUIK-TOP™ floor underlayment provides rapid repairs for a luxury Washington, D.C. condominium.

Developer PN Hoffman Inc. recently solved a critical problem when an innovative contractor, East Coast Poured Floors Inc., quickly repaired out-of-level subfloors at PN Hoffman's Union Row condominiums in Washington, D.C.

"We came with a new product, and we were able to address the tolerances and meet the production schedule," says Greg Woodard, general manager, East Coast Poured Floors, a division of J.W. & Sons Inc., Baltimore.

In one morning, East Coast Poured Floors repaired an entire floor and was ready to move on to the next one. In all, East Coast Poured Floors repaired 105,000 square feet of out-of-level concrete at Union Row using LEVELROCK® QUIK-TOP™ floor underlayment from the Specialty Products Division of USG®.

No special floor preparation was needed – no scarifying, no shot blasting – only minimal time on the job.

Deck Out of Level

The Flats at Union Row luxury condominiums are located in the northwest section of Washington, D.C. The nine-story high-rise features a post-tension concrete deck with hardwood flooring specified throughout the open-studio units. The project's second phase is the adjacent Warehouses at Union Row, which also has an uneven poured concrete deck needing repair.

The problem at both sites was that the concrete deck was so far out of level that hardwood flooring could not be installed. "The tolerance for the hardwood flooring required a minimum variation of 1/8 inch every 10 feet," says Woodard. "They needed an almost perfectly flat surface."

So, how could a subfloor repair get done quickly?

Interestingly, East Coast Poured Floors had not been PN Hoffman's first choice to fix the subfloor leveling problem. Another subcontractor had in fact been called in, but that firm struggled with the repair work.

Specifically, the repair method selected by this subcontractor was flawed. With some cementitious self-leveling products, the curing process often results in dimensional movement of the self-leveler, creating the need for mechanical bonding to the substrate. The firm intended to scarify the concrete to create a sufficient

bonding surface and then apply a competitive cementitious, self-leveling material. But for some reason, this subcontractor had chosen to use hand grinders, thinking the concrete could be scraped quickly.



"The job had gone to this subcontractor because of pricing, but the developer had become frustrated," recalls Woodard. The repair was taking too long, and PN Hoffman had had enough. Jeff Mitsky, a PN Hoffman superintendent, called Woodard to the job site to finish repairing the remaining floors.

Repairs Made Quickly

Woodard, who has been in construction for 25 years, knows the ins and outs of construction. A carpenter early on, he also sold prefabricated fireplaces and plumbing products. In 2000, he joined J.W. & Sons to run its East Coast Poured Floors division. So, when Woodard inspected the concrete deck at Union Row, he knew exactly what to do about it.

After field-walking the site with Randy Mullet, quality control manager with ALCORP Marketing, which services LEVELROCK products for USG, Woodard proposed using the LEVELROCK QUIK-TOP flooring system.

This premium poured underlayment features a revolutionary self-drying technology that typically permits the underlayment to dry in as little as 15 hours. Consequently, most floors can be prepped, poured and floor coverings applied within one day. In addition, the product provides compressive strengths up to 6,000 psi and eliminates the need for sealing prior to floor-covering installation. Because of its high compressive strength, the underlayment can also be used by itself as a finished floor in conjunction with an approved coating or staining system.

Woodard and his crew made all the difference. "The other contractor was on the second floor for two-and-a-half weeks," says Woodard. "We repaired the third floor in one day."

Woodard's crew was able to work quickly, since QUIK-TOP underlayment requires minimal surface preparation – no shot blasting and only two coats of LEVELROCK™ floor underlayment concrete primer. "We ended up with 1/8 inch of material over high spots, maybe 1/4 inch at max," says Woodard. "In low areas, we'd have as much as 1/2 inch."

Within two hours of pouring, Woodard ran a straightedge across the floors. "We didn't see a glimpse of light underneath," he says. "It was perfectly flat."

Affordable Results

Woodard says PN Hoffman is pleased with the results. The hardwood flooring contractor was able to complete his work and, in the end, the subfloor repair was affordable.



"With other technologies, the manufacturers say they don't require preparation. They say you don't need shot blasting, but they recommend it," says Woodard. "They also base their bonding on high-end primers. They want to sell you a primer that's \$250 for a 6-gallon bucket of concentrate. I paid \$10 a gallon for my primer."

A simple approach with affordable materials – that's what East Coast Poured Floors provided. But the speed of the repair made the most difference.

"I finished the prep and pour in one day, but my competition sent somebody to grind and then prime and pour," says Woodard. "They had a complicated operation, whereas I did everything in one shot. The GC got the next trade in quickly, and that was a very big deal."

