

CHAIN STORE AGE®

NEWS AND ANALYSIS FOR RETAIL EXECUTIVES

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Concrete With A Sheen

Eneref Institute examines how the reflective sheen of the polished concrete floor increases ambient light in an Office Depot.

An ordinary concrete floor can be a thing of beauty—just ask Office Depot. The office-product and services retailer uses a unique process that gives concrete-slab floors a shiny-smooth surface that resembles polished marble. What's most unusual is that the sheen is accomplished without the application of waxes or any other coatings.

Office Depot started using the polished-concrete system, DiamondQuest (from QuestMark, Canonsburg, Pa.) about three years ago. The system uses industrial diamonds in a multistep grinding process that results in a dense, smooth floor surface with a high-quality sheen. The process also has the ability to inhibit water and other contaminants from penetrating the surface. Today, DiamondQuest processed concrete is the standard flooring at Office Depot and is written into its specs.

“There are some scenarios—takeovers of existing stores—where the condition of the slab is so bad that we have to use VCT,” said Jim Cornwell, director of design and construction, Office Depot, Delray Beach, Fla. “But we try to avoid VCT as much as we can due to the high cost of maintaining it.”

Office Depot chose DiamondQuest for several reasons, including its appearance (the final product can have varying levels of reflectivity, from a

matte finish to a high gloss, depending on preference) and lower maintenance and repair costs. The polishing or grinding process is enhanced with silicate densifiers that harden the surface of the concrete, resulting in better abrasion resistance. And unlike with coatings, there is nothing on the surface to peel, flake, mar or discolor.

Additionally, because there is no topical product, no recoating or re-application is involved. The maintenance is simple compared to that required for VCT tile, and offers a significant savings to the same, according to Cornwell. Office Depot maintains the DiamondQuest processed floors by cleaning them with a dry mop either nightly or a few nights a week, depending on store traffic, and buffing them every few months.

Another important factor in Office Depot's use of DiamondQuest has to do with safety. The grinding process results in a safe floor surface (even with a highly reflective finish) and also levels uneven areas to eliminate tripping hazards. The National Floor Safety In-



A grinding process uses industrial diamonds to create a shine on the concrete floor.

stitute has certified the DiamondQuest system for slip co-efficient of friction safety.

There are other advantages. The shininess of the floor has increased the lighting on products in the lower shelves from the light reflected from above.

“The reflectivity we get out of the polished concrete increased our ambient lighting levels in the store,” Cornwell said.

In another benefit, the concrete floor gives the chain the flexibility to move displays and furniture around without having to worry about blending the floor color to match the rest of the overall floor.

DiamondQuest can be used in new construction and on existing concrete. When working in Office Depot stores that are already doing business, Quest-

Mark works on the floors at night, leaving the stores open during the day with no downtime (the floors can be used as soon as the diamond polishing is done). Regional managers from Quest-Mark coordinate with store managers to schedule the portion of the store to be worked on that particular evening.

The system uses integrated HEPA vacuums, which keep the store nearly completely free of dust and the merchandise clean. While new stores are typically processed in one to two weeks, the job takes a bit longer in existing locations.

There are also environmental benefits associated with using polished concrete, Cornwell added. Cement is a low-VOC emitting material, and its use as a finished surface conserves other natural resources by eliminating the need for additional finish applications such as VCT or carpet. The installation and

maintenance of the floor does not require the use of chemical strippers or harsh cleaners. ●



This article is an excerpt of the future Enerref report which assesses the impediments to building zero-energy urban communities in the US. A companion film documentary, The Enerref Project, will seek to demonstrate to key decision-makers how zero-energy communities can be commercially viable.