

case study

Polishing Project Transforms and Cleanses a Terrazzo Restroom Floor

CUSTOMER

Located in the extreme southeast corner of Iowa on the Mississippi River, Burlington, Iowa is the center of a metropolitan area that includes West Burlington and Middleton in Iowa, and Gulfport, Illinois. Burlington High School is a four-year public school with an enrollment of more than 1,000 students. The current school was built in 1969 and has hosted fifty years of graduating classes.

PROJECT OPTIONS

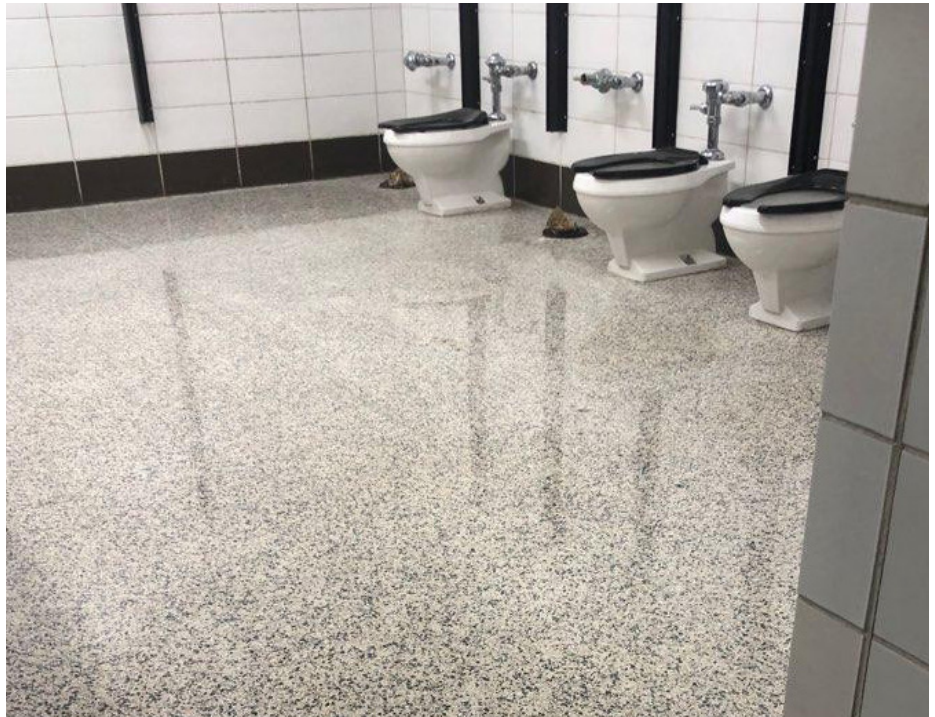
Recently administrators undertook refurbishing of Burlington High's severely worn terrazzo restroom floors, the first of several planned facility improvements. The floors were discolored and layered with grime from decades of use, and also covered with multiple layers of wax.

RECOMMENDATIONS

The polishing project was awarded to Royale Concrete, an Iowa contractor specializing in concrete repair and polishing for commercial, government and residential customers. The company has a well-deserved reputation for service and commitment to leading-edge restoration processes and materials. "Every project is unique," says Royale founder and owner Jessica Ledger-Kalen, "and our team keeps pace with emerging technologies and innovations to deliver the best for our customers." In keeping with that commitment, Royale selected a combination of Lavina by Super Abrasive and DiamoPro® Systems tooling for the Burlington restoration project.

PROCESS

DiamoPro Systems manufactures leading edge UV coatings and chemicals, diamond tooling and abrasives, scrapers, and dust collection systems. Among their products are DiamoPro

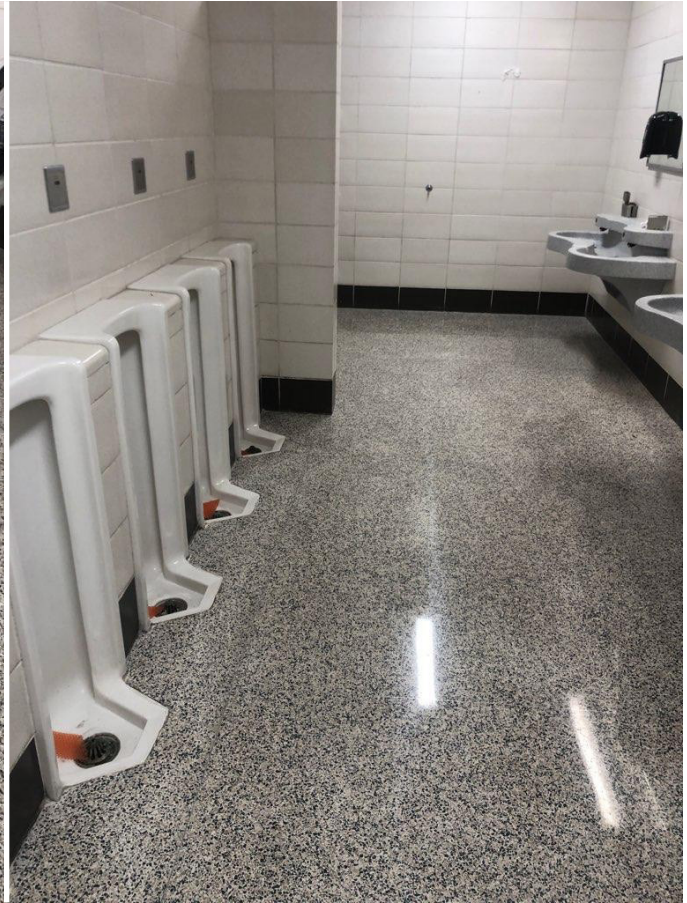


UV HS®, an innovative UV-cured, urethane-based topcoat, and Diamo-TLC®, a colorant. Both DiamoPro UV HS and Diamo-TLC are available with Microban®, an antimicrobial that helps prevent the growth of bacteria that can cause stain, odor and concrete deterioration. DiamoPro Systems' comprehensive line of precision diamond tooling includes PCDs, bars, buttons, 6 SEGS, 10 SEGS, hybrids, and resins to accommodate all major brands of walk-behind grinders.



Royale Concrete used a Lavina L20GE three-head planetary grinder. The propane-fueled grinder has a Kawasaki FS481V engine and features a 20-inch working width. Two DiamoPro SVX series dust collectors were used on the project.





Diamond selection is the first step in the polishing process, and also one of the most critical. DiamaPro Systems' precision tools have been extensively researched and tested to ensure the optimal combination of cutting speed and tooling life. Based on the hardness and age of the Burlington High School floors, the Royale crew selected a Lavina 70-grit quick-change single button diamond for the first cut to aggressively remove the accumulated grime and wax layers. For the next step, 50-grit and 100-grit hybrids, transitional resin and metal diamonds, were used to remove the scratches left by the metal bond tools. Finally, the floor was polished using DiamaPro's P-Pucks polishing system in

successive finer tools ranging from 200 to 3,000-grit.

OUTCOME

Niagara Machine, Inc. sales rep Todd Lambel underscores the importance of matching diamond tooling and abrasives to the specific application. "No two concrete floors are quite alike," says Lambel. "In this case, we wanted to restore the particular DOI and aesthetic appeal of the original terrazzo. It was particularly important to assess the hardness of the floors to select the most appropriate and efficient abrasives.

Royale used the correct equipment and tools and did an excellent job. I think the results speak for themselves."



DiamaPro Systems' SVX Series HEPA-filtered vacs

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