SELECTING THE RIGHT COMMERCIAL FLOORING TO IMPROVE SAFETY CONDITIONS ON A COLLEGE OR UNIVERSITY CAMPUS









A hallmark of colleges and universities are expansive buildings and grounds. Each area unique in its look and feel, as well as its purpose.

One of the biggest considerations when architecting new spaces, or renovating and repairing areas on campus is the floor system that is installed.

Indoors and out, commercial flooring solutions for college campuses have significant safety implications, as well as support or enhance the look and feel of the environment in which it is installed. Black Bear, the Northeast's leading industrial flooring experts, partners with GCs and facility managers on college campuses to provide longer lasting solutions. Our epoxy, urethane, MMA, and polished concrete coatings are customized for each individual space.

Through a unique approach known as reverse-engineering, we are able to create durable and stylish solutions that meet and exceed safety regulations, and provide the unique look and feel for every inch of a college campus.

Understanding the Correlation Between a Floor's Durability and Environmental Impact to Engineer a Better Floor Solutions

Every aspect of college life on campus has some bearing on the durability and lifespan of flooring. Prior to engineering any industrial floor solution, it's important to understand how the space is going to be used to determine the environmental impact that could compromise the efficacy and reliability of a selected floor system.

The Different Spaces on a Campus

While ease of maintenance and budget are primary factors in the decision-making process, today's higher education facilities account for air quality, sustainability and aesthetics when selecting the appropriate flooring solution. Schools may opt for multiple products to accommodate individual spaces. *For Example:*



General Classrooms

A high degree of durability and easy maintenance will uphold the integrity of the floor. With constant foot traffic and the arrangement of desks and equipment, the system should have the strength and stability to withstand chipping, fractures and wear.



Athletic Locker Rooms & Showers Waterproofed epoxy floors engineered with slip or skid resistance is ideal for these spaces. Customized team logos and branded design can also be stenciled in locker rooms and athletic centers greater detail.



Study / Concentration Specific Classroom Environments

It's not uncommon to have science labs, video production areas, and art rooms engineered to withstand environmental impact. No VOC, chemical resistant urethane coatings may be the right choice for these classrooms.



Libraries, Common Areas, Offices, & Auditoriums

The floor in these high traffic spaces can vary but all should be durable, easy to clean, and enhance the aesthetics of the surroundings. From colored walkways to speckled or polished epoxy, schools can get their desired look through a customized flooring design.



ENGINEERING FLOOR SOUTIONS FOR CAMPUS DINING

Commercial kitchens and dining areas are subject to various stressors that need to be addressed prior to the installation of any floor system. This is the only way to engineer an optimal solution that will last longer and maintain the safety of staff and students.

Compliance and regulatory agencies assess the integrity of a school cafeteria's flooring. Any chips, cracks, stains, or mold are red flags that indicate safety hazards and compromise the health and well-being of those on the property. Epoxy and urethane topcoats are ideal due to their durability and customization that can withstand the stressors of the food and beverage industry.

Environmental Stressors that Impact Kitchens, Cafeterias, Dining Halls & Break Rooms



Wet Spaces

Damp spaces and faucet runoff can produce dangerous mold, and erode and buckle flooring. Seamless, water resistant solutions are preferred to avoid frequent damage.

Fridge/Freezer/Heat Sources

Shock resistant flooring is required to counter-act the extreme temperature changes that can destroy floors.

Foot Traffic & Tire Tread

The weight of food pallets, constant foot traffic, and moveable storage will wear a floor down over time. A durable solution is needed to withstand daily impact.

Sanitization

Working with raw materials and food by-products require regular sanitization. Harsh chemicals can erode flooring, however epoxy or urethane solutions with chemical resistance will protect the space from commercial cleansers.

DESIGNING A DURABLE FLOOR WITH AESTHETICS & SCHOOL SPIRIT IN MIND

As facility managers contemplate new flooring for common spaces in schools and universities, they tend to employ solutions that complement the aesthetics, and mesh with a school's branding and identity. More institutions, including public and private schools, specialty academies, and universities, are also discovering, and taking advantage of, the lesser touted benefits of concrete coatings that include decorative designs and stenciling that can be customized to meet the needs of a space's individual look and feel.



School Pride

Most schools have a mascot, logo, or descriptive phrase that they use to differentiate themselves. Stenciling concrete and designing an insignia on the floor is an option that can enhance an entry way or main lobby of a school. Using custom colors or polished concrete to display branding colors can create a surface that will scream school spirit.



Guiding Direction

It's not uncommon for hallways and larger building complexes to have facilities that include directional arrows or indicators on floors to help guide people through the campus. Larger schools and campuses are discovering the benefits of customized concrete using guides to steer foot traffic in the right direction.



Going Green

As new builds emerge and renovations of older structures are initiated, schools are turning to green construction to enhance their buildings. Concrete floors are energy efficient and can help to save on heating and cooling costs. Plus, concrete is a recyclable material, and the durability and sustainability translates into less waste. Concrete can minimize your carbon footprint.

COMMON FLOORING SOLUTIONS ON CAMPUS



EPOXY FLOORS

Combining high durability with low maintenance, epoxy floors are regarded as a popular option for high-traffic areas on campus. Epoxy is ideal for classrooms, office spaces, common areas, and hallways. Alone, this commercial flooring product offers little to no thermal shock resistance and limited protection against byproducts and acids. However, with the appropriate additives, you can safeguard the floors against corrosive elements to create a compliant floor system.



URETHANE FLOORS

Ideal for optimum protection in kitchens, lavatories, labs, and wet spaces, urethane flooring can withstand the stringent conditions including sanitization and decontamination processes, chemical byproducts, and acidic liquids. Urethane is highly durable and thermal shock resistant. A non-porous finish can offer the bacterial and chemical resistance that will maintain both the integrity and sustainability of the floor, to provide a safe and longer-lasting product.



POLISHED CONCRETE

Give it your best shot. Polished concrete floors are practically indestructible. And, for a high traffic floor under constant duress this may be your first line of defense. While it can be a costly solution up front, the thermal shock resistance and virtually no chipping or cracking means it's a reliable choice and will outlast other products. Therefore, it will ultimately be a more cost-effective solution in the long run. Polished concrete can also be treated with top sealants for slip resistance and chemical and moisture resistance to protect against mold and bacteria. It is relatively easy to maintain and won't stain easily.





about the client

Wellesley College is one of the most prestigious and highly respected institutions of higher education in the country. It's widely acknowledged as the nation's top college for women and the school's robust alumnae base has been viewed as "the most powerful women's network in the world."

Custom Color Polished Concrete Enhances 4 Floors in Wellseley's Pendleton Hall West

Project Overview

Wellesley College was in the midst of their Pendleton Hall renovation which would expand the property to include a new build of Pendleton Hall West connecting to the existing building. Black Bear's experience engineering custom colors was ideal to help the school design and install a new floor system for the hallways on four floors. The walls were all precast concrete and the college wanted the floors in the new building to accent the hallways.

The Process

STEP 1: Custom mockups created to zero in on the exact color STEP 2: Custom color was added during the concrete pour STEP 3: Floors were polished to 800 grit STEP 4: Burnished with 2500 grit diamond stone STEP 5: Hand tool used to polish edges to 6 to 10 inches out

Project Details

Project Name – Wellesley College: Pendleton West Type of Business – College / University Campus Location – Wellesley, Massachusetts GC/Architects: Consigli & contracted architect firm Size - 4,000 Sqft Timeframe – 3 weeks Products – AmeriPolish 3D HS Densifier Guard

Challenges

In order to seamlessly integrate the new floors with the precast concrete walls, this particular project required a lot of handwork in a tight timeframe. Manual hand tools were used to polish edges six to ten inches out on each level as outlined in the scope of work.

Black Bear's Solution

The college had a very unique set of requirements for the look and feel of the space. Black Bear worked with the college's architects to design custom mockups to ensure the color was to exact specifications needed. Once the tint was identified, a polished concrete solution with integrally colored concrete was engineered with the color being added at the time of concrete pour.

WELLESLEY COLLEGE

The Northeast's Leading Commercial Flooring Experts with Over 25 Years Experience. Learn how we can help you.

Leveling the Ground at Babson's Innovation Center

Project Overview

Babson College required modification to their classrooms in Olin Hall. Black Bear Coatings and Concrete was brought in to integrate existing concrete slab with new concrete floors that would complete the re-envisioned room.

The Process

STEP 1: Shot blast/grind substrate flooringSTEP 2: Apply Vapor Mitigation PrimerSTEP 3: CMP Specialty Product and CMP Diamond Cap appliedSTEP 4: Polished topping installed at a ¼ inch (leveling floor)

Project Details

Project Name – Babson College, Olin Hall Type of Business – Non-Profit / Education Location – Wellesley, Massachusetts Size/Square Footage –2,100 sqft space Timeframe – 4 days (night work) Products – CMP Specialty Product, CMP Diamond Cap, Vapor Mitigation Primer

Challenges

Black Bear needed to salvage the current concrete and engineer a new industrial flooring to meet the height of the existing floor within a restrictive timeframe to be completed over four nights.

Black Bear's Solution

An evaluation of the concrete foundation determined that a new concrete floor was value engineered to seamlessly integrate the existing base to become one unified system.

about the client

BLACK BEAD

Babson College educates entrepreneurial leaders. The school's distinguished business education program blends innovative, integrated and applied business and liberal arts, with curricular and co-curricular learning experiences.



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Retrofit Harvard's Semitic Museum with Decorative, Longer-Lasting Floors

Project Overview

Having completed multiple projects on the Harvard University campus, the school reached out to Black Bear during the renovation of their Semitic Museum. The university was retrofitting their museum to update their gallery and further protect the artifacts preserved in the building as well as maintain the safety of visitors as they walked the property. Though Black Bear was hired directly to install a new system, it was also necessary to bring in a civil engineering firm to assist with a floor solution.

The Process

STEP 1: Floor demolition exposed preexisting conditions STEP 2: Removed vinyl layers and demolition of granolith STEP 3: Waterproofed existing slab on 3rd floor STEP 4: Colored and poured concrete STEP 5: Polished and installed 6 inch decorative border

Project Details

Project Name – Harvard Semitic Museum Type of Business – College / University Campus Location – Cambridge, Massachusetts GC/Architects: Direct Hire & Simpson Gumpertz & Heger Size - 5,000 Sqft Timeframe – Phased over 3 months Products – Waterproofing Dex-O-Tex M-E Flooring, Metzger McGuire RS 88 custom color polyuria, Prosoco Consolideck LS Guard Densifier. Tennant's Eco-HTS 100 urethane

Challenges

The museum, in an old historical building, revealed problems early in the process that would need to be addressed as to not impact the artifacts and museum antiquities. While the initial solution needed to be redirected when existing floor revealed vinyl layers over granolith, civil engineers from SGH architects were brought in to collaborate with Black Bear on a new. more effective solution.

Black Bear's Solution

Once the granolith was removed and the old slab was exposed, it revealed 4x4 blocks that would result in a grid-line pattern that the university did not want showing. Therefore, the Black Bear team collaborated with SGH to evaluate new options that would eliminate grid-lines. An integrally colored, modified 2 inch topping was engineered and installed, polished, and enhanced with a decorative border.



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The Harvard Semitic Museum houses ancient Near Eastern exhibitions and explores the rich history of languages. The museum remains dedicated to the use of their collections for the teaching, research, and publication of Near Eastern archaeology, history, and culture.

about the client cultures connected by the family of Semitic

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AD

Installation of Durable Floors in Dorm Baths Over School Break

Project Overview

When the American International College (AIC) engaged in the renovation of shared bathrooms in three on-campus dormitories, the goal was to install a more cost effective flooring solution that would reduce the need for future repairs. Black Bear was uniquely suited for this project – having engineered longer lasting floors and completed multiple installations for New England universities which included lavatories and wet spaces. Adept at meeting tight timelines, Black Bear was able to work around the school's schedule as to minimize disruption to campus residents.

The Process

STEP 1: Failing tiles were removed and patched STEP 2: Diamond grind and surface prep STEP 3: HIde grunt lines on floor with scratch coated base-coat of polycrete STEP 4: Installed polycrete 8th inch double flake broadcast urethane topcoat STEP 5: 6 inch cove for the floor, 12 inch for showers

Project Details

Project Name – AIC Dormitory Common Baths Type of Business – College / University Campus Location – Springfield, Massachusetts Size - 7,500 Sqft Timeframe – Phased over 3 weeks Products – Epoxy mortar, Polycrete, Urethane topcoat

Challenges

The school needed the installation to take place over 3 weeks during a scheduled break and the buildings were empty. The short, inflexible timespan in which to complete the bathroom renovations meant that Black Bear had to be strategic about the phasing of work being completed.

Black Bear's Solution

Black Bear demo'd the existing baths 1x1 inch tiles. Non-shrink epoxy mortar flash patched the floors, and a scratch coated basecoat of polycrete was used to hide grunt lines. Polycrete double flake broadcast urethane topcoat was installed; and a 6 inch cove was provided for floors and a 12 inch seamless base for showers for moisture resistance. Black Bear valueengineered a solution that provided AIC with a durability they were looking for, in an abridged timeframe.





about the client

BLACK

The Northeast's Leading Commercial Flooring Experts with Over 25 Years Experience. Learn how we can help you.

The Northeast's Leading Commercial Flooring Experts Black Bear Coatings & Concrete is a partner you can trust. Our experts have over 30 years of experience designing, installing, repairing, and maintaining commercial floors.

Our comprehensive approach is all-encompassing. We know that selecting the correct resinous coating to install is defined by the performance of the material in a specific space. Black Bear takes the time to work with clients to understand the environmental conditions of a particular area – including substrate condition, chemical exposure, impact and wear resistance, thermal shock, and aesthetics.

Talk to us to learn more about successful projects completed for colleges and universities to learn how Black Bear Coatings & Concrete can help your school.

the process a customized approach

TESTING

It is critical to understand any underlying issues that may present challenges. Black Bear experts conduct extensive testing of existing concrete surfaces to create the best approach for prep and resurfacing efforts.

COATINGS & OVERLAY

Black Bear can help you select Proper protection and mainand design the right coating to provide a stronger, longer-lasting concrete surface that really enhances your environment and complements the design.

PREP

Existing concrete needs to be appropriately prepared before any resurfacing with coatings or polymers. Our experts meticulously clean, roughen/profile, and repair any defects to make sure it is ready for resurfacing.

SEALER & MAINTENANCE

tenance of coating or new concrete extends the life of your product. We work with you to apply the appropriate sealant and to maintain the flooring for years to come.

mitigation systems | urethane mortars decorative & designer epoxy | surface restoration cementitious coatings | polishing replacement and new flooring systems

learn more

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