







The food and beverage industry is one of the few segments where floor coating budget is NOT considered discretionary funds. This is due to the safety and regulatory implications a commercial or industrial flooring system has on this type of business. Selecting the appropriate flooring will improve workplace safety, and ensure that the general public is protected from potential infectious agents that can cause a massive contamination outbreak.

Food processing plants, grocers, restaurants, and food service establishments are held to rigid safety standards imposed by the USDA, FDA and local board of health departments. For this reason, it is not only imperative to select an appropriate floor that meets the required specifications, but also to vet a flooring contractor that has extensive experience installing for the industry, and is well-versed in the requirements that meet and exceed standards for regulatory agencies.

Hygienic Conditions / VOCs

Commercial flooring in food and beverage industries should minimize the threat of microbiological contamination. Businesses from manufacturing plants to retail stores are at an increased risk of food byproducts infiltrating a flooring system and subsequently, becoming a breeding ground for bacteria. Cracks and buckles in flooring, seams, and gaps can pose a threat to the environment. If mold and mildew, or microorganisms do grow beneath the surface, it can impact air quality and taint the foodstuff on the premises. This can lead to foodborne illnesses such as e-coli, listeria and salmonella. In some cases, foodborne bacteria can lead to serious conditions and even fatalities, and result in legal action against the company.

Excessive Moisture

Excessive moisture will deteriorate a floor, compromising the integrity of the system in place. As moisture builds up, the floor will begin to crack and buckle which can lead to bacterial growth and environmental concerns. Too much moisture can also lead to surface damage and unbond materials which can result in workplace hazards. A thorough assessment of the space and testing of the concrete will determine if high levels of moisture are detected. This will require a mitigation and waterproofing system be factored into a flooring solution.

Chemical Resistance

Prior to any floor installation, a full site assessment should be completed to determine the level of chemical resistance needed for a solution. Depending on the business, elevated levels of acids, alkalis, grease, salts, oils, sugars, fats and even blood can seep into a floor and destroy the foundation. Corrosive materials such as these will erode floors quickly - increasing the risk of contamination and the need for immediate replacement. To engineer the appropriate solution, it is necessary to walk the jobsite and understand the substances and their quantities that could penetrate and impact the flooring.



Wet Conditions

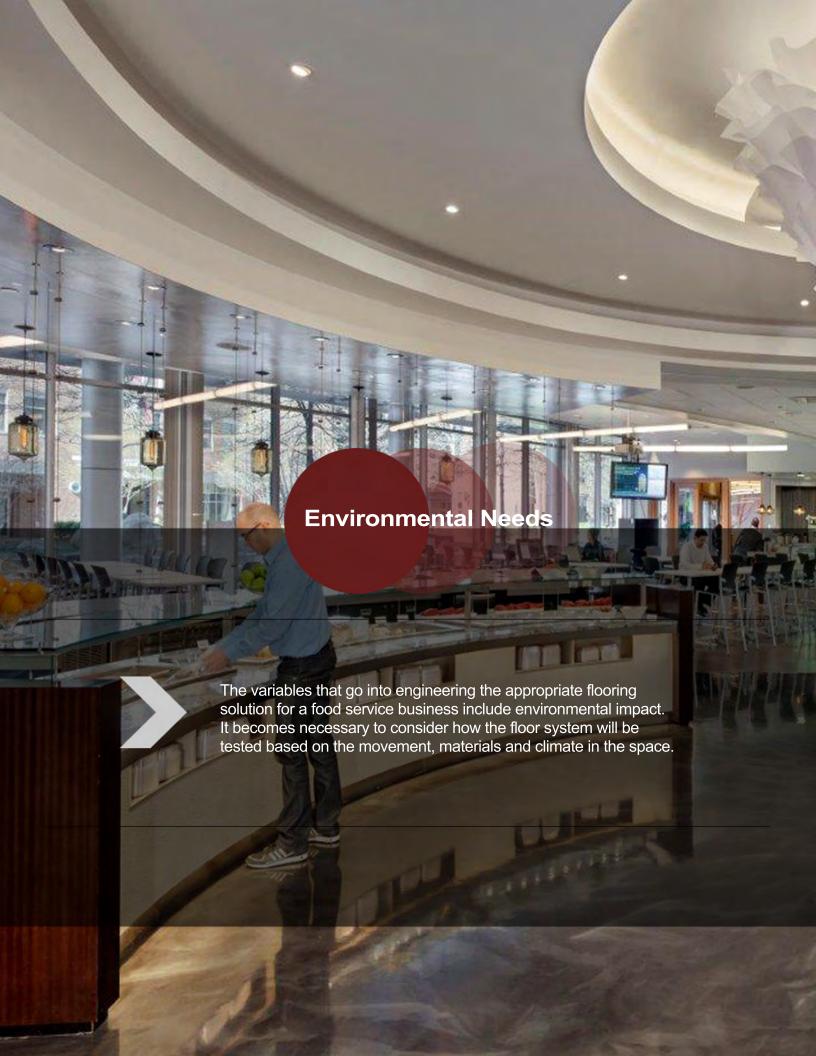
Wet spaces exist in every food and beverage business. From wash bays to oversized sinks, industrial flooring in food and beverage companies are accompanied by elevated risk of hazards. Water and liquids can damage floors by expediting wear and tear. Signs of deterioration should be a warning that there is a potential for bacterial growth. Wet spaces should be sloped or have appropriate drainage in place to prevent stagnant water from accumulating and reduce workplace slips. Wet conditions can put food and beverage businesses at an increased risk of violations imposed by strict health codes.

Thermal Shock

From freezers to ovens, and steam cleanings to sanitization procedures, the thermal shock resistance of a floor is important to delineate for any food and beverage business. Thermal shock occurs when the flooring is subject to extreme fluctuations in temperature. This can cause cracking and blistering of a flooring system. Industrial flooring should be able to withstand sudden surges and decreases in temperature to avoid any damage that can lead to immediate health risks for both employees and customers. The thermal shock resistance will likely vary depending on whether there is food storage, production, and the type of wash down procedures the flooring will endure.

Skid Resistance

Industrial flooring in food manufacturing plants endures constant stress. Motion from foot traffic and machinery tread are present around the clock. Engineering a seamless and durable solution will avoid buckling which can lead to dangerous working conditions. A skid-resistant surface will also prevent slips and falls in a commercial kitchen where wet spaces are prevalent. A skid-resistant floor will support productivity and reduce the risk of workplace dangers.





TEMPERATURE CONTROL

Temperature fluxuations increase the risk of thermal shock abrasion on a floor. Excessive heat from ovens, and fryers, and high-temp steam sanitizing, as well as cooler internal temps from freezers and refrigeration systems can lead to cracking and destruction of floors.

APPEARANCE & STYLE

In today's commercial flooring marketplace, each solution is accompanied by a variety of unique color and style options. It's important to consider how a specific product will enhance or detract from the overall aesthetics before making a final decision.



EPOXY

Epoxy floors coatings are a popular choice for office spaces, break rooms, lobbies and shipping and receiving bays. It offers the strength and durability to withstand rugged impact in high-traffic spaces. Additional product can be added to epoxy floors to ensure the necessary protection against byproducts of food and beverage businesses.

URETHANE

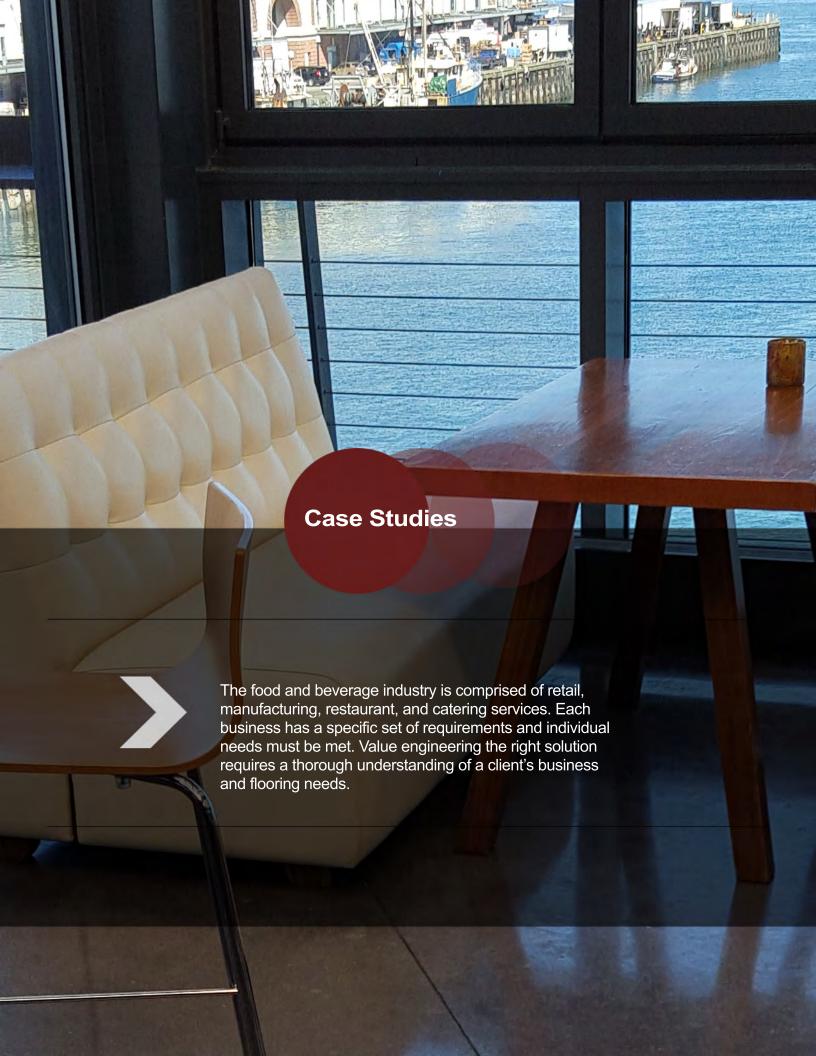
Urethane flooring is ideal for stringent conditions found in food and beverage businesses such as wet processing, high temperature cleaning, sub-zero freezers, or to prevent byproduct contamination. The thermal shock resistance, along with a seamless, nonslip surface provides increased protection from safety risks associated with the food and beverage industry.

MMA

Methyl Methacrylate (MMA) flooring is known to cure quickly and offers the benefit of a quick installation. It offers a seamless, hygienic surface, and is available in an array of colors and finishes. MMA floors are an effective way to replace flooring in food and beverage businesses with minimal downtime.

METALLIC EPOXY

When the aesthetics of an environment plays a significant role in the design and development of a business, metallic epoxy floors combines durability with a unique flair. This system provides the same strength and resilience that is synonymous with epoxy floors, and offers an individualized look that makes a statement, and enhances the overall feel of a space.



manufacturers

Food and beverage manufacturing spaces must comply with health and safety regulations set forth by the FDA, USDA, and local boards of health. Under constant stress from foot traffic and equipment, it is necessary to install durable, non-slip flooring that conforms to regulatory standards. Main production floors typically require trenching for drains that minimize buildup and accommodate frequent sanitization. Manufacturing areas that include wash bays and chemical storage are subject to runoff that can take its toll on the foundation. A commercial flooring system for a food and beverage manufacturing plant should be seamless and durable, to resist erosion from harsh chemicals, cleaning solvents, and byproducts, and include no VOC materials to avoid the growth and spread of bacteria.

Black Bear Clients





CASE STUDY

Vitasoy USA

Vitasoy USA Inc. is the soy foods pioneer - offering an array of products that promote health and wellbeing. Under the umbrella of the parent company are brands Nasoya® and Azumaya®, San Sui®, Vita® and Vitasoy® that manufacture premium tofu, Asian noodles, pasta wraps, vegan spreads, soymilks, juices and teas.



Manufacturing & Processing Plants

Project Overview

Black Bear was required to repair the existing floors in the chemical storage room that were heavily damaged by chemical byproducts. When the tanks were removed, Black Bear needed to neutralize the area before starting the renovation. A big challenge was the regular storage of Sodium Hydroxide at 85%. This corrosive compound and byproducts of chemicals stored in the area deteriorated the existing floor. Black Bear needed to repair the heavily degraded floor that was exposing signs of ½ inch to ¾ inch aggregates.

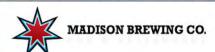
Black Bear Solution

Black Bear was able to salvage remnants of the existing floor and value engineer a cementitious urethane solution that would withstand the harsh chemicals in the storage facility. The flooring was more durable and the additional topcoat provided extra protection to prevent early decay.



Madison Brewing Company

The Madison Brewing Company and Restaurant is a fixture in Bennington, Vermont's historic downtown district. Home to more than seven unique brews on tap, including six regular beers and a seasonal brew, diners favor the lunch and dinner spot for original dishes, friendly service and its local flavor.



Project Overview

Black Bear Coatings & Concrete spent three days at the Madison Brewery in Vermont to install a replacement system floor in the brewery room. As both a beverage manufacturing facility and restaurant, the Black Bear crew needed to work in a tight space adjacent to the dining room while it was in service. To minimize disruption, Black Bear had to shield the work from public view and keep the space free of production debris and contaminants. This also kept the noise level to a minimum.

Black Bear Solution

Black Bear needed to repair the substrate prior to installing a new system. Deepfill patching was required to salvage existing slabs. The team used tarps and Hepa-filtered equipment on site to keep byproducts of the work from filtering into public spaces.



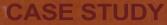
Bakeries, supermarkets and specialty food stores have the typical intense foot traffic that is commonly found in the retail sector. However, they must also comply with health and safety standards set forth by the USDA, FDA, and local boards of health. Flooring for retail stores that offer food and beverage products must be durable and withstand the day-to-day wear and tear that accompanies high-traffic areas, resist contamination of byproducts, and withstand sanitization processes. Larger stores, such as grocers and multi-faceted superstore retailers that include food and beverage sections often require off-hour installation and repair. Experienced flooring contractors skilled in phased gondola moves involving aisles and equipment during off-business and evening hours are preferred for these complex projects.

Black Bear Clients









Shaw's Supermarket

Established in 1860, New England based Shaw's is one of the oldest operated supermarket chains in the United States. Shaw's Supermarket, and sister company Star Market, employs approximately 20,000 associates in 154 locations throughout the northeast.



Retail & Specialty Stores

Project Overview

Shaw's Supermarket needed a costeffective, longer lasting solution that would replace their VCT commercial flooring that was bubbling and had become a safety hazard. Shaw's had to replace the original manufactured floor three times in six years. Black Bear agreed to evening and off-hour shifts. Relocating the aisles required gondola moves in the evenings and early morning hours while the store was closed; and returning the aisles to original positions prior to opening. The aisle relocation was completed in sections to demo and remove the VTC flooring.

Black Bear Solution

Black Bear tested the existing concrete to analyze moisture, salt levels and the PH to value engineer the appropriate commercial concrete flooring solution. Two options were recommended - a hybrid epoxy and a polished concrete floor. Polished concrete was selected as the more cost-effective of the two approaches, and would provide the slip-resistance and long-term results they were looking for.

cafeterias

Lodging and event facilities often have their own in-house dining services; while commercial properties and larger corporations offer cafeterias to employees. These spaces require industrial flooring similar to that of restaurants and retail stores. However, because these commercial kitchens occupy space in structures that aren't dedicated to food service, there is an inherent risk of wet runoff and food byproducts contaminating adjacent spaces. Waterproofing and mitigation systems are typically suggested to provide the extra protection from moisture to these dry areas. Commercial kitchens of this size tend to include multiple wash bays, prep areas, and service stations. Slip-resistant floors are necessary to improve the safety of employees moving swiftly through these spaces.

Black Bear Clients







CASE STUDY

Hynes Convention Center

Located in Boston's historic Back Bay neighborhood, the Hynes Convention Center offers a state-of-the-art facility for holding meetings and events. With over 175,000 square feet of flexible exhibit space, including a 25,000+ square foot grand ballroom, the Hynes is a popular venue for both large and small events.



Cafeterias & Industrial Kitchens

Project Overview

Portions of the existing concrete in Hynes Convention Center's bi-level commercial kitchen were showing signs of wear and water was leaking through the foundation. Moisture caused problems for other areas of the facility. Black Bear evaluated the space, and proposed solutions for both moisture control and easier maintenance. Portions of the concrete floor were prone to water seepage, and it was difficult to keep clean. With moisture the primary concern, Black Bear needed an industrial-grade solution before new concrete flooring was installed.

Black Bear Solution

Black Bear value engineered a solution with two main components – water proofing and commercial flooring. The extra layer of water proofing in the base of the concrete provided the reassurance the client required to eliminate leakage and avoid costly repairs. The new industrial flooring proposed offered the durability and ease of maintenance needed for the large commercial kitchen.

Partner with Us

The Black Bear Process

A unique start-to-finish approach customized to each client's individual needs.

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.

Preparation

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 your concrete is completely ready for resurfacing.

Coatings and Overlays

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

Sealer and Maintenance

Proper protection and maintenance of a coating or new concrete will extend the life of your product. We will work with you to apply the appropriate sealant and help you to maintain the flooring for years to come.



The Northeast's Leading Coatings and Concrete Company

Black Bear Coatings & Concrete is a partner you can trust. Our experts have over 30 years of experience designing, installing, repairing, and maintaining concrete 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 in the food and beverage industry to learn how Black Bear Coatings & Concrete can help your company.

