

A CLEAN BILL OF HEALTH FOR FLOORS

INTERVIEW WITH CASEY BALL, GLOBAL MARKET

DIRECTOR — FLOORING, SHERWIN-WILLIAMS HIGH

PERFORMANCE FLOORING



Casey Ball has nearly 20 years of experience focusing on the flooring market at Sherwin-Williams High Performance Flooring. Previously, he served as a Project Development Manager, drawing on his experience as a Corrosion Specification Specialist and a Technical Service Rep for Sherwin-Williams. He is a NACE-Certified Coating Inspector and a

Certified Concrete Coatings Inspector with the Association for Materials Protection and Performance (AMPP).

Contact: Casey.A.Ball@sherwin.com

MARKET PULSE: What has changed since COVID raised awareness about hygiene?

BALL: While food and beverage plants and pharmaceutical processing facilities have always been laser-focused on cleanliness and hygiene, many commercial spaces have implemented new cleaning protocols. Flooring in these facilities may have never been exposed to the disinfecting regimens now being used. Therefore, facilities need to ensure their floors are compatible not just with the chemicals and temperatures used but also the frequency of cleanings. Increased "dwell times" — how long a cleaner sits on the floor before being rinsed — are another important compatibility factor. A flooring system may perform fine with frequent, brief chemical contact times but not with repeated, prolonged exposures.

Have any surprise cleaning practices emerged?

The use of high-intensity UVC light for sterilization is more prevalent. That's significant because ultraviolet light degrades many materials, including epoxies, which turn amber under UV light. Flooring systems specified in areas subject to UVC disinfection therefore need to be compatible with that exposure. Two-component acrylic urethane systems offer the best resistance to UV light, with broadcast systems featuring decorative aggregates that shield much of the resin from UV exposure performing best.

How do you ensure compatibility with new cleaning procedures?

It's best to check with your flooring supplier before starting a new cleaning protocol. Some systems may not hold up to new or higher-concentrated cleaners, increased cleaning frequency and longer chemical exposure times. To verify performance against these more aggressive protocols, Sherwin-Williams has tested

an array of flooring systems for their resistance to quaternary ammonias, various levels of peroxides, bleach and combinations of these chemicals — all at longer dwell times than previously tested. Some studies also added UVC exposure to test systems against the combination of light and chemical exposure. This new data is enabling more accurate flooring specifications to meet facility cleaning needs.

Can antimicrobial coatings improve hygiene?

While not an effective technology to combat viruses like COVID, antimicrobial coatings are beneficial in improving facility hygiene. Antimicrobial additives incorporated into the coatings neutralize bacteria and germs that come into contact with coated surfaces. Because the additives can only fight microbes that contact the coatings, antimicrobial coatings are not a replacement for cleaning protocols. Facilities must still remove food soils and other contaminants from floors to enable the required direct, microbe-fighting contact.

What can facilities do to improve their cleanliness?

The first step would be to replace certain flooring surfaces with seamless resinous systems that are fully compatible with specified cleaning regimens. This includes the brick and dairy tile commonly used in food and beverage facilities, as water may collect in grout lines and harbor bacteria. It also includes carpet and other soft surfaces, which are harder to disinfect. In areas subject to washdowns, facilities should add cove or cant bases at wall-to-floor transitions and slope resinous floors properly to drain. Then, water can't collect anywhere, leaving no place for bacteria to proliferate. Finally, facilities need to monitor their floors. Signs of fading or cracking may indicate that either the flooring system or the disinfecting procedures need to be changed. *MP*



Seamless resinous flooring systems offer numerous hygienic advantages over other materials, including enabling complete washdowns, eliminating standing water and bacteria harborage points, and providing lasting resistance to chemicals, high-temperature steam and other disinfecting procedures.