

# FOOD AND BEVERAGE GUIDE

HIGH PERFORMANCE FLOORING





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HIGH PERFORMANCE FLOORING

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Sherwin-Williams supply flooring systems which are specifically designed for use within food manufacturing, food processing and food service industries.

Our tried and tested range of food-safe, non-slip resin flooring systems are antimicrobial and comply with strict hygiene and safety standards as stipulated by the HACCP system (Hazard Analysis and Critical Control Point) and tested to ISO 22196 for antimicrobial effectiveness. These requirements are specified by authorities such as the Global Food Safety Initiative (GFSI), the Food Standards Agency (FSA) and the European Food Safety Authority (EFSA) to ensure food factories maintain the highest standards of handling and production. The Sherwin-Williams flooring range being HACCP certified performs to these standards for food manufacturing, distilleries, wineries and breweries, dairies, meat processing, bakeries, confectionaries and pet food factories – we've got you covered from spec to protect.



FasTop systems are HACCP International certified as food safe.

Members of

Campden BRI

FasTop systems are Campden BRI certified as non-taint and odourless.

**ISO 22196** 

FasTop systems are antimicrobial as tested to ISO 22196.



#### **CHEMICAL AND THERMAL RESISTANT FLOORINGS**

#### **Bakeries**

FasTop™ polyurethane hygienic flooring systems are slip resistant and reduce the risk of slips, trips and falls caused by loose materials, powders and liquids such as flour, grains, sugar or water, oils and syrups on the floor. The systems can be cleaned with the aggressive processes used in this industry to maintain standards.

#### Brewing and distilling

FasTop™ flooring systems offer excellent temperature and chemical resistance, wear, non-slip features, and compatibility with steam and hot water cleaning processes used in this industry. Antimicrobial properties protect against bacteria tested to ISO 22196.

#### Meat and poultry processing

FasTop™ food safe, antimicrobial and non-slip resin flooring complies with strict hygiene and safety standards to provide very heavy duty surfaces as required in the meat industry. FasTop™ TG69 will withstand attack from contaminants such as blood and grease and can be cleaned with the aggressive methods operated in these facilities using hot water and steam.

#### Manufacture of oils and fats

FastTop™ screed systems are chemical and thermal resistant to hot oils and fats tolerating temperatures from -40°C to 120°C. The same chemical resistance is provided with Resuflor™ epoxy resin coating systems for warehouse and distribution areas and slip resistant properties can be incorporated to enhance safety on greasy floors.

#### FLOORS THAT ARE EASY TO SWEEP CLEAN

#### Confectionery

FastTop™ SL23 and SL45 smooth profile systems are popular choices for areas that require powder spillages such as flour and sugar to be swept clean in-between more intensive cleaning, because it achieves a good balance between non-slip performance and cleanability of a floor.

There are a wide range of finishes available which can include slight textures for non-slip depending on the requirements for areas and need.

#### Mineral water and soft drinks production

Processes involved in soft drinks production means that flooring needs to be hygienic, tough, durable and resistant to sugars and chemicals. In such environments where liquids are spilt on floor areas it is essential that low slip potential flooring is installed which the FastTop™ range provides. Our range of food-safe, antimicrobial, non-slip, resin flooring systems complying to HACCP standards and being monolithic means no ingress of water or fluids can seep between the substrate and the floor surface.



#### **HYGIENIC AND NON-SLIP FLOORS**

#### Pet foods and animal feed

FastTop™ systems are ideal for animal food manufacturing areas with wet and dry environments which include meat product production and processes with cereal and grain-based mash operated at high temperatures and then pelletised through specialised presses. FastTop™ TG69 can be subjected to regular wash downs including the use of steam cleaning up to 120°C in these environments.

#### Fish and seafood processing

For fish industry situations FastTop™ TG69 and FastTop™ RS69 monolithic floor structured systems ensure there's no ingress of water or fluids, and nothing gets trapped between the substrate and the floor surface. Being seamless and impervious, deposits and spillages stay on the surface and can be easily cleaned with hygiene maintained. The FastTop™ flooring range provides non-slip performance in these wet situations and can be installed in conjunction with drainage systems laid to falls to enhance washdowns which are directed to drains ensuring that liquid solutions do not pond or puddle on a floor surface.

#### Dairy facilities

FastTop™ resin floors in dairy processing and cheese making facilities can withstand heavy-duty traffic, aggressive cleaning at high temperatures, pressure from heavy storage loads, and attack from substances such as dairy fats, lactic acid, brine and whey. Our food-safe, antimicrobial, non-slip systems for the dairy industry comply with hygiene and safety standards stipulated by HACCP certification.





#### LONG LASTING HYGIENIC FLOOR SCREEDS

FastTop™ flooring systems are supplied incorporating antimicrobial performance which prevents odour generation, discolouration and product degradation that can be caused by the growth of fungi, bacteria and algae. This is achieved with the inclusion in the product formulation of an antibacterial agent tested to ISO 22196 for effectiveness. FastTop™ systems provide such a hard wearing flooring finish that when using a regular cleaning regime the surface will not harbour bacterial growth.

Many food and drink manufacturing processes involve substances and by-products which have the potential to corrode and contaminate floors and wall surfaces. These include fats and grease, hot oils, sugars and syrups, blood and natural food acids such as lactic, citric and acetic acids – all of which can eat away at inferior surfaces such as concrete, grouting in tiles or joins in vinyl floors. It's this kind of corrosion and contamination that can harbour growth of bacteria and put a facility at risk of hygiene infringements.

Our seamless resin floor systems for the food and beverage industry can withstand extreme conditions, whether it's chemical attack from acids and sugars, thermal exposure to reflective heat from ovens, physical impact, heavy machinery and equipment, and a high volume of footfall.

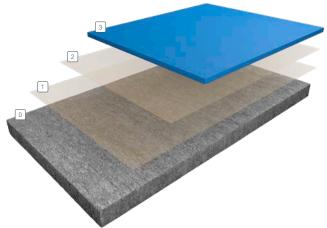
FASTOP™ SL23/SL45

#### SELF LEVELLING FLOORING SYSTEMS

FastTop self levelling flooring systems deliver a smooth surface for food and beverage production areas suitable for heavy duty use with resistance to thermal shock, abrasion and chemical attack. The flat surfaces enhance ease of cleaning and allows powders such as flour and sugar to be swept up whilst also providing slip resistant properties. FastTop SL23 and FastTop SL45 deliver thicknesses from 2–5 mm and are often used for fast installation for areas which are costly to shut down.

#### **BENEFITS**

- · HACCP International certified
- High build finish
- 100% solids content, solvent free and low odour
- · Hygienic and easily cleaned
- · High gloss finish with good colour stability
- Excellent slip resistance with the inclusion of selected aggregates\*
- · Excellent chemical resistance and resistant to hot water
- Overnight drying to receive foot traffic after 24 hours
- Antimicrobial properties, tested to ISO 22196



- 3 Screed: FasTop Multi SL23
- 2 Primer (optional): FasTop Multi Primer
- 1 Primer: FasTop Multi Primer
- Substrate: Concrete/cementious screed

#### **SERVICE TEMPERATURES**

FasTop SL23 at 3mm = -20°C up to 80°C FasTop SL45 at 5mm = -25°C up to 90°C

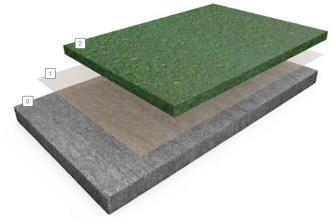
FASTOP™ TG69/RS69

#### SCREED FLOORING SYSTEMS

FasTop screed flooring systems deliver a textured surface for food and beverage production areas suitable for very heavy duty use with resistance to thermal shock including steam, abrasion and chemical attack. The profiled surfaces are cleanable with normal food factory cleaning regimes whilst providing slip resistance in wet and dry situations. FasTop TG69 and FasTop RS69 deliver thicknesses from 6–9 mm for maximum performance.

#### **BENEFITS**

- HACCP International certified
- Ease and speed of installation via rake and spike RS69 version only
- High chemical resistance
- · Resistant to hot water
- Resistant to steam at 9 mm depth
- Self sealing
- Excellent slip resistant finish
- · Hard wearing
- Antimicrobial properties, tested to ISO 22196.



- 2 Screed: FasTop Multi TG69
- 1 **Primer (optional):** FasTop Multi Primer
- Substrate: Concrete/cementious screed

#### **SERVICE TEMPERATURES**

6 mm = -25°C up to 100°C 9 mm = -40°C up to 120°C

<sup>\*</sup>Enhanced slip resistance can be created by using the FasTop SL45 SRA system.

<sup>\*</sup>Do not splash, clean, wash or treat the resin flooring with water or any other chemicals until full cure is achieved as it may affect the surface quality and performance.

# **FASTOP™ WR**

#### **COVING RESIN**

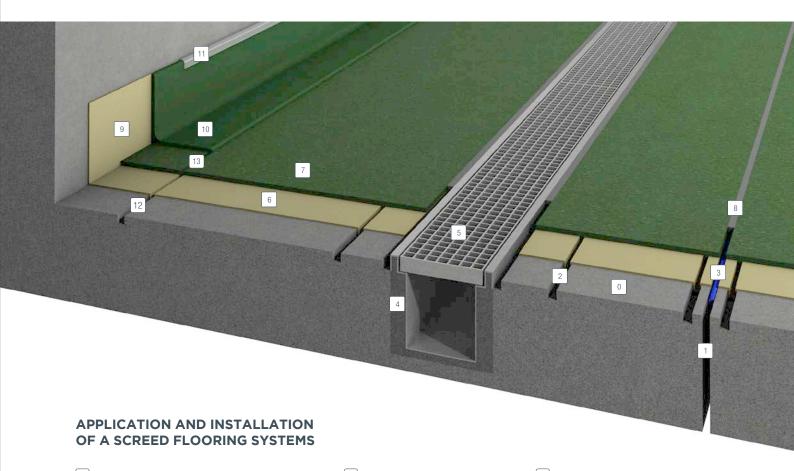
The use of coved skirtings around food factory floors is standard practice to create a tanked resin system to enhance the washing down of areas for maximum hygienic standards. This enables a smooth transition to be made from floor to wall with a permanent finish which can be cleaned and will not harbour dirt and bacterial growth. FastTop™ WR resin coving cures to a much harder finish than concrete and provides a smooth finish for a long-term solution which resists hot water and impact.

Coving would usually be formed with a radius at a thickness of around 4 mm on the vertical typically to a height of 150 mm though this could be lower or higher as required. The coving would usually be fixed to a stainless steel or plastic 'birds beak' trim at the top which is pre-installed to the wall/substrate.

In food factories, where maximum impact can occur against coving with pallet trucks and fork lift traffic a concrete kerb can be installed to withstand this. FastTop $^{\text{TM}}$  WR coving can be applied up and over this kerb to complete the resin floor finish with integrated skirtings and upstands creating a 'bunded' hygienic area.

#### **BENEFITS**

- Suitable for forming radius coves.
- · Seamless finish.
- · High chemical resistance.
- Resistant to hot water and steam.
- · Matt finish.
- · Extremely hard wearing.



#### 0 Substrate:

Concrete/cementious screed

#### 1 Expansion joint:

Pre-cut joint created when concrete is laid

#### 2 Toe-in joint:

Prevents shrinkage whilst product dries

#### 3 Cavity filler:

Backing rod/foam filler

#### 4 Bedding mortar:

FasTop Bulk onto Resuprime ST

#### 5 Drain:

Stainless steel grid

#### 6 Primer:

FasTop Multi Primer

#### 7 Screed:

FasTop Multi RS69/TG69

#### 8 Flexible jointing material:

Epo-Flex JF

#### 9 Coving Primer:

Resuprime MVT

#### 10 Coving material:

FasTop Multi WR

#### 11 Trim

Brushed steel/plastic

#### 12 Anchor joint:

Anchor in FasTop RS69/TG69

#### 13 Toe-in anchor joint:

FasTop JT40 'toe-in' into RS69/ TG69

## **FASTOP™ SYSTEMS**

#### CHEMICAL RESISTANCE LIST

Chemical	FasTop TG69	FasTop RS69	FasTop SL23	FasTop SL45
Petrol/gasoline	R	R	R	R
Aviation fuel	R	R	R*	R
Kerosene	R	R	R*	R
Diesel fuel	R	R	R	R
Toluene	R	R	R	R
Xylene	R	R	R	R
Benzene	R	R	R	R
Aromatic hydrocarbons	R	R	R	R
Crude oil	R*	R*	R*	R*
Ethanol	R	R	R*	R
Butanol	R	R	R*	R
Propanol	R	R	R*	R
Isopropanol	R	R	R*	R
Methanol	R	R	R*	R
Ethyl acetate	R	R	R	R
MIBK	R	R	R	R
Methyl ethyl ketone	R	R	R	R
Acetone	R	R	R	R
Formaldehyde 40%	R*	R*	R*	R*
Acetic acid 10%	R*	R*	R*	R*
Sodium bisulfate	R	R	R*	R*
Sodium dihydrogenphosphate	R	R	R*	R*
Sulfuric acid 20%	R	R	R*	R*
Potassium hydroxide 20%	R	R	R	R
Sodium hydroxide 20%	R	R	R	R
Potassium chloride	R	R*	R	R*
Sodium chloride	R	R*	R	R*
Organic durfactants	R	R	R	R
Dethyl ether	R	R*	R	R

Resistant for up to three days exposure.

R\* Resistant for up to three days exposure but discolouration will occur.

Unless othewise stated all tests were carried out at 20 degrees celsius.

 $All\ products\ have\ been\ tested\ according\ to\ BS\ EN\ 13529:2003\ -\ Determination\ of\ Resistance\ to\ Severe\ Chemical\ Attack.$ 

#### Please note

- 1. Higher temperatures will reduce the chemical resistance as shown in the table above.
- 2. Some chemicals may concentrate due to evaporation and become more aggressive.
- 3. Mixtures of chemicals can be more aggressive than the individual components alone.

Sherwin-Williams always recommend good housekeeping to maintain the integrity and performance of our High Performance Flooring range. Ensure chemical spillages are cleaned up within a 24 hour period to minimise any damage/discolouration.

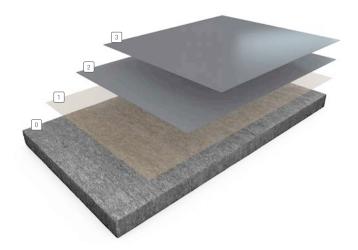
# **RESUFLOR™ HB**

#### FLOORING SYSTEMS

Resuflor HB epoxy resin floor coating systems are a cost-effective installation choice for a wide range of food and drink environments where coatings with superb adhesion to substrates are required. Resuflor HB can provide a smooth finish or a range of surface profiles using aggregates to achieve the right balance between nonslip texture and ease of cleaning. Applied by squeegee, roller and brush Resuflor HB coatings have low levels of solvent or 'Volatile Organic Compound' (VOC, 'Low-VOC') which means virtually no odour during installation (an important consideration for food and drink installations and refurbishments). Resuflor HB is resistant to staining and aggressive ingredients such as sugar and edible oils and it's non-dusting for a hygienic finish.

#### **BENEFITS**

- High build finish
- · Solvent free
- · Hygienic and easily cleaned
- · Good colour stability
- Excellent slip resistance with the inclusion of selected aggregates\*
- · High gloss finish.



- 3 **Top coat:** Resuflor HB
- 2 Intermediate coat: Resuflor HB
- 1 **Primer:**Resuseal WB or Resuprime ST
- Substrate: Concrete/cementious screed

# **RESUDECK™ ST**

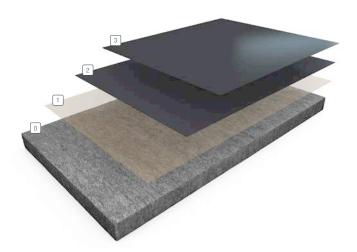
#### FLOORING SYSTEMS

Resudeck ST range of protective coatings are tough and flexible using the latest in polyurethane resin technology. This flexibility makes the systems resilient against the dynamic movement of traffic and pressure from heavy loads which can operate in food and drinks factories within warehousing and distribution areas. These solutions are also used in underground car parks, intermediate decks and ramps for vehicle areas and loading bays that need anti-skid and non-slip performance.

Resudeck deck coating solutions come in a number of bright and colourful RAL options as required for car park areas that are not only attractive, but also waterproof to prevent corrosion.

#### **BENEFITS**

- Solvent free, 100% solids content
- Resistant to hot water
- · Low odour
- Overnight drying to receive foot traffic after 24 hours
- Excellent slip resistance with the inclusion of selected aggregates
- Excellent chemical resistance.



- 3 Top coat: Resudeck ST
- 2 Intermediate coat: Resudeck ST with optional aggrgate for anti-skid
- Primer: Resuseal WB/Resuprime MVT
- Substrate: Concrete/cementious screed

<sup>\*</sup>Enhanced slip resistance can be created by using the Resuflor HBSR system.

<sup>\*\*</sup>Do not splash, clean, wash or treat the resin flooring with water or any other chemicals until full cure is achieved as it may affect the surface quality and performance.

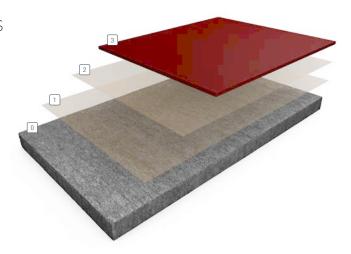
# **RESUFLOR™ SL X**

#### SELE LEVELLING ELOORING SYSTEMS

Resuflor SL X self-levelling systems achieve a smooth gloss finish which is not possible with a roller or brush applied product. Typically installed at a 3 mm thickness, using epoxy resin chemistry to achieve superb adhesion and hard wearing properties. These systems are installed in food factory areas where a hygienic finish is required which enhances operations in warehouses and storage areas, loading bays, laboratories and quality control areas. Resuflor SL X systems are installed as a single bright colour or as a decorative multi-coloured finish utilising multi-coloured quartz or flakes.

#### **BENEFITS**

- Hard wearing durable floor system for industrial use
- · Hygienic and easily cleaned
- · Good colour stability
- Excellent slip resistance with the inclusion of selected aggregates\*
- · Smooth finish
- Enhanced life expectancy
- · Excellent abrasion and impact resistance
- Good general chemical resistance.



- 3 Screed: Resuflor SL X
- 2 **Primer:**Resuprime MVT
- Primer: Resuprime MVT
- Substrate: Concrete/cementious screed

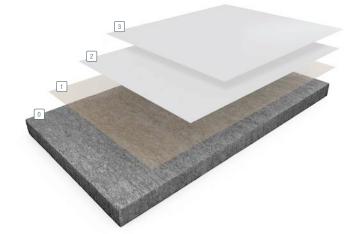
**AQUARMOR™ UV WALL** 

WALL SYSTEMS

AquArmor UV Wall is a two pack water based epoxy/polyurethane wall coating system with excellant adhesion to concrete, wood and other surfaces providing hard, dust-free finishes for food factories and kitchens etc. AquArmor UV Wall provides a very hard hygienic finish which is resistant to light chemical attack and is UV stable so a clean white finish can be installed which stays white and doesn't discolour making it ideal for modern food facilities.

#### **BENEFITS**

- UV stable finish
- Low odour
- · Hard wearing
- Superb adhesion
- Hygienic
- Suitable for concrete, plaster, brick, blockwork, ceramic tiles
- Excellent for previously painted surfaces.



- 3 **Top coat:** Resupen WB Wall
- 2 Intermediate coat: Resuseal Wall Gloss
- Primer: Resuflor WB Clear
- Substrate: Concrete, plaster, brick, blockwork, ceramic tiles

<sup>\*</sup>Enhanced slip resistance can be created by using the Resuflor HBSR system.

<sup>\*\*</sup>Do not splash, clean, wash or treat the resin flooring with water or any other chemicals until full cure is achieved as it may affect the surface quality and performance.



## **KEY APPLICATIONS**

#### **PRODUCTION**

- Dry processing
- Wet processing
- Abbatoirs
- Baking areas
- Breweries
- Cultivation areas
- Distilleries
- Refineries

#### **LOGISTICS**

- Freezers
- Blast freezers
- Chillers
- Warehouse
- Chemical storage
- Containment areas
- Loading docks

#### **STAFF WELFARE**

- Restrooms
- Canteens
- Kitchens
- Locker rooms
- Offices
- Meeting rooms
- Corridors and hallways
- Laboratories

#### **PUBLIC AREAS**

- Food retail areas
- Food markets/halls
- Restuarants
- Stadiums
- Concourses
- Fast food outlets

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#### FROM SPEC TO PROTECT

Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe. Our broad portfolio of high-performance coatings and systems that excel at combating corrosion helps customers achieve smarter, time-tested asset protection. We serve a wide array of markets across our rapidly growing international distribution footprint, including oil and gas, water and wastewater, bridge and highway, steel fabrication, flooring, food and beverage, rail and power marine and passive fire protection.



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