

## Technical Data Sheet

Effective: August, 2015

### Description

**Surefloor** is a single component, 100% solids, solvent free floor coating system which contains no VOC's (volatile organic content). It can be applied to give a highly effective anti-skid finish as well as very smooth high gloss finishes where required. **Surefloor** in either form delivers an extremely durable abrasion, impact and chemical resistant surface. **Surefloor** is UV stable making it suitable for exterior applications. The properties of **Surefloor** create optimal conditions to resist the growth and accumulation of bacteria on the easy to clean surface of the coating. Also, the ability to apply the product at low temperatures with little effect on curing time is setting new standards for this application.

At junctions **Surefloor** used in conjunction with **Smarttech** Fabric creates a monolithic surface, leaving no crevices for the collection of contamination or bacteria.

### Uses

**Surefloor** is successfully used on the floors of:

- Cold Rooms & Cold Storage warehouses
- In food handling and food processing rooms, e.g. Abattoirs, Bakeries, Supermarket Prep. Areas, Restaurants and Commercial Kitchens
- Clean rooms in electronic manufacturing & medical facilities.
- Showrooms
- Workshops and Garages.
- Walkways and Driveways

### Substrates

- Concrete & Masonry
- Ceramic & Glass
- Wood
- Glass, Ceramic & Ceramic tiles
- GRP Panels (Glass Reinforced Polyester)
- Metal (including Stainless Steel)

### Advantages

**Surefloor** offers the following advantages:

- 1-component, no mixing
- ready to use
- solvent free
- Containers can be resealed for future use
- can be applied to damp surfaces
- seamless, monolithic surface
- no joints
- no locations for bacteria or germs to lodge
- Odorless – allowing application in close proximity to food products
- fast curing from below freezing
- After curing it is resistant to acids and alkalis, most petroleum solvents, animal fats, blood and aggressive cleaning chemicals with 160°F plus hot water pressure rinsing.
- Contains no VOC's
- Contains no isocyanates, reducing health concerns
- Adheres to most building surfaces without priming

### Colors & Finishes

White, Grey, OSHA approved Yellow, Red, Blue and Green Safety colors and Clear as well as natural colored quartz sand finishes.

Solid colors as well as Colored quartz finish are available in non-skid or high gloss depending on desired surface use. Additional colors available upon request.

**Note:** *Slight variations in color can occur between batches.*

### Application

#### **Surface Preparation**

Surfaces must be sound, clean, free of dust and loosely adhering particles, oil, fats, mildew and algae.

Concrete and masonry surfaces should ideally not have a moisture content above 8%. Surfaces should be free of laitance and efflorescence as well as any other deposits that may interfere with the bond to the concrete or masonry.

Before applying **Surefloor**, surfaces must be wiped down with a cleaning fluid such as denatured alcohol or other appropriate cleaning method ensuring that no residue remains. The product must be gently stirred before use, taking care not to entrain air as this will create air bubbles in the coating which may form small craters on curing. Should this occur allow the product to stand with the lid in place for between 5 and 10 minutes to allow air to escape.

### Priming

Metal, Concrete and Masonry, Glass or Ceramic require no priming.

On wood surfaces prime surface with **Smarttech** Primer. This will prevent any tannin bleed from the wood and will also pre-seal the porous nature of the surface.

For other substrates not mentioned above contact the customer service line.

### Application Instructions

At all junctions between panels, dissimilar substrates, pipe or conduit penetrations and at plane junctions, apply **Smarttech** Fabric to reinforce these locations. Apply a moderate coat of **Surefloor** by brush or roller symmetrically over the joints covering approximately 2" each side of the junctions (e.g. panel joints, floor to wall sealing). Lay in the 4" wide fabric symmetrically over the joint and imbed using a brush or roller. Make sure that no bubbles or creases appear in the fabric. At the same time apply a moderate coat of **Surefloor** over the entire area to be treated. Allow to become touch dry (about 2 hours at 38°F and slightly quicker at higher temperatures).

### Smooth Solid Colors

Once touch dry the first general coat is applied over the entire floor area at approximately 160 ft<sup>2</sup> per gallon and allow to dry. Apply a second moderate coat over the entire area again at approximately 160ft<sup>2</sup>/gal. This will complete the monolithic lining of the floor surface.

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#### **Non Skid Finish**

Apply first general coat at approx. 160ft<sup>2</sup>/gal. and immediately broadcast with colored quartz or kiln dried silica sand into wet surface.(for application techniques contact our technical department). Allow to cure at least 2 hours and vacuum or sweep away excess sand. For colored quartz finishes apply a moderate coat of Surefloor Clear and allow to cure. For solid color nonskid application apply a second coat of the base color used, over the silica sanded surface and allow to cure.

#### **Smooth High Gloss Colored Quartz**

Follow nonskid procedure from previous paragraph and apply a subsequent generous coat of Surefloor Clear to achieve glossy finish. For a mirror like finish another coat may be applied if desired. A clear mirror like finish on solid colors can also be achieved by adding one coat of Surefloor Clear.

Floors will be walkable in 12 hours.

#### **Application Conditions:**

Ambient Temperature: 23°F to 110 °F

Surface Temperature: 23°F to 95 °F

#### **Note:**

**Do not apply over frozen matter!**

#### **Coverage:**

The coverage of **Surefloor** will vary depending upon thickness and finish chosen for the application as well as porosity of substrate. Some guidelines are:

##### *Smooth Solid Color*

Smooth substrates 80ft<sup>2</sup>/gal.

This includes total coverage for both coats.

##### *Non Skid Solid Color*

Smooth substrates 80 ft<sup>2</sup>/gal.

This includes total coverage for both coats.

##### *Non Skid Quartz Finish*

Smooth substrates.

Surefloor (color) 170 ft<sup>2</sup>/gal

Surefloor (clear) 150 ft<sup>2</sup>/gal

##### *Smooth Quartz Finish*

Surefloor (color) 170ft<sup>2</sup>/gal per coat

Surefloor (clear) 160ft<sup>2</sup>/gal per coat

Two coats of Clear required

#### **Curing Times:**

Touch dry after 2 hours at 38°F and 50% RH

Trafficable after 12 hours at 38°F and 50% RH

Fully cured after 14 days.

#### **Resistance to Chemicals**

Chemical resistance tests show that cured **Surefloor** is resistant to many solvents, acids and alkalis like

- Diesel
- Acetone
- Butanol
- Methyl Ethyl Ketone (MEK)
- White spirits
- Sulfuric Acid 5%
- Sodium hydroxide 5%
- Hydrochloric Acid
- Animal Fats and Blood
- Commercial cleaning chemicals

It is advisable to allow 48 hours cure before subjecting surfaces to aggressive cleaning chemicals.

#### **Cleaning**

Uncured **Surefloor** can be removed with White Spirits. Cured **Surefloor** can only be removed mechanically.

#### **Storage**

##### **Unopened containers:**

12 months from manufacture date.

#### **Opened unused Material:**

When reopening for further use, remove any skin that might have developed on the surface and mix gently to create a homogeneous liquid without entraining air bubbles

#### **Caution:**

Carefully read the Safety Data Sheet for **Surefloor** before use. Avoid contact with eyes and skin as this may cause irritation. Should contact with eyes occur rinse for 15 minutes under running water. If swallowed do not induce vomiting and seek the advice of a physician.

#### **Important Notice:**

Please always consult our website at **www.smarttechcoatings.com** to check that you are reading the most up to date data on this product.

#### **Note:**

The information contained in this technical data sheet is based upon our experience and is therefore not binding. All data are laboratory values, which may differ in practice. Therefore, these represent no assurance of characteristics. This data is given in order to allow compliance with respective local specificities. The variety of possibilities and the specific project details in combination with the products cannot be handled within the framework of this data sheet. If you have questions, please contact us. It is the user's responsibility to be informed about the characteristics of the products as well as the technical information and proper processing. Please take careful note of all manufacturers' specifications, e.g. information on surface pretreatment. A specific result cannot be guaranteed due to differing prevailing individual conditions, which can lead to differing result. Preliminary tests are advised to test for the desired result.

#### **Technical Data**

Type	Solvent Free 1 component Synthetic Polymer
Shelf life and Storage conditions	unopened 12 Months, Storage Temp. +40 - 902°F
Application Temperature	23 - 110°F (Ambient) 23 - 95°F (Surface) Do not apply over frozen matter
Total Thickness (Smooth Surface)	20 mils
Total weight	12.5lb/gal
Trafficable	after 12 hours at 38°F and 50% rel. humidity
Moisture Vapor Transmission (ASTM E 96)	4.2 Perms @ 20mils
Drying Time (touch dry)	2 hours at 32°F and 50% rel. humidity
Full Cure	after 14 days
Anti Skid ASTM E-303 Pendulum Test (Using Smarttech Standard Quartzsand)	Dry PTV 72 and Wet PTV 63 (Considered "Low Risk" at values above PTV 36)
Coverage	Check specific application in "Coverage" text above. (Caution: Surface Unevenness & absorbency will consume more product to achieve desired thickness.)
Container Size / Article	Packaging
<b>Surefloor Colors</b>	1 gallon pail (Special Colors upon request)
<b>Surefloor Clear</b>	1 gallon pail
<b>Smarttech Fabric</b>	Roll 4" x 300ft
<b>Smarttech Colored Quartz Sand</b>	50 lb Bags