

Description

The Sanitile 933 TG Trowel-Down System is a heavy duty, chemical resistant antimicrobial treated polyurethane resin floor screed. Attractive fine textured colored floor finish with a speckled effect on the surface.

Sanitile 933 TG is unaffected by moisture vapor transmission, provided it is applied per the substrate requirements below and the surface preparation performed meets ICRI CSP-5 or CSP-6.

Uses

Ideal for wet processing zones such as food manufacturing, food preparation areas, and chemical processing plants.

Benefits

- Contains Polygiene, an antimicrobial additive based on silver ion technology
- Unaffected by moisture vapor transmission
- Very high chemical resistance
- Easy to clean and sterilize anti-slip surface, minimal joints
- Heat resistant to 120°C
- Steam cleanable
- Non tainting, non dusting
- High abrasion resistance
- Withstands high mechanical stress
- Good alternative to expensive acid resistant tiles
- Low odor during application and positive slip resistance
- Can be applied to new concrete after 7 days

Substrate Requirements

Concrete or screed substrate should be free from laitance, dust and other contamination. The substrate must be dry and free from rising water or hydrostatic pressure.

Components

Topping: Sanitile 933 TG Part A / Part B

Filler: Reactive Filler #55

Pigment Pack: Colored pigment pack

Sanitile 933 TG is a self-sealing finish.

Limitations

Sanitile 933 TG is not color fast and may change color over time (exhibits a yellowing effect). Color change depends on the UV light and heat levels present and hence the rate of change cannot be predicted. This is more noticeable in light colors and blues but does not compromise the product's flexibility or chemical resistance characteristics. We have endeavoured to adopt colors within our standard range which minimise this change. Sanitile 933 TG is not resistant to ground water hydrostatic pressure.

Microbial / Fungal Resistance

The Polygiene antimicrobial additive incorporated into Sanitile TG provides control of most bacteria and fungi which come into contact with the floor.

Technical Information

The figures that follow are typical properties achieved in laboratory tests at 20°C and at 50% Relative Humidity.

Compressive Strength	8,000 psi (ASTM C 579)
Tensile Strength	1,450 psi (ASTM C 307)
Coefficient of thermal expansion	1.1 x 10 ⁻⁵ in/in/°F (ASTM C 531)
Impact resistance	No visible damage or deterioration at minimum 160 in-lb
Flexural strength	2,900 psi (ASTM C 580)
Modulus of elasticity	1.7 x 10 ⁵ (ASTM C 469)
Water absorption	< 0.1%
Abrasion Resistance	50 mg loss (ASTM D 4060) CS-17 Wheel, 1,000 cycles
Adhesion	400 psi (ASTM D 4541) 100% concrete failure
Coefficient of friction	Passes ADA recommendations (ASTM D 2047)
Chemical resistance	Excellent resistance to sugars and most acids (organic and inorganic)

Carboline Company

Flowfresh 933 TG 1/4" Trowel Floor

Sanitile 933 TG
Trowel Applied @ 1/4"



Speed of Cure	50°F	70°F	85°F
Light traffic	36 hrs	24 hrs	12 hrs
Full traffic	72 hrs	48 hrs	24 hrs
Full chemical cure	10 days	7 days	5 days

Aftercare - Cleaning and Maintenance

Clean regularly using a single or double headed rotary scrubber drier in conjunction with a mildly alkaline detergent.

Application Instructions

Preparation/Substrate

Surfaces to be coated should be sound and provide adequate strength for the proposed end use with a minimum compressive strength of 3625 psi. Substrate should be surface dry and free from excessive rising moisture. Blasting or scarifying removes laitance. Irregularities, damage and cracks can be filled with epoxy mortar or with Sanitile 933 TG. Anchor grooves, at least 1/4" wide and 1/4" deep, must be cut at 6" perimeter along all walls, edges, pillars, doors, drainage channels, grid drains and penetrative joints. All moving joints must pass through the coating and must be sealed tight. Anchor grooves must be cut on both sides of such joints. Welded joints and cracks in the concrete may be coated, but if movement occurs the coating will also crack. All residues must be removed to provide a dry, dust free open textured surface. The surface profile and levels should be appropriate for the system to be applied. Contact Carboline Tech Service for advice if there are impurities, such as oils etc., in the concrete.

Outline Specification

- Apply Sanitile 900 at approx. 175-225 sq ft/gal - for very porous surfaces only.
- Apply Sanitile 933 TG at 24 sq ft/unit (1/4") or 17 sq ft/unit (3/8").

Primer

Flowfresh 933 TG does not normally require a primer. In the case of a highly porous substrate, prime the substrate using Flowprime 900 as described below. Pour all Hardener B into the Base A container. Mix using a slow speed drill and helical spinner until a homogenous mixture is obtained (high speed mixing and/or incorrect mixing heads will cause excessive air entrapment). Immediately after mixing, pour out all of the resulting mixture onto the floor and apply using a double-lipped rubber squeegee and roller. Scatter dry sand or quartz (approx. 16-30s mesh) into the primer, whilst wet. Allow the primer to harden until the surface can be walked on, approx. 12 hours at 70°F. At lower temperatures the hardening time is longer. It is important there are no dry patches.

Mixing

Check that the batch numbers of the colored components are the same for the entire surface. For larger projects or continuation of works, a batch matching service should have been requested at point of order. Remember, never split batches/components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in color, etc.

Sanitile 933 TG (4 pack product with pigment pack)

Pour Base A into a suitably sized mixing vessel and add the pigment pack and mix using a slow speed drill and helical spinner for 20 seconds. Add Hardener B. Mix for 30 seconds and then add Reactive Filler #55 while mixing. Ensure that all fillers and resins are scraped into the mix from the sides of the mixing vessel otherwise bubbles/blisters can develop in the applied floor. Continue mixing until a homogenous mixture is obtained (1-2 minutes).

Application

Pour the material into a screed box (laying box) that is set to a depth which is 1/16" greater than the required thickness. Pull the box slowly (across the width of the area to be applied) allowing the material to flow from the bottom of the box and achieve consistent coverage. The surface can then be compacted and finished with a trowel.

Alternatively, the mixed product can be poured out directly to the floor, spread to the desired thickness and finished with a trowel. Further finishing can be done by lightly rolling the surface with a mohair roller to even out the surface and reduce trowel marks. Excessive rolling reduces texture and can lead to pin holes in the resin rich surface. Finishing must be completed as quickly as possible and within 5 minutes after the material has been applied. The roller head must be replaced regularly (approx. every 500 sq ft) to prevent resin curing on the roller. Maximum application width is determined by material and ambient temperature conditions, which affect the working life of the product and determines the speed of installation/man power. As a guide (for substrate and material temperatures up to 70°F) a competent team of 4-5 men could lay a maximum bay width of 30 feet. At higher temperatures the bay width should be reduced by up to a half.

Note that:

Flowcrete products are often multiple-component systems. Poor mixing, or incorrect mixing procedures, can result in irregular and incomplete hardening, which in turn can result in an inferior final result.

The temperature should be at least 60°F to achieve the best results during application. The temperature of the substrate should be at least 50°F, although a temperature of 60-80°F is recommended.

The temperature of the substrate should exceed the "dew point" by more than 5°F during application and hardening.

The product should be stored in such a way that the temperature is the same as the room temperature where the product is to be applied, i.e. between 60-80°F. This improves the mixing, flow, penetration and hardening of the product. Complete hardening takes 5-7 days. Carboline coatings should not be applied in thicker coats than specified because the cure (hardening) can be impaired. There are often several types of products at a workplace. Sort the products separately to avoid mistakes. It is important that the material is kept warm, to maintain its fluidity. It is also necessary to warm up the filler component; otherwise it will act as a heat sink and cool down the mixture.

Bear in mind that the surface will NOT be sufficiently hardened the same day as the flooring application to apply coves. Wait a day before applying coves to avoid marks in the floor.

Cleaning of Tools

Cleaned immediately after use with solvent or thinners.



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