

Flowseal HTS

Product description

Flowseal HTS is a coloured, 3-component, aliphatic polyurethane coating with extreme abrasion and UV resistance.

Features and Key Benefits

- One of the most scratch-resistant coatings available on the market
- High UV resistance and colour stability
- Very low consumption rates
- Compatible with most of resin flooring systems

Product Information

Applications

Designed for all areas that require very high durability and scratch-resistance, such as heavily trafficked factory zones – main communication alleys, storage and warehousing areas etc. Due to slight anti-slip properties combined with easy cleaning it can be also applied in zones where liquid spills are possible.

Flowseal HTS can be used to overcoat most of the smooth resin systems to increase their durability and UV-resistance.

Environment and Health

Follow the appropriate Occupational Health and Safety Guidelines applicable to the location where the application is undertaken. For more information, please refer to the safety datasheets for the individual components.

Technical Information

Appearance	A: Pigmented liquid B: Transparent liquid C: Fine, white powder
Mixing ratio (A/B/C)	1 / 3.5 / 2 by weight
Solid content	~ 94 %
Pot life at 20°C	~30 min
Density at +23°C (EN ISO 2811)	~1.42 kg/dm ³ (mixed A/B) ~1.17 kg/dm ³ (A) ~1.16 kg/dm ³ (B) ~3.77 kg/dm ³ (C)
Curing time at +20 °C:	Touch dry: after 6 hours Light foot traffic: after 16 hours Full load: after 72 hours Full cure: after 7 days
Overcoat time at +20°C:	See "Overcoat" section below

Colour

Product is available in the following standard colours:

Silk Grey 217, Goosewing Grey 222, Light Grey 232, Window Grey 2012, Mid Grey 280, Dark Grey 281, Sand Beige 326, Pastel Blue 452, Tile Red 637, Forest Green 754, Pastel Green 740.

Non-standard colors available upon request.

Packaging

The product is delivered A+B+C in the following packs:

Unit	Flowseal HTS A	Flowseal HTS B	Flowseal HTS C
6.5 kg (4.58 liters)	1 kg	3.5 kg	2 kg

Storage

Store in dry area, in unopened, original containers in temperatures +5 °C to +30 °C. Protected from freezing, out of direct sunlight, moisture or contaminant ingress.

Shelf-life

Parts A & C - 12 months, Part B – 6 months from manufacture day (on the package) when stored in the original, unopened pack.

Usage Guidelines

Application conditions

Ambient temperature range:	+15°C - +25°C
Substrate temperature range:	+10°C - +25°C
Ambient relative humidity:	< 75 %
Substrate relative humidity	<5% (TRAMEX scale or 85% RH BS 8203)

- Flowseal HTS is a polyurethane coating with moisture-affected cure mechanism. Elevated ambient humidity will significantly increase cure speed and reduce the ability to apply even coating and achieve satisfactory finish.
- To ensure best application behaviour of material it is recommended to condition the containers for at least 24 hours in +15 °C - +25 °C prior to application.
- The recommended substrate temperature is 15 - 25°C, but not less than 10°C.
- **During application and initial curing of product, substrate temperature needs to be at least 3°C higher than dew point temperature.**
- Temperatures should not fall below 5°C in the 24hrs after application.
- High humidity in the early stages of cure can result in white, matt surfaces (blooming)

Surface Preparation

Substrate needs to be dry, clean, free of laitance and other contaminants that could reduce bond strength of applied coatings. Surface should be prepared by mechanical means – e.g. by shotblasting, grinding, milling etc. All cracks and floor damage has to be repaired before installation of flooring.

Any underfloor heating should be turned off well in advance of the application and allowed to cool.

When Flowseal HTS is to be applied over a smooth epoxy/PU basecoat, it is required that the basecoat be thoroughly sanded/screened (complete removal of gloss).

Note: Due to low relative application thickness (~100 microns), selected colour of Flowseal HTS should closely match the substrate shade to ensure good visual result. That is especially valid for bright and vivid colours.

Overcoat:

Flowseal HTS must be aggressively sanded with a diamond-impregnated buffer pads, resin bond buffer plugs (50-150 grit) or other suitable method prior to application of a second topcoat. If a second coat is to be applied the first coat needs to cure for at least 10 hours (20°C, RH 50%) before the preparation starts.

Detailed requirements for substrate and other application conditions can be found in Substrate Requirements for Flowcrete Floor Systems.

Mixing

Stir Base A before adding Hardener B. Carefully empty Hardener B into Base A. Mix using a low-speed mixer and helical spinner for 2 minutes and ensure that the material is thoroughly mixed, taking care not to entrain air. Add the filler C and mix for an additional minute.

NOTE: A few minutes after mixing a full unit a foam will appear on top of the mixed product, when this happens remix the product for a minute and continue the application.

Remember never to split batches/components. Incorrect mixing ratios or poor mixing can result in irregular hardening or variations in colour, etc.

Application

Before pouring the material into the paint tray, remix the pail to resuspend that the filler is evenly suspended in the mix. Use the roller to keep filler suspended in paint tray before each application (dip the roller, move it around in the tray and remove excess).

Use a paint tray and good quality short-haired roller (avoid using rollers that shed a lot of fibre). Apply by dip and roll procedure followed immediately with cross-rolling. Care should be taken to minimize the entrapment of air caused by over-rolling.

Do not exceed recommended coating thickness/coverage rate ($\sim 0,14 \text{ kg/m}^2 = \sim 100 \text{ microns}$). Cross rolling is always recommended, do this immediately. If resin begins to “fish-eye” or separate, immediately re-roll. Isolated areas can be re-rolled after ~ 10 minutes. Be sure to check areas already finished to confirm that fisheyes did not form.

DO NOT rapidly roll the Flowseal HTS or micro-bubbles may form from air entrainment.

Exchange the roller every 45 minutes - when residue begins to build up on the ends of the roller or roller frame, accumulated older resin may cause reaction with fresh material, resulting in shortened working time and/or microbubbles.

Coverage

$\sim 0,14 \text{ kg/m}^2$ maximum.

Cleaning

Uncured material can be cleaned using solvent (acetone, xylene), cured remains can be removed only by mechanical means.



Technical Service

Contact Tremco CPG “Country”

Guarantee

Tremco CPG “Country” warrants all goods to be free from defects and will replace materials proven to be defective but makes no warranty as to appearance of colour. The information and recommendations herein are believed by Tremco CPG “Country” to be accurate and reliable.