SpECtop LFE2 & LFE4

SOLVENT-FREE FLOW APPLIED EPOXY BASED FLOOR TOPPINGS


Traffic & mechanical wear


Chemical Resistance


Hygiene


Impact Resistance


Waterproof


VOC Free


Cleaning & Maintenance


Colour Shades

DESCRIPTION

SpECtop LFE2 & LFE4 are pre-packed, three component self smoothing toppings, which consist of a graded filler in epoxy binder.

TYPICAL USE

SpECtop LFE2 & SpECtop LFE4 may be used in industrial and commercial situations to provide long lasting finishes in particular where an impervious, abrasion resistant and easy to clean floor is required. **SpECtop LFE4** is designed for use in abrasion or impact loading situations.

SpECtop LFE2 & SpECtop LFE4 are designed to be used in a variety of situations, such as:

- Engineering, production and maintenance areas
- Warehousing
- Food production, for example dairies, bakeries, fruit/vegetable processing and canning plants
- Beverage production and bottling facilities
- Medical and Pharmaceutical factories, for example in production areas and laboratories
- Kitchens, laundries and canteens
- Showrooms and demonstration areas

ADVANTAGES

- Impact and abrasion resistant
- Resistant to a range of acids, alkalis and industrial chemicals
- Hygienic and easy to clean finish
- Will not support the growth of bacteria, fungi and micro-organism
- Seamless
- Minimum downtime due to fast application
- Completely non-toxic once fully cured
- Available in a range of colours to provide an attractive, light reflective floor

TECHNICAL DATA

Typical results @ 20°C	
Compressive strength (BS 6319)	40±5 N/mm² @ 7 days
Flexural strength (BS 6319)	25±5 N/mm² @ 7 days
Exposure times	
Foot traffic	48 hrs
Vehicular Traffic	7 days
Chemicals	7 days
Pot Life @ 25°C	40 - 60 minutes
Typical system thickness	
SpECtop LFE2	2mm
SpECtop LFE4	4mm

ANTIBACTERIAL ACTIVITY TEST, ISO 22196 : 2011

Escherichia , Lethality > 99.98 %
Staphylococcus Aureus, Lethality > 99.98 %
Enterobacteriacea, Lethality > 99.98 %
Salmonella, Lethality > 99.98 %
Campylobacter spp, Lethality > 99.98 %
Listeria monocystogenes, Lethality > 99.98 %
Pseudomonas aeruginosa, Lethality > 99.98 %

CHEMICAL RESISTANCE CHART

15% Lactic Acid	Very good
10% Citric Acid	Very good
50% Phosphoric Acid	Very good
Concentrated bleach	Very good
Saturated Urea Solution	Very good
White spirit	Very good
Oils	Very good
Petrol	Very good
Diesel	Very good
Greases	Very good
10% Ammonia	Very good
50% Hydrochloric acid	Good
50% Sulphuric acid	Good
10% Nitric acid	Good
Saturated sugar solution	Good
Xylene	Good
Caustic Soda	Good

Notes:

- **SpECtop LFE2 & LFE4** should not be subjected to chemicals until fully cured (min 7 days @ 30°C)

- If chemical spillage occurs then immediately remove the spillage and wash down with water to prevent any attack or discolouration

APPLICATION

Preparation

It is essential that adequate preparation is carried out prior to the application of **SpECtop LFE2 & LFE4**.

Grit blasting is recommended to ensure the removal of all laitance, grease and oil. The resultant surface should be dry and dust free. Cracked and damaged areas must be made good with appropriate repair materials.

Priming

The prepared surface should be primed with **SpECtop Primer F1** or **SpECtop Primer FX**.

The contents of the curing agent should be emptied into the base component and stirred with a spatula until the product appears uniform.

The mixed primer should then be applied to the prepared substrate by a roller at 0.1 - 0.2 litre/m².

If the primer appears to be absorbed into the surface easily, it will be necessary to apply a second-coat once the initial coat is tack-free. Alternatively, you may apply one coat of SpECtop Scratch Coat at 0.3 - 0.5 litre/m². Please refer to SpECtop Scratch Coat TDS.

It is essential that the primer is tack-free prior to the application of the topping. The application of **SpECtop LFE2** or **LFE4** should commence between 8-24 hours after priming. If this period is exceeded, then the surface of the primer should be lightly abraded before re-application of a fresh priming coat.

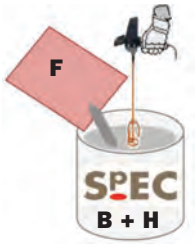
Mixing

SpECtop LFE2 and LFE4 are supplied in a three-component kit consisting of a base component, a curing agent and a bag of graded filler.

Both of the liquid components should be briefly stirred to ensure that any settlement products are fully suspended.

Empty the entire contents of the curing agent and the base component into a 25 litre metal container with straight sides, sturdy enough to withstand the mixing action. To ensure that all material is extracted, the insides of the tins should be scraped.

The curing agent and base component should then be mixed with a low speed, heavy-duty electric drill and a spiral mixing paddle for at least two minutes and until the material appears uniform.

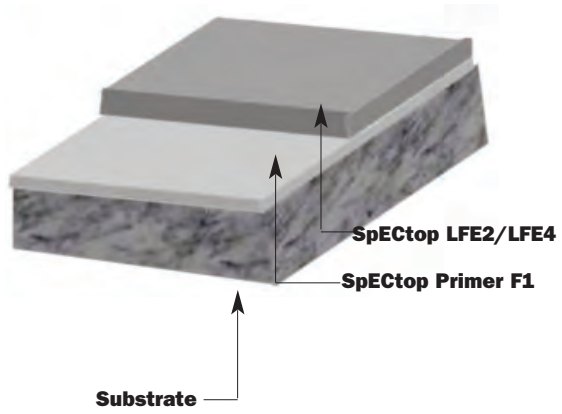


The aggregate is slowly added to the resin whilst mixing and the mixing operation continues for a further 5 minutes.

Application

A quantity of the mixed product should be poured onto the tack free primed surface and floated with a steel trowel to produce a seamless surface. **SpECtop LFE2** can be laid at a thickness range of between 2 - 3mm and **SpECtop LFE4** between 3 - 5mm.

The material should be poured **IMMEDIATELY**.



EQUIPMENT CLEANING

All equipment may be cleaned of uncured material using **SpECtop Cleaning Fluid**.

PACKAGING AND YIELD

Both grades of material are supplied as three part systems with the following coverage rates.

SpECtop LFE2

15 litres

@ 2mm 0.50 m²/litre

SpECtop LFE4

15 litres

@ 4mm 0.25 m²/litre

SpECtop Primer F1

10 m²/litre 1 litre pack gives 10-15m²

@ 100µm WFT 5 litre packs gives 50-75m²

SpECtop Primer FX

10 m²/litre 1 litre pack gives 10-15m²

@ 200µm WFT 5 litre packs gives 50-75m²

APPLICATION TEMPERATURE RANGE

Minimum	5°C
Maximum	35°C

STORAGE AND SHELF LIFE

When stored in a cool environment, in original unopened containers, the material has a shelf life of 12 months.

HEALTH AND SAFETY

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and all personnel should avoid inhaling the vapours produced. If working is necessary in a confined area it is strongly recommended that sealed respiratory equipment is utilised.

Eye Contact rinse with copious amounts of clean water and seek medical attention.

Skin Contact rinse with copious amounts of clean water followed by thorough cleaning with soap and water.

DO NOT USE SOLVENTS

Ingestion seek immediate medical attention.

DO NOT INDUCE VOMITING

FLAMMABILITY

SpECtop Primer F1 and **SpECtop Cleaning Fluid** are flammable. Do not expose to naked flame or other ignition sources.

SpECtop LFE2/LFE4 and **SpECtop Primer FX** are non-flammable.

Issue 13: 04/2021

QA-054

Whilst the information and/or specifications given are, to the best of our knowledge, true and accurate, no warranty is given or implied in connection with any recommendations or suggestions made by us, our representatives, agents or distributors as the conditions of use and labour involved are beyond our control.

If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

SPECIALITY ENGINEERING CHEMICALS
PO Box 61347, Dubai, United Arab Emirates. Telephone: +971 4 883 6662, Fax: +971 4 883 7696
E-mail: info@spec.ae
www.spec.ae