



URS is a member of Registrar of Standards (Holdings) Ltd.



SpEC

SpECtop Armourite Standard

DRY SHAKE, MONOLITHIC SURFACE HARDENER FOR NEW CONCRETE FLOORS

DESCRIPTION

SpECtop Armourite Standard is supplied in 25kg bags and consists of graded synthetic mineral aggregate blended with Ordinary Portland cement and plasticisers.

SpECtop Armourite Standard is applied to plastic concrete and the resulting finished surface is extremely dense, abrasion resistant and hard wearing. As the application of **SpECtop Armourite Standard** results in the floor curing monolithically with the topping, excessive shrinkage, cracking etc., is avoided.

The aggregate used, apart from being completely inert chemically, is exceptionally hard and is not prone to polishing.

TYPICAL USES

SpECtop Armourite Standard can be used in any application where an uncoated concrete is required to provide high abrasion, skid and impact resistance.

It is particularly suited for heavy industrial wear.

ADVANTAGES

- Non metallic aggregate
- No additions required - ready to use
- Extremely hard wearing aggregate resulting in high resistance to abrasion and impact
- Monolithic bond to host concrete
- Resistant to oils and greases

TECHNICAL DATA

Typical Values

Compressive strength

28 days 70 N/mm²

Abrasion Resistance Test data indicates that concrete floors treated with **SpECtop Armourite Standard** exhibit an abrasion resistance 300% better than that exhibited by 40 N/mm² concrete on its own.

Hardness When tested against the Mohs hardness scale, the synthetic aggregate used in **SpECtop Armourite Standard** provided values in excess of 7.0.

Impact Resistance Testing in accordance with B.S. 8204: Part 1 gave results 3.5 times better than those required of a screed designed to with stand heavy traffic.

APPLICATION

Preparation

It is essential that adequate planning of the application is made in advance and that sufficient material is laid out to meet the requirements of the application.

The base concrete slab should have a thickness not less than 80mm and the concrete mix design should be formulated as follows:

Water/cement ratio	< 0.50
Cement content/m ³	> 300kg
Slump	> 75mm
Air entrainment	< 2%

Vacuum dewatering should not be used.

Application

SpECtop Armourite Standard should be applied at the rate of 4 to 7kg/m² depending on the degree of traffic anticipated.

SpECTop Armourite Standard must be applied as soon as the base concrete has reached the stage where light foot pressure leaves an indentation of around 5mm or as soon as it is practicable to apply the product correctly without damaging the plastic surface of the base slab.

On large applications it is essential that sufficient operatives are available to work at a controlled rate behind the concreting team.

SpECTop Armourite Standard is applied in two applications. The first application utilises two thirds of the chosen application rate and is broadcast evenly across the surface but ensuring the material lands nearly vertically rather than spread horizontally. Once applied the free water in the base concrete will slowly darken the applied material and once this stage is complete, wood floating of the surface can commence. Do not over trowel at this stage.

The remaining one third of the material can now be applied and moisture allowed to combine with the material as before and wood floating of the surface can be completed. Once the floor has attained a degree of stiffness at which light foot traffic does not mark the surface, steel floating and/or power floating can progress.

CURING

SpECTop Armourite Standard should be cured with a curing membrane such as **SpECcure WE**.

Continuous polyethylene sheets taped at the edges is an acceptable alternative.

LIMITATIONS

SpECTop Armourite Standard must not be used in floor areas which are likely to be exposed to acids or any other product which is known to attack Ordinary Portland cement concrete.

PACKAGING & YIELD

SpECTop Armourite Standard pack in 25kg bags.

Medium duty	4 - 5 kg/m ²
Heavy duty	6 - 7 kg/m ²

STORAGE & SHELF LIFE

The shelf life of the product in sealed bags is typically in excess of twelve months.

Storage at high ambient temperatures or in high humidity environments may reduce the shelf life of the product.

HEALTH & SAFETY

SpECTop Armourite Standard is alkaline in nature and in a moist environment may be harmful and irritating to the skin, eyes and respiratory system.

Wear dust mask, gloves and goggles during handling.

Skin contact should be treated with soap and water.

Contact with the eyes should be treated by rinsing well with copious amounts of water prior to obtaining medical advice.

FLAMMABILITY

SpECTop Armourite Standard is non-flammable.

Issue 9: 01/2016

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