

High performance solvent free floor coating for concrete

Product Description

TAL EPOXYSEAL FLR100 is a high performance, high build, solvent free epoxy floor coating that is also decorative and suitable for use in a wide range of applications. It can also be used as a wall coating.

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- High abrasion resistance
- Resistant to wide range of chemicals
- VOC compliant
- Smooth and anti-slip finish available
- Easy to clean and maintain

Uses

- Car park decks
- Process areas
- Pharmaceutical, food and beverage plants
- Storage areas
- Stairwells

Specification Compliance

SCAQMD Rule 1113*
LEED NC2009 IEQ 4.2*
FDA CFR 21 Section 175.300
EFNARC Type 3A
FeFRA Type 3 MD
* when used with TAL SF PRIMER

Laboratory Test Data

Property	Typical Results
Compressive strength (BS 6319)	70MPa (10150psi)
Flexural strength (BS 6319)	40MPa (5800psi)
Abrasion resistance (ASTM 4060,CS17 wheel)	41.3mg loss/1000 cycles
Impact resistance (ASTM D2794)	No cracking
Bond to concrete (BS 1881)	>2MPa

Fire Performance

UK Building Regulations (Document B): Class O
BS 476 Part 7: Class 1 Surface Spread of Flame

Volatile Organic Content

TAL SF PRIMER = 0g/L
TAL MT PRIMER = 145g/L
TAL EPOXYSEAL FLR100 = <10g/L

Application Properties

Application thickness	300 to 400 microns
Application temperature range	10 to 35°C
Pot life at 25°C (77°F)	
TAL SF PRIMER	45 mins
TAL MT PRIMER	120mins
TAL EPOXYSEAL FLR100	60 mins
Recoat time	6 to 24 hours at 25°C (77°F)
Full cure	6 days at 25°C (77°F)

Chemical Resistance

TAL EPOXYSEAL FLR100 has excellent resistance to the following chemicals:

10% Lactic acid
White spirit
50% Sulphuric acid
Oils
Concentrated bleach
Petrol
Saturated sugar solution
Xylene
Saturated urea solution
10% Ammonia

Colours

RAL 7001 Silver Grey
RAL 5017 Traffic Blue
RAL 6029 Mint Green
RAL 1001 Beige
RAL 7035 Light Grey
RAL 3002 Carmine Red
Others colours available on request.

Theoretical Coverage

TAL SF PRIMER: 10m²/L
TAL MT PRIMER: 5m²/L
TAL EPOXYSEAL FLR100: 5 to 6.6m²/L
Actual coverage will depend on wastage and surface profile and can be up to 20% or more higher than theoretical coverage.

Packaging

TAL SF & MT Primer: 5 and 15L kits
TAL EPOXYSEAL FLR100: 5 and 15L kits

Shelf Life

18 months when stored below 30°C (86°F) under shade in a dry environment.

Installation Guidelines

TAL EPOXYSEAL FLR100 should be applied by experienced coating crews. TAL provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Surface Preparation

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The surface should be prepared by captive blasting to produce a lightly exposed aggregate surface i.e. a ICRI CSP 4 or 5 surface profile. Any bug holes (blow holes) should be filled with TAL BUGFILL or TAL PRIMER FILLER (when using TAL MT PRIMER apply TAL BUGFILL or Primer Filler after priming). If substrate is not level or is uneven, level using TAL LEVELCEM HD.

Moisture Testing

The concrete slab should be tested for moisture with the Rapid RH system following the procedure in ASTM F2170. If the humidity reading is greater than 80% then conduct moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (Both test kits are available for purchase from TAL). If the MVER is 3 to 5 lbs/1000ft²/24h use a single coat TAL MT PRIMER at 165 microns wft. If the MVER is 5 to 12 lbs/1000ft²/24h use two coats of TAL MT PRIMER at 200 microns wft per coat.

Priming

Prime with TAL SF PRIMER or TAL MT PRIMER and allow to dry before applying TAL EPOXYSEAL FLR100. The base and hardener have to mixed using a slow speed drill and approved mixing paddle until homogenous. The mixed primer should then be applied to the prepared substrate with a polyurethane squeegee and back rolled with a short hair roller (TAL velvet roller or similar). Do not over apply or allow puddles of primer to form. If the primer is absorbed into the surface easily, it will be necessary to apply a second coat once the initial coat is tack-free. Allow the primer to become tackfree before application of TAL EPOXYSEAL FLR100. Apply TAL EPOXYSEAL FLR100 within the recoat window.

Mixing

Add the hardener to the base and mix using a slow speed drill with an TAL Coating Mixer. Paddle for 3 minutes until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

Application

Apply in two coats of 150 to 200 microns per coat (6 to 8mils) wet film thickness using short hair roller (TAL velvet roller or similar) or airless spray. Recoat after 6 to 24 hours at 25°C. Clean equipment using TAL SOLVENT S.

Slip Resistant Finish

A slip resistant finish can be achieved by broadcasting TAL AS GRAINS onto the surface of the first coat while still wet. The grain size (Fine, Medium or Coarse) and broadcast rate will depend on the surface texture required but will generally be in the range of 0.5 to 1kg/m².

Limitations

May change color when exposed to direct sunlight.
Do not be apply within 3°C of the dewpoint or if it is within 5°C of the dewpoint and dropping.
Avoid excessive application.
Avoid skin contact.
Do not apply below 10°C.
Do not discard into the water system.
Protect from chemical and water spillage until fully cured.

