



040 034
Low Emission Low
Toxicity Adhesive/Sealant

FORMDEX APO1

ACRYLIC POLYMER CEMENTITIOUS COATING (APCC)

DATA SPECIFICATION SHEET

DESCRIPTION

Formdex APO1 is a two-component pre-packed high performance acrylic polymer modified cementitious mortar. It is ideal for surfaces that require high abrasion, impact and skid resistance.

AREAS OF USAGE

- Repairs and resurfacing of old worn concrete floors, roads, bridges, runways, tarmac, etc.
- Patching and repairing of damaged concrete surfaces .
- Topping of new and existing concrete floors to increase the skid and wear resistance
- Warehouses, car parks and driveways, bus bays, concrete roads, docks, etc.
- As a screed over to concrete roof gutters
- As water, skid and wear resistance on carparks and ramps.
- Corridors and walkways for new and upgrading projects
- Protective screed for industrial floors in high wearing areas to architects' specification
- Repair and re-surfacing to damage concrete stairs

ADVANTAGES

- Suitable for interior and exterior applications
- Excellent impact, abrasion and skid resistant
- Water resistant barrier
- Excellent adhesion to new and old concrete

PRODUCT SPECIFICATION

	Component A	Component B
PACKAGING	: 5 liters (liquid)	: 25 kg (powder)
MIX RATIO		: A : B = 1 : 5
SHELF LIFE		: 2 years in dry and cool environment
COMPRESSIVE STRENGTH (ASTM C109/C109M)		: $\geq 35 \text{ N/mm}^2$
FLEXURAL STRENGTH (ASTM C348)		: $\geq 8 \text{ N/mm}^2$
TENSILE STRENGTH (ASTM C307)		: $\geq 5 \text{ N/mm}^2$
UV ACCELERATED WEATHERING (ASTM G154)		
a) 500 HOURS		: No cracking, softening or delamination
b) 1000 HOURS		: No cracking, softening or delamination
WATER ABSORPTION AFTER THERMAL AGING (ASTM C413)		: $\leq 10\%$ after 30 mins water immersion
FLOWABILITY (ASTM C939)		: $\leq 150 \text{ sec}$
TENSILE ADHESION BOND STRENGTH (BS EN 13892-8)		: $\geq 1.5 \text{ N/mm}^2$
POLYMER IDENTIFICATION (FTIR)		: Does not contain polyvinyl acetates
SKID RESISTANCE (ASTM E303)		: $\geq \text{BPN } 55 \text{ (wet condition)}$
TABER ABRASION (H22 WHEEL) (ASTM D4060)		: $\leq 1.5\text{g weight loss} / 1000 \text{ cycles}$
SHEAR BOND ADHESIVE (ASTM C482)		: $\geq 2.0 \text{ N/mm}^2$
WATER PENETRATION @ 0.4 kgf/cm² FOR 6 HOURS (DIN 1048)		: $\leq 5\text{mm}$

SUBSTRATE PREPARATION

- Clean surfaces and remove any dust, oil, grease or contaminants.
- All smooth, old and deeply contaminated substrate must be abraded by mechanical means.
- Defective and unsound substrate has to be repaired prior to application of Formdex APO1.
- Existing substrate expansion joint is to be continued through the new topping and any movement joint should be isolated with a movement joint.

APPLICATION

PRIMING

- Prime substrate with APO1 Primer using brush or roller at coverage of approximately 8-10 m² per litre. (Surface texture can alter the coverage of any particular installation)
- Leave coated surface to dry for approximately 30-60 minutes prior to the application of Formdex APO1.

MIXING

- Pour Formdex APO1 Part A (Liquid - 5 litres) into a pail and slowly add Part B (Powder - 25kg)
- Mix ratio 1:5 (Liquid:Powder)
- Stir with a slow hand-held drill until a homogeneous lump free mixture is obtained
- Avoid entrapping air during mixing.

PLACING

- Immediately after mixing, apply the mixture with a steel trowel or squeegee to the primed surface.
- The consistency of the mixture allow application of 3mm - 5mm in one layer.
- For placement of more than 1 layer, each subsequent layer should only be placed after the previous layer has hardened for minimum of 24 hours.

CURING

- Dry curing is essential to Formdex APO1.
- Where rapid drying condition exists such as high temperature, direct sunlight and strong wind, Formdex APO1 must be protected by a polyethylene sheet to reduce water loss.

FINISHING

- Formdex APO1 is manufactured from cement and other natural materials.
- Colour variations can occur although necessary controls are taken during manufacturing to minimise.
- Where aesthetics are important, it is recommended to coat Formdex APO1 with Formrok 300 TFC (PU Topcoat for coloured finished).

PRECAUTION

- Do not apply Formdex APO1 at temperature below +10 °C and above +40 °C.
- Do not use Formdex APO1 to repair moving cracks or existing concrete expansion joints.

HEALTH & SAFETY

- Formdex APO1 is classified as non-hazardous.
- Avoid contact with skin and eyes.
- Flush with water when it comes in contact with skin and eyes.
- Refer to Product Safety Data Sheet.

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Place Product
Sample Here

Revision A

All data given and statements and recommendations made herein are base upon our research and experience and are believed to be accurate. However, no guarantee of their accuracy is made or applied. This data specification supersedes all other issues.