SPEC Speciality Engineering Chemicals

CONSTRUCTION CHEMICALS

www.spec.ae

Speciality Engineering Chemicals (SpEC) manufactures a comprehensive range of high quality specialist construction chemicals, carefully selected to offer our end user customers problem solving solutions to many of their every day construction challenges.

Product Range:

Concrete Repair
Flooring
Coatings
Waterproofing
Sealants
Grouts
Adhesives

SpEC is a manufacturing subsidiary of Bardawil, a group with more than 70 years experience in the construction chemicals industry. Therefore, SpEC recognises your requirements and that of our distributor partners very well.

Our Strategy

QUALITY PRODUCTS, ENGINEERED SOLUTIONS AND AVAILABILITY.

Quality Products

SpEC have been particularly careful to formulate products to high standards, incorporating the highest quality raw materials, all carefully sourced from reputable suppliers worldwide.

Engineered Solutions

SpEC is committed to product development and programs to meet the industry needs. A key feature of our success has been our flexibility and ability to react quickly to local demand and your own individual requirements.

Availability

SpEC is readily available to you via an international spread of carefully selected distributors with good local relationships in the Middle East, Asia, Africa and Europe.

CONTENTS

CONCRETE
Repair

INTRODUCTION

Concrete Repair Solutions

SpEC offers complete solutions to concrete repair and protection. Our comprehensive range of repair, strengthening and protection systems will give our customers the correct tools to manage their various problems.

The deterioration of concrete is a complex matter and is induced by many physical, chemical and environmental factors.

Concrete should be of high quality and the application of our high-quality repair materials can extend the life of a structure well beyond its original design life.

Structure Information

Before a repair method is agreed, it is important to understand the following:

- the structure's history, its use and its intended working life.
- identify any clear defects from reports or visual surveys.
- identify hidden issues from concrete tests

If the structure is in a poor situation it is important that a structural consultant is appointed to ensure that the structure is safe.

COMMON PROBLEMS IN REINFORCED CONCRETE

Concrete Damage

Hammer testing

Chloride Testing

Location of defects

Carbonation depth testing

Petrographic analysis

Reinforcement Corrosion

- Loss of Alkalinity
- Contamination

THE ASSESSMENT PROCESS

When areas to be repaired are identified, it is essential that full diagnostic testing of the concrete is started. The root causes of the defects should be fully understood.

Qualified inspectors are able to undertake this evaluation including some or all of the following test- ing methods:

The number of tests is relative to the age and condition of the structure. A complete analytical work will provide more information and a better understanding of the current issues affecting the concrete. The appropriate corrective action should begin once the root causes of the problems are diagnosed.

REPAIR PLAN

Once the fundamental causes of deterioration have been diagnosed, merged with the structural report and safety concerns then a strategy can be developed to evaluate what can be done with the area of concern and suggest the right repairing method using SpEC concrete repair products.

PRODUCT APPLICATION

Concrete repair mortars are applied in 3 ways:

Repair works should be undertaken by qualified and experienced personnel. The correct preparation, priming, application and curing is very critical to attaining high quality repair materials when it comes to reaching maximum performance of the system.

SpEC closely supports applicators to develop an understanding of the challenges they face on site. Our products are tailored to suit the requirements of our customers as well as the local market demand and conditions.

SpECbuild repair products are formulated of high quality materials to provide consistency and ease of application.

PRODUCT SELECTOR

APPLICATIONS

	Bridges	Tunnels	Retaining Walls	Dams	Industrial Floors	Warehouse	Acid Tanks	Sewage Lining	Sea Walls	Blowholes	Repaired Surfaces	Line & Level	Reinforced Beams & Columns	Marine Environment	Concrete Structures	Honey Combing	Timber/Steel	Membrane for concrete
SPECbuild SC										✓	✓	✓						
SPECbuild SG15													✓	✓				
SPECbuild LWC50															✓	✓		
SPECbuild MC500											✓			✓		✓		
SPECbuild S10	✓	✓	✓	✓														
SPECbuild EM					✓	✓	✓	✓	✓									
SPECbuild MRA																	✓	
SPECcure Series																		✓

SPECbuild SC

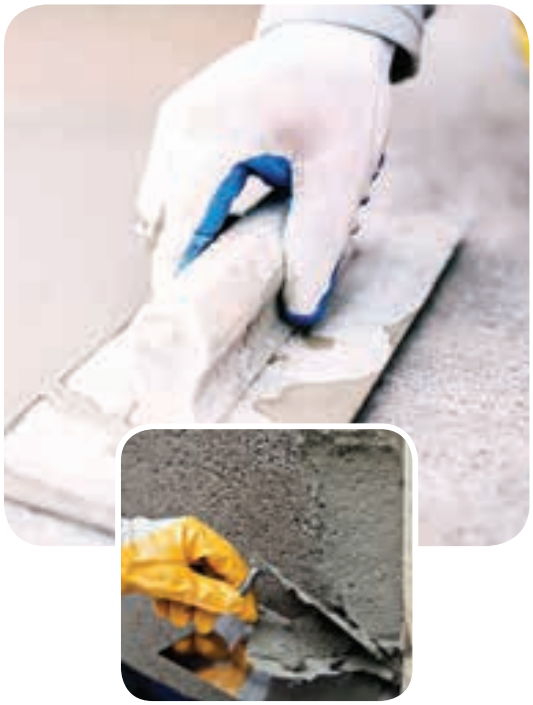
CEMENTITIOUS SKIM COAT

TYPICAL USES

- To provide a uniform surface over repaired surfaces.
- Correcting errors with respect to line and level.

ADVANTAGES

- Pre-bagged to ensure constant high quality
- Easy to use. Needs only the addition of clean water
- No need for a primer or a curing agent in normal conditions.
- Excellent adhesion to concrete.
- Resistant to shrinkage cracking.



Packaging:
25 kg bag

SPECbuild SG15

HIGH STRENGTH, ONE-PART POLYMER MODIFIED REPAIR COMPOUND

TYPICAL USES

- Repairs to structural concrete elements, e.g. reinforced beams and columns
- Highly trafficked surfaces, particularly transition strips adjacent to mechanical bridge joints
- Repairs in marine environments or other situations where concrete is in contact with chloride or sulphate solutions

ADVANTAGES

- High bond strength to concrete substances.
- Good abrasion resistance
- High compressive strength
- Coefficient of thermal expansion similar to host concrete.
- Compensated for plastic and long- term shrinkage.

Packaging:
25 kg bag

SPECbuild LWC50

LIGHTWEIGHT CEMENTITIOUS REPAIR COMPOUND

TYPICAL USES

- The replacement of debonded, cracked or damaged concrete
- To repair concrete structures or buildings suffering from carbonation or chloride attack
- The reinstatement of "honey combing"
- Reprofiling concrete and masonry
- Overhead and vertical situations

ADVANTAGES

- Provides excellent application and performance characteristics in hot climates
- Pre-packaging and quality raw materials ensure constant performance
- Fast and easy to use, needing only the addition of clean water
- Chloride free

Packaging:
25 kg bag

SPECbuild MC500

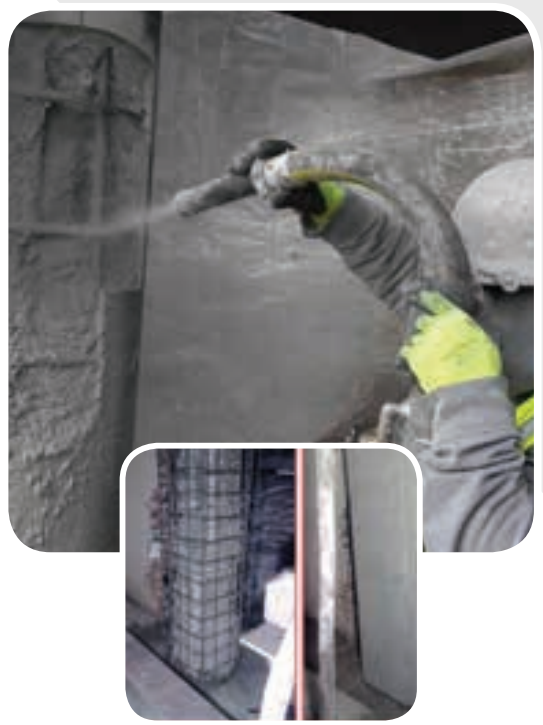
HIGH FLUIDITY MICRO-CONCRETE

TYPICAL USES

- Structural repairs to columns
- Replacing sections of concrete beams
- Making good areas of honeycombed concrete

ADVANTAGES

- No compaction required
- Low permeability inhibits the ingress of chlorides and carbon dioxide
- Excellent bond strength to adequately prepared concrete substrates
- May be placed by concrete pump
- Chloride free



Packaging:
25 kg bag

SPECbuild S10

POLYMER MODIFIED DRY SPRAY REPAIR MORTAR

TYPICAL USES
- Bridges
- Tunnels
- Retaining walls
- Dams

ADVANTAGES
- Low rebound
- Rapid strength gain
- Low water absorption
- High resistance to carbon dioxide penetration
- Excellent bond to the concrete substrate
- Single component - ready to use
- No added caustic accelerators
- Contains no chloride admixtures

Packaging:
25 kg bag

SPECbuild EM

HIGH STRENGTH, THREE COMPONENT EPOXY MORTAR

TYPICAL USES
- Industrial floors
- Warehouses
- Acid tanks
- Sewage lining
- Sea walls

ADVANTAGES
- High mechanical strength
- Early strength gain to minimize disruption
- Resistant to aggressive chemicals
- Highly impervious
- Slip resistant
- Waterproof
- Non-toxic surface (after full cure)

Packaging:
12 litre packs

SPECbuild MRA

MOULD RELEASE AGENT FOR CONCRETE

TYPICAL USES

- Timber
- Steel
- Plastic-faced formwork

ADVANTAGES

- Improved release performance when compared to oils and emulsions
- Reduces the incidence of blowholes
- Economical - 40-70m² per litre
- Prevents rusting of steel moulds
- Produces good fair-faced concrete
- Reduces formwork-cleaning costs
- Non-staining property enables use in white cement

Packaging:
20 & 200 litre drum

SPECcure Series

HIGH EFFICIENCY, RESIN BASED CURING MEMBRANE

TYPICAL USES

- As a membrane for concrete to provide adequate and effective curing
- As a primer/sealer to subsequent coatings

ADVANTAGES

- More effective cement hydration providing more durable concrete
- May be applied by simple knapsack spray units
- In some cases, subsequent coatings can be applied directly over the membrane without the need for expensive surface preparation
- Reduces shrinkage and improves permeability

Packaging:
5, 20 & 200 litre tin/drum

SPECbuild Sandset

SOIL STABILIZATION

TYPICAL USES

- Erosion and dust control of highway embankments and pipeline embankments .
- Stabilization of open desert sand for the purpose of suppressing sand storm.
- Hydro seeding and landscaping.
- Dust control on construction sites and in military areas.
- Maintain stability and density of treated soils whencompacted.

ADVANTAGES

- Tolerates the extreme climatic conditions.
- Resists corrosive atmosphere and ground water environment.
- Remains unaffected with the temperature and humidity.

Packaging:
20 & 200 litre drum

FLOORING

INTRODUCTION

SpEC Flooring Systems

The SpEC flooring product family is a group of environmental friendly and versatile epoxy, polyurethane, dry shake and cementitious flooring systems, that are appropriate for various applica-tions in a diverse range of sectors.

SpEC epoxy flooring products are generally used in parkings, factories and warehouses due to their significant mechanical strength and resistance to corrosive liquids such as chemicals and oils. Also used in hospitals and showrooms due to their resistance to bacteria formation and highlight reflection characteristics.

SpEC polyurethane flooring products are most appropriate where flexibility, elasticity, crack bridging and scratch resistance and are required. Used for multi-story car parks, public, commercial and retail buildings as well as healthcare and educational facilities. Polyurethane flooring is completely seamless and provides an attractive, hygienic, easily cleanable and durable floor.

SpEC cementitious and dry shake products are applied in factories and warehousing facilities where economical hardwearing surfaces are required. These hard cement based floor toppings consist of sand, special cements and hard aggregates to provide high mechanical resistance. They are also used as underlay material for a wide range of floor finishes.

SpEC Flooring Systems Guidelines

Their protection of a floor is divided into three phases:

- Flooring product selection suitability
- Precise and complete specification
- Application by an experienced and professional installer

Product selection

The selection of the suitable product can be done when the requirements below are known to prevent costly errors.

- Elasticity
- UV resistance

Properties of the substrate

It is very important to know the specific features of the substrate where the flooring system is to be applied such as the compressive strength and moisture content.

Surface preparation

Surface preparation is key to any successful flooring product application. To ensure proper adhesion to the substrate, it is necessary for the substrate be sound, dry and clean. There are various methods of surface preparation which include:

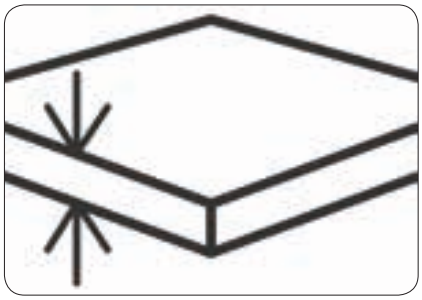
- Grit blasting
- Milling

Rely on us for all your flooring needs

We take into consideration the entire life cycle of the product to precisely identify the best quality, most durable, workable and cost-effective flooring solution. SpEC flooring products are designed to match the specific needs of each customer, application and industry.

Design life & Maintenance

Thickness



Impact

Surface preparation

Structural loading

Traffic & mechanical wear

Chemical spillage

Slip resistance

Hygiene

Crack-bridging ability

Temperature

Aesthetics

Elasticity

UV resistant

PRODUCT SELECTOR

	APPLICATIONS																
	Factory	Warehouses	Car Parks	Dairies	Abattoirs	Showrooms	Kitchen	Storage Areas	Production Areas	Beverage Production	Electroplating Shops	Processing Plants	Aircraft Hangers	Loading Bays	Walkways	Pharmaceutical Plants	Ship & Oil/Gas Platform
SPECtop A100	✓							✓									
SPECtop WDE100					✓	✓	✓	✓	✓								
SPECtop ARE125			✓	✓			✓		✓	✓	✓	✓					
SPECtop ARE300			✓	✓		✓	✓			✓			✓				
SPECtop SRE500			✓	✓						✓				✓	✓		
SPECtop LFE2 & LFE		✓		✓		✓	✓			✓						✓	
SPECtop TE5												✓					
SPECtop CPD System			✓														
SPECtop PU500				✓								✓					
SPECtop UV						✓											
SPECtop EU						✓											
SPECtop LFC							✓										
SPECtop SLC						✓											
SPECtop CRM														✓			
SPECtop RSR			✓														
SPECtop Armourite Standard		✓															

Packaging:
4.5 & 15 litre tins

SPECtop WDE100

2 COMPONENTS, WATER DISPERSED EPOXY COATING

TYPICAL USES
- Potable water tanks and reservoirs
- Storage areas
- Kitchens
- Food production areas
- Abbatoirs
- Showrooms
- Warehouses - light traffic

ADVANTAGES
- High durability, requires low maintenance
- Solvent free, odourless, non-toxic and non-flammable
- Resistance to wide range of chemicals
- Easy to clean, hygienic finish
- Available in a range of colours

Packaging:
4.5 & 15 litre tins

SPECtop ARE125

2 COMPONENTS, HIGH PERFORMANCE EPOXY COATING

TYPICAL USES
- Production areas
- Dairies
- Beverage production & bottling plants
- Car parks
- Kitchen
- Electroplating shops
- Processing plants

ADVANTAGES
- Easy to clean, hygienic finish
- High durability, requires low maintenance
- Excellent resistance to a wide range of chemicals
- Available in range of colours

SPECtop ARE300

2 COMPONENTS, HIGH BUILD EPOXY RESIN COATING

Packaging:
4.5 & 15 litre tins

TYPICAL USES
- Covered Car Parks
- Dairies
- Beverage plants
- Showrooms
- Kitchens
- Assembly areas in production units
- Aircraft hangers

ADVANTAGES
- Range of colours
- Excellent chemical resistance
- Impermeable surface ensuring ease of cleaning
- Extremelyt hard wearing enabling long periods between maintenance work

SPECtop SRE500

2 COMPONENTS SOLVENT FREE, HIGH BUILD EPOXY COATING

Packaging:
4.5 & 15 litre tins

TYPICAL USES
- Car Parks
- Loading Bays
- Walkways
- Chemical production facilities
- Dairies
- Beverage production
- Wet working areas

ADVANTAGES
- Abrasion resistant
- High build and therefore requiring low maintenance
- Resistant to wide range of chemicals
- Solvent free to minimise disruption
- Slip resistance to suit site conditions

Packaging:
15 litre packs

SPECtop LFE2/LFE4

3 COMPONENTS, FLOW APPLIED EPOXY TOPPINGS

TYPICAL USES

- Engineering, production & maintenance areas
- Warehousing
- Food production
- Beverage production
- Medical & Pharmaceutical facories
- Kitchen, laundries & canteens
- Showrooms & demonstration areas

ADVANTAGES

- Impact & abrasion resistant
- Resistant to a range of acids, alkalis, & industrial chemicals
- Hygienic & easy to clean finish
- Will not support the growth of bacteria
- Seamless
- Non-Toxic

Packaging:
12 litre tins

SPECtop TE5

3 COMPONENTS, HEAVY DUTY TROWEL APPLIED SCREED

TYPICAL USES

- Heavy engineering plants
- Chemical handling & process areas
- Oil refineries
- Workshops
- Battery rooms

ADVANTAGES

- High impact & abrasion resistant
- Slip resistant
- Resistance to wide range of chemicals
- Available in a range of colours

SPECtop A100

COLOURLESS, HARDWEARING SURFACE COATING

Packaging:
5 & 210 litre drums

TYPICAL USES

- Provides a coating, which acts as a protective barrier on porous surfaces thus resisting chemical attack and preventing dusting.

ADVANTAGES

- Cures and seals the floor in single operation
- Simple one part product applied by brush or spray
- Prevents dusting
- Waterproof
- Durable surface finish with good abrasion

SPECtop EU

3 COMPONENTS, EPOXY UNDERLAY LEVELLING SCREED

Packaging:
12 litre tins

TYPICAL USES

- Economical method of levelling floors prior to laying alternative SpECtop epoxy screeds and toppings

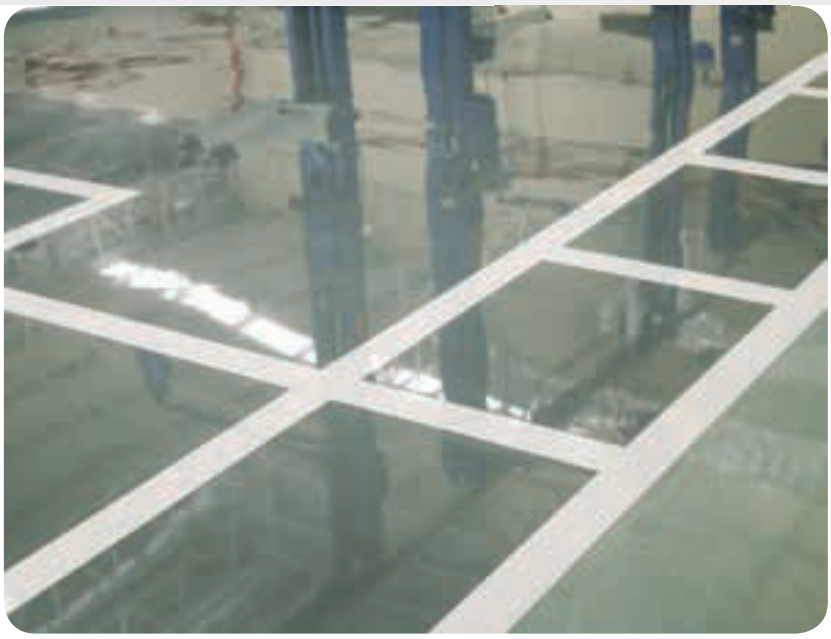
ADVANTAGES

- Good impact & chemical resistance
- Economic levelling screed
- Can be overcoated with any other SpECtop resin flooring system after 24 hours

Packaging:
4.5 & 15 litre tins

SpECtop UV

2 COMPONENTS, HIGH STABLE POLYURETHANE SEALER COAT



TYPICAL USES

- UV resistant sealer coat for the SpECtop CPD System and SpECtop range of epoxy and polyurethane resisn systems. The sealed system is ideal for all weather exposure.

ADVANTAGES

- UV stable
- Hardwearing
- Good Chemical resistance
- Slip resistanrt finish available

Packaging:
4.5 & 15 litre

SpECtop PU500

2 COMPONENTS, FLEXIBLE POLYURETHANE COATING

TYPICAL USES

- Chemical processing
- Food preparation/wet areas
- Brewing clean areas
- Dairy clean areas

ADVANTAGES

- Hardwearing
- Good chemical resistance
- Slip resistant finish can be tailored to requirements
- Solvent-free

SpECtop CPD Elastomeric Membrane

2 COMPONENTS, CAR PARK DECK CRACK BRIDGING PU MEMBRANEPITCH EPOXY COATING

Packaging:
4.5 & 15 litre tins

TYPICAL USES

- For application over concrete in combination with a appropriate primer to provide a highly flexible waterproof membrane

ADVANTAGES

- Waterproof
- Highly elastic
- Excellent crack bridging properties
- Durable

SpECtop CPD Finish

CAR PARK DECK FLEXIBLE POLYURETHANE FINISH

Packaging:
4.5 & 15 litre

TYPICAL USES

- As a coloured finish coat over SpECtop CPD Primer SB/SpECtop CPD Primer SF or SpECtop CPD Elastomeric Membrane as part of the SpECtop CPD System.

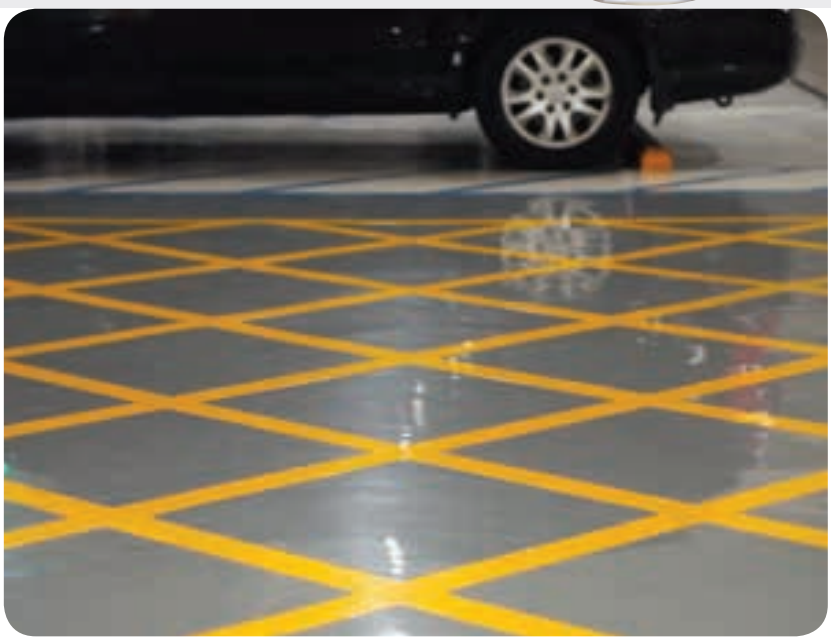
ADVANTAGES

- Hardwearing
- Good chemical resistance
- Slip resistant finish available
- Solvent-free
- UV resistant

Packaging:
4.5 & 15 litre tins

SpECtop CPD Linemarker

2 COMPONENTS, CAR PARK DECK BASED LINEMARKING



TYPICAL USES

- Is typically used as a UV resistant sealer coat for the SpECtop CPD System and SpECtop range of epoxy and polyurethane resin systems. The sealed system is ideal for all weather exposure.

ADVANTAGES

- UV stable
- Hardwearing
- Good chemical resistance
- Slip resistant finish available

Packaging:
4.5 & 15 litre tins

SpECtop CPD System

CAR PARK DECKING SYSTEM

TYPICAL USES

- Surface protection to car park decks
- Elastic waterproofing on exposed decks

ADVANTAGES

- Hard wearing
- Waterproof with elastic membrane
- Good chemical resistance
- Aesthetic
- Reduces noise
- Can be used over concrete and fully bonded screeds

SPEC top LFC

SELF-LEVELLING CEMENT BASED FLOORING COMPOUND

Packaging:
21.6 kg packs

TYPICAL USES

- Provides a self-levelling, cement based underlay material for a wide range of floor finishes including carpets, tiles, vinyl sheet, linoleum and rubber sheet.

ADVANTAGES

- Pre-measured components giving consistent performance
- Polymer modified to ensure excellent adhesion to prepared substrate
- Curing is not generally required
- Easy to lay and excellent early strength grain

SPEC top CRM

1 COMPONENT, CEMENTITIOUS REINSTATEMENT MORTAR FOR CONCRETE PAVEMENT FLOORS

Packaging:
25 kg bag

TYPICAL USES

- For the reinstatement of large areas of concrete pavements and floors to avoid the total replacement of bays. The product is alkaline in nature and will protect embedded steel reinforcement. It may be used internally and externally.

ADVANTAGES

- Rapid strength gain
- High strength, abrasion & weather resistance
- Single component
- Excellent bond to the concrete
- Shrinkage compensated
- Contains no chloride admixtures

SPEC top RSR

Packaging:
25 kg bag

RAPID SETTING REPAIR COMPOUND FOR CONCRETE PAVEMENT AND FLOORS

TYPICAL USES

- May be used for the rapid reinstatement of concrete floors where interruption to traffic flow must be minimised

ADVANTAGES

- Extremely rapid gain of strength
- Does not contain chloride based additives
- Excellent abrasion resistance
- Self compacting

SPEC top Armourite E9

Packaging:
25 kg bag

EMERY BASED, DRY SHAKE, MONOLITHIC SURFACE HARDENER FOR NEW CONCRETE FLOORS

TYPICAL USES

- Can be used in any application where an uncoated concrete is required to provide high abrasion, skid and impact resistance.
- Particularly suited for heavy industrial wear.

ADVANTAGES

- Non metallic aggregate
- No additions required - ready to use
- Extremely hard wearing emery aggregate
- Monolithic bond to host concrete
- Resistant to oils and grease

SPECtop Armourite Standard

DRY SHAKE, MONOLITHIC SURFACE HARDENER FOR NEW CONCRETE FLOORS

Packaging:
25 kg bag

TYPICAL USES

- Can be used in any application where an uncoated concrete is required to provide high abrasion, skid and impact resistance.
- Particularly suited for heavy industrial wear.

ADVANTAGES

- Non metallic aggregate
- No additions required - ready to use
- Extremely hard wearing emery aggregate
- Monolithic bond to host concrete
- Resistant to oils and grease

SPECtop SLC

ONE-PART SELF-LEVELLING CEMENT BASED FLOORING COMPOUND

Packaging:
25 kg bag

TYPICAL USES

- Mineral screeds
- Concrete
- Tiles and Slabs
- Natural stones
- Terrazzo
- Dry areas

ADVANTAGES

- Self-levelling and pumpable
- Good strength values

COATINGS

INTRODUCTION

SpEC Protective Coatings

Buildings, bridges and other reinforced concrete structures usually require protection against rain, air pollution, aggressive marine environment conditions and chemicals which may reduce the designed service life of structures leading to expensive reinstatement.

Whether the purpose is to protect the new construction or refurbishment of the structure in order to protect against water ingress, atmospheric carbonation, chloride ingress or aggressive chemicals from degrading the structure, SpEC can assist you with expert technical advice and guidance in selecting the protective coating solution to meet your performance requirements.

SpEC offers a range of protective coatings manufactured to the highest quality standards on durable & sustainable technology.

Using our wide range of products, supported by expert knowledge and experience of our staff, from buildings to bridges and primary & secondary concrete containments SpEC can assist you to achieve the best protective coating solution for your projects. Our protective coating solutions are:

- Cost effective
- Easily applied
- Proven technologies ensuring long term durability
- Supported by expert technical advice and customer service

Protective Coating Selection

When selecting a protective coating, designers/engineers shall consider the following parameters:

- Level of water tightness to liquid water – e.g. Is the project near the sea? The ability to reduce or prevent chloride migration
- Permeability to water vapour – e.g. Highly breathable or restricting vapour exchange?
- Barrier against CO2 diffusion – e.g. At which thickness?
- Crack bridging – e.g. Static or dynamic? Temperature range?

Any selected protective coating shall have good resistant to weathering and ageing, shall exhibit good hiding power and low dirt pick up. SpEC range of protective coatings cover all the different requirements for most project types and will perform in environments varying from the cool climate of Lebanon, to the hot and dry weather of UAE and the humid and hot conditions of Vietnam.

PRODUCT SELECTOR

APPLICATIONS

	Sewage Plants	Effluent Plants	Docks	Harbour Installations	Sewage Tank Protection	Sewage Pipes	Manholes	Chemical Plant Linings	Coating Steel	Concrete & Fibre Cement Pipes	Water Tanks	Dairies	Food Processing Plants	Abattoirs & Gain Silos	Protective Lining	Fill Blow Holes	Bedding Compound	As a Gap Filling Adhesives	Facade
SPECcoat PE145	✓	✓	✓	✓															
SPECcoat PE400					✓	✓	✓	✓	✓	✓									
SPECcoat CRE200									✓		✓	✓	✓	✓					
SPECcoat Firesafe Facade																			✓
SPECcoat MHL															✓				
SPECcoat BC/BC121																✓	✓	✓	
SPECcoat EPU	✓	✓					✓				✓								

SPECcoat PE145

SOLVENT BASED PITCH EXTENDED EPOXY RESIN COATING

TYPICAL USES

- Particularly useful and economic in dirty water situations such as:
- Sewage plants
- Effluents plants
- Docks
- Harbour installations

ADVANTAGES

- Good abrasion resistance
- Resistant to a wide range of chemicals
- Provides long term protection
- No primer required
- Economic and versatile

Packaging:
4.5 & 15 litre

SPECcoat PE400

COAL TAR PITCH, EPOXY COATING COATING

TYPICAL USES

- Sewage tank protection
- Sewage pipes, manholes and effluent plants
- Chemical plant linings
- Coating steel, concrete and fibre cement pipes

ADVANTAGES

- Resistant to wide range of chemicals
- Excellent adhesion, flexiblity & waterproof characteristics
- High build abrasion resistant coating
- Can be laminated with glass fibre
- May be applied by brush, roller or air less spray

Packaging:
4.5 & 15 litre

SPECcoat CRE200

NON-TOXIC, MOISTURE TOLERANT, SOLVENT-FREE EPOXY RESIN

TYPICAL USES

- Maybe used as a protective coating for concrete and mild steel. The coating once cured, is resistant to common chemicals and abrasion. It is particularly suited for application in water tanks, waste water treatment environments, dairies, food processing plants, abbatoirs and grain silos.

ADVANTAGES

- Non-toxic
- Solvent-free
- High build
- No primer required
- Easily cleaned surface
- Resistant to a wide range of chemicals
- Corrosion and abrasion resistant

Packaging:
4.5 & 15 litre

SPECcoat Firesafe Facade

2 COMPONENT, FIRE RATED, ACRYLICMODIFIED MOISTURE BARRIER FOR FACADE

TYPICAL USES

- It is used where there is a requirement to exclude water moisture from a building facade, while it is still breathable.

ADVANTAGES

- Fire resistant
- High bond strength to concrete and masonry
- Excellent flexibility
- Long pot life even at high temperatures

Packaging:
15 kg packs

SPECcoat MHL

SOLVENT-FREE EPOXY LINING AND BENCHING MORTAR

TYPICAL USES

- Ideally suited for the reinstatement of manhole and outfalls
- As a protective lining to exposed concrete in sewage works

ADVANTAGES

- Solvent-free
- Highly impervious
- Excellent abrasion resistance
- Excellent impact resistance
- Slip resistant
- Non-tainting

Packaging:
4.5 & 15 litre

SPECcoat BC / BC121

EPOXY BEDDING COMPOUND AND REPAIR MORTAR

TYPICAL USES

- Designed to fill blow holes and repair surface defects in concrete prior to the application of epoxy coatings.
- Maybe used as a bedding compound for pre-cast concrete elements including bridge beams, concrete kerbs and achor bolts.

ADVANTAGES

- Non-slump and non-shrink
- Easy to use
- Chemically resistant to a wide range of common chemicals
- Trowels to a smooth finish

Packaging:
3kg & 5 kg packs

SPECcoat EPU

FLEXIBLE PROTECTIVE COATING, BASED ON EPOXY POLYURETHANE RESINS

TYPICAL USES

- Wall and floor coating for concrete protection
- Manhole and pipe linings
- Secondary containment
- Lining for sewage and effluent plants
- Sea water tanks, channels and intakes
- Reservoirs, water treatment plants

ADVANTAGES

- Flexible coating
- Environment friendly
- Easy brush roller or spray application. No Primer needed
- Excellent chemical resistance, UV resistance and resistance to bacterial growth

Packaging:
4.5 & 15 litre

JOINT SEALANTS

INTRODUCTION

SpEC Joint Sealants

The cost of joint sealants is considered small relative to the overall construction project value and often measured as a secondary detail. Yet, joint sealants play a main part in keeping a building air and water tight and therefore prevent future damages and additional costs.

Designers should have knowledge of joint design and the capability of choosing the appropriate sealants taking into consideration all possible impacts.

Joints can be found between concrete slabs, at the connection between floors and walls, in storage tanks, in containment bunds, etc..

Floor joint sealants have to meet various requirements depending on the purpose and location of the joint. This type of sealant must tolerate much higher mechanical and chemical influences than a façade sealant. They are also used for sealing and resealing high movement joints in building, civil engineering structures and for sealing joints in structure which are subject to high rapid movements.

Joint sealants are generally used to:
- Prevent passage of air, chemicals, water, dust & debris etc.
- Provide sound insulation
- Improve the whole construction

Factors affecting the selection of the right sealant:
- Anticipated life of the joint
- Sealant application method
- Movement accommodation factor
- Movement of the joint
- Resistance to chemicals, fuels, bacterial attack, etc.

Grades of sealants:

- Pouring grade: designed for use in horizontal joints
- Gun Grade: designed for use in vertical joints

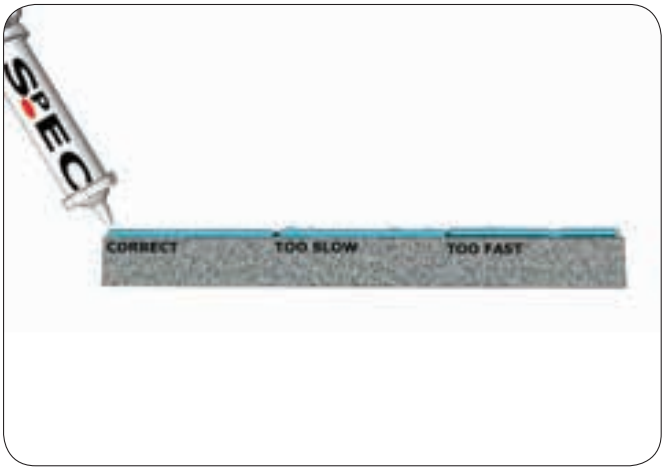
<u>Design Implications</u>

The width of the joint sealant should be a minimum of four times the anticipated movement for a sealant with an MAF of 25%. Joints with cyclic movement should have a width to depth ratio of 2:1 but minimum depth of the sealant should be maintained as recommended:
- 10mm for all porous surface
- 20mm for joints exposed to traffic and hydrostatic pressure
- 5mm for impervious surface such as metals, glass, etc.

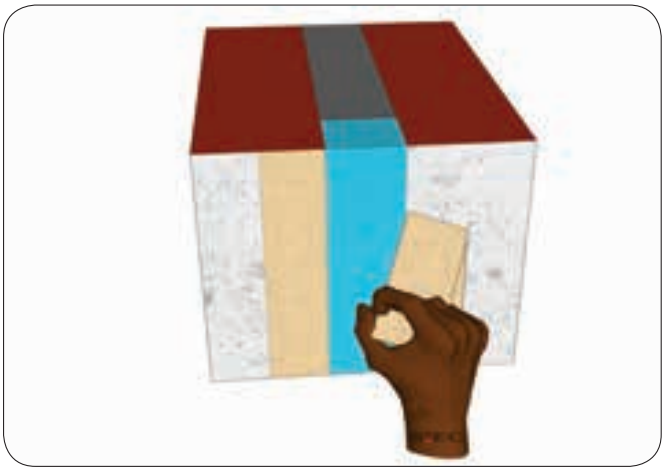
Application of Sealants

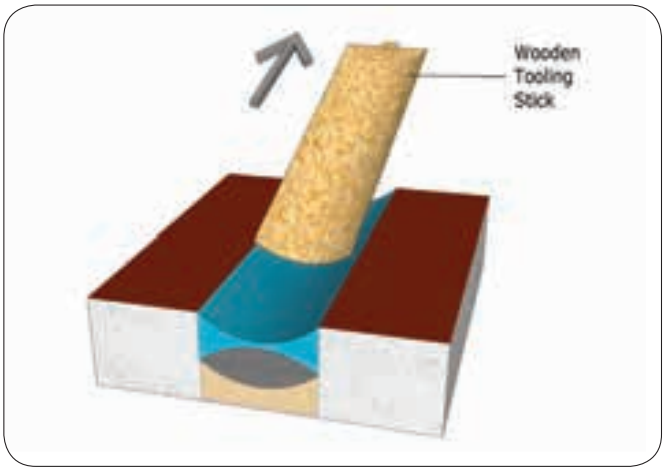
Joint Preparation
The joint surface must be clean, dry and free from oil, loose mortar, laitance, release agents and other contaminants. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to exposed clean, sound surface.

Priming
The primer should be applied to clean, dry surfaces prior to the installation of backer rod or bond breaker tape.



Gunning
The nozzle should be cut at about 45 degrees to achieve maximum wetting of the sides of the joint to be sealed. Hold the gun at an angle to the joint and squeeze to expel sealant. Try to make the sealant press against the sides of the joint





Tooling
To compact the sealant, the joint should be tooled with a metal spatula to remove air bubbles. It also creates a concave surface which decreases the internal stress produced by the movement.

PRODUCT SELECTOR

	APPLICATIONS															
	Bonding & sealing	High Movement Joints	Immersed Joints	Pavement Joints	Sealing & Resealing	Joints in trafficked surfaces	Sealing & Assembling	Sealing Joints	As a Temporary Filler	Isolation Joints to Infill panels	As a Bond Breaker	Anti-Vibration Pads	Back-up Cord	Timber/Steel	Membrane for concrete	Embedding Glass Panels
SPECseal PU25	✔															
SPECseal Acrylic							✔									
SPECseal 200		✔	✔	✔												
SPECseal 625					✔			✔								
SPECseal Glaze PU																✔
SPECcell Fibre									✔							
SPECcell Polyethylene										✔	✔	✔		✔	✔	
SPECcord													✔			

SPECseal PU25

1 PART POLYURETHANE, MEDIUM MODULUS CONSTRUCTION SEALANT

TYPICAL USES

- May be used for bonding and sealing most common building materials including concrete, wood, lacquered metal, anodised aluminium and glass.
- High elasticity, excellent recovery, tear resistance and good weatherability
- Can be used in submerged condition

ADVANTAGES

- Top resilient seal
- No primer required
- Non-staining
- Good resistance to dilute acids and alkalis
- Available in range of colours
- Non-toxic, safe for potable water applications

Packaging:
600 ml

SPECseal Acrylic

SINGLE COMPONENT ACRYLIC SEALANT

TYPICAL USES

- Can be used on all porous surfaces such as bricks, concrete, wood, etc., and suitable for filling cracks and joints both indoors and outdoors
- Cost effective plastic-elastic sealant ideal for particularly static joints

ADVANTAGES

- Over paintable
- Very easy to apply and clean
- Waterproof after curing
- Resistant to weathering such as rain, snow, and sunlight
- Solvent free
- No odour

Packaging:
280 ml

SPECseal 200

TWO COMPONENTS, HIGH PERFORMANCE FUEL RESISTANCE JOINT SEALANT

TYPICAL USES

- High movement joints
- Immersed joints
- Pavement joints subject to fuel spillage
- Joints in seawater structures
- Floors subject to chemical spillage

ADVANTAGES

- High performance in extreme climates
- Low modulus & high movement accommodation
- Fuel, oil, hydraulic fluid and skydrol resistant
- Self-levelling

Packaging:
4.0 & 15 litre pack

SPECseal 625

TWO PARTS, POLYSULPHIDE JOINT SEALANT

TYPICAL USES

- For sealing and resealing high movement joints in building and civil engineering structures
- For sealing joints in structures which are subject to high rapid movements

ADVANTAGES

- Tough & resilient seal
- Provides permanent & uniform water tight seal
- Excellent adhesion to most surfaces
- Pouring & gun grades for horizontal vertical & overhead application
- Non-toxic once cured high resistance to ageing

Packaging:
2.5 & 4 litre packs

SPECseal Glaze PU

SELF LEVELLING 2-PART PU GROUT FOR EMBEDDING OF GLASS PANELS

TYPICAL USES

- Embedding of monolithic or laminated glass panes in U-profiles or concrete joints.
- Glass balustrades
- Total vision glass walls

ADVANTAGES

- Room temperature curing
- Solvent-Free
- Easy to use
- Stress free glass embedding

Packaging:
30kg pack

SPECseal IG

TWO-PARTS POLYSULPHIDE SEALANT FOR INSULATING GLASS

TYPICAL USES

- For residential & commercial applications

ADVANTAGES

- Solvent-Free
- Non-hazardous
- Excellent adhesion for glass, aluminium, stainless steel & galvanized steel
- Compatible with most glazing materials used in the market

Packaging:
20.9 L & 209 L

SPECcord

CLOSED CELL POLYETHYLENE BACK-UP CORD

TYPICAL USES

- Joint sealant back-up cord in concrete and brickwork designed joints where cold applied sample sealants are used

ADVANTAGES

- Economical
- Easy to install
- Excellent absorption & chemical resistance
- Provides a bond breaker function
- Not impaired by climatic extremes

Packaging:
Bags of 6, 10, 15, 20, 15, 30, 40 & 50 mm

SPECcell Fibre

BITUMEN IMPREGNATED FIBRE BOARD JOINT FILLER

TYPICAL USES

- Joints in trafficked surfaces, bridges, roads, runways & pedestrian areas
- As a temporary filler in expansion joints
- Joints in concrete roofs, external walls, cladding & floor
- As a separator strip in slab pavement construction

ADVANTAGES

- Completely fills the joints under repeated cycles of expansion and contraction and will not support dry or wet rot, fungus attack or similar forms of deteriorating agents

Packaging:
10, 13, 19, & 25

SPECcell Polyethylene

CLOSED CELL POLYETHYLENE JOINT FILLER BOARD

TYPICAL USES

- Structural expansion joints in concrete, brick and blockwork
- Isolation joints to infill panels
- Bridge joints, abutments, pier hinge joints
- As a back-up support for sealants
- As a bond breaker for sealants over bituminous joint fillers
- Anti-vibration pads for machinery

ADVANTAGES

- Non-absorbent, closed cell
- Readily compressible
- Rot proof
- Deformable - accepts temperature cycle with minimal load transfer
- Non-tainting, suitable for potable water applications
- Excellent recovery after compression

Packaging:
PE40/60/100:
10, 15, 20, 25 mm

WATERPROOFING

INTRODUCTION

SpEC's comprehensive range of high end quality, environmentally friendly waterproofing products are designed with long-life flexibility and with the ability to adhere to porous and non-porous surfaces, as well as old and new surfaces. Our products are suitable for use in areas of severe climatic environments.

SpECtite range of products have several advantages such as:

- Excellent adhesion
- Easy to apply
- Weather resistant
- Designed Flexibility
- Non-toxic
- Vapour permeable

We have a full range of world class waterproofing systems from basement to roof to ensure long lasting integrity and durability of your building structure.

SpEC waterproofing products are designed to be used for:

- Below Ground Waterproofing
- Above Ground Waterproofing
- Wet Areas

Each building is constantly exposed to external environmental conditions and must be adjusted to match the corresponding individual surrounding impacts.

Below Ground Waterproofing

Building components located within the ground require a high quality and professional installation of water- proofing measures. Succeeding enhancements or even rebuilding are time consuming as well as incurring financial implications because once the building trench has been back-filled, the exterior is difficult to reach. For this reason, we offer optimum solutions for below grade waterproofing externally for a waterproof basement.

The choice of appropriate waterproofing components in basements depends on many different factors such as the use of the basement and the different types of exposure. Ground water under pressure requires a different waterproofing application than normal ground moisture.

The SpECtite liquid-applied membranes provides protection for foundations or for damp proofing, they are easy to apply and are available in a wide range of grades. Our PVC waterstops are of a high grade PVC extrusion formulated to meet the highest performance specifications.

Above Ground Waterproofing

A leaking roof is one of the most harmful failures that can happen for a construction. Water ingress is likely to damage the structure of the building. The long-term performance of a properly protected roof improves the durability of the building. At the same time, it secures the investment made in materials and assets.

Often, roofs are very detailed with upstands for air-conditioning, ventilation, windows and architectural shapes. Reliable waterproofing is only possible with liquid membranes because the liquid ensures full surface contact even in tiny corners.

SpEC waterproofing systems are based on polyurethane membrane systems and can be installed on most substrates. The applied liquid membrane forms a fully bonded waterproofing membrane. There are no welds and seams, which are typically the weak spots of non-liquid roofing sheet materials.

Wet Areas

Bathrooms, kitchens and other wet areas are subjected to potential leakages and subsequent damaged to the structure and interior finishes. These serious applications can be dealt with by using a wide variety of waterproofing products supplied by SpEC, ensuring piece of mind for long term durability and comfort.

SpEC offers a full range of wet area waterproofing products, manufactured to the highest quality standards supported by independent test certificates.

PRODUCT SELECTOR

	APPLICATIONS																	
	Potable water containers	Swimming Pools & Silos	Waterproofing Planter Boxes	Foundation Protection	Rapid Plugging of concrete	New & old surfaces	Retaining walls & columns	Drinking water tanks	Water treatment & sewage plants	Foundation slabs	Tunnels/Subways	Tanks/Reservoirs	Green Roofs/Roof Gardens	Oil storage tanks	Balconies/Roof terraces	Roof Areas/Wet Areas	Waterproofer for walls/floors	Effective adhesive
SPECtite CW100	✓	✓	✓	✓														
SPECtite RS60					✓													
SPECtite WS						✓	✓	✓	✓	✓	✓							
SPECtite Acryflex															✓			
SPECtite PUFlex															✓		✓	✓
SPECtite HP600										✓					✓			
SPECtite PAR800			✓										✓					
SPECtite Elastobond																✓		
SPECtite DP Series																	✓	✓
SPECtite PVC Waterstop		✓										✓		✓		✓		
SPECtite Swellseal Bentobar						✓												
SPECtite Swellseal Polybar						✓												

SPECtite HP600

ONE PART PU ELASTOMERIC WATERPROOFING MEMBRANE

TYPICAL USES

- Tiled floors in bathrooms, shower rooms, kitchens and plant rooms
- Foundation & basement structures
- Suspended floors, parking decks & promenades over utilised areas
- Balconies, roof terraces, patios & planter boxes
- Inverted roofs

ADVANTAGES

- Single component which requires no mixing or heating
- Excellent adhesion to most common construction substrates
- Highly flexible with excellent crack bridging properties
- Good resistance to industial environments

Packaging:
20 litre tin

SPECtite DP Series

LIQUID BITUMEN EMULSION WATERPROOFING MEMBRANE

TYPICAL USES

- As a protective coating for concrete & masonry
- Underground concrete structures protection from attacks by salts and sulphates
- General protection of concrete structures from vapour infiltration to reinforcement steel

ADVANTAGES

- Direct application without any additives or heating
- Good yield over porous surfaces
- Chemically stable & resistant to sulphate & chlorine attack
- No toxic fumes during application
- Non-hazardous

Packaging:
20 & 200 litre drums

SPECtite Acryflex

ONE-COMPONENT, PU BASED HIGH ELASTIC ACRYLIC WATERPROOFING MEMBRANE

TYPICAL USES

- Waterproofing of roofs (asbestos, cement tile terrazzo and concrete)
- Waterproofing of domes, arches, terraces, balconies, sunshades & parapet walls
- Wet area, i.e. under tiles in bathroom, kitchen and shower areas
- Waterproofing over old refurbished roof

ADVANTAGES

- One-component ready to use, light weight compared to conventional roof system
- Formulated to withstand harsh Middle East climate
- Non-flammable and non-hazardous
- Highly elastic and UV resistant
- High crack building capability

Packaging:
20 litre
tins

SPECtite PUFlex

ONE-COMPONENT, PU BASED HIGH ELASTIC POLYURETHANE WATERPROOFING MEMBRANE

TYPICAL USES

- For use as waterproofing for damp proof membrane in sandwich construction as general purpose water proofer for walls, floors, other structures, swimming pool and as a vapour seal as well.
- Effective adhesive and bonding agent for insulation boards, cork panels, etc
- Suitable where some movements of structure is expected.

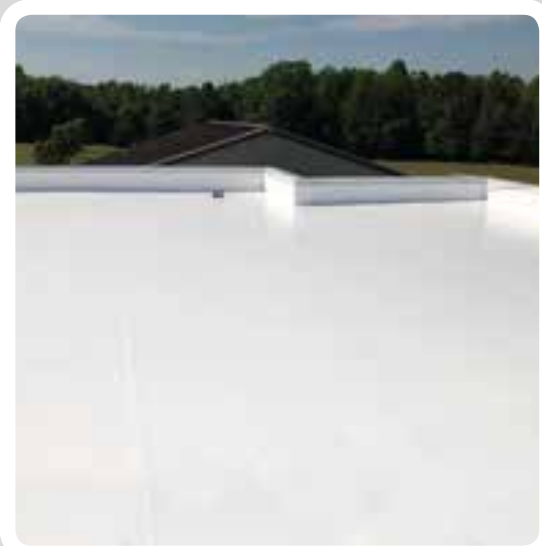
ADVANTAGES

- Cold applied
- Single component
- Water based, non-toxic
- Highly extensible
- Non-flammable
- Resist attacks from chloride and sulphates
- Asbestos free

Packaging:
20 litre tin

SPECtite RoofFlex Plus

COLD APPLIED ALIPHATIC POLYURETHANE



TYPICAL USES

- Exposed Roofing
- Planter boxes
- Swimming
- Pools
- Balconies
- Terraces
- Wood
- Metal Surfaces
- Exterior Masonry Building

ADVANTAGES

- Easy and quick application
- High Tensile Strength
- Highly Elastic
- UV Resistance
- Hard-Wearing
- Durability
- Crack-Bridging

Packaging:
20 litre tin

SPECtite Polyurea Series

LIQUID APPLIED POLYUREA MEMBRANE

TYPICAL USES

- Erosion and dust control of highway embankments and pipeline embankments.
- Stabilization of open desert sand for the purpose of suppressing sand storm.
- Hydro seeding and landscaping.
- Dust control on construction sites and in military areas.
- Maintain stability and density of treated soils when compacted.

ADVANTAGES

- Tolerates the extreme climatic conditions
- Resists corrosive atmosphere and ground water environment.
- Remains unaffected with the temperature

Packaging:
20 & 200 litre

SPECtite PAR800

FIBRE REINFORCED, ONE PART POLYURETHANE ELASTOMERIC ANTI-ROOT MEMBRANE

TYPICAL USES
- Green roofs
- Roof gardens
- Planter boxes
- Suitable for indoor and outdoor

ADVANTAGES
- Easy and quick application
- Excellent waterproofing capabilities
- High tensile strength
- Excellent elasticity
- Moisture tolerant

Packaging:
20 litre tin

SPECtite Elastobond

POLYMER MODIFIED ELASTOMERIC WATERPROOF MEMBRANE

TYPICAL USES
- Roof areas
- Wet areas
- Pre-cast joints

ADVANTAGES
- Can be applied to damp substrates
- No primer required
- Elastomeric - able to bridge cracks
- Able to take foot traffic when cured
- Factory pre-blended two component system ensure quality control at site

Packaging:
16 kg bag

SPECtite CW100

FLEXIBLE CEMENTITIOUS WATERPROOF MEMBRANE

TYPICAL USES

- Potable water containers, tanks and reservoirs
- Swimming pool & silos
- Waterproofing planter boxes
- Waterproofing new & existing buildings
- Foundation protection
- Protection against brackish water
- Coating seawater channel

ADVANTAGES

- Withstand high hydrostatic pressures
- High bond strength to concrete & masonry
- Excellent crack bridging capabilities even after long periods of immersion
- Long pot life even at high temperatures

Packaging:
22.1 kg pack

SPECtite RS60

CEMENT BASED RAPID SET WATERPROOFING MORTAR

TYPICAL USES

- May be used for rapid plugging of concrete elements, where water leaks must be stopped

ADVANTAGES

- Does not contain chloride additives
- Low exotherm
- Rapid water-stopping ability
- Pre-bagged only requires the addition of water

Packaging:
5 & 25 kg bag

SPECtite WS

CEMENTITIOUS CAPILLARY WATERPROOFING SYSTEM

TYPICAL USES

- Retaining walls and columns in underground reservoirs
- Swimming pool prior to tiling or painting
- Drinking water tanks - concrete
- Water treatment and sewage plants
- Support wall and column
- Foundation slabs
- Sand cement rendering

ADVANTAGES

- Creates a crystalline structure deep within the pores & capillary tracks of the concrete mass to prevent the penetration of water aggressive chemicals.
- Resistant to hydrostatic pressure
- Permanent & reactivates whenever water is present

Packaging:
25 kg bag

SPECtite PVC Waterstop

INTERNAL AND EXTERNAL FIXED PVC WATERSTOP

TYPICAL USES

Water Retaining

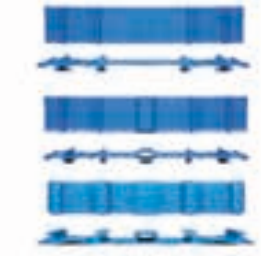
- Tanks resservoirs and sewerage plants
- Swimming pools
- Elevated water towers
- Oil storage tank bond walls

Water excluding

- Basements
- Underground car parks
- Buried storage tanks
- Retaining walls

ADVANTAGES

- Unique design
- Full range of profiles
- Full range of factory pre-fabricated junctions
- Continious 4 valve network
- Reinforced edge flange with brass eyelets on internal sections
- Easy joining system
- Approved for use in contact with potable water



Packaging:
150mm-20m roll
200mm-15m roll
25mm-12m roll

SPECtite Swellseal Bentobar

BENTONITE BASED HYDROPHILIC WATERSTOP – SALINE GRADE

TYPICAL USES

- Construction joint
- Pipe and cable penetrations
- New to existing concrete
- Sealing irregular concrete surfaces

ADVANTAGES

- Quick and easy to install – does not require special intersections, on-site welding or jointing.
- Suitable for ground/saline water conditions.
- Safe and odour-free
- Totally flexible
- Surface fixed - no preformed chases required

Packaging:
220 x 25mm x 5m long

SPECtite Swellseal Polybar

POLYMER BASED HYDROPHILIC WATERSTOP – SALINE GRADE

TYPICAL USES

- Construction joint
- Pipe and cable penetrations
- New to existing concrete
- Sealing irregular concrete surfaces

ADVANTAGES

- Quick and easy to install – does not require special intersections, on-site welding or jointing.
- Suitable for ground/saline water conditions.
- Safe and odour-free
- Totally flexible
- Surface fixed - no preformed chases required

Packaging:
220 x 25mm x 5m long

GROUTS

INTRODUCTION

SpEC offers a wide range of both cementitious and epoxy grouts. We have tailored each product to perform reliably in all situations.

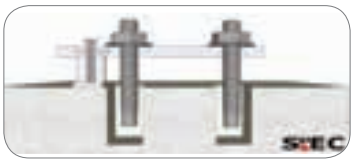
We provide all the grouting solutions to our customers. SpEC can provide solutions to all your grout- ing needs

Our grouts have exceptional flow, stability and strength characteristics, and provide the best solution for high precision applications.

The majority of our cementitious grouts have dual phase shrinkage compensation which means that they can adjust for water loss in the plastic and hardened phases of the grout. This guarantees the grout delivers an extremely high contact area for base plates etc.

Application of Grouts

For successful grouting, we recommend the following procedure:



1. Planning

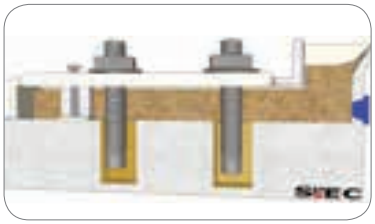
Correct planning is key. Calculate the correct material consumption including material wastage. Ensure the appropriate equipment is available as well as enough mixing teams to commence a continuous pour. Time planning and correct working temperatures are essential to achieve the desired successful application.

2. Preparation

It is essential that adequate preparation is carried out prior to the application of SpECgrout cementitious products. This preparation should ensure the removal of all grease, oil and loose material.

To avoid absorption and reduction in flow characteris- tics, it is essential that the prepared substrate is soaked with clean water for a few hours prior to grouting. Before placing the grout, any water remaining on the surface should be removed by blowing clean oil-free compressed air.

The underside of the base plate to be grouted should be clean and any oil or grease must be removed. The underside should preferably have no geometry, which would impede the flow of grout. Should cruciform shapes be present, it is essential that air release holes are drilled through the base plate to avoid trapping air consequently reducing the total contact area. All formwork should be sealed to prevent loss of grout during pouring. The formwork should be tight to the base plate and parallel to the direction of flow. A gap of around 100mm is required at the pouring hopper with a gap of around 50mm at the opposite end.



3. Mixing

SpECgrout must be mixed using a slow speed electric drill fitted with a SpEC Mixing Paddle. This method is suitable for small quantities and for larger quantities it may be necessary to consider the use of a grout pump.

4. Application

The grout should be poured immediately after mixing.The mixed product should always be poured from the hopper end of the formwork. On no account should grout be poured from more than one side of the base plate. Maintenance of a fluid head is essential to avoid air entrapment.

Zero shrinkage and resistance to fatigue and vibrations are paramount to the SpECgrout line of cementitious and epoxy grouting products. Our grouts are capable of handling tensile, shear, compressive and dynamic forces, and ensure effective bearing-load distribution when grouting base plates and machinery bases.

PRODUCT SELECTOR

	APPLICATIONS																	
	Anchor Bolts	Turbine base plates	Generator base plates	Pressing & Milling Machines	Pecast Units	Crane Rails	Generators	Grouting gaps	Static cracks in concrete	High dynamic loaing	Bedding layer	Free flow grouting	Pile cap waterproofing	Injecting into static cracks	Rebar splicing system	Machine base plates	Large bolt pockets	Beneath Ground tanks
SPEC*grout* C1	✔	✔	✔	✔														
SPEC*grout* C2	✔				✔	✔	✔											
SPEC*grout* C3								✔										
SPEC*grout* E12									✔									
SPEC*grout* E60										✔	✔							
SPEC*grout* PC												✔	✔					
SPEC*grout* ES															✔	✔	✔	✔
SPEC*inject* EP														✔				

SPEC grout C1

GENERAL PURPOSE, SHRINKAGE COMPENSATED CEMENTITIOUS GROUT

TYPICAL USES

- Anchor bolts
- Turbine base plates
- Generator base plates
- Pressing and milling of machine base plates

ADVANTAGES

- Non-shrink
- Consistent performance
- High bond strength to concrete & steel
- High compressive strength at early ages
- Low permeability

Packaging:
25 kg bag

SPEC grout C2

HIGH FLUIDITY, SHRINKAGE COMPENSATED CEMENTITIOUS GROUT

TYPICAL USES

- Anchor bolts
- Precast units
- Crane rails
- Turbines
- Generators
- Pressing & milling machines
- By altering the material consistency, other operations may be carried out, for instance, filling holes due to formwork ties

ADVANTAGES

- Unique non-metallic shrinkage compensation
- Consistent high performance
- Extremely high flow characteristics
- Suitable for placing by pump
- High bond strength to steel & concrete
- High compressive strength at early stages

Packaging:
25 kg bag

SPEC grout C3

SHRINKAGE COMPENSATED, HIGH FLUIDITY THICK GROUT

TYPICAL USES

- Recommended for grouting gaps where the thickness is not less than 75mm & not greater than 500mm
- Suitable for gaps up to 100mm. Grouting larger gaps normally requires the addition of larger aggregate to reduce the exotherm produced during the hydration process and the consequent risk of thermak cracking

ADVANTAGES

- Unique non-metallic shrinkage compensation system
- Extremely high flow characteristics
- Suitable for placing by pump
- Extremely low permeability
- High compressive strength at early stages allowing minimal downtime on machinery
- No requirement for site addition of aggregate

Packaging:
25 kg bag

SPEC grout E12

FREE-FLOW EPOXY RESIN GROUT

TYPICAL USES

- For injecting into static cracks in concrete or masonry, to form a permanent bond or seal

ADVANTAGES

- Low viscosity allows penetration into the finest cracks
- Formulated for hot climates
- Suitable for structural repairs
- Extremely low permeability
- Excellent bond to concrete, brick and masonry
- Non-shrink, adheres with no loss of bond

Packaging:
1.5 litre tins

SPECgrout E60

FILLED EPOXY RESIN GROUT

TYPICAL USES

- In situation where high dynamic loading is anticipated
- It is suitable as a bedding layer for mechanical joint systems

ADVANTAGES

- Resistant to dynamic loading
- Non-shrink ensuring maximum contact area
- High strength
- Early strength gain
- Chemically resistant

Packaging:
12 litre pack

SPECgrout PC

MULTI-PURPOSE, EPOXY RESIN GROUT FOR PILE CAP WATERPROOFING

TYPICAL USES

- For free-flow grouting where the mechanical properties, low permeability and chemical resistance of the hardened grout are required
- Pile cap waterproofing

ADVANTAGES

- High flexural strength and adhesion to substrate ensures excellent performance
- High compressive, flexural and tensile stengths ensure durability & long term service life
- Very low permeability ensures integrity as part of a water- proofing system

Packaging:
12 litre packs

SPECgrout ES

SHRINKAGE COMPENSATED, HIGH FLUIDITY EARLY STRENGTH GROUT

TYPICAL USES

- For use in rebar splicing system
- Suitable for deep voids under machine base plates, voids around and beneath ground tanks and large bolt pockets

ADVANTAGES

- Enable to withstand impact, torque, and vibrating loads
- Extended working range
- High early strength grout
- Ready to use grout
- Excellent fluidity
- Suitable for placing by pump
- Extremely low permeability

Packaging:
25 kg bag

SPECinject EP

LOW VISCOSITY EPOXY INJECTION RESIN SYSTEM

TYPICAL USES

- For injecting into static cracks in concrete or masonry, to form a permanent bond or seal

ADVANTAGES

- Low viscosity allows penetration into the finest cracks
- Formulated for hot climates
- Suitable for structural repairs
- Minimum creep under sustained load
- Non-shrink, adheres with no loss of bond

Packaging:
12 litre packs

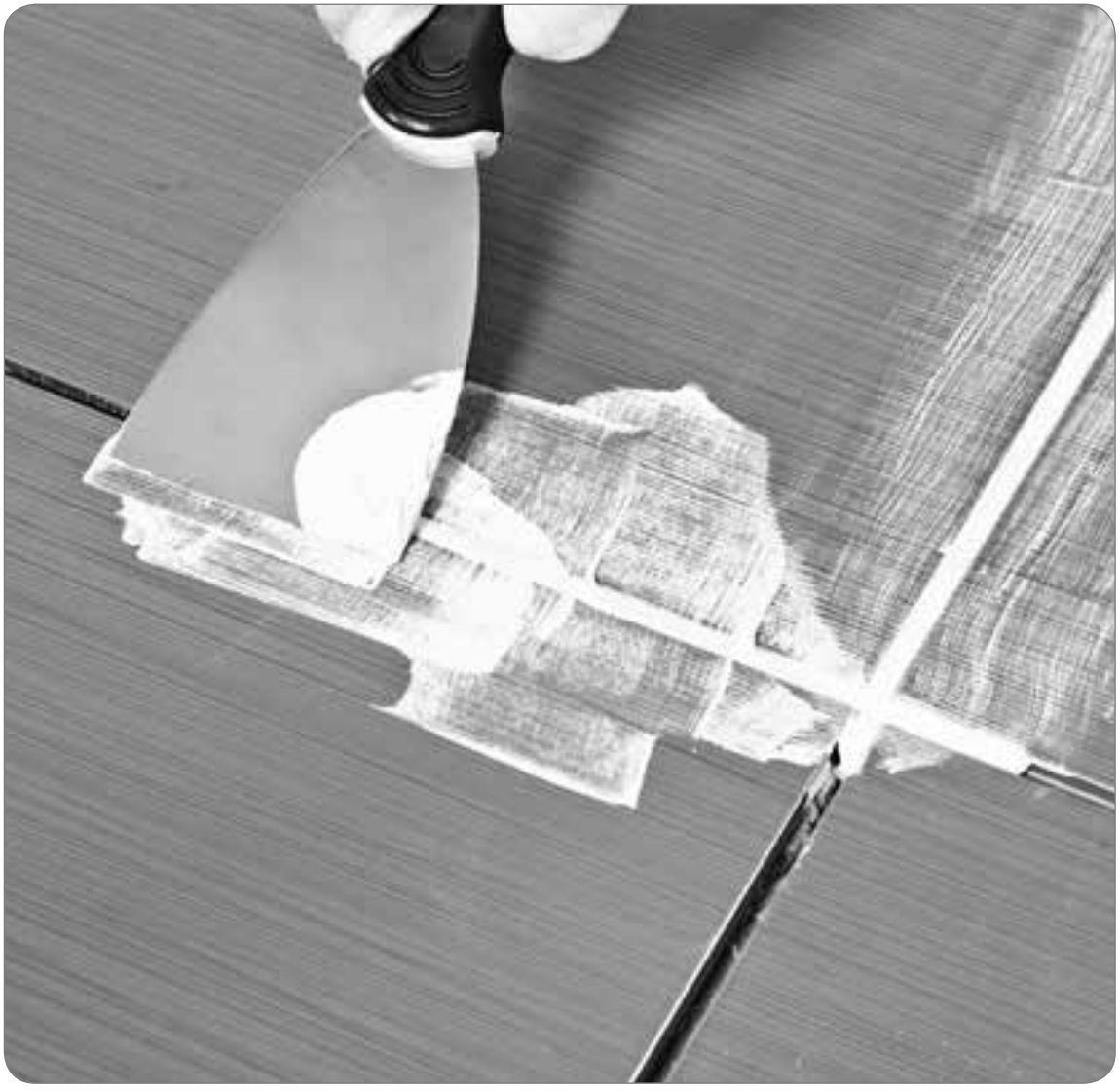
ADHESIVES

INTRODUCTION

SpEC's wide range of adhesives, are manufactured to the highest quality standards and supported by independent test certificates for tiling, concrete repair and various coatings bonding purposes.

Whether fixing ceramic tiles or natural stones indoors or out, tiling to residential and commercial projects, large infrastruc- ture, concrete bonding or applying water proofing and floor coatings, SpEC will assist you with expert technical advice and guidance in selecting the correct adhesive solution to meet your specific needs.

SpEC adhesives range of products can be found in many infrastructure, commercial and residential projects throughout the Middle East, Africa and Asia providing compatible high performance solutions lasting for many years.



PRODUCT SELECTOR

	APPLICATIONS																	
	Ceramic Tiles	Stone Cladding	Brick Slips	Glass Mosaic	Insulation	Acoustic Boards	Msonry	Concrete & Wooden Surface	Interior/Exterior	Dry Areas	Walls/Floors	Wet Areas	Food processing Areas	Swimming Pools	Hospital	Floor Repairs	Spalled Concrete	Bedding Tiles/Fixing Slip Bricks
SPECtite WTA	✔	✔	✔	✔	✔	✔												
SPECtite WTA Latex	✔						✔	✔	✔	✔	✔	✔						
SPECtite FXTA	✔						✔	✔	✔	✔	✔	✔						
SPECtite Tile Grout										✔		✔						
SPECtite ETA											✔		✔	✔	✔			
SPECbuild BA10																✔	✔	✔

SPECtite WTA

CEMENTITIOUS WATERPROOF TILE ADHESIVE

TYPICAL USES

Designed to provide permanent fixing for rigid materials, such as:

- Ceramic tiles
- Stone cladding
- Brick slips
- Glass mosaics
- Insulation & acoustic boards

ADVANTAGES

- High bond strength
- Excellent waterproof characteristics
- Suitable for use onto a variety of substrates

Packaging:
25 kg bags

SPECtite WTA Latex

POLYMER MODIFIED WATERPROOF MORTAR/ ADHESIVE FOR CERAMIC TILES, STONE AND MARBLE

TYPICAL USES

- Installation of ceramic tile & stone/ marble over masonry, concrete & wooden type surfaces. Application areas include interior & exterior, wet & dry areas, walls, floors & ceilings
- Interior & exterior use over concrete, plaster, masonry, blockwork & gypsum boards

ADVANTAGES

- Flexible & shock resistant
- Easy to use
- Economical

Packaging:
30 kg pack

SpECtite FXTA

FLEXIBLE CEMENTITIOUS TILE ADHESIVE TYPE C2

TYPICAL USES

Suitable for exterior and interior use, various substrates like concrete, natural stones, hollow and solid masonry, plasters and renders, tiling showers, wet areas, swimming pools, thin and thick bed application, ceramic porcelain, heated floors and industrial flooring areas

ADVANTAGES

- C2 Classified EN 12004
- Fixing wide range of tiles
- Excellent adhesion to the substrate
- No vertical slipping
- Low wastage
- Water resistant

Packaging:
25 kg bags

SpECtite Tile Grout

CEMENT BASED GROUT FOR JOINTS IN CERAMIC TILES

TYPICAL USES

- Designed for use with SpECtite WTA as a grout for dry tile joints
- Shower cubicles
- Kitchens
- Bathrooms
- Swimming pools

ADVANTAGES

- Resistant to mould growth
- Water resistant
- Maybe used in permanently submerged situations
- Non-slump
- Single component
- Designed for use in hot climates

Packaging:
25 kg bags

SPECtite ETA

EPOXY RESIN CERAMIC TILE ADHESIVE AND GROUT

TYPICAL USES

- Designed to provide permanent fixing for ceramic tiles where a hygienic, chemically resistant & waterproof adhesive is required
- Designed as an impervious, high strength adhesive & grouting
- For wall & floor tiling where hygiene is of paramount importance

ADVANTAGES

- Excellent adhesion eeven in immersed conditions
- Hygienic - will not encourage bacterial growth
- Excellent application characteristics
- Excellent chemical resistance

Packaging:
4.5 & 1.5 litre pack

SPECbuild BA10

WATER RESISTANT ADDITIVE AND BONDING AGENT FOR CEMENT SYSTEMS

TYPICAL USES

- Floor repairs
- Spalled concrete
- Bedding tiles
- Fixing slip bricks

ADVANTAGES

- Exhibit excellent adhesion
- Improve tensile, flexural & compressive strength
- Excellent resistance to water & water vapour
- Improved chemical resistance

Packaging:
20 litre & 200 litre drums

SPECbuild Primer E1

EPOXY RESIN BONDING AGENT FOR CEMENTITIOUS MATERIALS

TYPICAL USES

- Concrete repair applications
- Granolithic floor screeds
- Bonding newly poured concrete to existing concrete

ADVANTAGES

- High mechanical strength
- Produces a bond that exceeds the cohesive strength of the parent substrate
- Solvent-free

Packaging:
1,5 & 15 litre packs

SPECbuild Primer S1

STYRENE BUTADIENE RESIN BONDING AGENT FOR CEMENTITIOUS MATERIALS

TYPICAL USES

- As a bonding agent for cementitious repair materials

ADVANTAGES

- Single component. No mixing
- Suitable for use in hot climates
- Economical in use

Packaging:
1 & 5 litre packs

SpECcoat Zn25

ONE PART ZINC EPOXY PRIMER

TYPICAL USES

- As a primer for exposed reinforcement where a corrosion resistant primer is specified
- It is specifically developed for use with SpECbuild cementitious repair mortars

ADVANTAGES

- One-part
- High metallic zinc content inhibits corrosion
- Compatible with SpECbuild cementitious mortars

Packaging:
1, 2.5 & 5 litre tins

SpECseal Primer 25

MOISTURE TOLERANT EPOXY RESIN PRIMER

TYPICAL USES

- Concrete
- Brickwork
- Stonework
- Asbestos and timber
- Stainless steel and ceramics
- Primer for SpECseal 625

ADVANTAGES

- Hazardous
- Two-components
- Flammable

Packaging:
1 litre packs

SpECtite Acryflex Primer

SINGLE COMPONENT, WATER BASED SBR PRIMER

TYPICAL USES

- For sealing and priming porous cement type substrates and boards prior to applying SpECtite Acryflex
- For interior and exterior use

ADVANTAGES

- Very good sealing properties
- Excellent foundation for cementitious
- waterproofing and self-levelling product
- Very good adhesive strength
- Quick drying
- Water based - Environmentally friendly

Packaging:
5 & 20 litre packs

SpECtite HP600 Primer

POLYURETHANE PRIMER

TYPICAL USES

- Suitable when used in conjuction with SpECtite HP600

ADVANTAGES

- Special blend of moisture curing urethane prepolymers in solvent and its chemical similarity to SpECtop coatings ensures good adhesion between the two within the specified overcoat times.
- Acts as a sealer on porous substrate such as concrete and will consolidate a friable substrate

Packaging:
5 & 25 litre packs

SpECtite PUFlex Primer

SINGLE COMPONENT, WATER BASED SBR PRIMER

TYPICAL USES

- For sealing and priming porous cement type substrates and boards prior to applying SpECtite PU-Flex Primer
- For interior and exterior use

ADVANTAGES

- Very good sealing properties
- Excellent foundation for cementitious waterproofing and self-levelling product
- Very good adhesive strength
- Quick drying
- Water based - Environmentally friendly

Packaging:
5 & 20 litre packs

SpECtop CPD Primer SB

CAR PARK DECK SOLVENT-BASED PRIMER

TYPICAL USES

- Suitable for providing an excellent bond between cementitious surfaces and the SpECtop CPD System range.

ADVANTAGES

- Low viscosity properties
- Provides a bond greater than the cohesive strength of the parent concrete

Packaging:
4.5 & 15 litre

SpECtop CPD Primer SF

2 COMPONENTS, CAR PARK DECK SOLVENT-FREE PRIMER

TYPICAL USES

- Suitable for providing an excellent bond between cementitious surfaces and the SpECtop CPD System range.

ADVANTAGES

- UV stable
- High mechanical strength
- Produces a bond that exceeds the cohesive strength of the parent substrate
- Solvent-free

Packaging:
4.5 & 15 litre

SpECtop Primer F1

LOW VISCOSITY EPOXY RESIN FLOOR PRIMER

TYPICAL USES

- Suitable for providing an excellent bond between cementitious surfaces
- As a primer for SpECtop epoxy resin range of floor toppings
- As a primer for SpECbuild EM epoxy mortar

ADVANTAGES

- Low viscosity properties, which enable the material to penetrate the substrate
- Provides a bond greater than the cohesive strength of the concrete

Packaging:
1, 5 & 15 litre packs

SpECtop Primer FX

MOISTURE TOLERANT EPOXY RESIN PRIMER

TYPICAL USES

- When concrete floors can be prepared but not thoroughly dried
- When it is impossible to wait for concrete to dry out completely
- When it is necessary to suppress rising damp in concrete floors

ADVANTAGES

- High mechanical strength
- Produces a bond that exceeds the cohesive strength of the parent substrate
- Provides an impervious barrier to the passage of moisture
- Solvent-free

Packaging:
5 litre packs

SpECtop LFC Primer

WATER BASED ACRYLIC PRIMER

TYPICAL USES

- Primer for SpECtop LFC
- For priming wide range of floor finishes including carpets, tiles, vinyl sheet, linoleum and rubber sheet.

ADVANTAGES

- Water-based

Packaging:
5 litre packs

SpEC | Speciality Engineering Chemicals

ENGINEERED SOLUTIONS

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