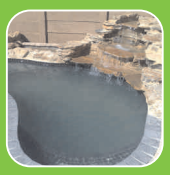




hydro SEAL

Multi Purpose Sealants

Hydro Seal is a unique range of multi purpose sealants which comprises of cementitious powders and activating chemicals.

It is a watertight compound with filling properties which penetrates concrete and masonry units forming part of the structure.






hydro SEAL *withstands all Elements of Nature!*



HYDRO SEALANT

Cementitious Surface Waterproofing System

Description

Hydro sealant is a two part waterproofing system incorporating a blend of cementitious powders combined with proprietary activating chemicals and high grade quality aggregate fillers with Hydro Bonding agent.
Hydro Sealant is available in two formulations:

* Course
* Fine

Hydro Sealant is a waterproofing system with concrete, cementitious and masonry substrates.
It penetrates the surface through moisture absorption and reacts with the free lime forming a hard crystalline material which blocks the pores against water penetration and becomes an integral part of the structure.
It provides positive and negative waterproofing against dampness and ground water as well as hydrostatic pressure.

Typical Applications (see mix sheet for more)

* Waterproof grout
* Basements, lift walls, tunnels
* Sewerage tanks, effluent pits
* Reservoirs, canals, swimming pools
* Water towers, silos
* Subway, manholes
* Pre-stressed and pre-cast concrete units
* Koi/fish ponds, Brick or Concrete farm Dams
* Seals and Decorates Exterior & Interior Walls

Advantages

* Pre-blended
* Available in two formulations
* Ease of applications - brush applied
* Blocks passage of waterseals pores
* Can be applied to damp surfaces or green concrete
* Non-toxic and non tainting

Typical Properties

Colour - Various
Gravity: Hydro bonding agents
Working time: approximately 60 minutes at 20 C
Setting time: Similar to concrete
Over coating: Minimum 12 Hours
Time: Depending on temperature
Application temp: 10C to 35C
Durability: Similar to that of normal Portland Cement
Toxicity: Non-Toxic
Drinking Water: Will not taint water once product has cured.
Yield: One 25kg bag of Hydro Sealant when mixed with 3 liters of Hydro bonding agent and 6 liters of water will yield approximately 16 liters of slurry.

Directions for use

Surface Preparation

* Surfaces to be treated must be free of dust, oil and grease.
* Any curing compound, mould, oil, release agent or other surface treatment must be removed. Remove any laitance from concrete and weak delaminating mortar from brickwork / concrete.
* Brush down and clean off, leaving a sound substrate providing adequate bond for the applied slurry. Preparation is usually carried out using mechanical tools such as angle grinders fitted with surface grinding discs.
* Static cracks greater in width than 1mm must be chased out, dampened down and repaired with HydroStop which is then coated with a slurry of Hydro Sealant.

Mixing

* Mix 1 x 25kg bag of Hydro Seal to 3 liters of Hydro Seal Bonding Agent and 6 liters of water to produce a suitable brush on mixture.
* Using a suitable container, add the powder to the liquid and stir to produce a thick slurry. Whilst applying the product, occasionally stir the slurry to prevent settlement of the solids within the container.
* Do not re-tember the product once it has started to set.
* Let mixed product stand for 2 minutes for the Chemicals to Activate.
  Stir the slurry again and now the product is ready for applications.

Application

* If there is exposed reinforcement within the treatment area, coat with Hydro Bonding Agent where it enters the concrete, to ensure sound bonding is achieved.
* Prior to application, Pre saturate with water, (the area to be treated) and ensure any free standing water is removed before commencing with the coating
* Apply the material in two or three coats, each coat at right angles to the other. For adequate waterproofing protection and results, a minimum coverage of 1.5kg/m2 should be specified Note:- Dual coat application is applicable only on water containing units.
* Allow 12 hours curing between each and subsequent coats.
  Wash with water and soft Brush / Broom after at least 12 Hours of last coat then fill with water.

Watch points

* Protect treated areas from mechanical damage.
* Protect newly treated surfaces from frost and rain.
* Use rubber or plastic gloves to protect against cement burns.

Colours

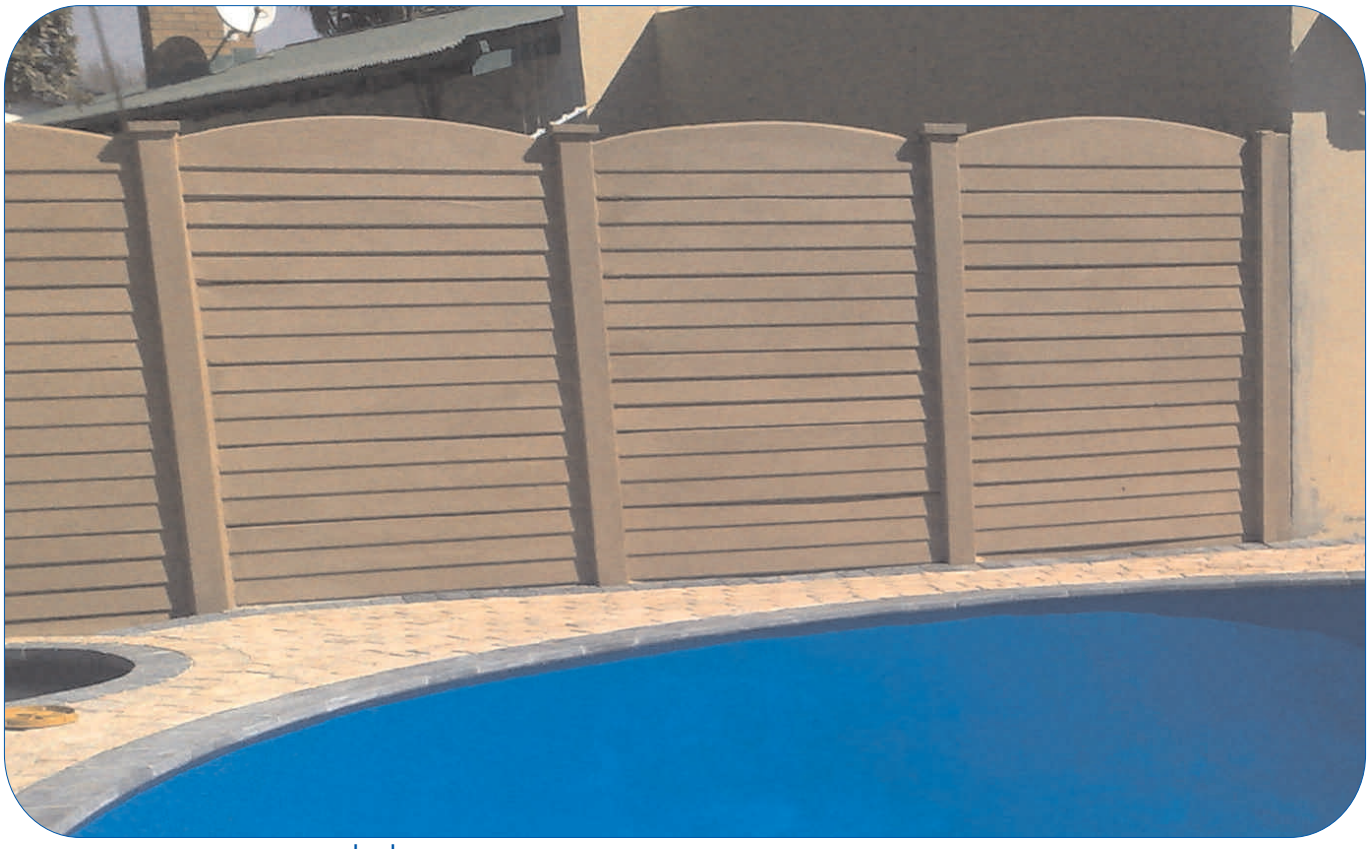
Hydro Sealant is available in selected colours

Packaging

Hydro Sealant is supplied in a kit containing 25 kilograms, powder and one 3 litre bottle of Hydro Bonding Agent or 12.5 kg powder and 1.5litre Hydro Bonding Agent and 2kg powder and 250ml Hydro Bonding Agent.

ROCK ART CRACK FILLER

PRE CAST WALLS



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HYDRO SCATTER CRETE

A Natural Aggregate Concrete Floor Hardener, 2-3 Times Greater Wear Resistant than Plain Concrete Floors

Description

HYDRO SCATTER CRETE specially graded inert quartz aggregate combined with blended cements, water absorbing agents and other proprietary chemicals. The hard wearing quartz aggregate has high abrasion resistant characteristics and is non-oxidizing and chemically inert.

Typical Applications

HYDRO SCATTERCRETE provides one of the hardest wearing non-dusting floor surfaces in the following typical locations / facilities:

Industrial / Commercial

Engineering Workshops
Abattoirs
Garages
Bakeries
Warehouses
Laboratories
Power StationsBoma's
Subways Carports
Loading BaysHigh Traffic Walkways
Car Parks
Breweries
Refineries
Desalination Plants
Factories

Household

Decorative Flooring
Garages
Lapas
Patios
Bathrooms
Entertainment Areas

Advantages

* HYDRO SCATTER CRETE is designed to increase the durability and wearing properties of industrial and commercial concrete floors.
* HYDRO SCATTER CRETE is applied by the dry shake method and is incorporated monolithically into the concrete surface.
  it produces an extremely hard wearing durable floor surface with added resistance to abrasion, dusting and penetration of aggressive liquids.
* Improves impact resistance.
* Reduces maintenance costs.
* HYDRO SCATTER CRETE can also be applied as a trowelled overlay system, incorporating HYDROBOND

Typical Properties

Natural concrete colour
Also available in other colours - see chart

Directions for Use

Base Concrete: The base concrete should be designed to a minimum of 25 MPA - 30 MPA with ± 65 mm slumps.

Method of Application, Dry shake method: Base Concrete

* Place concrete and strike off to the specified level
* Level and consolidate with wood float, bull float or power trowel with the blades flat
* If bleeding occurs, remove all bleed water from surface prior to application
* Hand or machine floating

Application

* The HYDRO SCATTER CRETE should be applied when the base concrete is sufficiently firm to take the weight of both workman and power float leaving foot prints no greater than 3mm in depth. It is essential that no free standing water is evident. DO NOT DELAY application when this point has been reached.
* Apply 2 / 3 of the first shake and carry out the first power or hand trowel operation, repeat the operation with the remaining 1 / 3 at right angles to the first. Ensure that the first stage is completely trowelled - in before continuing with the second stage.
* When the sheen begins to leave the surface, carry out power trowelling to close the pores and completely level the surface. Initially the power float blades should be set flat or at a slight angle and as the surface continues to stiffen, the angle of the blades should be increased When trowelling, do nor add water to the surface for finishing purposes.

Coverage

Dry shake method:

The following table details the coverage rate of the HYDRO SCATTER CRETE:

Floor specification:	kg / m² Dry Shake Application
Light duty:	3-4
Medium Duty:	5-7
Heavy duty:	8-10

Curing should be carried out immediately the final trowelling operation has been completed with HYDROCURE Concrete Curing Compound Protect all surfaces from traffic until the surface has gained full strength.

Joints: Saw Cut joints should be cut at + 5mm wide and 25% in depth to the surface bed thickness These joints should be cleaned immediately with water and compressed air and left open for at least 28 days before sealing Cuts should be made as soon as is practically possibly without spading the cut joint Seal joints with HYDROSEAL Joint Sealant in gun or pour grade.

Watchpoints

* Maximum concrete slump should be 75 mm
* Do not apply over concrete containing calcium chloride or where concrete contains more than 3% entrained air
* Do not cure with salt water or brackish water
* Never apply over bleed water
* Be aware of concrete susceptible to delayed bleeding.
* Do not apply over concrete containing unrefined lignosulphonated admixtures.
* Always cure as soon as possible with HYDROCURE Curing Compound

Packaging

Supplied in 25kg double-lined moisture resistant bags or 25kg buckets.

HYDRO SELF LEVELLING FLOOR SCREED

DESCRIPTION

Hydro Self Levelling Floor Screed consists of a specially graded inert quarts aggregate incorporating light fast coloring pigments combined with blended cements, water absorbing agents, super plastic ises and redispersable powders. The hard wearing quartz aggregate has high abrasion resistant characteristics, is non-oxidizing and chemically inert.

TYPICAL APPLICATION

Hydro Self Levelling Floor Screed provides a hard wearing non dusting coloured floor services for the following locations and facilities:

* House floor applications
* Garages
* Warehouses
* Abattoirs
* Bakeries
* Car Parks
* Factory Floors

Advantages:

* Produces an extremely hard wearing surface with added resistance to abrasion, dusting and penetrating of aggressive liquids
* Added colours produce a permanently coloured overlay.
* Improves impact resistance
* Easy to clean
* Once properly applied it will provide a smooth flat surface onto which vinyl or linolium, large format tiles, parquet carpets and laminated floors can be laid.
* It also provides a substrate of uniform absorbency on a variety of sub surfaces.
* A surface with defined absorbency is particularly important for laying textile and elastic floorings using water based dispersion adhesives.
* These very low - emission adhesives will usually only set properly on an absorbent substrate.
* Self levelling floor screeds have extremely complex compositions and must meet a wide range of demands.
* The trend towards rapid construction means that the product must set and develop their strengths very rapidly, and at the same time, applicators require long pot lives of the product.
* Hydro Self Levelling Floor Screed meets these complex requirements.

TYPICAL PROPERTIES

COLOUR:	Natural concrete colour as well as other alkali-fast inorganic colours
ABBRASION VALUE:	Two times greater than plain concrete surfaces
STORAGE LIFE:	Up to one year when stored in accordance with manufacturer's instructions.

DIRECTIONS FOR USE:

BASE CONCRETE

The base concrete should have a minimum strength of 15 MPA in the case of house floors and 25-30MPA for industrial floors.

CONCRETE PREPARATION

New floors

New floors must be cleaned; all dust and laitance must be removed. Wash floor thoroughly with water and remove pooled free water.

The concrete floor needs to remain damp prior to application of Hydro Self Levelling Floor Screed.

Old Floors

There are two recommended ways of laying Hydro Self Levelling Floor Screed onto old concrete surfaces.

1)Acid etching

Remove all oil, grease laitance and dust by washing the floor surface with a normal detergent
Ensure that all of the emulsified oil and grease is washed off with copious volumes of water.
The above procedure is followed by acid etching by the prepared surface.
Leave the acid reagent on the floor for 15-20 minutes before the final washing with water.

2)Scrabbling

The area to be prepared must be scrabbled and then cleaned to remove all oil, grease, laitance and dust.
The clean surface is then pre-saturated for a period of 18-20 hours prior to the product being applied.
For both methods of application

MIXING

It should at all times be carried out mechanically.
This type of mixing will ensure smooth lump free pourable slurry of the product.
Add 6 litres of water per 20kg bag to produce a flow able self levelling material.
Let mixed product stand for five minutes to fatten up before use.

INSTALLATION

Construct side forms having a minimum depth of 5mm along the construction joints of the concrete slabs or blocks. Level the side forms. Mix the product as prescribed under mixing. Ensure the subsequent batches are ready to place as soon as the first batch of material is applied. In Practice, the mixed product is poured out onto the concrete surface, and using a spiked roller pushes the liquid product in place. The roller will help to remove any air bubbles, and will keep the product alive along the working front of the placed materials. Repeat process with subsequent batches.
As the area is being filled with the product it will be necessary to use a straight edge to level off the product to the required height. A smooth flat surface should be obtained. Protect all surfaces from traffic until the surface has completely hardened or gained full strength. A newly laid surface must be cured with Hydro Cure 200 curing compound.

JOINTS

Saw cut joints may be required and will depend upon the size of the area. The width of the saw cut joint must be approximately 5mm and the depth will depend upon the thickness of the overlay. After cutting ,the joints should be cleaned with water and compressed air and left open to dry. The joints must be sealed with Hydro Seal Joint Sealant.

YIELD

One 20kg bag when mixed with 6litres of water will yield approximately 14litres of liquid mortar.

PACKAGING

Supplied in 20kg bags or buckets.

HYDROPLAST

Modified Cementitious Fibred Polymer Mortar and Waterproofer for concrete Repairs and Structural Renovations

Description

HYDROPLAST a fibre and polymer modified cementitious mortar suitable for heavy duty plaster aerated concrete and cementitious structures repairs.

HYDROPLAST ensures that repairs to new and old structures are waterproof and further protects the concrete from deterioration by preventing penetration of chloride irons, sulphate, etc. Being cement based, the HYDROPLAST repair system protects embedded steel by creating a passive (alkaline) environment as well as ensuring thermal compatibility with the base concrete

Typical Applications

* Repair of concrete pipes / precast concrete
* Repair of damaged structural concrete
* Used as a water-tight plaster / caulking mortar
* Beams / columns
* Food processing and bottling plants
* Offshore structures and sewage works
* Marine environments exposed to constant contact with sea water
* Repairs and renovations to squash court walls
* Repairs to honeycombing
* Repairs to aerated concretes and mortars
* Wherever a Highly durable repair topping or render is required to ensure maximum resistance to salt penetrations, sulphate, etc.

Advantages

* Factory controlled - no site blending required
* Can be plastered to a feather edge or applied for mass mortar renovations
* Thermal movement is similar to that of base concrete
* Extremely versatile - can be used for repairs in both vertical and horizontal applications
* Highly resistant to abrasion and mechanical impact
* Initial surface absorption 90% less than that of normal concrete
* Excellent bond to base concrete or asphalt
* Vapour permeable

Directions for Use

Concrete Repair: It is generally accepted that concrete is best repaired with concrete or cement mortar (only when there are other over-riding factors are epoxy resin based materials substituted). To meet these requirements for a cementitious repair method use HYDROPLAST in conjunction with our HYDROPOXY Wet to dry Epoxy adhesive.

Surface Preparation: Where necessary cut back to expose sound concrete and reinforcing bars. Mechanically clean reinforcing steel to remove corrosion. Wash reinforcing steel with clean water (to remove soluble salt contamination) and allow to dry. Use hot water and trisodium phosphate to remove grease and oil. Prime reinforcing with zinc rich primer and allow to dry for 3-4 hours.

Priming: Prime all clean and prepared surfaces with HYDROPOXY Wet to Dry Epoxy Adhesive. If inserting new reinforcing bars, coat same with HYDROPOXY wet to Dry Epoxy Adhesive prior to proceeding with the repair.

Repair: Whilst primer is still wet - carefully apply and compact HYDROPLAST mortar. HYDROPLAST mortar can be applied from 5mm to 40mm dependent on repair size geometry. On larger flat areas, layers should not exceed 10mm in thickness, though several layers can be applied in quick succession, each layer being allowed to obtain initial set before the next is applied (usually between 20-40 minutes dependent on ambient temperature conditions). Finish off the final surface. Alternatively scratch the first coat after application, allow to dry overnight and then apply second layer. Cure with water or wet Hessian.

Other Repairs: Squash court walls, new or renovated: Remove existing plaster to brick or concrete face and scarify where necessary to obtain a rough and sound surface. Wash down with water. Pre-saturate prepared surface and apply bonding slurry of equal parts cement, water and HYDROBOND to surface. Immediately apply HYDROPLAST to the required thickness (15mm to 25 mm) then strike off to desired profile and wood float. As soon as the HYDROPLAST has firmed, steel trowel to final finish. Allow a maximum working time of 25 minutes when applying the product to the bonding slurry. Cure with HYDROCURE Curing Compound using brush or roller. Where crack bridging is required, use HYDROPLEX Acrylic System.

Mixing: Utilizing a suitable mixer, simply add the water to the powder and mix to desired consistency. Hand mixing is permissible for one bag mixing. Use 3 to 5 litres of water per 25kg bag/bucket

Yield: 1 x 25kg bag yields ± 12 litres

Watch points

* Do not mix more mortar than can be used within 20 minutes
* Do not provide less than 25mm absolute minimum cover of repair mortar over reinforcement
* Do no re-temper or add water once the material has started to set
* For areas where the repairs are larger than 40mm thick, steel ties with thin mesh should be inserted to support its own weight.

Chemical Resistance

Improves resistance to attach from raw sewage, mild acids and alkalis, dairy products, sugar and petroleum spirits.

Packaging

Supplied in 25kg moisture resistant bags or buckets.

Typical Properties
HYDRO MIX N FIX

Compressive Strength:	1Hr MPA	24Hrs MPA	7 Days MPA	28 Days MPA
	10	18	25	30

Note: Alternative formulations are available where higher ultimate strengths are required.

Setting Time

Temperature can effect the setting time of HYDRO MIX & FIX. Initial set is +- 10 minutes and final set 1 hour. This allows sufficient time for mixing, placing and finishing.

Typical Setting times for HYDRO MIX & FIX

Temp °C	Initial Set Time (Minutes)	1 Hr MPA	24Hrs MPA	7 Days MPA
4	60	2.5	15	25
22	10	10	18	30

Bond Strength: Using 12mm diameter x 1000mm long reinforcing bars, bond pull-out strengths of 10 tons in 6 hours are achieved.

Expansion: HYDRO MIX & FIX is non-shrink and has slight expansive properties. When mixing small batches at a time the entire bag should be thoroughly mixed dry before weighing off the required quantity.

Direction of Use

Surface Preparation: Concrete surface must be dean, sound and free of all contamination viz., dust, dirt, grease, acids, oil and curing membranes, etc. Areas for repair must be square cut to a minimum depth of 25mm and made rough. Do not feather edge this material. When reinforcing bars are exposed ensure that they are thoroughly wire brushed or sand blasted prior to application of HYDRO MIX & FIX. do not use bonding compounds on the reinforcing steel. Never add more water than the mixing instructions allow as additional water will destroy the strength and chemical properties of he HYDRO MIX & FIX Formulations.

Mixing Instructions - No Priming Is Required

Mortar:	1 x 25kg bag HYDRO MIX & FIX 2-2,5 litres of clean water
Patching:	1 x 25kg bag HYDRO MIX & FIX "Fine Patch" to 2-2,5 litres of clean water
Concrete:	1 x 25kg bag HYDRO MIX & FIX to maximum 2 litres of clean water
Small Batches:	5kg MIX & FIX TO 400ML - 500ML OF CLEAN WATER

Note: Never add cement and / or sand to HYDRO MIX & FIX

When mixing small batches at a time, the entire bag should be thoroughly mixed dry before weighing off the required quantity

Watch points

Joints: All joints and non-static cracks in the substrate must be duplicated in the HYDRO MIX & FIX repair. As soon as the repair is hard any joints that could not be formed must be saw-cut through the full depth of the repair and to the same width as the joint in the substrate, clean out all debris from the formed joint and seal with a HYDRO JOINT SEALANT.

Coverage: 25kg HYDRO MIX & FIX combined with the correct amount of water (see instructions) will yield +- 12 litres / bag. Compacted density is +- 2280kg / m3 (77 x 25kg bags per m3). HYDRO MIX & FIX yields 10 litres / 2500kg /m3.

Packaging

Supplied in 25kg polyethylene lined bags or bucket.

hydro SEAL

Multi Purpose Sealants

APPLICATIONS

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Multi Purpose Sealants

Koi Ponds
Farm Dams
Water Proof Grouting

Swimming Pools

Rock Art

Exterior Walls
Boundary Walls
Parapet Walls
Balconies
Dampproofing
Coloured Flooring

HYDRO MIX & FIX

An Exciting new product added to our Revolutionary range of Products. A pre-blended Chemical Set Mortar for High strength repairs: A maintenance product to complete the job within minutes instead of hours. Over and above our specified typical applications this product can be used for repairs to the following:

* **Potholes**
* **Swimming pool structures and weirs**
* **Koi pond / fish ponds**
* **Concrete water retaining units**
* **Gate Rails**
* **Palisade Posts, etc**

Typical Applications

Used in situations where minimum delay and work disruption is of utmost importance

* Repairs to industrial floors
* Repair of concrete roads
* Repairs to all types of pre-cast concrete
* Crane rails and small base plates
* Loading bays and Platforms
* Beams / columns / plinths
* Used as a bedding mortar
* Bridge decks and nosings
* Cold room floor areas
* Around fixing bolts and pipes
* Repairs to honeycombing
* Raising and levelling manhole covers, gratings, hydrants, etc.
* Sewerage repairs

Description

HYDRO MIX & FIX a pre-blended grey coloured powder incorporating selected aggregates and is chemically formulated to give controlled high early strength properties.
HYDRO MIX & FIX is a repair material for concrete /pavements and reaches adequate strength for trafficking normally within 1 hour. It is also used as a repair medium at low ambient temperatures.

Advantages

The advantages over conventional repair materials are:

* High early strength
* Minimum delays to traffic and production. When used to repair concrete paving it allows the opening to traffic within one hour after laying
* Pre-mixed - only requires the addition of water (see Mixing)
* High bond strength. No secondary bonding agents required (+- 7 times greater than that of concrete)
* Highly durable, excellent resistance to de-icing salts
* No curing required
* Can be placed in sub-zero temperatures
* Non-shrink
* No pre-saturation to substrate required
* Thermal expansion and contraction similar to that of Ordinary Portland Cement

HYDRO DECOR

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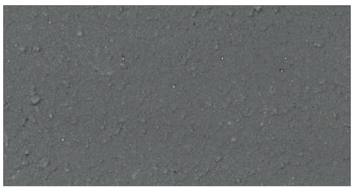
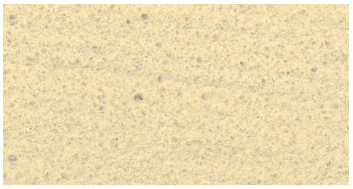
HYDROSEAL COLOUR CHART

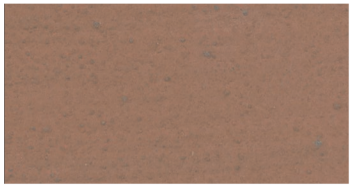
The Decorative range of Sealants are
available in the following colours



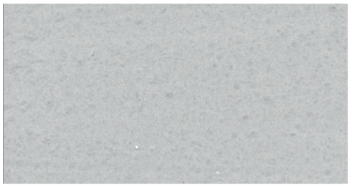
Charcoal



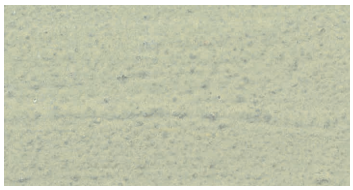
Sandle Wood



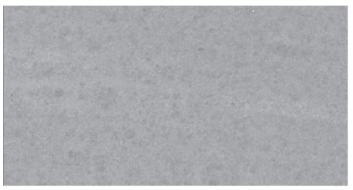
Terracotta



Light Grey



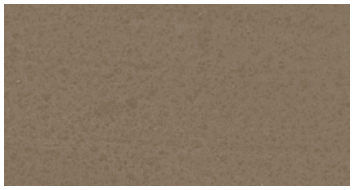
Faded Green



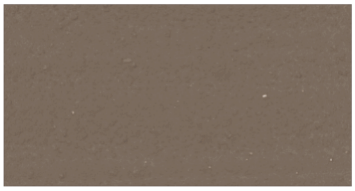
Grey

Summer Orange

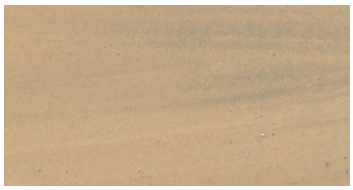
Almost White



Sanlemere



Mid Brown



Kalahari

Sandstone

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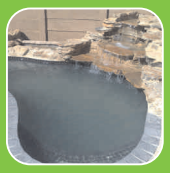


HYDROSEAL
Multi Purpose Sealants
Tel: 011 396 3684
Fax: 011 396 3540
Fax to email: 086 627 8250

PLOT 162
3rd Avenue, Bredell
Kempton Park

For further enquiries and information contact:
Danny Williams: 083 274 4082

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