



**GlobalBusiness
SOLUTION**

ADVANCED WATERPROOFING & PROTECTION SYSTEM







+88 01916 82 21 06



info@globalbusinessbd.com



www.globalbusinessbd.com

-  **Complete Waterproofing Solution**
-  **Advance Repair System**
-  **Flooring & Surface Formation**
-  **Sealing & Bonding System**





WE DEVELOP QUALITY & ADD VALUE

A NETWORK OF TECHNICIANS, CONSULTANTS
AND SALE AGENTS AT YOUR SERVICE

Our aim is to ensure that your work is guaranteed success and finished to highest quality. For this purpose, we offer the services of our expert team to assist and advise you on the best solution for all of your projects.

Our sales network is always available to help you and we will appoint a personal representative qualified to give specific advice at any time.

We offer technical support for all the architects, engineers, technical departments and contractors. Your personal advisor will be available to resolve any doubts and assist with the specific needs of your project.

In addition, we will provide all the information, technical specification and certificates for our range of products before, during and after the execution of work.

Our business model, based on research, development, quality and service, has allowed us to operate in accordance with the strictest quality standards of this sector, marking us one of the top supplier on Bangladesh market, with an ever growing and sustained for our product





SELF ADHASIVE MEMBRANE: (SBS Polyester reinforcement)



DESCRIPTION: BITUMAT BITUSEAL 1200 - a widely specified and proven product, used extensively in waterproofing. The nonwoven polyester reinforcement provides additional puncture resistance, tensile strength and tear resistance

ROLL LENGTH: 20mt.

THICKNESS : 1.55mm

WEIGHT 1.5kg/m

RE- INFORCEMENT: 130/140 gsm nonwoven polyester fabric

COVERAGE RATE (Approx.)

Flat areas : 1.12 M2/M2 with 10 cms. Side laps and 15 cms. end laps using 20 Mtrs. rolls.

AVARAGE WASTAGE : 3 - 5 %

FILDS OF APPLICATION: BITUSEAL 1200 is the ideal membrane for damp proofing foundations, bridges, viaducts and tunnels. It is recommended for use under composition shingles and roof tiles, as a protective shield against water and ice. Strips of various widths are used extensively in road design and construction

PROPERTIES & ADVANTAGES: · Self-adhesive, Re-inforced, · Ease of application

TECHNICAL CHARACTERISTICS:

Softening Point ,°C- 110 (ASTM D 36)

Penetration, @ 25°C, dmm- (ASTM D 5)

Tensile Strength, N/5cm Longitudinal Transverse- (7.995 N/mm)2 480 (6.39 N/mm)2 -(ASTM D 412;ASTM D 828 UNI 820)

Elongation at break, % >2000 (ASTM D 412(c); DIN 1955)

Tear Resistance, KN/M Longitudinal Transverse: 44.44 (248.58 lbf/in) 50.00 (279.66 lbf/in) (ASTM D 624 D)

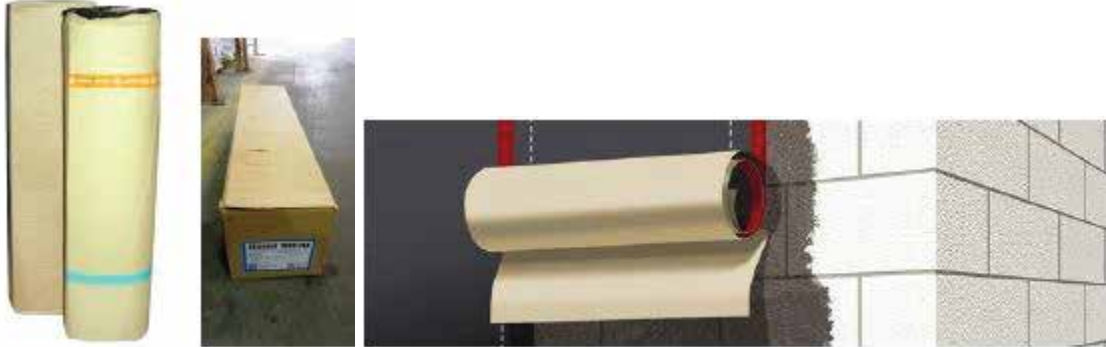
Puncture Resistance, Kg 38.67 (ASTM E 154)

Water Absorption, % WT (72 hrs.@ 23°C) <0.08 -(ASTM D 5147)

PACKING: 1M x 20 M IN ROLL (WITH OUTSTDE STRONG CTN)



SELF ADHASIVE MEMBRANE: (SBS, Cross Laminated HDPE Film)



DESCRIPTION BITUSEAL 1500 CLX – MR is a self-adhesive, extremely flexible waterproofing membrane. The elastic self-adhesive, SBS Modified bitumen compound is reinforced with rotproof 50 – 60 GSM Glassfiber matt backed with a Cross Laminated HDPE Film resulting in outstanding physical properties making Bituseal 1500 CLX - MR as one of the most rugged self-adhesive membranes. The advanced carrier film is manufactured by cross laminating and chemically bonding the layer together.

ROLL LENGTH: 20mt.

THICKNESS: 1.6mm

WEIGHT: 1.6kg/m

RE- INFORCEMENT: SBS Modified bitumen compound is reinforced with rotproof 50 – 60 GSM Glassfiber matt backed with a Cross Laminated HDPE Film

COVERAGE RATE (Approx.)

Flat areas : 1.12 M2/M2 with 10 cms. Side laps and 15 cms. end laps using 20 Mtrs. rolls.

AVERAGE WASTAGE: 3 - 5 %

FILDS OF APPLICATION: BITUSEAL 1500CLX MR is the ideal membrane for damp proofing foundations, bridges, viaducts and tunnels. It is recommended for use under composition shingles and roof tiles, as a protective shield against water and ice. Strips of various widths are used extensively in road design and construction

PROPERTIES & ADVANTAGES: · Self-adhesive, Re-inforced, · Ease of application

TECHNICAL CHARACTERISTICS:

Elongation of Adhesive Compound coating 2000 (ASTM D 882)

Adhesive compound softening point (C) -110 (UEAtc, ASTM D 36)

Tensile Strength Longitudinal-35 (N/mm), Transverse 30 (N/mm)- ASTM D 882

Elongation Longitudinal 550 % Transverse 600 % (ASTM D 882)Tear Resistance, KN/M Longitudinal

Tear Strength Longitudinal 180 N/mm, Transverse 190 N/mm (ASTM D 100)

Tear Strength Longitudinal 210 N, Transverse 130 N (ASTM D 514)

Puncture Resistance, 210 N (ASTM E 154)

Resistance to Hydrostatic Pressure 7 bar DIN 1048, (ASTM D5385)

Flexibility at Low Temperature 0 -20 C Pass (UEAtc)

Adhesion Strength to Primed Concrete 2.2 N/mm (ASTM D 1000)

Water Vapour Transmission 2 0.2 gr/m /24hrs (ASTM E 96)

Water Absorption @ 24 hrs. 0.14 % , @ 35 days 0.95 % (ASTM D 570)

Crack bridging ability 2 mm (ASTM C 836)

PACKING: 1M x 20 M IN ROLL (WITH OUTSTDE STRONG CTN)



APP & SBS Waterproof Membrane: Polymer modified



DESCRIPTION TOP SEAL : (Polymer modified Bitumen membrane with Non-woven Polyester) is a finely formulated polymer modified bitumen membrane, consists of non-woven polyester reinforcement impregnated and coated on both sides with polymer modified bitumen

ROLL LENGTH: 10mt.

THICKNESS: 2mm, 3mm, 4mm 5mm

WEIGHT: 3.8kg/m

RE- INFORCEMENT: Non- woven polyester

COVERAGE RATE (Approx.)

Flat areas : 1.15 M2/M2 per layer with 10 cms. Side laps and 15 cms. end laps using 10 Mtrs. rolls.

AVERAGE WASTAGE: 3 - 5 %

FIELDS OF APPLICATION: Its ideal for a wide range of waterproofing application including Roof, Terrace Garden, basement, Car parking, Foundation works, Sunken slabs, Tunnels

PROPERTIES & ADVANTAGES:: · Excellent cost performance ratio, Easy to install, , Total Impermeability, Good Bondability & seam integrity, Stability at high temperature, Good Flexibility, Compatible with normal roofing & building.

TECHNICAL CHARACTERISTICS:

1. Softening Point ,°C- 150 (ASTM D 36)
2. Penetration, @ 18°C, dmm- (ASTM D 5)
3. Tensile Strength, L/T, N/5cm@23+ 2°C 600/400 (ASTM D 5147)
4. Elongation L/T, % @23+2°C 40/45 (ASTM D 5147)
5. Tear strength L/T, N 300/200 (ASTM-D 5147)
6. Heat Resistance @ 80 °C – No Flow (ASTM D 5147)
7. Cold Flexibility °C 0 to +5 (ASTM D 5147)
8. Lap Joint strength L/T, N/5 cm @23+2°C 620/400

PACKING: 1M x 10 M IN ROLL



Bituminous Primer



DESCRIPTION

Hitech Extraseal is an excellent quality universal primer, manufactured from a special type of bitumen. It is solvent based and commonly applied onto various substrates (concrete, concrete blocks, bricks, foam concrete, fiber and steel substrates) to improve bonding of bituminous products. **Hitech Extraseal** is in accordance with **ASTM D 41**. Its recommended to apply at temperatures above 5°C

PROPERTIES & ADVANTAGES

- Binds dust, which increases its adhesive property.
- Improves adhesion / bonding of bituminous materials to the substrate.
- Water-resistant.
- Corrosion and chemical resistant.
- Penetrates and seals porous surfaces.
- Fast drying.
- Cost effective, no heating, thinning or mixing.
- Compatible with various substrates and structures.

FIELDS OF APPLICATION:

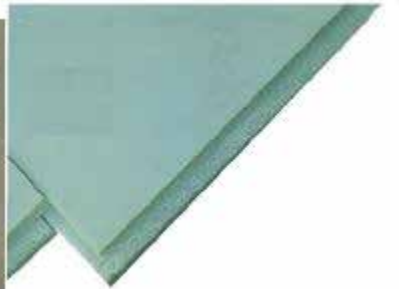
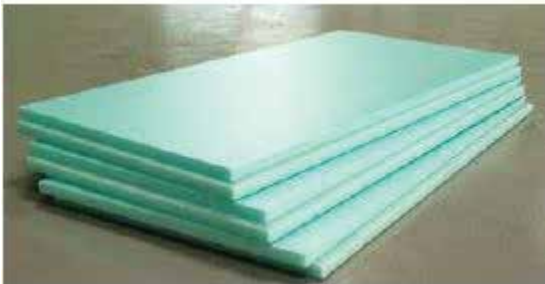
- Extra seal primer on roofs and walls made from reinforced concrete, asphalt, bricks, metal and porous substrates before applying any of waterproofing sheet membranes and protective coatings.
- Single coat protective coating on various construction structures and on metal structures. It can be applied on vertical and horizontal structures..

PACKING: is available in 20-liter pail

COVERAGE AREA: 500 sft



Extruded Polystyrene Thermal Insulation Board (XPS)



DESCRIPTION Bitumat BituTHERM is a thermal insulation Extruded Polystyrene material in form of rigid boards, made of polystyrene, (a derivative of petroleum) by using the extrusion method. The boards have a closed cell structure and therefore they are resistant to water and humidity. They have excellent thermal insulation and compressive strength properties.

PROPERTIES & ADVANTAGES

Heating and cooling account for 50 to 70% of the energy used in an average home. Inadequate insulation and air leakage are leading causes of energy waste in most home. • Reduce the consumption of electrical energy up to 40% during the cooling process Inside the building. • Increases the level of comfort for the inhabitants In a building as It provides a cooler Interior ambience. • The usage of AC Is minimized. This helps to reduce the cost of power consumption

FIELDS OF APPLICATION:

• Flat roofs, either accessible or non-utilizable, as inverted roof construction. • Roof Gardens. • Parking decks. • Exterior walls of buildings insulated on outer surfaces • Below-grade exterior walls of basements (Perimeter insulation). • On-grade floors of buildings. • Cold store Insulations.

SIZE: Standard size L 1250mm x W 600mm also available L 2500mm x W 1200mm

THICKNESS: 25,30,40,50,75,100 mm (Other thicknesses available upon request up to 180 mm)

EDGE PROFILES: Shiplap

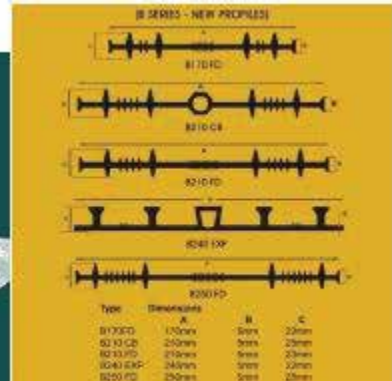
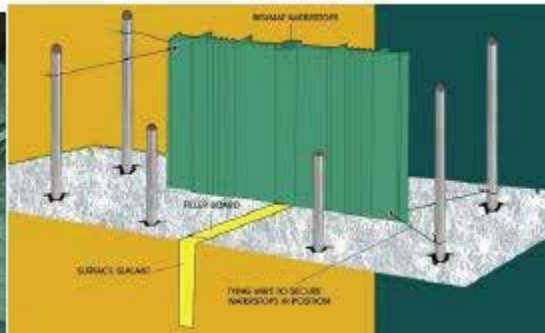
COLOR : GREEN & BLUE, SURFACE : SMOOTH

TECHNICAL CHARACTERISTICS:

- Density, min. Kg/m³ - 38-42 (ASTM D 1622)
- Thermal Conductivity (K) "0.026 0.18 (ASTM C 518)
- Compressive Strength at 10% deflection, min "70-100 480-700" (ASTM D 1621)
- Flexural Strength, min "75 517" (ASTM C203, Method I, Procedure B.)
- Water Absorption by Submersion, min. 0.30 ("ASTM D 2842 (+1% By vol. precision))
- Water Vapour Permeance, max 1.10 (ASTM C 355)
- "Dimensional Stability (Change in dimension), max." 2.0 (ASTM D2126)
- Oxygen Index, min. 24.0 (D2863)
- Classification Type VII (ASTM C 578)



PVC WATERSTOPS:



DESCRIPTION Bitumat Waterstops is an internally cast PVC waterstop system manufactured in a range of sizes for use in reinforced concrete structures. It is essential to form a continuous waterstop network at all joints to prevent the ingress of water and it is vital to use factory produced fabrications. Bitumat Waterstops, internal flexible waterstop systems, have been developed for positive embedment in insitu concrete by creating a valve action to seal the water path, suitable for horizontal and vertical application.

FIELDS OF APPLICATION:

- Dams
- Ponds
- Canal lining
- Water cisterns
- Water refining facilities
- Swimming pools
- Deck
- Construction tunnels
- Hydro electricity & thermal plants
- Bridges
- Refining facilities
- Metro constructions
- Power plants viaducts
- Supporting walls
- Flooring settled on ground & foundations
- Industrial structures

TYPICAL JUNCTION PIECES:

Available for Flat Dumbell and Centre Bulb Waterstops. Additional patterns other than those illustrated are available. Non regular design requirements of all types can be met by the supply of irregular L and Y Junction pieces manufactured in the full range of sizes. When ordering specify all the included angle.

- Supply for construction/contraction joints Flat Dumbell
 - 170mm wide 15m rolls wt 21.9 kg
 - 210mm wide 15m rolls wt 27.8 kg
 - 250mm wide 15m rolls wt 36.7 kg
- Supply for expansion/movement joints Centre Bulb
 - 210mm wide 15m rolls wt 26.9 kg
 - 260mm wide 15m rolls wt 38.4 kg

TECHNICAL CHARACTERISTICS:

Bitumat PVC waterstops of the size and dimension specified shall be used to form a continuous network as shown on the detailed drawings and fixed in position with site jointing limited to butt joints, strictly in accordance with the manufacturer's instructions.

- Properties of PVC Compound
- Tensile strength 13.78 N/mm² (2000 psi)
- Elongation at break 300%
- B.S. Softness 45
- Specific Gravity 1.25 - 1.35
- Compound Tested in accordance with BS 2571 and US
- Corps of Engineers CRD-C572-74.



PREMIUM QUALITY ACRYLIC WATERPROOF COATING



DESCRIPTION BITUMAT SYNROOF is a versatile acrylic elastomeric waterproof coating. It cures to a highly flexible, tough, seamless membrane for the protection of all kinds of roofs.

FIELDS OF APPLICATION:

BITUMAT SYNROOF is suitable for application to most types of roofs, flat or pitched eg., concrete, metal and wood etc. It also forms a heat and solar reflecting membrane.

PROPERTIES & ADVANTAGES

- Strong and flexible
- Excellent adhesion to substrate.
- Vapour permeable.
- Resistant to aging and UV radiation.
- Designed to be used in the Middle East
- climatic conditions.
- Single pack.
- Labour saving.
- Safe, non-flammable, non-toxic.
- Easy to apply.

COLOURS: Satin white and Grey.

COVERAGE: 1 Sq. mtr/kg to obtain 500 micron dry film thickness.

PACKING: 20 kg. metal pail.

EXPECTED LIFE TIME : 10 years

TECHNICAL CHARACTERISTICS

Solid Contents-60 + 1% (ASTM D 1076)

Viscosity at 25°C, CPS- 40,000 to 55,000 CPS (Brookfield)

PH- 9+1- (In-House Test)

Density, Kg / Lit 1.24 + 0.05 (ASTM D 1475-90/16)

Application Temp. +5 to +100°C

Curing Time at 25°C Around 48 Hours

Tensile Strength 145 N / cm (ASTM D 412)

Elongation at Break 300% (ASTM D 412)



WATERPROOFING ON EXPANSION JOINT & WALL PANEL JOINT TREATMENT



HYPERSEAL®-expert (One component, polyurethane-based, low modulus joint sealant ideal for use in high humidity conditions) is a novel low modulus expansion joint sealant, especially formulated to ensure bubble free cure even at very high temperature and humidity climatic conditions. The product displays excellent thixotropy allowing its use even in very large expansion joints

FIELDS OF APPLICATION:

•Expansion concrete plates, •Precast panels, •Brick and block work, •Water tanks and swimming pools, •Metal frames, •Aluminum windows and panels, •Irrigation channels •Glass, •Granite & marble

PROPERTIES & ADVANTAGES

- Excellent resistance to water and chemicals.
- Application underwater possible.
- Excellent Heat & Chemical Resistance.
- Microorganism and fungus resistant
- Low modulus, joint movement accommodation 50%
- Minimum elongation 700%
- Easy gunning.
- Good over paint ability.
- Economy
- Long successful track record in Performance

COLOURS: Grey, Black, Taja.

COVERAGE: Per sealants

- | | | |
|-------------------------|-------------------------|-------------------------|
| ● 5mmx5mmX1m- 24 RMT | ● 15mmx5mmX1m- 8 RMT | ● 20mmx5mmX1m- 6 RMT |
| ● 10mmx5mmX1m- 12 RMT | ● 15mmx10mmX1m- 4 RMT | ● 20mmx10mmX1m- 3 RMT |
| ● 10mmx10mmX1m- 6 RMT | ● 15mmx15mmX1m- 2.6 RMT | ● 20mmx15mmX1m- 2 RMT |
| ● 10mmx15mmX1m- 4 RMT | ● 15mmx20mmX1m- 2 RMT | ● 20mmx20mmX1m- 1.5 RMT |
| ● 10mmx20mmX1m- 3 RMT | ● 15mmx25mmX1m- 1.6 RMT | ● 20mmx25mmX1m- 1.2 RMT |
| ● 10mmx25mmX1m- 2.4 RMT | ● 15mmx30mmX1m- 1.3 RMT | ● 20mmx30mmX1m- 1 RMT |
| ● 10mmx30mmX1m- 1 RMT | | |

PACKING: 600cc sausage.

EXPECTED LIFE TIME : 25 years

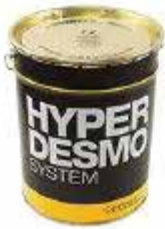
TECHNICAL CHARACTERISTICS:

- | | |
|---|---|
| ● Specific weight 1.45 gr/cm ³ | ● Elongation >700% |
| ● Cure Rate 2-3 Mm/day | ● Resilience >90% |
| ● Service temperature -40 to 80 oC | ● Adhesion to concrete > 20 (> 2) kg/cm ² (N/mm ²) |
| ● Hardness ±27 Shore | |



Exposed Polyurethane UV Resistant Membrane (Exposed Polyurethane UV Resistant Membrane)

HYPERDESMO®- CLASSIC



HYPERDESMO®-CLASSIC is a simple and economic solution for waterproofing and protection. It is a one component, low viscosity, polyurethane fluid which cures with the humidity in the atmosphere to produce a highly elastic membrane with strong adhesion to many types of surfaces. It is based on pure elastomeric hydrophobic polyurethane resin plus special inorganic fillers, which result in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

FIELDS OF APPLICATION: Water proofing, Protective coating & flooring- Exposed roof, Concrete, Metal, Gypsum walls, Fiber Cement, Under Tiles, Asphalt membrane, Car Parking System.

PROPERTIES & ADVANTAGES

- One component liquid PU
- Weather & UV resistance
- Excellent thermal insulation
- Seamless Flooring
- Applicable on sound substrates
- No toxic after full cure
- Good chemical resistance
- Very simple application
- Safe, non-flammable, non-toxic.
- Easy to repair with least cost

COLOURS: White, Grey & Taja.

COVERAGE: Apply with brush, roller or airless spraying in two coats with minimum total consumption of 1.2 kg/m²

PACKING: 25 kg. metal pail

EXPECTED LIFE TIME : 25 years

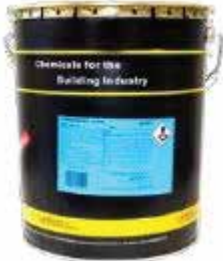
TECHNICAL CHARACTERISTICS (HYPERDESMO CLASSIC)

- 20kg/cm² adhesion.
- Seamless with High Elongation > 300%
- Hardness (Shore A) - > 60
- 40°C to 80 service temperature
- 200°C shock temperature
- 0.8 g/m².h-WV transmission
- 3000 cp to 6000 cp Viscosity
- 55 kg/cm² tensile strength
- 6-12 hrs. recoat time
- Excellent UV & chemical resistance.
- Specific weight - 1.3-1.4
- Strong adhesion to any substrata (>20Kg/Sqcm).
- Very Low water absorption.



NON –EXPOSED TERRACE TREATMENT-

HYPERSEDMO SWR (Polyurethane liquid membrane for waterproofing of wet rooms and non-exposed applications)



HYPERDESMO®-S-WR is a one component polyurethane fluid that cures with the humidity in the atmosphere. It produces a highly elastic, hydrophobic membrane and has been designed to offer excellent long term waterproofing of wet rooms, substructures and any application not exposed to UV. The rheology of the material is such that it allows easy application even on vertical substrates.

FIELD SOF APPLICATION:

Water proofing- Foundation Walls, Wet areas, Sunken areas, Concrete, fibrous cement, mosaic, cement roof tiles, wood, corroded metal, and galvanized steel. Flat roofs, under tile or screed, verandas and balconies (under protection

PROPERTIES & ADVANTAGES

- One component liquid PU
- Highly elastic and durable.
- Resistance to cold: The film remains elastic even down to -40 oC.
- Can be applied on a wet surface.
- No primer required.
- very strong adhesion to the substrate,
- cures with humidity in the atmosphere
- Cures very fast.
- Low water absorption rate.
- High elongation, tensile and tear strength
- Seamless & Water vapor barring

COLOURS: Black.

COVERAGE: Apply with brush, roller or airless spraying in one or two coats with minimum total consumption of 1.5 kg/m²

PACKING: 25 kg. metal pail

EXPECTED LIFE TIME : 25 years

TECHNICAL CHARACTERISTICS (HYPERSEDMO SWR)

- Seamless with Elongation @ 23 oC > 1000
- Hardness (Shore A) - > 60
- -40 to 60 service temperature
- Specific weight – 1
- 0.8 g/m².h-WV transmission
- 3000 cp to 6000 cp Viscosity



WATERPROOFING + ROOT RESISTANCE.

HYPERDESMO®-PB-2K (Two-component, liquid membrane for waterproofing & protection)



HYPERDESMO®-PB-2K is a fast-curing, two component, bitumen-extended polyurethane fluid. It produces a highly elastic membrane with strong adhesion to many types of surfaces and excellent mechanical and chemical resistance properties. It is based on a pure elastomeric hydrophobic polyurethane resin extended with chemically polymerised virgin bitumen

FIELDS OF APPLICATION:

Water proofing & Protection for Podium, Roof, Roof top Gardens, Flower Pots, Kitchens, Balconies, Verandas, Gypsum & Cement boards, Bridges, Cut over tunnels, Irrigation channels, EPDM Membrane, Non portable tanks, on PU insulation foams, Asphalt sheets.

PROPERTIES & ADVANTAGES

- Seamless with High Elongation > 1000%.
- 2 component, 1:1 by volume – Long Shelf life.
- Inherent Anti root properties for Landscape use.
- Classic polyurethane with polymerized bitumen.
- Self leveling to develop thickness in one coat.
- Crack bridging over any cracks larger than 1mm
- Very low water absorption
- Cures with humidity in the atmosphere
- Strong adhesion to any substrata (>20Kg/ Sqcm)
- Good chemical resistance
- Cures very fast.
- Good water vapor barrier properties.
- Can also be used as a joint sealant
- Seamless & Water vapor barring

COLOURS: Black.

COVERAGE: Apply with brush, roller, spatula or airless spraying. Minimum consumption: 1.0-1.5 lt/m².

PACKING: 2x20 lt = 40 kg. metal pail

EXPECTED LIFE TIME : 25 years

PRODUCT PROPERTIES (HYPERDESMO PB 2K)

- Seamless with Elongation @ 23 °C > 1000
- Max. temperature short time 150 °C
- Tensile strength at break @ 23 °C > 20 kg/cm²
- Hardness (Shore A) - > 35
- -40 to 80 service temperature
- Specific weight – 1
- 0.8 g/m².h-WV transmission
- 3000 cp to 6000 cp Viscosity
- H₂O absorption (10 days) < 0.9%



Low Viscosity, Polyurethane Based Primer

MICROSEALER PU: (Primer)



DESCRIPTION: MICROSEALER-50 is a one component, low viscosity, polyurethane based primer suitable for many different substrates. It is characterised by its very low viscosity and balanced curing speed that result in excellent wetting, impregnation and paint-over time on different substrates, whether of high, low or no porosity (e.g. glass and metals). Additionally, it can be effectively used on both dry and wet concrete, even green concrete, not only as primer but also as a low-cost sealing solution, increasing, thus, the durability of the substrate.

Recommended For: Concrete structures (humid, damp or wet concrete) Ceramic tiles, Non-porous substrates like glass, marble & metals.

Features & Benefits: One component

low viscosity

Easily applicable

even on wet concrete

Adheres strongly

even on glassy

non-porous substrates

Excellent wetting

impregnation and paint-over time

Many pigment pastes available

A low-cost solution for concrete sealing & protection

Consumption: Minimum total consumption: 100-300 gr/m² in one or two coats.

Application Procedure: Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Apply with brush or roller. Once cured, the main membrane (e.g. HYPERDESMO® System) can be applied.

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C. Once opened, use as soon as possible.

PACKING: 1 Lt, 5 Lt & 20 Lt.



TWO-COMPONENT, LOW VISCOSITY, WATER BASED, 1:1 BY VOLUME, EPOXY COATING / PRIMER.

AQUASMART – DUR



Description: AQUASMART® -DUR is a revolutionary epoxy based primer/coating formulated by ALCHIMICA® research and development laboratory. It is a two-component, water based, epoxy coating, specially formulated for use in a 1:1 by volume ratio. This allows the user to consume even the smallest quantities and store the material for future needs. The viscosity of the material is low and the pot life long, making it ideal for DIY applications. AQUASMART® -DUR can be easily colored with universal pigment pastes available in hardware stores and can be filled with equal parts of quartz sand giving rise to an excellent protective coating for concrete surfaces. The material displays very low levels of yellowing upon prolonged exposure to UV.

Recommended For: Primer for AQUASMART®, HYPERDESMO® and Epoxy range of products. Primer when humidity barrier properties are required and Sealing coat for concrete Adhesive layer between old and new concrete Anti-Dust floor coating and protective coating for old metal based structures

Features & Benefits: 1:1 By volume application ratio

Quick curing even at lower temperatures

Low-odorsafe non-flammable (zero VOC)

Suitable for application in closed spaces

Easy clean up

Strong adhesion even on damp or green concrete

Also on iron, galvanized steel, aluminium, glass and wood Good mechanical properties

abrasion resistance Easy coloring with water based pigment paste

Visible pot-life

Application Procedure: Mixing: Mix the two components well manually or using a low speed (300 rpm) mixer.

As primer – Application in thin coats only. Apply with roller in one or two coats with total maximum consumption of 150-200 gr/m².

As water/humidity barrier – Apply with roller in three coats with total consumption of 500-600 gr/m².

Recoat time cannot be determined in terms of hours since it is highly dependent on weather conditions: It can be as low as 2 hours during summer and as high as 24 hours during winter. Use the following rule of thumb to determine when recoating should take place. Recoat (with AQUASMART® -DUR or HYPERDESMO®) when material has hardened to the degree where it can no longer be punctured by finger nail.

Consumption: **As primer** – Apply in one or two thin coats with total consumption of 150-200 gr/m².

As water/humidity barrier – Apply in three coats with total consumption of 500-600 gr/m².

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C. Once opened, use as soon as possible.

Packaging: Component A : 1 Lt, 4 Lt

Component B : 1 Lt, 4 Lt



WATER BASED, FULLY ALIPHATIC POLYURETHANE HYBRID COATING FOR WATERPROOFING AND PROTECTION

AQUASMART - HYBRID



Description: AQUASMART® HYBRID is a water based, very fast drying, aliphatic Polyurethane hybrid coating for waterproofing and protection. The product may be applied as a one-component material (under the commercial name AQUASMART® HYBRID-MONO) or can be used with a second component (booster) during cold weather for faster curing (under the commercial name AQUASMART® HYBRID-2K). The product is easily applied on both vertical and horizontal substrates and forms a seamless, elastic and hydrophobic membrane.

Recommended For: Waterproofing and Protection of:

PU foam, Roofs, Light roofing made of metal or fibrous cement, Under tile applications such as wet rooms, Protection of concrete/reinforced concrete from carbonization.

Features & Benefits: Water based Very fast drying Easy to apply & repair. Thixotropic Seamless. Elastic. Highly resistant to stagnating water (ensure proper adhesion-see suitable primers list). Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat. Excellent weather and UV resistance. The white color reflects much of the solar energy and so reduces the internal temperature of structures considerably. Easy coloring of product with almost any water based pigment paste available at hardware stores, subject to adequate tests.

Application Procedure: Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities should also be filled. **Priming:** Apply recommended primer according to Technical Data Sheet specifications. For non-demanding applications (where standing water or negative water pressure is not an issue) prime with same material by diluting with 15% water. For more professional applications, apply primers as per above list or contact our technical department for further information. **Mixing:** Use a low speed (300 rpm) mixer. Although thinning is not necessary, the material can be further thinned by 5-10% water.

Application: Apply with roller, brush or airless spraying in two or more coats. Do not apply under conditions of extreme wet weather or imminent rain or near freezing temperature.

Consumption: Applied with roller or brush : First coat: 0.6-0.8 kg/m². Second coat: 0.6-0.9 kg/m². Applied by airless spraying: 0.5 kg/m² per coat. Minimum total consumption: >1.5kg/m² for waterproofing, depending on project requirements. For use as a protective paint, recommended consumption is 0.5 Kg/m².

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C. Once a pail has been opened, use as soon as possible.

Packaging: Plastic pails of 12 kg (+125 gr booster), 20 kg (+ 200 gr booster)



Two-component, Solvent-free, Polyurethane Coating For Flashing And Tank Waterproofing & Protection.

HYPERDESMO – 2K-W



Description: HYPERDESMO®-2K-W is a two-component, solvent-free, thixotropic coating, based on high quality elastomeric polyurethane resins. After polymerization, it produces a strong, elastic, hydrophobic membrane suitable for waterproofing and protection. It is recommended for waterproofing of water tanks. It has been certified for use in potable water tanks (more details available on request from our technical service department).

Recommended For: Water tanks made of concrete/steel reinforced concrete or otherwise, steel or other material. Prefabricated concrete tanks, Drinking water tanks, Tanks with wall movement due to expansion and contraction.

Features & Benefits: Excellent adhesion on almost any type of surface. Being solvent-less, it can easily be applied in closed spaces. Extremely hydrophobic and hydrolysis resistant. Wide working temperature range: -40°C to 90°C. Good chemical resistance. Certified for potable water tanks, in accordance with the latest European Union requirements. The best value, performance-to-cost, solution for water tanks. Special primers, topcoats and coloring pastes are available.

Application Procedure: (The following guidelines are for concrete tanks. For information about tanks made of other materials, please contact our Technical Service Department.)

Clean the surface using jet water, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must be removed. Fill surface irregularities with

HYPERSEAL®-25LM-S or HYPERSEAL®-EXPERT. **Priming:** Apply AQUADUR, AQUASmart®-DUR primer particularly in case of negative pressure (e.g. in underground tanks). As soon as the primer has cured, seal cracks, holes and the edges of the tank walls and floor with HYPERSEAL®-25LM-S or HYPERSEAL®-EXPERT, the polyurethane mastic.

Mixing: Mix the two components using a low speed (300 rpm) mixer. **Application:** Apply with roller in two coats with consumption per coat of 0.7 kg/m². On the tank floor, a single coat of 1.4 kg/m² is sufficient. Information on application by airless spraying is available on request from our technical department.

Consumption: Consumption per coat: 0.7 kg/m². Minimum total consumption: 1.4 kg/m²

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25°C. Once opened, use as soon as possible.

Packaging: 9 kg (comp. A 1.5 kg, comp. B 7.5 kg) and 24 kg (comp. A 4 kg, comp. B 20 kg).



One-component, Semi-glossy, Aliphatic, Elastic Polyurethane Top Coat

HYPERDESMO®-ADY-E



Description: HYPERDESMO®-ADY-E is a one-component polyurethane coating, which contains specialty inorganic fillers that upon combination with small amount (5-10%) of ALCHIMICA pigment paste offer superior hiding power. This allows minimal consumption of material and omitting of a second coat (in cases of simple UV protection, not traffic resistance) resulting in overall cost reduction. The material is based on the very successful product HYPERDESMO® -ADY E (transparent) so it has similar elastomeric properties with HYPERDESMO® products. It is based on pure elastomeric hydrophobic polyurethane resin, which results in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

Recommended For: Top-coating HYPERDESMO® range of products. Top-coating flooring applications

Features & Benefits: Excellent hiding Power even in one coat Traffic Resistant and highly Hydrophobic Recommended For Top-coating HYPERDESMO® range of products. Top-coating flooring applications Strong and uniform adhesion on almost any type of surface, Highly durable when exposed to the natural elements, maintains its elasticity even down to -40°C, Excellent heat and UV resistance, it will not yellow, peel or soften up to 90°C, Outstanding resistance to chemicals and mechanical stresses (high tensile strength and abrasion resistance), Compatible pigment pastes available in many colours.

Application Procedure: Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes, etc. must be removed. Further primer information available on request. The application surface must be dry. When used as a topcoat, for colour protection of HYPERDESMO® products, it is either pre-pigmented from the factory in white/grey colour or it comes in NEUTRAL version that must be pigmented with ALCHIMICA® pigment pastes only (10% max). It must be applied within 24-72 hours of HYPERDESMO® depending on weather conditions. **Preparation:** When stirring (or pigmenting) take care not to introduce air in the fluid, which may result in bubbling on the cured membrane. Stirring can either be done manually or with a low speed (300 rpm) mixer. A small sediment may form in the pail after prolonged storage. This can be homogenized in the product with mechanical mixing.

Consumption: 0.2-0.6 kg/m² in one or two coats, depending on traffic conditions.

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5 25°C. Once opened, use as soon as possible.

Packaging: 5 Kg, 20 Kg



Single Component, Non Staining Primer for Non Porous Substrates

PRIMER-T



Description: PRIMER-T is one component, colorless, nonstaining primer especially designed to secure the adhesion of HYPERDESMO®-T on non-porous substrates. Although designed for HYPERDESMO®-T, it is fully suited for all products in the HYPERDESMO® product range. Chemically, PRIMER-T is composed of a moisture reacting organosilane in a mixture of solvents and additives to ensure overall wetting of the substrate. PRIMER-T is easily applied by wetting a clean cloth and essentially cleaning the surface to be protected with HYPERDESMO®-T. PRIMER-T dries quickly; within 10-15 min max, the surface is ready for application.

Recommended For: Priming of non-porous substrates. Glazy tiles , Glass

Features & Benefits: Quick drying, No thinning is required, Non-Staining, Easy application

Application Procedure: Clean the surface, using jet water if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mold release agents, curing membranes must be removed. Apply the material with cloth as cleaning the surface. Allow 10-15 min for drying and subsequently apply HYPERDESMO®-T.

Consumption: Maximum total consumption: 50-60 ml/m² .

Shelf Life: PRIMER-T can be kept for minimum 12 months in the original unopened pails at a temperature of 5 oC - 25 oC in dry places.

Packaging: 1lt, 5 lt, 20 lt



Transparent, fully aliphatic, polyurethane liquid membrane for waterproofing & protection.

HYPERDESMO®-T



Description: HYPERDESMO®-T is a one component high solids, polyurethane fluid, which cures with the humidity in the atmosphere. It produces an elastic, highly durable, highly hydrophobic membrane with excellent UV resistance. Being aliphatic, it does not yellow/discolour when exposed to sunlight. It is based on pure elastomeric, hydrophobic, aliphatic polyurethane resin, which results in excellent mechanical, chemical, thermal, UV and natural element resistance properties. Apply with roller in one or two coats. Minimum total consumption: 0.2-1.0 kg/m² according to application type. Although HYPERDESMO®-T looks coloured, especially when it is in large containers, it is stressed that the end result is, indeed, transparent must be primed with PRIMER-T first.

•Porous substrates, such as marble, natural stones must be primed with MICROPRIMERPU first.

Recommended For: Waterproofing and protection of:

- tiles
- natural stone
- wood
- verandas and balconies
- terraces. Also suitable for sealing concrete: Applied in thick, bubble-free, coats.

Features & Benefits: •No thinning is required but SOLVENT-01 may be used

- Excellent weather and UV resistance
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 C, max shock temperature 200 C.
- Resistance to cold: The film remains elastic even down to -40 C
- Excellent mechanical properties
- Good chemical resistance
- Water vapor transmission.
- Can also be applied in thick, bubble-free, coats.

Application Procedure: Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. If used for concrete sealing, cement laitance, loose particles, mould release agents, cured membranes must also be removed. Priming: Priming is required when application is on nonporous substrates, such as ceramic/glazy tiles. In this case, PRIMER-T is used. It is applied at a low consumption of 50-60 ml/m² with a clean cloth without leaving any pools of fluid (apply as if wiping the surface). For porous substrates such as marble, coto, natural stones, fully aliphatic MICROPRIMER-PU should be applied at max 200 ml/m². Mixing: Stir well, manually or with a low speed mixer. No thinning is required but SOLVENT-01 may be used. Application: HYPERDESMO®-T is applied as soon as PRIMER-T dries (after 15-20 min) with roller in one or two coats. Do not leave more than 24 hours between coats. In cases of MICROPRIMERPU application, HYPERDESMO®-T should be applied not earlier than 12 hours and not later than 2 days.

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 oC. Once opened, use as soon as possible.

Packaging: 1 kg, 5 kg, 20 kg and 200 kg drums.



ELASTOMERIC WATERPROOFING COATING SYNGUARD



Description: Synguard is a high performance water based acrylic elastomeric waterproofing coating, formulated with selected highly elastic & resilient acrylic polymers, properly identified & graded fillers, pigments, micro-fibers, additives & fungicide. It is used as a liquid applied seamless waterproofing or protection membrane for all types of Substrates (e.g. Metal Decks, Concrete Decks, Terraces, Walls and Polyurethane Foam)

Recommended For: • Protective & Waterproofing coating on polyurethane foam insulation

- Roof Waterproofing Coating
- Wall Waterproofing Coating
- Vertical & Overhead Surfaces
- Repair Works of Waterproofing Systems
- Concrete Surfaces
- Metal Surfaces (Corrugated Metal Decks)
- Asbestos
- Over existing Coatings
- Terrazzo Tiles
- Polyurethane Foam

Features & Benefits: • Single Component

- Seamless Waterproofing Membrane
- Breathable (Permits water vapor to escape)
- Excellent Solar Reflective Index
- UV Resistant for Excellent Durability
- Low VOC content - Promoting Green Building
- Crack Bridging Ability
- Protects Concrete Surfaces Against Carbonation
- Easy Maintenance

Application Procedure: Coating System: • Dilute SYNGUARD with 20% Water and mix thoroughly to prepare the primer.

- Coat the entire substrate with a prime coat and allow it to dry.
- Apply the first coat of SYNGUARD (no dilution) at the coverage rate of 1.0 Kg/m² and allow it to dry.
- The Second coat of SYNGUARD (no dilution) should be applied at right angles to the first coat at the coverage rate of 1.0 Kg/m².
- Roofs in excess of 150 m² area are recommended to be reinforced by 60 gsm thermally bonded geotextile or glass fiber mesh sandwiched between the first and second coat. The reinforcement layer has to be placed when first coat is wet.
- For Metal deck, the overlap areas should be reinforced.

Shelf Life: Store under cover at above +5°C and below + 40°C. Protect from direct sunlight and protect from Frost. Minimum shelf life of one year can be expected in original unopened containers and suitable storage.

Coverage: Primer coat in addition to two coats. Each Coat at the approximate rate of 1 Kg SYNGUARD per m².



Elastomeric Polyurethane Liquid Applied Waterproofing Membrane

DURAFLEX PU



Description: DURAFLEX PU is a solvent free liquid-applied, highly permanent, elastic, cold applied and cold curing, one component polyurethane membrane, used for long-lasting waterproofing. DURAFLEX PU cures by reaction with ground and air moisture and provides excellent mechanical, chemical, thermal and UV resistance properties so that the membrane can be kept direct exposed to sun and can be covered for

Recommended For: Waterproofing of Concrete & Metal Roofs (Exposed & Non-Exposed). Water proofing of Podiums, Roof Gardens & Planter Boxes (Protected with Screed). Waterproofing of Wet Areas in Bathrooms, Kitchens, Balconies. Water proofing of flashing, roof edgings, gulley's, steeply pitched designs, etc. Water proofing of external plastered walls, sunshades, parapet walls, etc. Water proofing of new surfaces as well as for the repairs of old surface. DURAFLEX is optimally suitable for application on structures having complicated geometry like domes, arches, shells, folded plates, sandwich panels, corrugated sheets, etc.

Features & Benefits: • Simple application (roller or airless spray)

- When applied polymerizes and forms a seamless, waterproofing membrane without joints
- Resistant to water and frost. Leaves no bare spots or puddles
- Provides resistance to root penetration (green roof application)
- Crack-bridging up to 2 mm thick, even at 14 oF (-10 oC)
- Provides water vapor permeability (allows the substrate to "breathe")
- Provides exceptional surface adherence without any additional anchoring
- Excellent resistance to weather and sunlight (UV radiation)
- Maintains its mechanical properties over a temperature span of (-20 oC to 80 oC). No seasonal softening or hardening occurs
- The waterproofed surface can return to service
- The membrane can be easily repaired locally within minutes, in case it gets mechanically damaged.
- Economical

Shelf Life: Minimum 12 months in unopened container. Store away from sunlight and preferably below 42 C.

Packaging: DURAFLEX is available in 20kg Pail.



High Flexible Black Polyurethane Liquid Applied Waterproofing Membrane

AQUABIT PU 1K



Description: BITUMAT'S AQUABIT PU 1K is cold applied form modified bitumen extended aliphatic polyurethane waterproofing liquid membrane, specially designed from the blend of polyurethane compound grade of aliphatic resin, reinforced with special water repelling fillers, mineral stabilizers, and jelling agent. It cures by reaction with atmospheric moisture.

Recommended For:

- Concrete roofs
- Polyurethane foam slabs
- Polyester built up roofs
- Maintenance of existing roofs
- Masonry and concrete walls
- Bathrooms
- Basements
- Metal surface

Features & Benefits:

- Simple application (roller or airless spray)
- it is highly elastic product and cures too rubber like membrane capable of withstanding severe cases of expansion contraction and deck movements.
- When applied polymerizes and forms a seamless, waterproofing membrane without joints
- Provides resistance to root penetration (green roof application)
- Crack-bridging up to 2 mm thick, even at 14 oF (-10 oC)
- Provides water vapor permeability (allows the substrate to "breathe")
- Provides exceptional surface adherence without any additional anchoring
- The waterproofed surface can return to service
- The membrane can be easily repaired locally within minutes, in case it gets mechanically damaged
- Economical & Durable

Shelf Life: Minimum 12 months in unopened container. Store away from sunlight and preferably below 42oC.

Packaging: AQUABIT 1K is available in 20kg Pail.



Bituminous Roofing Primer

CONCRETE PRIMER



Description: BITUMAT CONCRETE PRIMER is a cold applied general purpose roofing primer formulated with highly pliable, flexible bitumen, select petroleum solvents and compounded with wetting and saturation additives.

Recommended For: BITUMAT CONCRETE PRIMER is suitable for concrete, smooth asphalt roofs, brick and metal surfaces, used as the prime coat prior to installation of any BITUMAT membranes.

Features & Benefits:

- Select solvent allows for optimum penetration of BITUMAT CONCRETE PRIMER into the surface pores, pin holes and cracks.
- Absorbs the existing dust and scale thus prevents the formation of additional dust and scale.
- The resulting surface permits the proper bonding of self adhesive as well as torchable membranes, in addition to any other bituminous adhesives and coatings.

Application Procedure: The surface must be thoroughly cleaned, and all dust, dirt, loose coatings, oil or greasy substances removed, concrete must be completely cured, and dried prior to priming. BITUMAT CONCRETE PRIMER should be allowed to dry before application of subsequent layers. It can be applied with a roofing brush, roller, squeegee, or airless spray equipment at the recommended coverage rate.

COVERAGE: 0.3 - 0.5 ltr/m² depending on Condition of Substrate

Packaging: 18.2 ltr. Pails and 200 ltr. Drums



Water based, One Component Polyurethane Insulating Paint

AQUASMART® THERMO



Description: AQUASMART® THERMO is a one component, water based insulating paint for both interior and exterior use. It is a water-based polyurethane with exceptional performance in difficult climatic conditions. AQUASMART® THERMO is a unique insulating product specifically designed to reduce unwanted summer time heat gain and unwanted winter time heat loss from buildings to which it has been applied. The product retains its insulating properties due to the fact that the cells are 100% closed always. Apply with brush or roller, airless spray is possible; please contact our technical department for further details. Consumption: 2 Lt/m² (1 Lt product gives a dry film thickness of 1mm).

Recommended For: The product is recommended as an insulating wall paint for both interior and exterior walls. It is elastic and has excellent crack bridging properties even in very low temperatures.

Features & Benefits Excellent insulating properties, 100% closed cells.

- Water based
- Easy to apply & repair.
- Thixotropic
- Elastic even at below zero temperatures.
- Capable of bridging small cracks.
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Easy coloring of product with almost any water based pigment paste available at hardware stores.

Application Procedure: Priming: Depending on the application specifications and performance demands various primers may be used. For humidity barrier properties we recommend the use of either AQUADURTM, AQUASMART® EPOXY PRIMER. For refurbishment over old acrylic paint please contact our technical department. **Mixing:** Use a low speed (100 rpm) mixer. Although thinning is not necessary, the material can be further thinned by 5-10% water.

Application: Apply with roller, brush or airless spraying in one or two coats.

Consumption: 2 Lt/m² in 1 or more coats

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 oC. Once opened, use as soon as possible.

Packaging: 1 Lt, 4 Lt, 10 Lt



One Part Hydrophobic type PU Grouting

CYH-500



Description: CYH-500 is a hydrophobic grout based on polyurethane. Upon contact with water CYH-500 reacts to closed cell rubber-like foam while expanding its volume up to 27 times.

The cured material is of a constant volume.

Since water is not a component of the foam structure, the cured material is essentially not affected by water or dryness. The reacted material does not shrink or swell. Depending on the pressure of injection CYH-500 reacts to a very dense material or foam.

Recommended For:

- Defective concrete. (Cracked or Honeycombed)
- Concrete joints, Limestone, Brick construction.
- Pipe intrusions, Waste water tanks.
- Tunnels, Dams, Subway(Metro), Sewers, Manholes, Utility boxes, etc.
- Soil stabilization.

Features & Benefits

- Negative side application possible.
- Deep penetration into very small cracks.
- Foam increases in volume to fill cavities and voids.
- Excellent bond to surfaces.
- Good adhesive strength, tolerant of movement.
- Inert after curing, constant volume, no shrinkage.
- Does not create new cracks.

Shelf Life: 1 year when unopened and undamaged

Packaging: 20 kg/pail



High Flexible PU foam (double component type)

CYH-303



Description: CYH-303 is self-reacting of double components (Resin & Hardener) type hydrophilic polyurethane which has polyether polyol properties. CYH-303 applies to the leakage area for the waterstops where has vibration also because it has elastic property foaming ratio with water is very lower than normal PU foam (Hydrophobic type). CYH-303 density is high and hardened foam is same like a rubber. Therefore, it is useful for the expansion joints and water leakage caused by deformation. Waterproof effects last semi-permanently. It provides strong physical strength after contact with water. So these properties brings excellent bonding strength to give the waterproof ability and reinforcement. It is high elastic PU material.

Recommended For:

- ▣ Tunnel, Expansion joint, Basement, Moving structure.
- ▣ Utility boxes, Sewers, Dams, Subway(Metro) Concrete joints. Defective concrete.
- ▣ Underground concrete structures, Basement parking area.
- ▣ For repair of dry & wet cracks and reinforcement for every concrete structure.

Features & Benefits

- ▣ The hardened foam cannot be fractured by compression test because it has elastic characteristic material.
- ▣ It has strong adhesive. So it has strength and high elasticity on both wet and dry cracks because it is self-reactive type, dual components PU resin. Also, it has an effective on reinforcement and waterstops.
- ▣ CYH-303 provides good waterproof effect because of its low viscosity and it's enable to penetrate into fine crack. Also it is easy to inject the fine leakage areas.
- ▣ You have enough time (approximately 60~100min) to inject PU resin after you mix the double (Main & Hardener) components, So you are able to inject the PU foam by using single component injection pump (CY-1000, CY-800M1).

Shelf Life:

- ▣ Minimum ambient and substrate temperature is 5°C
- ▣ Store in cool and dry places.
- ▣ Good storage stability for unopened containers at 15-30°C

Packaging: 10kg, 10kg



Acrylic Agents

ACY-808



Description: ACY-808 is an acrylic system with 3-components mixed for curing water-stoppage and for curtain grouting which is developed for making much of safety and durability, forms as a gel type, with excellent elasticity, passable, swelling power, durability, etc. ACY-808 is used for curtain grouting injection in tunnels, subways, building basements etc. It exhibits the water-stoppage and ground settling agent effect. It has no leaching of liquid gel, (a weak point of the existing polyurethane) and is safe even for underground structures. ACY-808 has semi-permanent durability and not toxic (or) polluting product.

Recommended For:

- Water-proof grouting work for underground structure (Subway, tunnels, parking lots, manhole, etc)
- Water-proof work for civil structure such as dam.
- Water-proof work for the ground of concrete structure
- Water-proof work for leakage area of underground structure
- Water-proof work for constructed joint area and cracked area

Features & Benefits Excellent insulating properties, 100% closed cells.

- Water based
- Easy to apply & repair.
- Thixotropic
- Elastic even at below zero temperatures.
- Capable of bridging small cracks.
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Easy coloring of product with almost any water based pigment paste available at hardware stores.

Application Procedure: 1) Mixing the acrylic powder with water and then make B agent. Comply with the mixing ratio as under: Mixing ratio is the Acrylic powder (B, 350g/pack) and water (19.5 liters).

2) Mix A agent (Acrylic resin) by adding C (Accelerant).

3) Comply with the mixing ratio between A agent and B agent. Mixing ratio is at a one to one. (A : B = 1 : 1)

Note : 1) The amount of accelerant may vary depending on the temperature based on 20°C. 2) The hardening time may vary depending on the workplace temperature. Before we do the job, we have to check the hardening time of the product as a sample test.

Shelf Life: 1 year when unopened and undamaged.

Packaging: A agent (20kg), B agent (20gk), Catalyst (300cc)



Epoxy putty

DEP-009



Description: It is a typical high strength epoxy sealant for concrete structure repair and reinforcement. It is used on the crack sealing for the epoxy injection work, the steel plate reinforcement-sealing and the syringe injector pedestal mounting and other multiple sealing works. And, it is highly adhesive to concrete and highly impact resistant.

Recommended For:

- ▣ Crack sealing for crack repair
- ▣ Pedestal mounting and steel plate reinforcement sealing

Features & Benefits: DEP-009, with its outstanding property, is excellently adhesive to a wide variety of materials such as concrete, metal, cement and mortar. Since it does not run down, it is highly workable on the vertical surface and the ceiling. When fully hardened, it does not chemically affect the steel reinforcement in the structure or the concrete structure. After hardened, it is free of internal stress so to maintain the stably adhesive-structure. Compared to the cement mortar or the concrete, it exhibits outstanding mechanical strength in every aspect such as compressive strength, the flexural rigidity and the tensile strength.

Packaging: Base agent (10kg) : Curing Agent (10kg)

Technical & Physical Data

Mixing ratio (Base Agent : Curing Agent)	1:1 (Weight Ratio)
Pot life (25°C)	30-50 min.
Curing time (25°C)	After 24 hrs.
Viscosity (mPa-s)	Paste
Specific Gravity	1.74
Tensile Strength	21.2 N / mm ² (KS F 4923)
Compressive strength	53 N / mm ² (KS M 3015)
Adherence strength	6.8 N / mm ² (KS F 4923)
Packing unit	Base agent (10kg) : Curing Agent (10kg)
Theoretical Consumption	Crack width 0.3mm : 0.2kg/1m (Differ according to site condition)



Carbon Fiber Primer

CRP-105



Description: Carbon Fiber Epoxy Primer CRP-105 contains epoxy resin and Polyamide as primary substances. It has a short pot life and has excellent chemical and water resistance. It penetrates to concrete surface to strengthen adhesion performance.

Method and Sequence of Use

- 1. Treatment of the Concrete Base:** Remove pollutants from concrete (laitance, cement paste, paint, etc.) using a hand grinder, maintain a clean condition and polish the surface smoothly. If cracks, defects or peelings of the concrete base are severe, they must be repaired beforehand with epoxy crack repair or high strength mortar.
- 2. To mix Carbon Fiber Epoxy Primer CRP-105:** For immediate use, mix Carbon Fiber Epoxy Primer CRP-105 with its hardener at the 2:1 (by weight) ratio in a container and mix with the electric mixer for about 3-4 minutes until the mixture is in uniform color. Wash the empty container with solvent after each use for repeated use at later times.
- 3. To apply Carbon Fiber Epoxy Primer CRP-105:** Once mixed, place Carbon Fiber Epoxy Primer CRP-105 in a container. Apply uniformly using rollers or brushes to the surface. (Standard use: 0.3-0.4Kg/m²) Proceed with the next process once the epoxy primer is completely hardened. Re-apply the product in a sufficient amount for areas where a vast amount of epoxy primer is required for much penetration.

The Characteristic and Kind of Carbon Fiber Primer

Name of goods		CRP-105(N)	CRP-105(S)	CRP-105(W)
APPLICATION TEMPERATURE (°C)		15~20	25~35	5~15
POT LIFE (Min.)	@30°C	-	45	-
	@20°C	45	-	-
	@10°C	-	-	45
DRYING TIME (HOUR)	@23°C	IN LESS THAN 11 HOURS	IN LESS THAN 15 HOURS	IN LESS THAN 9 HOURS
RESIN : HARDNER (WEIGHT)		2:1	2:1	2:1
VISCOSITY(CPS)	@20°C	1,300	2,000	1,000
SPECIFICATION		STANDARD/ SOLVENT FREE	FOR SUMMER USE/ SOLVENT FREE	FOR WINTER USE/ SOLVENT FREE

TEST RESULT

TEST ITEM(S)	UNIT	TEST METHOD	TEST RESULTS	REMARKS
WORKING TIME	MIN.	KS M 6030:2014	45	(23±1) °C (50±4) % R.H.



Carbon Fiber Resin

CRR- 100



Description: Carbon Fiber Epoxy Primer CRP-105 contains epoxy resin and Polyamide as primary substances. It has a short pot life and has excellent chemical and water resistance. It penetrates to concrete surface to strengthen adhesion performance.

Method and Sequence of Use

1. To Mix Carbon Fiber Epoxy Resin CRR-100 For immediate use, mix Carbon Fiber Epoxy Resin CRR-100 with its hardener at the 2:1 (by weight) ratio in a container and mix with the electric mixer for about 3-4 minutes until the mixture is in uniform color.

2. To apply Carbon Fiber Epoxy Resin CRR-100 Once mixed, place Carbon Fiber Epoxy Resin CRR-100 in a container. Apply uniformly using rollers or brushes to the surface. Ensure that no air bubbles or pockets are created on the surface during application. Fix the carbon fiber sheet over the surface within 30 minutes to 2 hours (depending on the temperature at the workshop) of an application before the epoxy resin is hardened. The standard amount of use of Carbon Fiber Epoxy Resin CRR-100 is as follows

- 1) Carbon Fiber Sheet's unit weight 200g/m²: 0.6~0.8Kg/m² (for single ply application)
- 2) Carbon Fiber Sheet's unit weight 300g/m²: 0.7~0.9Kg/m² (for single ply application)

The Characteristic and Kind of Carbon Fiber Resin

Name of goods		CRR-100(N)	CRR-100(S)	CRR-100(W)
APPLICATION TEMPERATURE (°C)		15~20	25~35	5~15
POT LIFE (Min.)	@30°C	-	45	-
	@20°C	45	-	-
	@10°C	-	-	45
DRYING TIME (HOUR)	@23°C	IN LESS THAN 11 HOURS	IN LESS THAN 15 HOURS	IN LESS THAN 9 HOURS
CURING TIME(DAY)	@30°C	-	7	-
	@20°C	7	-	-
	@10°C	-	-	14
RESIN : HARDNER (WEIGHT)		2:1	2:1	2:1
VISCOSITY(CPS)	@20°C	5,000	7,000	4,000
SPECIFICATION		STANDARD	FOR SUMMER USE	FOR WINTER USE



FIBER MESH 45



Description: Fibreglass mesh is manufactured by weaving from Fibre Glass Yarn and Treated with Coating. It has excellent properties like high strength alkali resistance, water resistance, thermal resistance, rot and mildew resistance, temperature resistance, flexibility, softness and resistance to aging. It is used for Water Proofing on roof in almost all types of structures i.e. buildings of residence, industrial or commercial, hospitals, multiplexes, schools, colleges, metro stations etc. It helps in reducing the wear and tear of the roofs. It is a high heat and chemical resistance material therefore provides a good insulator and stops the heat from the roof making the top floor cooler. It acts as Excellent Reinforcement Product and gives Long Life to the Coatings.

Recommended For:

- External & Internal Plaster Reinforcement.
- Marble Slab Reinforcement.
- Asphalt reinforcement (Roof waterproofing)
- Reinforce lightweight construction boards.

Features & Benefits:

- it is very light in weight making it easy to handle
- it is very cheap in rates giving the economical value to the customers.
- it has a good resistance to almost all the adverse climatic conditions

Packaging:

- Length: 100 M and Width :1M packed in Shrink Film.
- Carton Packed with 600SQM .



Non-Woven Geotextile, From 100% Polyester Fibers

GEOTEX 60GSM



Description: GEOTEXTILE-50 is a non-woven geotextile, from 100% polyester fibers, manufactured with the needle punching process.

Recommended For:

Reinforcement of waterproofing in construction details, flashing, joints, cracks and gaps. It is suitable for either solvent based or water based liquid waterproofing systems. It is particularly recommended for PU liquid waterproofing membranes (HYPERDESMO)

Application Procedure: GEOTEXTILE-50 is applied between the two coats of HYPERDESMO® (particularly recommended over old bitumen membranes to prevent potential creation of future cracks).

Application Conditions:

- Temperature: 5-35 C.
- Relative humidity: < 85%.

Shelf Life: Keep them in cool and dry places, at temperatures of 5-25 C.

Packaging: White: 1X200m rolls



Two component Self Levelling, Slightly Elastic Polyurethane Flooring Resin

HYPERFLOOR-2K



Description: HYPERFLOOR-2K is a two component, self-levelling solvent free polyurethane material that upon curing produces a strong, slightly elastic film with excellent adhesion to various surfaces. The product is based on pure hydrophobic polyurethane resin plus special inorganic fillers that provide the material with excellent abrasion and Chemical Resistance.

Recommended For:

- Industrial Floors
- Ship Decks
- Food, Chemical and Pharmaceutical Industries
- Refrigeration cells
- Secondary containment
- Asphalt floors
- Tanks
- Car parks

Features & Benefits:

Solvent free Long pot life Temperature Resistance from -40°C up to 90°C. Excellent mechanical properties, high tensile and tear strength, abrasion resistance. Crack bridging

Application Procedure: Concrete substrate conditions (standard): Hardness: R28 = 15MPa. Humidity: W < 10%.

Temperature: from 5 C - 35 C Relative humidity: < 85%. Clean the surface, using jet water if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, curing membranes must be removed. Fill surface irregularities with adequate products. Primer must be applied on relatively fresh concrete or in cases where negative pressure may cause the material to bubble. In these cases, either apply several coats of AQUASMART-DUR (water based epoxy primer) or EPOXY RESIN-21 CLEAR (our 100% solids epoxy primer). Both can be charged with sand as described in the respective technical data sheets. For substrates that need to be made stronger, the one component penetrating primer MICROSEALER-50 should be used. **MIXING:** Use a low speed (300rpm) electric drill.

APPLICATION: Apply undiluted with a notched trowel, squeegee or roller. As soon as the material is applied, use a spiked roller to remove entrapped air. **TOP COAT:** HYPERFLOOR-2K is an aromatic polyurethane system and therefore will discolor when exposed to UV. For color protection, traffic/abrasion resistance as well as providing an easy clean final satin finish, the use of AQUASMART® -TC-2K-FLOOR PROTECT pigmented is recommended. Alternative topcoat (APPLIED PIGMENTED) selections are: HYPERDESMO® ADY-2K HYPERDESMO® ADY-100 HYPERDESMO® ADY-E

Shelf Life: HYPERFLOOR-2K can be kept for minimum 12 months in the original unopened pails at a temperature of 5 oC - 25 oC in dry places.

Packaging: 15.5 kg + 4.5 kg (20 Kg) 3.875 kg + 1.125 kg (5 Kg)



Three-component, epoxy modified mortar

HYGROSMART®-DUR CEM 3K



Description: HYGROSMART®-DUR CEM 3K is a revolutionary epoxy modified mortar formulated by ALCHIMICATM research and development laboratory as a solution to the problems arising in waterproofing applications on porous and/or humid concrete. Waterproofing over such substrates with standard epoxy or polyurethane primers may not be sufficient and craters, ballooning and other defects will arise on the polyurethane membrane. HYGROSMART®-DUR CEM 3K is a low viscosity, self leveling mortar that will effectively seal the substrate allowing a defect free curing of HYPERDESMO® or other polyurethane based products. HYGROSMART®-DUR CEM 3K is a very hydrophobic material and can be used in itself as a first line waterproofing mortar. The material is available as SELF LEVELLING or THIXOTROPIC, HYGROSMART®-DUR CEM 3K SL or HYGROSMART®-DUR CEM 3K THIXO.

Recommended For:

- Primer for HYPERDESMO® range of products
- Waterproofing of foundation walls
- Floor leveling compound

Features & Benefits:

- Effective primer for very porous concrete.
- Strong adhesion even on damp or green concrete.
- Prevents osmotic blistering of resin based coatings over damp substrates.
- Very long open time of over 50 minutes.
- Easy mixing ratio (liquid components 1:1 by

Application Procedure: Mixing: Mix the two components well manually or using a low speed (300 rpm) mixer and add under mixing the third cementitious component. Do not add additional water. Can be applied on green or damp concrete, without any standing water. Although the product can be applied onto green concrete surfaces (> 24 hours), it is advised to allow at least 3 days for early shrinkage of concrete to occur in order to prevent concrete shrinkage cracks from appearing on the screed surface. Recommended thickness: 2-5 mm. Consumption: 2 Kg/m²/mm. Minimum consumption: 1kg/m².

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 oC. Once opened, use as soon as possible.

Packaging: Component A: 3,5 kg Component B: 3,5 kg Component C: 25 Kg



Unique Water based two component, Aliphatic, Satin Finish Polyurethane Top-Coat.

AQUASMART®-TC 2K FLOOR PROTECT



Description: AQUASMART®-TC 2K FLOOR Protect is a two component, water based, aliphatic coating with exceptional performance in a multitude of applications. The product is highly recommended for the protection of epoxy and polyurethane self-levelling floors. AQUASMART® -TC 2K FLOOR Protect has excellent UV, chemical, water and abrasion resistance. The product has excellent resistance to staining and is easily pigmented with off the shelf water based pigment pastes in a 5-10% by weight ratio depending on the hiding power required.

Recommended For:

- UV protective (pigmented) coat for self-levelling polyurethane and epoxy floors.
- Car Park final protective layer. Industrial paint

Features & Benefits:

- Water based
- Easy to apply.
- Fast Curing Excellent UV resistance.
- Easy pigmentation with water based pigment concentrates
- long pot life
- Excellent interlayer adhesion

Application Procedure: Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. **Mixing:** Use a low speed (300 rpm) mixer. Add second component and continue mixing for a few minutes.

Application: Apply with roller or spray. Make sure not to disturb applied material with excessive rolling as roll marks may appear. The material is relatively fast drying and therefore any additional rolling after first application will cause surface defects to appear. Make sure first coat is completely dry before second coat is applied. For the protection of micro cement or self levelling mortars it is recommended that a first coat of AQUASMART®-TC 2K Anti Stain is used as a penetrating primer. If application takes place in high temperatures on concrete or cementitious substrates, the substrate should be dampened in order to increase the working time.

Consumption: Minimum consumption 150 gr/m²

Shelf Life: Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5 - 25 C.

Packaging: 0.96 kg (comp. A 0.16 kg, comp. B 0.80 kg)



STP, TANKS CARRYING CHEMICALS, EFFLUENT TREATMENT TANKS, STADIUM STANDS, INDUSTRIAL FLOORING & CAR PARKING SOLUTION

HYPERDESMO D 2K (Two-Component, Moderately Elastic Polyurethane Paint for Sealing)



HYPERDESMO®-D-2K is a two-component, solvent-free polyurethane fluid. It produces a strong membrane of moderate elasticity with outstanding adhesion to many types of surfaces. It is based on pure hydrophobic polyurethane resin plus special inorganic fillers, which result in excellent abrasion and chemical resistance properties

FIELDS OF APPLICATION:

Water proofing & Protection Stp, Tanks Carrying Chemicals, Effluent Treatment Tanks, Stadium Stands, Industrial floor, Car parking

PROPERTIES & ADVANTAGES

- 2 component, solvent free liquid PU
- Very hard & Moderate elastic
- Cures with the help of moisture
- Outstanding mechanical property
- Never turns soft up to 90°C
- Good abrasion restraint
- Adhesion to any hard substrates
- Strong adhesion to any substrata (>20Kg/ Sqcm)
- Good chemical resistance Cures very fast. Excellent chemical resistant

COLOURS: Gray or As per customer require color (if project is more than 50000 sft.

COVERAGE: Minimum total consumption: 0.3-0.5 kg/m²

PACKING: 15 kg (10+5) metal pail

EXPECTED LIFE TIME : 25 years

PRODUCT PROPERTIES (HYPERDESMO PB 2K)

- Tack free time, @77 °F(25°C) & RH 55% -2- 4 hours
- Pot life @ 25 °C & RH 55% -20 min
- Tensile strength at break @ 23 °C->30 kg/cm²
- Hardness (Shore A) - > 60
- 0.8 g/m².h-WV transmission
- 2500 cp Viscosity
- Tack free time, @ 77 °F (25 °C) & RH 55% - 2- 4hours
- 40 to 90 service temperature

CHEMICAL RESISTANCE : Acetic acid, Acetone, Alcohol, Ammonia, Chloride, Chloride acid, Citric acid, Distilled water, Ethyl, glycol acetate, Fatty acids, Gasolin, Hydrogen peroxide, Lactic acid, Methylene chloride, Nitric acid, Potassium hydroxid, Sea water, Sodium hydroxid, Sodium hypochlorite, Sugar, Sulfuric acid, Tannic acid, Xylene



WATERFOAM PU INJECTION RESIN:

(Flexible polyurethane foam, one component, Low Viscosity, Injection resin)

WATERFOAMTM-1K-LV is a one component polyurethane, hydrophobic resin, which reacts with water to produce a flexible grout suitable for waterproofing and sealing cracks and joints of concrete surfaces, and for effectively stopping water leaks. Application is by one component injection pump



FIELDS OF APPLICATION:

Stopping water leaks in such structures as: • Foundations, • below-grade structures, e.g. garages, • tunnels & underpasses, • sewage systems, • tanks, • waterways & dams • Soil stabilization • Subway(Metro) • Brick construction • Pipe intrusions • Limestone • Concrete joints

PROPERTIES & ADVANTAGES

- Effective sealer of cracks & voids in concrete, especially in joints.
- Of low viscosity: Deep penetration with minimal pressure.
- Produces a flexible & completely hydrophobic foam.
- Easy to apply: One component with a very reasonable pot-life.
- Highly resistant to fungi and other microorganisms.
- Friendly to the user and the environment: Contains no solvents or propellant gasses – safe to store, transport and use.

PACKING: 10kg or 20kg pail

PRODUCT PROPERTIES

- Form- yellowish liquid
- Viscosity (Brookfield) 350-450 cP
- Specific weight 1.05 gr/cm³
- Flash point > 110 oC
- Max Expansion 30 times
- Induction Time, 20°C/68°F 15 sec
- Gel Time, 20°C/68°F 65 sec
- Strength 2 N/mm²
- Chemical Resistance Resistant to more organic Solvent, Mild Acids, Alkali.



Low Viscosity Dry Epoxy resin:

Low Viscous Epoxy injection agent to be injected in cracks for retaining the strength of the cracked concrete section to its original strength. Cracks (between 0.12mm to 1mm) can be injected with Low Viscous Epoxy resin.



FIELDS OF APPLICATION:

- Crack repair or steel plate reinforcement
- Bird-caged floor (artificial stone or marble) repair and reinforcement
- To be injected by using syringe injectors, injection pumps

PROPERTIES & ADVANTAGES

- To easily inject by crack width, it is divided into the ultra-low viscosity product, the low viscosity product, the mid-viscosity product and the high viscosity product.
- To control the curing speed, it is divided into the summer product, the spring and fall product and the winter product. Its curing speed can be controlled by the user's requirement.
- When fully hardened after injected, it does not chemically affect the concrete structure and it prevents corrosion on it so highly durable

PACKING: base agent (10kg) : curing agent (5kg)

PRODUCT PROPERTIES

Mixing Ratio (Base Agent: Curing Agent)	:	2:1 (Weight Ratio)
Pot Life (25 °C)	:	30-50 min
Curing Time (25 °C)	:	After 24 hrs
Viscosity (mPa-s)	:	210
Specific Gravity	;	1.18
Tensile strength	:	56 N/mm ² (KS F 4923)
Adherence strength	:	7.5 N/mm ² (KS F 4923)
Injecting Tool	:	Injector, Grease Gun, Injection pump
Theoretical Consumption:		Width 0.3mm x Thickness 300mm 0.15kg/m (Differ according to site condition)



Waterplug Stop Water Leaks

CRM-120 is extra-rapid cement for sealing water leaks. its can be also used for fast repair in very small areas.



FILDS OF APPLICATION:

- For very rapid sealing work concrete
- For stopping water leaks.
- For sealing ruptured waterpipes.
- For fast repair in small areas.

PROPERTIES & ADVANTAGES

- Waterproof
- Very rapid hardening
- Sealing water leaks in approx. 2-3 min
- Chloride-free
- Volume-stable
- Easy to use
- easy to mix
- just add to water
- Very fast setting with rapid strength development
- Permanent
- Good adhesion
- Excellent water-stopping power and hydraulic resistance
- No cracking
- Will not cause corrosion to steel bars
- Non-toxic after hardening

PACKING: 10kg pail

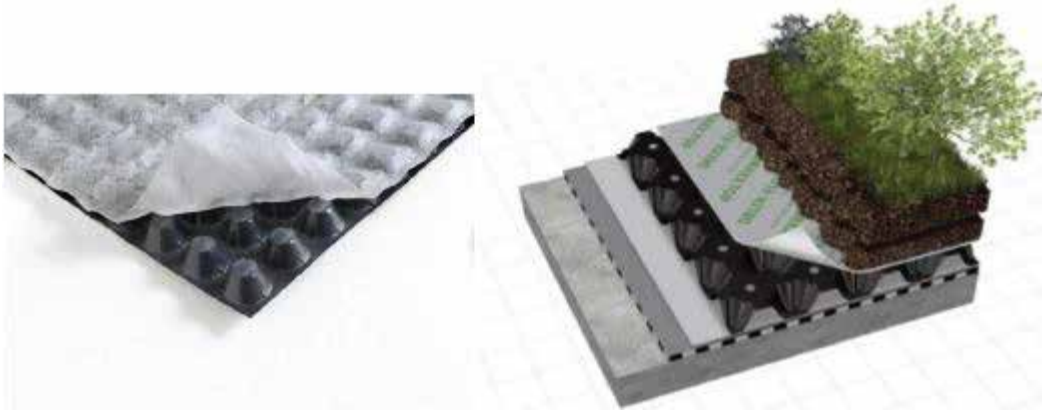
PRODUCT PROPERTIES:

Base	:	Combination of special cements and additives.
Powder density	:	approx. 1.3 kg/l
Application time	:	approx. 1 min
Application temperature:		5°C to 40°C
Mix proportions	:	approx. 0.3kg water for 1kg
Compressive strength	:	after 6 hours ≥ 12.5 N/mm ² after 24 hours ≥ 18.0 N/mm ² after 28 days ≥ 35.0 N/mm ²
Bending tension strength:		after 6 hours ≥ 2 N/mm ² after 24 hours ≥ 3 N/mm ² after 28 days ≥ 8 N/mm ²
Amount required	:	approx. 1.5kg/l cavity volume



External Drainage Membrane suitable for Green Roofs

HI- G DRAIN Top is the optimum solution for flat roofs which are to be extensively planted with greenery that does not need much care. This sheet amalgamates the functions of filtration, water storage, and high-performance drainage! Its octagonal dimples additionally reinforced by ribs make it unusually compression-resistant, so that it will sustain even heavy loads safely. It provides an extremely serviceable and economical foundation for green roofs



Advantages:

- High mechanical protection of bituminous membranes or synthetic membrane
- High drainage capacity
- Filter layer
- Resistant to all natural aggressive mediums in ground water and soil
- Suitable for contact with soft water (aggressive to concrete)
- Can be installed on damp and wet substrates
- HI- G DRAIN forms a hollow space between the structural
- Innovative octagonal dimples for outstanding compressive strength
- One sheet for drainage,
- Water storage, and filtration
- Easy and quick to lay out straight from the roll

Application Details : Surface clearing ≥ apply PU primer ≥ apply bituminous PU coating ≥ HI- G DRAIN with geotextiles ≥ sea sand

HI- G DRAIN :Dimpled membrane sheet with filter in (PP) bonded on top for drainage of roofs, podiums and foundations, its Drainage-Mechanical protection of waterproofing.

Raw material: PP Weight: g/m² **100**, Thickness: 1.2mm , roll size 2.4X20m= 48sqm, Water flow rate 6 ltr/sqm



DRAINSEL – SHEET MEMBRANE



Paver Deck Installation

Drain Cell is installed directly onto the waterproofing Membrane, covered with geotextile filter fabric before adding the soil media and planting.

The compact modules permit greater soil depths resulting in the use of a wider variety of landscape plants.

Subsoil modules are able to withstand pedestrian and light vehicular traffic loads and also serve to protect the waterproofing membrane.

FIELDS OF APPLICATION:

Cellular drain, Draino mat, Sub soil drainage cell, Drainage cell, Sub soil drainage cell, Water management component, Terrace and roof gardens, Landscape, Decks, Podium, Planter system, Sports & Golf courses, Floriculture and agric Horti culture etc.

FEATURES : • Cost Effective • Classy Design • Elegant Look

SIZE : 500mm (w) X 500mm (L) X 20mm, OR 325mmX325mmX25mm

MATERIAL : Poly Propylene .

COMPRESSIVE STRENGTH : 100 tn/m².

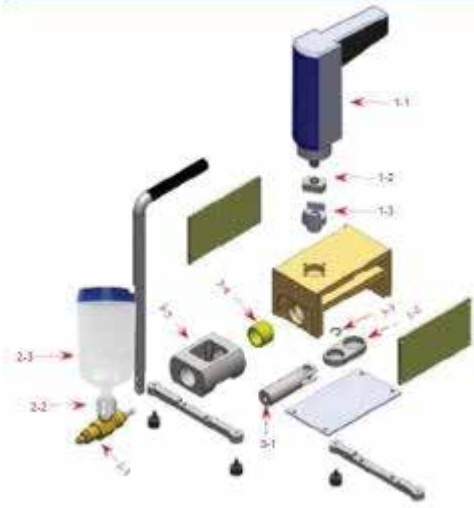
COLOUR : Black.

PACKING: 20pcs/bundle (20pcs is 2.11 sq.m)



Injection Pump

High pressure Grouting Injection pump for Epoxy resin and Polyurethane foam Electric Drill operated (Makita drill Model HP1630k & HP2070F) High pressure 610-1,000 kgf/cm² grouting injection pump

	<table><tr><th>SPECIFICATIONS</th><th>CY-1000</th></tr><tr><td>Transmission Function</td><td>1-speed</td></tr><tr><td>Power Consumption</td><td>AC220V. 710W</td></tr><tr><td>Maximum Pressure</td><td>610kgf/cm²</td></tr><tr><td>Recommended Pressure</td><td>300-500</td></tr><tr><td>Max. Flow Rate</td><td>400cc/min</td></tr><tr><td>Weight</td><td>6kg</td></tr><tr><td>Unit Composition</td><td>Same as pictures</td></tr></table>	SPECIFICATIONS	CY-1000	Transmission Function	1-speed	Power Consumption	AC220V. 710W	Maximum Pressure	610kgf/cm ²	Recommended Pressure	300-500	Max. Flow Rate	400cc/min	Weight	6kg	Unit Composition	Same as pictures		
SPECIFICATIONS	CY-1000																		
Transmission Function	1-speed																		
Power Consumption	AC220V. 710W																		
Maximum Pressure	610kgf/cm ²																		
Recommended Pressure	300-500																		
Max. Flow Rate	400cc/min																		
Weight	6kg																		
Unit Composition	Same as pictures																		
	<table><tr><th>Model</th><th>Section</th><th>Part No.</th></tr><tr><td rowspan="11">CY-1000</td><td rowspan="3">Drill Section</td><td>1-1</td></tr><tr><td>1-2</td></tr><tr><td>1-3</td></tr><tr><td rowspan="3">Piston Section</td><td>2-1</td></tr><tr><td>2-2</td></tr><tr><td>2-3</td></tr><tr><td rowspan="5">Crank Gear Section</td><td>3-1</td></tr><tr><td>3-2</td></tr><tr><td>3-3</td></tr><tr><td>3-4</td></tr><tr><td>3-5</td></tr></table>	Model	Section	Part No.	CY-1000	Drill Section	1-1	1-2	1-3	Piston Section	2-1	2-2	2-3	Crank Gear Section	3-1	3-2	3-3	3-4	3-5
Model	Section	Part No.																	
CY-1000	Drill Section	1-1																	
		1-2																	
		1-3																	
	Piston Section	2-1																	
		2-2																	
		2-3																	
	Crank Gear Section	3-1																	
		3-2																	
		3-3																	
		3-4																	
		3-5																	

* When you need spare parts, Pls. contact us with part number. WAHID 01916822106

Features

- □ Very simple to operate.
- □ Easy to carry in narrow and small space because its light weight & compact design.
- □ Easy to exchange piston.
- □ Low maintenance cost and Easy to clean after use



Parts & Accessories



* When you need spare parts, Pls. contact us with part number. WAHID 01916822106 or email : wahidgbs@gmail.com



It is expendable tools for using to inject Polyurethane and Epoxy into concrete cracks. The packers bear up against high pressure, have strong durability, and were designed for easy installation and easy removal. Also, we keep stock all sizes which are able to cover whole construction industry.

Packer sizes	
8Ø X 55mm	
10Ø X 60mm	10Ø X 100mm
13Ø X 70mm	13Ø X 120mm
14Ø X 70mm	14Ø X 120mm

Users can extend packer's length by adding Aluminum body.

SYRINGE INJECTOR

Specifications	
Filling Capacity	50 ml/cc
Max. Pressure	3.0 kgf/cm ₂
Max. Length	225mm
Min. Length	147mm
Weight	40g



Features

- The Transparent syringe allows you to observe the injected dosage.
- It is designed for low pressure injection.
- It is used for injecting epoxy into small cracks at large area.
- Crack repair work is possible without breaking or destroying the concrete structure.



CARBON FIBER

Advanced Reinforcement Solution

It is cutting edge new material for loadbearing capacity improvement and seismic retrofit, and have very strong tensile strength than steel, and have been used for repair and reinforcement of concrete structure since 1990s. Specially quake-prone countries like Japan have used carbon fibers lately and largely.



Features

- High reinforcement with more than 10 times tensile strength than steel
- Reinforcement with the less quantity than steel.
- Light weight : specific gravity is one-fifth of steel
- No deterioration by external factors like water, base, acid or ultraviolet rays
- Easy to work in small place because whole process by using hand
- Site workability is outstanding

Technical & Physical Data

item	CU-P200	CU-P300	CU-P400	CU-P600
Fiber Areal Weight(g/m ²)	200	300	400	600
Design Thickness(mm)	0.11	0.167	0.22	0.33
Tensile strength (kgf/cmV)	390	590	780	900
Sheet width(mm)/length(m)	500/100	500/100	500/100	500/100



GBS-8000

Operation Manual Airless Sprayer



You can interchange power with 2HP explosion proofed type electric motor so conveniently



Model	YH-8000	
Description	Engine	Motor
Power requirement (HP)	5.5	2(220V.60Hz)
Free - Flow output (lpm)	6.5	4
Max. working Pressure (kg/cm ²)	248	225
Max. tip size	1gun, .036" 4guns, .019"	1gun, .031" 4guns, .021"
Hose Length (Max.)	150M	
Weight(Net)	58kg	63kg
Dimension(mm)	910 x 600 x 1,000	910 x 600 x 1,000

GBS-24

MEGA POWER FLOOR GRINDER



Specification

Overall Size	55 x 135 x 110 cm
Grinding Width	550 mm (22 inch)
Weight	106 kg
Power	2.6kw / 3HP
Voltage	220V/50Hz single phase 3HP
Performance	Max 200m ² /HR



ACY-800

Acrylate Injection Pump



Usage: Water-proof grouting work for underground structure. (Subway, Tunnel, Parking lot, Manhole, Etc) Water-proof work for civil structure such as dam, etc. Water-proof work for the ground of concrete structure. Water-proof work for leaking area of underground structure. Water-proof work for constructed joint area and cracked area.

Mixing Ratio of Acryl Rear-Side Grouting Agent

Safety

Acrylic rear grouting agent does not generate harmful gas when hardened, and it is safe as product does not contain any flammable material.

Workability

Having low viscosity, it shows excellent performance especially in case of minute crack work, and even in case of work for the area where water pressure is high, unequalled construction quality can be realized, compared with existing waterproof agent, because hardening time can be adjusted.

Jellify

Re-water leakage can be prevented fundamentally by making water into gel that is collected in pore of rear side or flowing through.

Adhesiveness

Having excellent property of high elasticity and adhesiveness, water proofing effect can be expected which lasts for a long time after work.

Coefficient of Expansion

Having excellent coefficient of expansion, it can eliminate post-work defect factor caused by vibration to structure, etc.

Durability

This hardened product has excellent durability because it does not cause any hydrolysis phenomenon



GBS-1500



Description: The GBS-1500 is a large-capacity equipment for professionals. It is equipped with a high-power, strong motor and conversion device, so it is optimized for concrete polishing and surface treatment. In addition, you can create a more satisfactory floor finish by using this.

Advantages:

1. Weight conversion device

Existing weights had inconveniences such as the hassle of attaching and detaching, delay in working time, and risk of bodily injury to workers. In addition, if the weight is placed on the front of the grinding plate only to perform grinding work, a tilting phenomenon occurs. The system weight was developed to improve these shortcomings. The system weight guarantees operator safety and greatly reduces the risk of injury as there is no process of separately carrying heavy weights. In addition, it has the advantage of increasing the efficiency of work by conveniently fixing the weight value to the desired location according to the condition of the floor.

2. Remote control device

It is a wireless remote control device considering the user's convenience. The wireless remote control achieves the best results in floor flatness and gloss with reduced labor cost, increased work efficiency and uniform operation. Since the remote control and manual can be freely set and used, it is suitable for application in any field. A wireless joystick is also available as an option.

3. Electric lifting system

It is a device that adjusts the height of the abrasive material in contact with the floor while the machine is in operation. The height of the abrasive can be adjusted according to the curvature or condition of the floor, ensuring optimum work results.

4. drive wheels

When the machine is operated with a wireless remote control or joystick, the speed of the driving wheels is displayed on the panel of the machine body.

Wheels made of urethane rubber do not leave wheel marks or scratches on the finished surface during operation. It is a consideration of the small parts of the work process with meticulous consideration. Also, there is no problem at all when moving on a 45 degree incline.