

HYPERDESMO[®]

Waterproofing Leadership

WATER TANKS WATERPROOFING

Waterproofing system based on HYPERDESMO-2K-W.



A General Conditions

Equipment

The following application equipment is at minimum required:

1. Protecting clothing: Protective overalls and gloves.
2. Mixing equipment: 1KW slow speed drill, 400 or 500 rpm and suitably sized mixing vessel.
3. Application equipment: notched trowel, squeegee or roller, spike roller

B

Working Weather Conditions

Application temperature range: 5°C to 35°C. Avoid dew point conditions during application. Relative humidity must be no more than 95% and substrate temperature must be at least 3°C

above measured dew point temperatures. Do not apply under rain or snow. If temperature is above 35°C, the following guidelines are suggested:

1. Store materials in a cool environment, avoiding exposure to direct sunlight
2. Keep application equipment cool and dry.
3. Try to avoid application during the hottest hours of the day.

C

System Products

1. Primer: AQUASMART-DUR,
2. Sealant: HYPERSEAL-EXPERT-150 or 25LM-S,
3. Main Membrane: HYPERDESMO-2K-W.

D

Surface Preparation

Proper preparation of the substrate is essential for complete adhesion and successful application.

1. New concrete or other cementitious substrate should be at least 28 days old.
2. The substrate should be clean and free of loose particles, oil, grease.
3. Substrate should be free of any irregularities and flat. If needed, it should be grated with the appropriate mechanical equipment in order to achieve a flat and sound surface.
4. The substrate should be free of dust. Vacuum treatment or/ and high pressure washing is suggested to remove dust.

E

Substrate Priming

AQUASMART-DUR is a medium viscosity epoxy based primer. You choose to apply this primer over sound concrete surface. AQUASMART-DUR primer will create a slight film sealing the concrete and increasing the adhesion. After AQUASMART-DUR application you should wait at least 12 hours to apply the main membrane. Main membrane application has to be done within 48 hours after AQUASMART-DUR application. AQUASMART-DUR is completely solvent free and low VOC primer.

If outside the tank there is waterproofing of the concrete, AQUASMART-DUR can be applied in 1 single coat of 200 gr/m².

If there is not any outside waterproofing and concrete protection (or there are doubts how effective it is), AQUASMART-DUR should be applied in 3 successive coats at a minimum total consumption of 500 gr/m².

AQUASMART-DUR is a water based, low VOC primer and can be applied indoor as well as outdoor. So, it is ideal for applications in closed areas like water tanks.

Notes:

1. If it rains after primer and before main coat application, you may need to apply again one coat of primer.
2. More primers are available for exceptional cases, surfaces and weather conditions.

F

Dilatation Joints and Inner Angles

Dilatation joints and inner angles should be treated with HYPERSEAL-EXPERT-150 polyurethane based sealant or HYPERSEAL-25LM-S

G

Water Proofing Membrane

HYPERDESMO-2K-W is a solvent free, thixotropic, two component coating, based on high quality elastomeric polyurethane resins. After polymerization, it produces a strong flexible-elastic membrane completely impermeable by water. It has excellent resistance to acidic and basic environments and performs even in tanks containing chlorine treated water. The material polymerizes into a shiny compact membrane that does not allow the growth of microorganisms or bacteria which is a big problem when the waterproofing material is a cementitious or other highly porous material. The product is certified according to the latest requirements of European Union for potable water tanks.



HYPERDESMO-2K-W can be applied in one single coat of 1.4kg/m² over horizontal surfaces. On vertical surfaces this total consumption of 1.4kg/m² can be achieved by applying 2 successive coats of 0.7kg/m² each.



H

Top Coat

HYPERDESMO-2K-W can be used, without the need of any topcoat, for drinking water tanks and several other types of domestic water tanks. For industrial and waste water tanks a topcoat protection is recommended. For more details please contact our technical assistance team.

J

Cleaning

Tools and equipment should be cleaned immediately using SOLVENT-01 for HYPERDESMO-2K-W (or water for AQUASMART-DUR).

Tools that have been used for AQUASMART-DUR application should not be re-used to apply HYPERDESMO-2K-W.

J

Precautions and Variations.

Please consult above referred products technical data sheets (TDS) and safety data sheets (SDS).

This method statement is offered by ALCHIMICA as a 'summary proposal' for water storage tanks. For more information and technical support, please contact ALCHIMICA at: info@alchimica.co.za.

Where alternative methods are to be used, these must be submitted to ALCHIMICA for approval. ALCHIMICA will not accept responsibility or liability for variations to the above method statement under any other condition.

