SECONDARY CONTAINMENT TANK LINING SYSTEM BASED ON HYPERFLOOR-2K.

ALCHIMICA® BUILDING CHEMICALS

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ALCHIMICA'S COMPREHENSIVE SOLUTIONS FOR SECONDARY CONTAINMENT TANKS

Secondary containment tanks are a critical component in the storage and handling of hazardous substances. These specialized systems are designed to capture and contain any leaks or spills from primary storage tanks, thus preventing environmental contamination and ensuring safety. Secondary containment systems play a pivotal role in industries such as chemical manufacturing, oil and gas, agriculture, and water treatment, where the risk of spills and leaks poses significant threats to the environment and public health. The primary purpose of secondary containment tanks is to provide an additional layer of protection against the release of hazardous substances into the environment. By containing any accidental spills or leaks, these systems prevent pollutants from seeping into the soil, groundwater, or surface water. This is crucial for safeguarding ecosystems, preserving public health, and maintaining compliance with environmental regulations.

Another essential function of secondary containment tanks is to protect the containment structures themselves. These structures, often made of concrete and reinforcement steel, are vulnerable to damage from aggressive chemicals such as acids, alkalis, oils, and solvents. Over time, these substances can degrade the materials, compromising the structural integrity of the containment system. Therefore, it is vital to use protective coatings that can withstand prolonged exposure to these harsh substances, ensuring the longevity and reliability of the containment structures.

Secondary containment tank waterproofing systems are required to have a 2mm thickness system and secondary containment is considered a 48-hour contact with the substance before that being removed. This specification ensures that the containment system is robust enough to handle potential spills and leaks without compromising the environment or the structure itself. Alchimica’s products meet these stringent requirements, providing reliable protection and compliance with regulations.

ALCHIMICA'S ADVANCED SOLUTIONS FOR SECONDARY CONTAINMENT

Alchimica offers a comprehensive solution system for secondary containment tanks, designed to meet the stringent requirements of waterproofing and structural protection. Based on extensive experience in handling a wide range of chemicals, Alchimica's products are engineered to provide exceptional performance, durability, and environmental protection.

PRIMER: AQUASMART-DUR

AQUASMART-DUR is a medium viscosity, water-based epoxy primer that ensures strong adhesion between the tank surface and the main membrane. It is specifically formulated to create a reliable base for subsequent layers, enhancing the overall durability of the containment system. The primer's low VOC content makes it suitable for both indoor and outdoor applications, and it can act as a negative pressure barrier when applied in multiple layers. By sealing the concrete surface, AQUASMART-DUR prevents the ingress of water and other contaminants, thus protecting the structural integrity of the containment tank. This primer is a critical component in ensuring the waterproofing system achieves the required 2mm thickness.

SEALANT: HYPERSEAL-EXPERT-150 AND HYPERSEAL-EXPERT-60FC

For treating dilatation joints and inner angles within the containment system, Alchimica provides HYPERSEAL-EXPERT-150 and HYPERSEAL-EXPERT-60FC. These polyurethane-based sealants offer excellent adhesion, flexibility, and resistance to chemicals. HYPERSEAL-EXPERT-150 is a low modulus expansion joint sealant designed to ensure bubble-free curing even under high temperature and humidity conditions. It provides a 50% joint movement accommodation factor and adheres well to various substrates including glass, aluminum, steel, and polycarbonate. HYPERSEAL-EXPERT-60FC, on the other hand, is a fast-curing, high-hardness sealant with excellent chemical resistance, making it ideal for applications

where contact with water-polluting liquids occurs. These sealants contribute to maintaining the integrity and required thickness of the waterproofing system.

MAIN MEMBRANE: HYPERFLOOR 2K

HYPERFLOOR 2K serves as the primary waterproofing membrane in Alchimica's secondary containment system. This 100% solid, self-leveling polyurethane resin forms a robust, flexible film with excellent adhesion and abrasion resistance. The membrane is designed to achieve a minimum thickness of 2mm, ensuring comprehensive protection against chemical aggression. HYPERFLOOR 2K's unique formulation includes special inorganic fillers that enhance its chemical resistance, making it suitable for both light and heavy traffic industrial areas.

HYPERFLOOR 2K is applied undiluted with a notched trowel, squeegee, or roller, followed by a spiked roller to remove entrapped air. The membrane can be applied in a single layer on horizontal surfaces and multiple layers on vertical surfaces to achieve the desired thickness, providing a seamless, crack-free floor surface that withstands a wide range of temperatures and environmental conditions. This ensures that the waterproofing system meets the required 2mm thickness and can handle 48-hour contact with hazardous substances before being removed.

HYPERFLOOR 2K is CE certified according to EN 13813, ensuring it meets the highest standards for screed materials and floor screeds. This certification confirms its suitability for industrial flooring applications, providing assurance of quality and performance.

TOP COAT: HYPERDESMO-D-2K

The final layer in Alchimica's protective coating system is HYPERDESMO-D-2K, a two-component, solvent-free polyurethane coating. This top coat offers outstanding chemical resistance and durability, protecting the underlying layers from mechanical damage and environmental factors. HYPERDESMO-D-2K produces a strong membrane of moderate elasticity with excellent adhesion to almost any type of surface. It is ideal for use in closed areas due to its solvent-free formulation and is absolutely non-toxic after full cure, making it suitable for applications involving contact with drinking water or food. The top coat's exceptional thermal resistance (-40°C to 90°C) and mechanical properties (high tensile and tear strength) ensure long-lasting

protection for the containment system. HYPERDESMO-D-2K can be used exposed without a topcoat for secondary containment tanks and various industrial projects. However, it discolors under direct sunlight, which is only a visual issue. For aesthetic purposes, a pigmented aliphatic topcoat is recommended. This top coat also contributes to the system's compliance with the 2mm thickness requirement and the 48-hour contact regulation.

Disclaimer: Please refer to products TDS chemical resistance tables or contact Alchimica for chemical resistance to specific tank contents.

WHY CHOOSE ALCHIMICA'S SYSTEM AND PRODUCTS?

Alchimica's advanced solution system for secondary containment tanks offers several key advantages that make it the ideal choice for industries seeking reliable environmental protection and structural durability.

Firstly, Alchimica's products are designed to meet the highest standards of performance and safety. The use of water-based, low VOC primers like AQUASMART-DUR ensures minimal environmental impact while providing excellent adhesion and waterproofing capabilities. The polyurethane-based sealants, HYPERSEAL-EXPERT-150 and HYPERSEAL-EXPERT-60FC, offer superior flexibility and chemical resistance, making them suitable for a wide range of applications and environmental conditions. Secondly, the main membrane, HYPERFLOOR 2K, is formulated to provide exceptional durability and chemical resistance, ensuring the long-term protection of both the containment structure and the environment. Its self-leveling properties and ability to achieve a seamless, crack-free surface make it an ideal choice for industrial applications requiring robust waterproofing solutions. This membrane ensures the secondary containment tanks' waterproofing systems achieve the required 2mm thickness and can withstand 48-hour contact with hazardous substances. Additionally, the top coat, HYPERDESMO-D-2K, offers unparalleled protection against mechanical damage and environmental factors. Its solvent-free formulation and non-toxic properties make it safe for use in closed areas and applications involving contact with drinking water or food. The top coat's excellent thermal and mechanical properties further enhance the overall durability and

performance of the containment system, ensuring it meets the 2mm thickness and 48-hour contact requirements.

Choosing Alchimica's system and products means benefiting from decades of experience and expertise in the field of chemical containment and environmental protection. Alchimica's commitment to quality, innovation, and sustainability ensures that their solutions not only meet but exceed industry standards, providing peace of mind to industries and regulatory bodies alike. Investing in Alchimica's secondary containment solutions can lead to significant long-term cost savings. The high durability and chemical resistance of the coating systems reduce the need for frequent maintenance and repairs, thereby lowering the overall lifecycle costs of the containment structures. By preventing leaks and spills, these systems also minimize the risk of costly environmental cleanup operations and potential regulatory fines.

Alchimica's products are designed to comply with various international standards, ensuring that they meet the stringent requirements set by regulatory bodies across the globe. For instance, HYPERFLOOR-2K and HYPERDESMO-D-2K top coat is CE certified according to EN 13813, which pertains to screed materials and floor screeds, ensuring its suitability for industrial flooring applications. Such certifications provide assurance of the products' quality, safety, and performance.

One of the standout features of Alchimica's solutions is their adaptability to different environmental conditions. Whether the containment system is installed in a region with extreme temperatures, high humidity, or other challenging conditions, Alchimica's products are engineered to perform reliably. Alchimica places a strong emphasis on safety in the design of its products. The solvent-free formulations of the primers and top coats reduce the risk of toxic fumes, making them safer for application in confined spaces. Additionally, the non-toxic nature of the cured coatings means they are safe for applications involving contact with potable water or food products. This focus on safety helps protect workers during the application process and ensures that the end-use environments remain safe for all stakeholders. Alchimica understands that every project has unique requirements. As such, they offer tailored solutions to meet specific needs. Their technical support team is available to provide guidance on the selection of appropriate products, application techniques, and

maintenance procedures. This personalized support ensures that each containment system is optimized for its specific application, enhancing performance and longevity. With four decades of experience in the industry, Alchimica has a proven track record of delivering high-quality containment solutions. Their extensive portfolio includes successful projects across various sectors, demonstrating their capability to handle complex and demanding applications. This expertise, combined with continuous research and development, positions Alchimica as a leader in the field of secondary containment solutions.

ALCHIMICA is a pioneer and a global leader in complete polyurethane waterproofing solutions. With pedigree and expertise in this field, ALCHIMICA overcomes the challenges that others deem impossible. The technological depth and know-how of ALCHIMICA allow the formulation of innovative PU-based materials that can achieve performance levels that are not typically met. ALCHIMICA has been active in the research, development, and production of building chemicals for 42 years providing solutions for liquid waterproofing, reparations, sealing, flooring, and ETICs. The know-how of ALCHIMICA in Research and Development laboratories in construction, repair, and renovation solutions of buildings and infrastructure meets international industry standards.

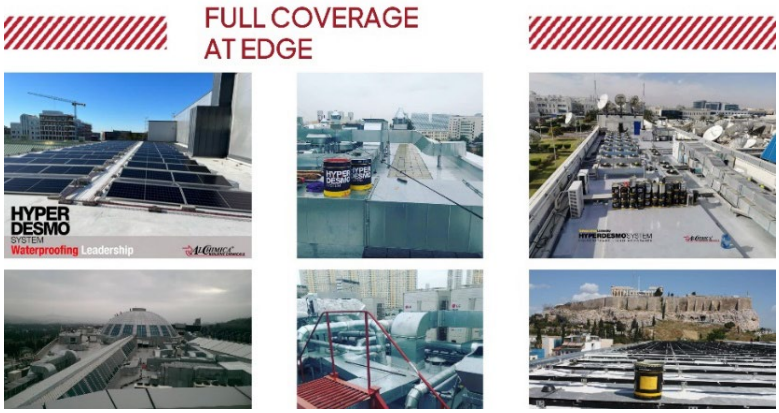
ALCHIMICA'S POLYURETHANE LIQUID MEMBRANES

To ensure effective waterproofing, it is crucial to select PU membranes that meet specific criteria: impermeability, flexibility, durability, breathability, and resistance to environmental factors such as UV radiation, heat, humidity, and chemical exposure.

ALCHIMICA is a leader in the waterproofing industry, pioneering the use of liquid applied polyurethane membranes. With a commitment to high performance and durability, ALCHIMICA's products excel in applications where seamless systems are paramount, whether for structural integrity or aesthetic appeal. These membranes offer decisive advantages, particularly in complex scenarios like geometrically complicated connections with ventilation outlets or upturns.

Throughout its history, ALCHIMICA has continuously expanded its range of polyurethane liquid membranes to provide versatile installation alternatives and long-

lasting solutions. From one and two-component polyurethane liquid membranes to bitumen-extended polyurethanes, water-based liquid polyurethane membranes, and advanced technology polyurethane dispersion (PUD) products, each solution is meticulously designed to address a wide array of waterproofing challenges with optimal performance and durability.



ALCHIMICA's liquid membranes offer durability upon application, elasticity to withstand various stresses and traffic, and resistance to chemicals, and ponding water. These properties meet stringent technical specifications, making them suitable for a diverse range of applications. The core objective of ALCHIMICA is to develop waterproofing systems that are competitive, simple to apply, and accessible to all professionals. By prioritizing ease of application and reliability, ALCHIMICA empowers users to achieve effective waterproofing solutions efficiently and effectively. The membranes are seamless, durable, and flexible and provide superior waterproofing performance, waterproof and moisture permeable, preventing water penetration, allowing moisture to escape, and reducing the risk of degradation and failure over time. With mechanical, thermal, and chemical resistance properties and breathability, ALCHIMICA's PU membranes ensure the longevity and efficiency of waterproofing systems.

ALCHIMICA's commitment to innovation and excellence has revolutionized waterproofing technologies globally. With a comprehensive range of polyurethane liquid membranes tailored to meet the demands of modern construction projects, ALCHIMICA remains the premier choice for effective, long-lasting waterproofing solutions.

EN 13813

EN 13813 is a European standard that specifies the requirements for screed materials used in constructing floor screeds, ensuring high-quality and durable flooring

solutions. This standard applies to a variety of screed materials including cementitious, calcium sulfate, magnesite, mastic asphalt, and synthetic resin screeds, each tailored to meet specific properties and performance criteria for different applications and environments.

These materials are primarily intended for internal applications, although cementitious screeds can also be used externally. Each type is defined with particular properties to suit different construction needs and environments. The standard details the essential properties and performance criteria for both fresh and hardened screed materials. These include working time, consistency, pH value, compressive strength, flexural strength, wear resistance, surface hardness, shrinkage, swelling, modulus of elasticity, and bond strength. These properties are crucial to ensure that the screeds can withstand the demands of their intended applications and provide long-lasting performance . Surface preparation is another critical aspect covered by EN 13813. Proper preparation of the substrate is vital for achieving strong adhesion between the screed and the underlying surface. This involves cleaning the substrate, removing any contaminants, and possibly applying primers or bonding agents to enhance adhesion. This step is essential to maximize the performance and durability of the screed material. The standard also provides detailed guidelines for the application of screed materials. These guidelines include mixing, placing, and curing procedures to ensure that the screed is applied correctly. Following these procedures is essential for achieving the desired performance and longevity of the flooring. Quality control measures are integral to EN 13813, ensuring that screed materials consistently meet the specified requirements throughout the manufacturing and application process. Regular testing of properties such as compressive and flexural strength, wear resistance, and bond strength is necessary to verify compliance with the standard and to ensure the reliability of the screed materials.

By adhering to EN 13813, construction professionals can ensure the quality, safety, and longevity of floor screeds, contributing to the overall durability and functionality of buildings. This standard supports sustainable construction practices by promoting the use of high-quality, reliable screed materials, thus enhancing the sustainability and preservation of building infrastructure.

PREPARATION

For successful and safe waterproofing applications specific tools and equipment are required. Each application might have different requirements.

Minimum application equipment includes protective clothing, a 1KW slow-speed drill, and a brush, roller, or airless spray machine for mixing and application. Before installing the system, the weather working conditions should be considered in order to ensure the correct and safe application of the system. Overall, avoid extreme cold or hot surface conditions. In case of high heat, contractors may apply the products either in the morning or afternoon. The application temperature range is 5°C to 35°C, with no dew point conditions, a maximum 95% relative humidity, and substrate temperature above 3°C. Store materials cool, tools dry, and avoid application during hot hours.

Substrate: To ensure successful application, substrate preparation is crucial. New concrete should be at least 28 days old, clean, dry, and free of substances that could reduce adhesion. Dust removal is recommended, and Alchimica's primer application can be done over damp concrete.

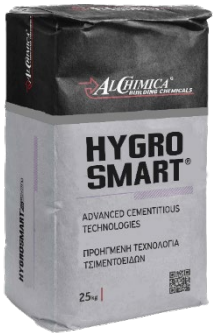
In case of doubtful conditions, please contact ALCHIMICA's technical assistance for instructions.

REPAIR AND LEVELING MORTARS

REPAIRING

In case any spots on the concrete surface require repairs, filling, and/or smoothing such as large cracks, cavities, or surface levelling, ALCHIMICA's HYGROSMART® range of cementitious mortars may be used:

1. **HYGROSMART®-FIX&FINISH** (Single component, rapid-setting shrinkage-compensated, thixotropic, fiber-reinforced, cementitious mortar applied in a single layer from 3 to 40 mm thick, for repairing and smoothing concrete, certified according to EN1504-03, Type R4 CLASS III), or
2. **HYGROSMART®-BUILDING-45-THIXO** (Single-component, shrinkage-compensated, thixotropic, fiber-reinforced cementitious repair mortar, certified according to EN1504-03, Type R4 CLASS III), or
3. **HYGROSMART®-BUILDING-F** (Single-component, reinforced, quick-setting, cementitious repair mortar with excellent adhesion and mechanical properties, easy application in horizontal/vertical substrates. Long pot life allows the application of thick coats without cracking. CE Certified as Class R3 class III repair mortar according to EN 1504-03.
4. **HYGROSMART®-MAK-FLOW** (Single-component, highly flowable and shrinkage compensated mortar for structural repairs and anchoring, certified according to EN 1504-6: 2006 (Anchoring cementitious mortar for strengthening concrete by installing reinforcing steel) and EN 1504-3: 2005, Class R4(Hydraulic mortar (R4-CC) for structural repair of concrete in building and civil engineering works).



LEVELING

In cases where the concrete needs to be levelled or slopes need to be created prior to the installation of the waterproofing membrane, the following products from the HYGROSMART® range can be used, depending on the requirements and desired outcome.

1. **HYGROSMART®-MAK FLOW** (as described above)

PRIMER SELECTION

After checking the weather conditions and having completed the substrate preparation along with any repairs that might be needed, you can start the waterproofing system's build-up with the selection of a suitable primer. ALCHIMICA's primer range provides unique properties for different substrates.

SUBSTRATE AND CONDITIONS	CONCRETE	HUMID CONCRETE	GYPSUM	METAL STEEL	POROUS CERAMIC TILES	GLASS / GLAZY TILES	PVC MEMBRANES	TPO MEMBRANES	BITUMEN MEMBRANES	LOW TEMPERATURE APPLICATION	VAPOR BARRIER	NEGATIVE PRESSURE / RISING HUMIDITY (≤4m/s)
PU PRIMERS												
PRIMER-PU	X	-	-	X	-	-	-	-	-	-	-	-
MICROPRIMER-PU	X	-	-	X	X	-	-	-	-	-	-	-
MICROSEALER-PU	X	X	X	X	X	-	-	-	-	-	-	-
MICROSEALER-50	X	X	X	X	X	-	-	-	-	-	-	-
GEODESMO 50	X	X	-	X	-	-	-	-	-	X	-	-
UNIVERSAL PRIMER-2K 4060	X	X	-	-	-	-	-	-	X	X	-	-
PRIMER T	-	-	-	-	-	X	-	-	-	-	-	-
PRIMER W	-	-	-	-	-	X	-	-	-	-	-	-
PRIMER TPO/FPO	-	-	-	-	-	-	-	X	-	-	-	-
PRIMER PVC	-	-	-	-	-	-	X	-	-	-	-	-
WATER-BASED PRIMERS												
AQUADUR	X	X	X	-	-	-	-	-	-	-	X	X
AQUASMART-DUR	X	X	X	-	-	-	-	-	-	-	X	X
AQUASMART-PRIMER PU-2K	X	X	-	-	-	-	-	-	-	X	-	-

ALCHIMICA's primers are designed to secure your waterproofing application in every substrate by strengthening the substrate, stabilizing, and sealing it, offering remarkable adhesion with their respective main membranes and sealants.

SEALING SOLUTIONS

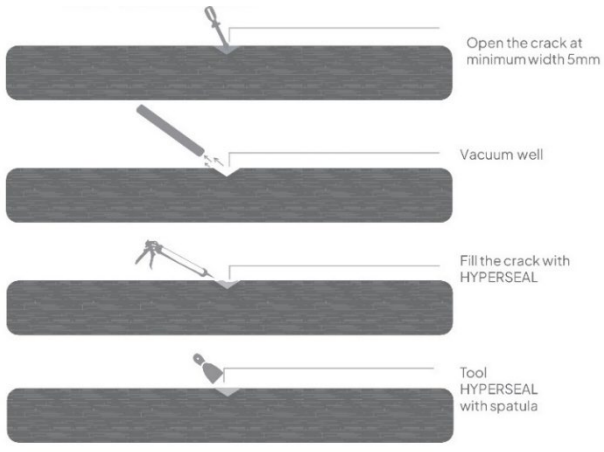
HYPERSEAL® range of PU sealants is essential in sealing applications due to its exceptional adhesion and elasticity, which ensures a durable seal even with the metal's natural expansion and contraction. Its robust formulation offers superior resistance to weathering and UV, making it an ideal choice for both repair and detail treatment in the harsh environment.

Additionally, HYPERSEAL® sealants provide a waterproof seal that prevents leaks, safeguarding the structure from water damage and corrosion, which is vital for maintaining the integrity of tank lining systems over time. HYPERSEAL®-EXPERT-150 and HYPERSEAL®-EXPERT-60FC are both high-performance polyurethane sealants from ALCHIMICA, but they serve different purposes and conditions. HYPERSEAL®-EXPERT-150 is a low-modulus sealant, making it ideal for high

humidity conditions and ensuring a bubble-free cure, which is critical in large expansion joints. With an impressive elongation of over 700%, it's designed to accommodate significant movement, making it well-suited for dynamic joints. On the other hand, HYPERSEAL®-EXPERT-60FC is a fast-curing sealant with a higher hardness and chemical resistance, recommended for cold environments, tanks and areas where contact with water polluting liquids occurs, such as petrol stations or secondary containment structures. Its fast tack-free time makes it preferable for projects requiring a quick return to service. Both products offer excellent adhesion to a variety of substrates including metal, but their different physical properties make them suitable for specific conditions encountered in metal roof applications. HYPERSEAL® sealants are available in various colors and compatible with a wide range of construction materials in general. Can be easily applied using standard caulking or gun techniques. Choose the suitable HYPERSEAL® sealant for your project requirements.

HYPERSEAL®-EXPERT-150

HYPERSEAL®-EXPERT-150 is a low-modulus expansion and construction joints PU sealant designed to ensure a bubble-free cure even in high temperature and humidity conditions. It exhibits excellent thixotropy, making it suitable for large expansion joints. The ratio width to depth should be 2:1 subject to a minimum depth of 10mm. It cures by reacting with atmospheric humidity, producing a joint sealant with a 50% joint movement accommodation factor, elongation >700% (ASTM D412 / EN-ISO-527-3), and excellent adhesion to a variety of substrates (Adhesion to concrete >20 kg/cm² (>2 N/mm²) ASTM D4541) with or without the use of special primers. The sealant's extrusion rate and tooling remain consistent across various temperature and humidity conditions. HYPERSEAL®-EXPERT-150 is CE



certified according to EN 15651-1:2012 (Sealants for Facades) and 15651-4:2012 (Sealants for Floor Joints with Foot traffic). HYPERSEAL®-EXPERT-150 is a highly flexible PU sealant, with elastic recovery of >70% (EN ISO 7389) allowing for the movement and expansion of structure components, preventing cracks, and ensuring a lasting seal. It adheres to various substrates, making it durable and able to withstand harsh environmental conditions and heavy traffic loads. As a PU sealant, it is also chemically resistant, protecting the structure from corrosion. Because of its excellent chemical and hydrolysis resistance, it is widely used for sealing joints in swimming pools and chemically treated water environments. HYPERSEAL®-EXPERT-150 provides excellent waterproofing, preventing moisture ingress, and has high elasticity, allowing for flexibility and elasticity. It does not shrink as it cures, ensuring no gaps or openings in the sealed joint. Its excellent heat resistance makes it suitable for application where exposure to temperatures >60°C takes place and its resistance to cold allows the sealant to remain elastic even down to -40°C (service temperature range -40 to +80°C). It has tack free time (@ 77°F (25°C) & 55% RH) of 2.5-3.5 hours and a cure rate of 2-3 mm/day, low VOC content, and remains resistant and unaffected by microorganisms, fungi, and algae growth, making it the most versatile PU sealant, usable in a variety of applications.

HYPERSEAL®-EXPERT 60FC

For sealing applications where quick return to service is crucial and chemical resistance is a priority, HYPERSEAL®-EXPERT-60FC is the sealant of choice, offering fast curing times and robust adhesion to a variety of surfaces. HYPERSEAL®-EXPERT 60FC stands out as a fast-curing polyurethane sealant, designed for high-performance sealing, providing excellent early grab adhesion even on challenging substrates such as aluminum, steel, and polycarbonate found in metal roofing applications. With its remarkable chemical resistance and resilience to microorganisms and fungus, it is an ideal sealant for metal roof joints exposed to harsh environmental conditions and those requiring contact with water or water-polluting liquids. Moreover, HYPERSEAL®-EXPERT 60FC assures a durable seal in metal roofing with an exceptional elongation rate over 600%, ensuring that the seal remains intact and flexible, accommodating the natural movement of the metal without compromise, even in the most demanding of sealing and repair scenarios. For metal roof applications, HYPERSEAL®-EXPERT 60FC offers a swift and dependable

sealing solution with its fast-curing properties and high hardness, ensuring quick return to service and long-lasting performance. Its exceptional adhesion capabilities make it suitable for a variety of metal surfaces, including challenging ones like aluminum and steel, eliminating the need for special primers in many cases. The sealant's robust chemical resistance and resilience to environmental factors, including UV exposure, provide a reliable defense against the elements, making HYPERSEAL®-EXPERT 60FC an advantageous choice for both the repair and detail treatment of metal roofs. It's fast curing profile, is making it ideal for cold climates and challenging weather conditions.

METHOD STATEMENT

SECONDARY CONTAINMENT TANK LINING SYSTEM BASED ON HYPERFLOOR®-2K

Secondary containment tanks are essential for protecting the environment and ensuring the integrity of storage systems handling hazardous substances, requiring a 2mm thick waterproofing system for 48-hour contact resistance. Alchimica's advanced solution, using HYPERFLOOR 2K and HYPERDESMO-D-2K, provides robust protection against chemical aggression and water ingress. By utilizing Alchimica's products, industries can ensure regulatory compliance and promote long-term environmental sustainability and safety.

GENERAL SYSTEM CONDITIONS

EQUIPMENT

For successful and safe applications specific tools and equipment are required. Each application might have different requirements in terms of application and protection equipment.

The following application equipment is at minimum required:

- Protective clothing: Protective overalls, masks, and gloves.
- Mixing equipment: 1KW slow speed drill, 400 or 500 rpm, and suitably sized mixing vessel.
- When stirring (or pigmenting) take care not to introduce air into 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.
- Application equipment: Brush, roller, notched trowel, squeegee, rubber spatula, caulking gun, spatula. Specific airless spray machines can also be used. Caulking guns.
- Extra equipment: Digital scale or other measuring equipment

Products can be applied with a variety of equipment. Please choose the desired

equipment and method of application according to your preferences and experience after consulting the proposed method of application on TDS of the Product.

DISCLAIMER: IMPORTANCE OF EQUIPMENT CLEANING

Use clean equipment when switching from different products, to prevent contamination between different products.

To maintain the integrity and efficacy of products, especially when working with liquid chemicals, it is crucial to use equipment that is thoroughly cleaned prior to use. Residual chemicals on containers, mixers, or other tools can initiate unintended chemical reactions or cause contamination **when switching between different products**. Such occurrences may lead to product degradation, and project failure. Adherence to rigorous cleaning protocols is essential to prevent these risks. All users must strictly follow the equipment cleaning guidelines specified herein to ensure product performance and project success.

WORKING WEATHER CONDITIONS

- Application temperature range: 5°C to 35°C.
- Avoid dew point conditions during application.
- Relative humidity must be a maximum of 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 recommended:
    - Store materials in a cool environment, avoiding exposure to direct sunlight.
    - Keep application tools cool and dry.
    - Try to avoid application during the hottest hours of the day.

SURFACE PREPARATION

THE FOLLOWING FACTORS PRIOR TO APPLICATION SHOULD BE CHECKED:

✓ Substrate type and condition.

- ✓ Previous substrate mechanical preparations (sanding, polishing, shot blasting, or milling)
- ✓ Porosity of the surface
- ✓ Existing cracks or damaged areas.
- ✓ In existing dilatation joints, remove old material, clean it, and replace it with HYPERSEAL®.
- ✓ Existing membranes or coatings.
- ✓ The substrates must be both durable and cohesive. Check the substrate for contamination (oil, grease, etc.).

CONCRETE SUBSTRATES

Concrete substrates are used in the construction of roofs and foundations in modern architectural designs. However, because concrete is a porous surface exposed to different climatic conditions, it can absorb water which can then cause damage. Waterproofing is a basic need at almost all stages of construction work, in order to protect structures from the adverse effects of moisture and water ingress. In the case of exposed concrete roofs, it is vital to avoid any water leak in order to prevent any wear and corrosion of reinforcing steel in the concrete structure.

ALCHIMICA's high-quality concrete roof waterproofing and protection systems consist of quality products that hold excellent workability, durability, elasticity, and resistance to weather, chemical, mechanical, and thermal effects, as well as to UV radiation on either flat or sloping roofs.

Standard concrete substrate conditions

- Hardness: R28 = 15 MPa.
- Humidity: W < 10%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%

Metal Substrates

Metal roofing is a common method for industrial or commercial buildings; however, climatic conditions have a great impact in the lifecycle of metal sheets, causing corrosion and damages that lead eventually to water leaks. ALCHIMICA's waterproofing system provides economical and durable refurbishment and protection for metal roofs in inclined and vertical substrates, easy coloring and high resistance

to harsh weather effects with excellent UV resistance while preventing from corrosion and damages, extending the life cycle of the metal sheets.

PREPARATION

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

- New concrete or other cementitious substrates should be at least 28 days old.
- The substrate should be clean and free of loose particles, oil, and grease.
- The substrate should be free of any irregularities. If needed, it should be ground with the appropriate mechanical equipment in order to achieve a flat and sound surface.
- The substrate should be free of dust. Vacuum treatment or/ and high-pressure washing is recommended to remove dust.
- If there are areas/spots that the original metal roof paint (or possibly anodized aluminium colour) has been damaged or worn out, you should remove these old paints or old waterproofing coats (if any), mold and/or corrosion before proceeding with priming.
- Primer application can be done over damp concrete too. But any ponding water should be removed before primer application.
- Metal details should be free of rust, oils, and old paints.
- The surface of PVC pipes should be treated with sandpaper in order to become rough.
- Surface irregularities can be filled with the appropriate HYGROSMART® products.
- For concrete levelling or sloping the appropriate HYGROSMART® products must be used.
- For more information about surface preparation please contact our technical assistance team.

MANDATORY DISCLAIMER BEFORE APPLICATION:

Testing the products to be used in this build-up application on the specific substrate and conducting mock-up tests are essential steps to ensure good adhesion. Mock-up tests replicate real-world conditions and provide a practical way to evaluate the performance of the products in situ. Pull-out tests conducted on these mock-ups help assess the bond strength between the products and the substrate, giving valuable insights into their adhesion capabilities.

By testing the products on the specific substrate and conducting mock-up tests, any potential issues or concerns regarding adhesion can be identified and addressed before full-scale implementation. This proactive approach helps mitigate risks associated with poor adhesion, ensuring the long-term durability and effectiveness of the build-up system.

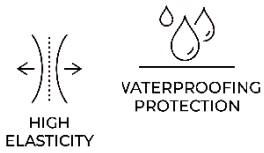
ALCHIMICA advises the thorough testing of the system to be performed prior to proceeding with full surface application in order to determine the suitability of the system based on project requirements.

SYSTEM PRODUCTS BUILD-UP

	PRODUCT	CONSUMPTION
1. PRIMER	CONCRETE: AQUASMART-DUR	200-600gr/m2 subject to project needs

CERTIFIED PRODUCTS

	METAL/STEEL: MICROSEALER-PU METAL/STEEL: MICROSEALER-50	80-100gr/m2
2. SEALANT	HYPERSEAL®-EXPERT-150 OR HYPERSEAL-EXPERT-60FC	Subject to project needs
3. MAIN MEMBRANE	HYPERFLOOR-2K	Minimum Total consumption: 2,6 kg/m^2
4. TOP-COAT	HYPERDESMO-D-2K	800gr/m2 in 2-3 coats.



SUBSTRATE PRIMING

PRIMER	AQUASMART-DUR / AQUADUR	MICROSEALER-PU	MICROSEALER-50
CONSUMPTION	- 150-200 gr/m² - water/humidity barrier –three coats with total cons. of 500-600 gr/m²	- 80-100 gr/m² per coat	- 80-100 gr/m² per coat
COMPOSITION	WATER BASED EPOXY	100% SOLIDS PU	SOLVENT-BASED PU
APPLICATIONS METHODS	brush, roller	brush, roller	brush, roller
TACK FREE TIME, @ 77 °F (25°C) & 55% RH	3-5 Hours	6-12 Hours	6-12 Hours
RECOAT TIME OF PRODUCT WHEN NEEDED	When the material has hardened to the degree where it can no longer be punctured by fingernail 6-24 Hours	6-12 hours	6-12 Hours
NEXT COAT TIME (HYPERDESMO® MEMBRANE)	Once the colour on the current coat goes from milky white to transparent 6-24 Hours	24 Hours	12-24 Hours
RECOMMENDED DILUTION	10% WATER	5% SOLVENT-01	X
ADDITIVES	X	X	X
COLORS	TRANSPARENT	TRANSPARENT	TRANSPARENT
POT LIFE	1 Hour	X	X
COMPONENTS	TWO COMPONENTS	SINGLE COMPONENT	SINGLE COMPONENT

Choose a suitable primer for your project needs and requirements:

For concrete water tanks:

■ AQUASMART-DUR is a medium viscosity epoxy-based primer. It is a water-based epoxy primer and humidity barrier, suitable for application in closed spaces too. It is a two-component product with a 1:1 mixing ratio by volume with zero VOC, low odor, and non-flammability. It has a long pot life while being fast curing, easy to clean, and suitable for concrete and humid concrete too.

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

Application: You choose to apply this primer over a sound concrete surface. AQUASMART-DUR primer will create a slight film sealing the concrete and increasing the adhesion. After the AQUASMART-DUR application, you should wait at least 12 hours to apply the main membrane. The main membrane application has to be done within 48 hours after the AQUASMART-DUR application. AQUASMART-DUR is completely solvent-free and low VOC primer. If a negative pressure humidity barrier is required, increase total consumption of AQUASMART-DUR at a minimum of 500 gr/m² in 3 successive layers (150-200gr/m² per coat)

For metal/steel water tanks:

■ MICROSEALER-PU is a low viscosity, 100% solids PU, polyurethane-based primer. MICROSEALER-PU is free of solvents. Its balanced curing profile makes it suitable for various climates and conditions. It is a single component with excellent wetting, impregnation, and paint-over time properties. It is used for sealing and stabilizing substrates, ensuring good adhesion of the main coat. MICROSEALER-PU is the 100% solids version of MICROSEALER-50 and is ideal for extreme porosity in concrete surfaces where multiple coats of primer may be required. It can be used on both dry and wet concrete, even green concrete, as a primer and low-cost sealing solution, increasing substrate durability and adhesion strength. It can be used successfully on both porous and non-porous substrates.

Mixing: Mix the product well manually or using a low speed (300 rpm) mixer.

Application: You choose this primer if the water storage tank is made from metal/steel. The product is dry to touch in 12 hours on dry cement, and 6 hours on wet cement while the main membrane application can be done 24 hours after primer application.

■ MICROSEALER-50 is a polyurethane based primer/concrete sealer suitable for both porous and non-porous substrates. It is a single component with low viscosity, deep penetration, and slow cure, offering excellent wetting, impregnation, and paint-over time on various substrates. It seals and stabilizes substrates, ensuring good adhesion of the main coat. It is suitable for concrete, humid concrete, metal/steel, porous ceramic tiles, and gypsum boards.

Mixing: Mix the product well manually or using a low speed (300 rpm) mixer.

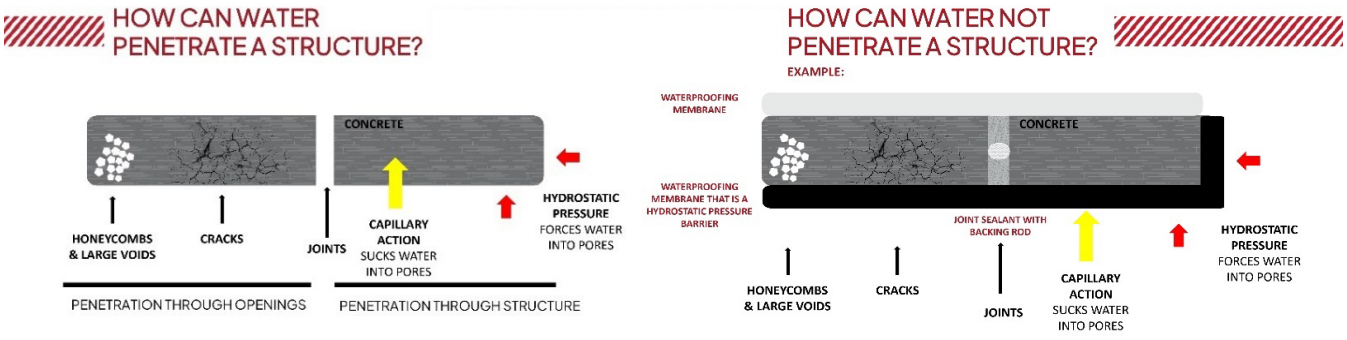
Application: You choose this primer if the water storage tank is made from metal/steel. Apply the product in well-ventilated conditions. MICROSEALER-50 primer will penetrate, stabilize, and seal the concrete surface in depth. After MICROSEALER-50 application you should wait at least 12 hours in order to apply the main membrane. Apply the main membrane within a maximum of 3 days after primer application.

Notes:

1. If it rains after the primer and before the main coat application, you may need to apply one coat of primer again.
2. More primers are available for special cases, surfaces, and weather conditions.
3. For more information about surface preparation please contact our technical assistance team.

DILATATION JOINTS, INNER ANGLES & SMALL CRACKS

Concrete expansion joints are small gaps in structures designed to prevent cracks, absorb stresses, and allow soil movement. They allow independent movement and thermal expansion without inducing stress. Concrete is susceptible to cracks due to its non-elastic nature, so joints are strategically placed to prevent failure. However, structures with expansion joints are susceptible to water leaks, so waterproofing and applying a durable sealant are essential to maintain flexibility and allow the joint to function properly. All dilatation joints, inner angles, wall-floor connections, cracks, drainage details, pipes, and other elements of equipment mechanically installed must be treated.



Dilatation joints and inner angles should be treated with HYPERSEAL®-EXPERT-150 or HYPERSEAL®-EXPERT-60FC, polyurethane based sealants.

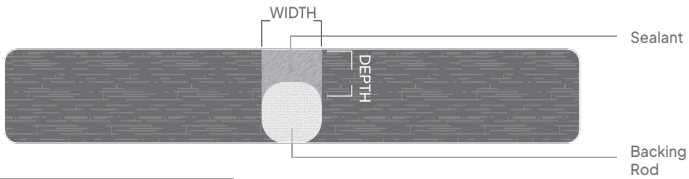
Clean joints thoroughly, and ensure that no dust, oil, grease, wax contaminants, or silicone remains are present. For many applications, primer is not obligatory. However, in case of application on porous or/and wet substrate the primer is required, as there is a possibility of air bubbles blown into the uncured sealant if the substrate temperature rises.

After the primer is cured, apply in dilatation joints the right backing material (where needed) – an open cell polyurethane or a closed cell polyethylene backing rod. Be sure that when applying a closed cell polyethylene backing rod, its outer skin is not punctured, as rising temperature may cause bubbles. Backing rod application is important as it ensures the correct width-to-depth ratio and provides a firm backing against which the sealant can be tooled off. Apply the sealant HYPERSEAL®-EXPERT-150 or HYPERSEAL®-EXPERT-60FC.

■ HYPERSEAL®-EXPERT-150 is a low modulus sealant, formulated to ensure bubble free cure even at very high temperatures and humidity climatic conditions. The product displays excellent thixotropy allowing its use even in very large expansion joints. It cures by reaction with atmospheric humidity to produce a joint sealant with a 50% joint movement accommodation factor and excellent adhesion on many types of substrates (concrete, fibrous cement, mosaic, cement roof tiles, wood, also glass, aluminum,

steel, polycarbonate, etc.). The extrusion rate and tooling of the sealant remain the same throughout a very wide range of temperature and humidity conditions.

■ HYPERSEAL®-EXPERT-60FC is a high-performance sealant engineered to deliver exceptional sealing capabilities in diverse environments. This product is specially designed for fast curing and low modulus, making it ideal for applications requiring rapid turnaround without sacrificing quality. The sealant excels in bubble-free curing, even under extreme conditions of temperature and humidity, ensuring a consistent application every time. HYPERSEAL®-EXPERT-60FC reacts with atmospheric humidity to form a durable seal with a 60% joint movement accommodation factor, adhering superbly to a variety of substrates including concrete, aluminum, glass, and polymers. It maintains excellent extrusion rate and ease of tooling across a broad spectrum of climatic conditions, demonstrating its versatility in both indoor and outdoor settings.



CONSUMPTION

WIDTH / DEPTH	5mm	10mm	15mm	20mm	25mm
5mm	24	12			
10mm			4	3	2,4
15mm					1,6

- Width # depth ratio 2/1
- Minimum width size 5mm

HYPERSEAL®-EXPERT-150 is particularly effective in high humidity and temperature conditions, offering a 50% joint movement accommodation factor and excellent adhesion to a variety of substrates. HYPERSEAL®-EXPERT-60FC, known for its rapid curing and low modulus, is ideal for fast-paced projects requiring durable and reliable sealing under extreme environmental conditions. Both sealants ensure consistent performance and adaptability across a wide range of climatic conditions, making them ideal for metal roofing applications.

Slide the sealant HYPERSEAL®-EXPERT-150 or HYPERSEAL®-EXPERT-60FC into the sealant dispensing gun, cut off the very end of the sealant packaging, and fit the gun with the nozzle. The nozzle should be cut to deliver the right bead size. Extrude the sealant into the joint ensuring that no air is trapped in the joint. Tooling is

recommended immediately after the application of sealant. The ratio width to depth should be 2:1 subject to a maximum depth of 25mm.

NOTE:

- Tool the sealant with a spatula.
- Do not use any solvent, alcohol, or soap to smooth the material.
- Clean tools and equipment first with a paper towel and then using SOLVENT-01.

POLYETHYLENE BACKER ROD

Special backer rod made of extruded polyethylene for joints where HYPERSEAL® sealants will be used.

SIZE	PACKAGING
F6	1500m
F10	680m
F15	250m
F20	180m
F25	100m
F30	100m
F40	100TEM
F50	65TEM

MAIN WATERPROOFING MEMBRANE

HYPERFLOOR-2K is a 100% solid, polyurethane self-leveling flooring resin. This advanced flooring solution is a two-component, solvent-free polyurethane material that, upon curing, produces a strong, flexible film with excellent adhesion to various surfaces. The product is based on pure hydrophobic polyurethane resin combined with special inorganic fillers, providing the material with outstanding abrasion and chemical resistance. HYPERFLOOR-2K boasts excellent mechanical properties, including high tensile and tear strength, as well as temperature resistance ranging from -40°C to 90°C, and it can withstand short-term temperature spikes up to 200°C. This broad temperature tolerance ensures that the material remains durable and crack-free, even under extreme conditions.

HYPERFLOOR-2K	
CONSUMPTION	2,6 kg/m²
APPLICATIONS METHODS	brush, roller, airless spraying
TACK FREE TIME, @ 77 °F (25°C) & 55% RH	4-6 Hours
APPLICATION OVER PREVIOUS COAT (PRIMER)	Depending on the primer curing time
RECOAT TIME OF PRODUCT	6-24 Hours
NEXT COAT TIME (TOPCOAT)	6-24 Hours
ADDITIVES	• THIXO-TOOL • ACCELERATOR-300A CHECK THE TDS FOR COMPATIBILITY
COLORS	GREY, NEUTRAL
COMPONENTS	SINGLE COMPONENT

With HYPERFLOOR-2K, achieving any desired thickness from 1mm to 10mm in just one single coat is possible, making it an incredibly versatile flooring option. The material's flexibility across a wide temperature range ensures a seamless, crack-free floor surface. Its primary applications include both light traffic industrial areas and high traffic areas when used with a traffic-resistant topcoat. Typical examples of its application are in hospitals, food industries, chemical industries, and industries that treat liquid materials.

HYPERFLOOR-2K's unique properties also make it an ideal solution for waterproofing Secondary Containment Tanks. These tanks require a waterproofing membrane of at least 2mm thickness, achievable by applying several layers on vertical surfaces and a

single layer on horizontal surfaces and the tank floor. For effective waterproofing, HYPERFLOOR-2K should be applied at a minimum thickness of 2mm, with a minimum total consumption of 2.6 kg/m².


Application of HYPERFLOOR-2K

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. With this material you can achieve any desired thickness (from 1mm up to 10mm) in just one single coat. It is a flexible material within a wide temperature range, so you can achieve a seamless, crack-free floor surface.

Thickness: The dry film thickness is calculated based on the application and can be determined by

considering that 1.3kg/m2 of HYPERFLOOR-2K will give you 1mm thickness.

Pot life: 20-30 minutes @ 25 oC & 55% RH.

Tip: 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 cleaning the use of an additional pigmented Top Coat is recommended.

TYPES OF APPLICATIONS

APPLICATION	With HYPERFLOOR-2K you can achieve any desired thickness (from 1mm up to 10mm) in just one single coat. The dry film thickness is calculated based on the application and can be determined by considering that 1.3kg/m2 of HYPERFLOOR-2K will give you 1mm thickness.
PIGMENTATION OF HYPERFLOOR-2K NEUTRAL	HYPERFLOOR-2K it is either pre-pigmented from the factory in grey colour or it comes in NEUTRAL version that must be pigmented with ALCHIMICA's PIGMENT PASTES only (10% max). At a maximum ratio of 10% by weight, the PIGMENTS PASTES are designed to be compatible with ALCHIMICA's products, offering high hiding power to the neutral version of HYPERFLOOR-2K. Pour the PIGMENT PASTE content of the pail into the product at a maximum ratio of 10% by weight. Mix thoroughly using a

low-speed electric mixer until the product homogenizes. Apply the product as per standard application instructions.

TOPCOAT

In areas where chemical resistance is critical, applying a topcoat is essential. In such cases, HYPERDESMO-D-2K is highly recommended due to its exceptional chemical resistance properties. HYPERDESMO-D-2K is a two-component, solvent-free polyurethane coating known for its superior resistance to aggressive chemicals. Formulated with pure hydrophobic polyurethane resins and special inorganic fillers, it resists a wide range of chemicals, including acids, bases, solvents, and salts. This robust chemical resistance ensures that HYPERDESMO-D-2K remains effective in harsh industrial environments, maintaining its protective qualities over time.

HYPERDESMO®-D-2K	
CONSUMPTION	0.2 -0.4kg/m² per coat In Total: 0.8 kg/m² depending on project requirements
APPLICATIONS METHODS	brush, roller
TACK FREE TIME, @ 77 °F (25°C) & 55% RH	1-2 Hours
APPLICATION OVER PREVIOUS COAT	It must be applied WITHIN 12-48 hours of HYPERDESMO®-2K-W depending on weather conditions.
RECOAT TIME OF THE PRODUCT	4-24 Hours
POT LIFE	20 MIN @25°C
COLORS	GREY, NEUTRAL
COMPONENTS	TWO COMPONENTS

The cured membrane of HYPERDESMO-D-2K exhibits excellent resistance to various chemicals, remaining unaffected by acetic acid (10%), chloride (10%), citric acid (10%), and nitric acid (10%). It also withstands exposure to fatty acids, gasoline, hydrogen

peroxide (10%), lactic acid (25%), potassium hydroxide (10%), sodium hydroxide (10%), sodium hypochlorite (3%), and sulfuric acid (10%). However, it does degrade when exposed to acetone, cresol, methylene chloride, and formic acid (10%) over extended periods. For detailed information please refer to products TDS.

HYPERDESMO-D-2K's chemical resistance makes it an excellent topcoat for projects requiring high chemical resistance. It enhances the durability and longevity of underlying layers, providing a robust barrier against chemical attacks. This makes it suitable for protecting industrial floors, chemical storage tanks, effluent treatment tanks, and sewage tanks from chemical exposure and mechanical wear. For treatment, chemicals and specialized tanks topcoat applications, HYPERDESMO-D-2K is applied at approximately 800 grams per square meter in 2-3 coats using a roller or rubber squeegee, with a thickness of about 0.3 kg/m² per coat. The recoating interval is between 2 to 4 hours, not exceeding 24 hours, ensuring efficient project completion within a single day.

In environments where aesthetic appearance is important, especially those exposed to sunlight, it is recommended to use a pigmented topcoat over HYPERDESMO-D-2K to prevent discoloration. These topcoats preserve the color while maintaining the chemical resistance and protective properties of HYPERDESMO-D-2K. After full cure of the waterproofing system, it is ready to be covered by concrete or concrete screed, depending on the selected applied solution. HYPERDESMO-D-2K's combination of chemical resistance, mechanical strength, and ease of application makes it a highly effective solution for protecting surfaces in chemically aggressive environments, ensuring long-term performance and reliability in industrial applications.

Mixing: Pour component A into component B container and use a low speed (300 rpm) mixer.

Application: Apply coats with roller or rubber squeegee. Do not leave more than 24 hours between coats.

Pot life: 20 minutes @ 25 oC & 55% RH.

APPLICATION BY COATS	Per coat: 0.2-0.4 kg/m^2. Total consumption:0.8 kg/m2 Apply more coats depending on project requirements and system build-up.
PIGMENTATION OF HYPERDESMO®-D-2K NEUTRAL	HYPERDESMO®-D-2K it is either pre-pigmented from the factory in grey colour or it comes in NEUTRAL version that must be pigmented with ALCHIMICA's PIGMENT PASTES only (10% max). At a maximum ratio of 10% by weight, the PIGMENTS PASTES are designed to be compatible with ALCHIMICA's products, offering high hiding power to the neutral version of HYPERDESMO®-D-2K. Pour the PIGMENT PASTE content of the pail into the product at a maximum ratio of 10% by weight. Mix thoroughly using a low-speed electric mixer until the product homogenizes. Apply the product as per standard application instructions.

CLEANING

Clean tools and equipment first with paper towels. Tools and equipment should be cleaned immediately using SOLVENT-01 (or water for water-based materials). Rollers will not be re-usable.

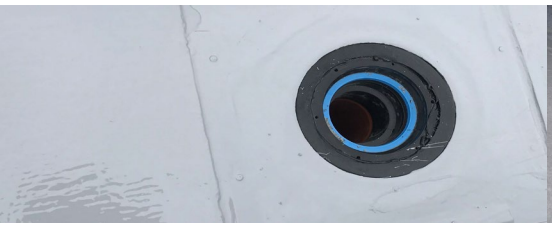
REPAIR AND OVERLAPS PROCESSES

LOCAL REPAIRS

One of the benefits of ALCHIMICA's liquid applied waterproofing systems is the ease of reparations to be carried out when spot problems occur. Nevertheless, it is always recommended to protect the membrane by ensuring that there are no foreign objects, sharp and heavy ones mostly, that they could fall and damage the membrane, to the best possible extent.

In cases where the membrane repair is caused by an accident or assembly procedures that are not covered by the installation, the following procedures must be followed:

- Grind the affected areas or remove the affected area and/or damaged surface by cutting.
- Sanding this area for overlapping, extending it about 20-30 cm around the perimeter.
- Clean the surface around the slit at a perimeter of 20-30cm depending on the repair length. Clean up thoroughly and remove all contaminants from the elements, such as dust or chippings, by mopping and/or vacuuming.
- If necessary, solvent wipe the area with a SOLVENT-01. Allow it to dry completely. The surface must be completely dry before the next steps.
- Apply a thin layer of primer MICROSEALER-50 at a consumption of 50-60gr/m^2 by overlapping the membrane at the prementioned perimeter.
- Fill the area by using HYPERSEAL®-EXPERT- 150, tool it to form a smooth patch, and the next day apply the same coat and topcoat that was applied to the rest of the membrane waterproofing system (if one was used) in order to ensure long term UV protection of the patch.
- In severe situations, the coating may have to be totally removed prior to system re-application.



OVERLAPS

In cases where the recoat time (24-48 hours) has been exceeded, the waiting time between jobs has been extended, or unexpected weather conditions (rain) have stopped the application, proceed as follows:

The SURFACE should be clean and free of loose particles and dust. If it rains after the first main coat application, you may need to solvent wipe the area and apply one thin coat of primer again.

- OPTION 1: clean the area and apply primer MICROSEALER-50 at the consumption of 50-80gr/m^2 in order to secure adhesion. After 6-12h you can apply the next coat of HYPERFLOOR-2K®.
- OPTION 2: solvent wipe the whole area with SOLVENT-01, let it dry, and then apply AQUASMART-DUR primer at 50-80gr/m^2 in order to secure adhesion. After 3-6h you can apply the next coat of HYPERFLOOR-2K®.

REFERENCES

ALCHIMICA throughout the years, has a collection of completed projects from around the world. On our website, you can find where we have provided a variety of solutions and expert know-how, in case studies ranging from the smallest roof to the largest project. www.alchimica.com

HEALTH AND SAFETY

The system proposal contains volatile flammable solvents. Apply in well-ventilated, no-smoking areas, away from naked flames. In closed spaces use ventilators and carbon-active masks. Keep in mind that solvents are heavier than air, so they float near the floor. The MSDS (Material Safety Data Sheet) of the products are available on request.

This handling safety advice is required for the implementation procedure as well as in the pre- and post-exposure to the loading machinery.

- Protect your lungs by using an air-purifying respirator when handling or spraying.
- Use rubber gloves to protect your skin and remove them promptly after contamination. Wear clean undergarments. After work and before eating, drinking, or smoking, thoroughly wash your hands with soap and water.
- Wear safety goggles to protect your eyes and face from splashes and airborne particles.
- Waste generation should be avoided or reduced.
- Incinerate under well-controlled conditions in line with local and national rules and regulations.
- Re-occupancy of the work site without respiratory equipment is limited to 24 hours if proper ventilation for the sprayed area is provided.
- Contractors and applicators must follow all applicable and necessary storage and safety regulations.
- In any case, review the system's material and safety data sheets.

PRECAUTIONS AND VARIATIONS.

The purchaser must determine the suitability of the products for the intended use and assume all related liabilities and risks. This information, recommendations, and any additional technical advice are given in good faith and are based on ALCHIMICA's present knowledge and experience of the products when properly stored, handled, and applied under normal conditions according to ALCHIMICA's recommendations.

However, ALCHIMICA assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third-party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. ALCHIMICA reserves the right to change at any time the properties of its products. The purchaser of the product(s) must test the product(s) suitability for the intended application and purpose before proceeding with a full application of the product(s).

The performance of the products build up described herein should be verified by testing and carried out by qualified experts.

NOTE: This method statement is offered by ALCHIMICA as a 'summary proposal' for **SECONDARY CONTAINMENT TANK LINING SYSTEM BASED ON HYPERFLOOR**. For projects' particularities and more precise technical support, please contact ALCHIMICA at: alchimica@alchimica.com

Please consult the above-referred products' technical data sheets (TDS) and safety data sheets (SDS). Under any circumstances, ALCHIMICA does not assume any responsibility for the performance of the waterproofing system given the conceptual flaws of the existing build-up. Imperative for the performance of the system is the correct cleaning, inspection, and maintenance of the waterproofing system. For projects' particularities and more precise technical support, please contact ALCHIMICA at: alchimica@alchimica.com

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

LEGAL NOTES AND CITATION

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- Appropriate Technical Documentation and/or Specific Technical Documentation: The performance of the products identified in the DoP files conform with the set of declared performances. This declaration of performance is issued in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer.
- It is recommended to check the TDS and MSDS of all the materials before use and application.

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