

2021

Waterproofing Solutions



■ Kalekim

Index

About Kalekim	02
Solutions for Safe, Durable, Comfortable and Healthy Living Spaces	05
Application Solutions	06
Waterproofing Products	29
Waterproofing Products Selection Chart	44
Complementary Products for Waterproofing Solutions	46
Technical Information and Drawings	49

About Kalekim



Among 80 countries. Always the best.

Kalekim Factories

• Istanbul • Balıkesir • Isparta • Mersin • Yozgat • Erzurum • Mardin

• Kenya • Albania

• Afghanistan • Albania • Algeria • Australia • Azerbaijan • Bahrain • Barbados • Belarus • Belgium • Benin
• Bulgaria • Burkina Faso • Cameroon • Canada • Cayman Islands • Congo • Denmark • Djibouti • Equatorial Guinea
• Ethiopia • France • Gabon • Gambia • Georgia • Germany • Ghana • Greece • Guinea • India • Iraq
• Ireland • Jordan • Kazakhstan • Kenya • Kosovo • Kuwait • Kyrgyzstan • Lebanon • Liberia • Libya • Macedonia
• Madagascar • Malta • Mauritania • Moldova • Montenegro • Morocco • Netherlands • Niger • Nigeria • Oman
• P.R. China • Pakistan • Palestine • Panama • Qatar • Réunion • Romania • Russia • Rwanda • Saudi Arabia
• Serbia • Sierra Leone • Slovakia • South Africa • Sweden • Switzerland • Taiwan • Tajikistan • Tanzania • Tunisia
• Turkish Republic of Northern Cyprus • Turkmenistan • Uganda • Ukraine • United Arab Emirates • United Kingdom
• United States of America • Uzbekistan • Yemen

Kalekim Chemicals Co. Inc.

A journey of almost half a century

Under the leadership of its founder Dr. Ibrahim Bodur, Kale Group established Kalekim A.Ş. in 1973 to manufacture tile adhesives and grouting mortars for the first time in Turkey, which now continues on its path providing all kinds of construction chemicals for the industry.

Continuously improved technology and R&D investments

Thanks to the huge investments it makes in production technology and R&D, Kalekim produces top quality products conforming to international standards. In this respect, it is a major force in Turkey and in the global industry.

International quality and durability

Kalekim products are produced under ISO 9001 Quality Management System, conforming to Turkish and European Standards and maintain their quality from the moment of production through application and for many years later.

High production capacity and product variety

Tile adhesives, grouting mortars, waterproofing and thermal insulation materials, putties, sealants, surface preparation materials, tile cleaning and maintenance materials, interior and exterior paints, and decorative coatings are among the gamut of products served by Kalekim, which has the capacity to produce 900,000 tons of construction chemicals and 100,000 tons of paints and coatings annually. Kalekim has production facilities in Istanbul, Balıkesir, Isparta, Mersin, Yozgat, Erzurum, Mardin in Turkey, as well as in Kenya, Albania and soon in Algeria.

Solutions for safe, durable, comfortable and healthy living spaces:

Water and moisture, which penetrates into buildings due to rain, snow, groundwater and water leakages; while damaging all structural elements and primarily the load bearing systems, also results in unseemly appearances in buildings, turning living spaces into unhealthy environments. Kalekim Waterproofing Solutions prevents the penetration of water and moisture into the building and as such protects them against these external influences hence rendering them long-lasting, durable and safe structures offering comfortable and healthy living spaces.

In buildings lacking waterproofing, the water that penetrates the reinforced concrete of the load bearing system causes the concrete to lose its load bearing capacity along with causing corrosion resulting in loss of thickness of the cross section. Moreover, freezing of water, which seeps into construction elements in cold weathers leads to fractures and disintegration in the concrete. Consequently resistance of the load bearing system weakens in time and the safety of the building becomes questionable. For all these reasons, waterproofing is essentially important to have safe and durable buildings.

On the other hand, any undesired effects of water and moisture penetration into interior areas, such as damage to the hardwood floors and painted surfaces, formation of mold and fungi threatening human health, can be prevented by waterproofing and it becomes possible to create comfortable and healthy living spaces.

For waterproofing to provide the foregoing benefits and be durable and hygienic as well, it would not be sufficient to use the right materials. It is essential for the right materials to be used at the right place and time by implementing the right methods to be able to provide waterproofing successfully.

Kalekim, with its expertise in construction chemicals and wide range of product portfolio, is offering you the most suitable and highest performance solutions for different waterproofing applications.



RENOVATION

Solutions for Waterproofing & Ceramic Tile Application on Underfloor Heating Systems



- 1 / Concrete Surface
- 2 / Technoflex
- 3 / Underfloor Heating System
- 4 / Concrete
- 5 / Kalekim Astar (Primer)
- 6 / İzolatex Plus (1st Layer)
- 7 / Kalekim Waterproofing Tape
- 8 / İzolatex Plus (2nd Layer)
- 9 / Technoflex
- 10 / Ceramic Tile
- 11 / Ultrafuga Flex



Surface Preparation

It should be ensured that the application surface is free of residues that will prevent adhesion, has taken its cure and is sound. It should be ensured that the heating elements are concealed in a screed suitable for underfloor heating systems and have passed all heating tests. Deformation and cracks in the screed, which may occur due to expansion, are controlled. If there deformations or cracks are observed on the screed, these should be repaired with 4005 Tamirart 40 structural repair mortar. 4505 Kalekim Astar (Primer) should be applied before application of waterproofing material in order to balance porosity of the screed surface, to reduce the absorbency and to prepare a homogenous sub-surface.

Waterproofing Application

3024 İzolatex Plus, which is a two component, flexible, under-tile waterproofing material should be applied before tile application on underfloor heating systems in wet areas such as bathroom, shower, WC etc. Existing tile floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be placed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it must be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

High performance, flexible (S1), cement based adhesive mortar 1054 Technoflex, which is resistant to surface tensions taking place due to the temperature changes in underfloor heating systems, should be used in ceramic bonding application on waterproofing material. 2500 Ultrafuga Flex high performance grouting mortar, which is resistant to dirt and flexible thanks to its silicone additive, should be applied for the application of a long-lasting grouting mortar in continuously wet areas such as bathrooms, showers, WC.

RENOVATION

Solutions for Waterproofing & Thin and Large Size Ceramic Tile Application on Concrete / Plastered Surfaces



- 1 / Concrete Surface
- 2 / Kalekim Astar (Primer)
- 3 / İzolatex Plus (1st Layer)
- 4 / Kalekim Waterproofing Tape
- 5 / İzolatex Plus (2nd Layer)
- 6 / Ultratech
- 7 / Ceramic Tile
- 8 / Ultrafuga Flex



Surface Preparation

First of all it should be ensured that the reinforced concrete or plastered surface is free of residues that will prevent adhesion, clean, dry and sound. If there are defects on the application sub-surface, it should be repaired with 4005 Tamirart 40 structural repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 should be used. 4505 Kalekim Astar (Primer) should be applied before application of waterproofing material for extremely absorbent surfaces.

Waterproofing Application

3024 İzolatex Plus, which is a cement based, two component, waterproofing material should be applied for under-tile waterproofing in wet areas such as bathroom, shower, WC etc. Existing floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

Extra flexible (S2 class), two component adhesive mortar 1059 Ultratech, which sets extremely fast, should be used in thin and large size ceramic tile bonding application on waterproofing material. 2500 Ultrafuga Flex grouting mortar, which is resistant to dirt and flexible thanks to its silicone additive, should be applied for the application of a long-lasting grouting mortar in continuously wet areas such as bathrooms, showers, WC.

RENOVATION

Solutions for Waterproofing & Ceramic Tile Application on Gypsum Boards and Plaster Surfaces - Quick Solution



- 1 / Gypsum Board / Gypsum Surface
- 2 / Kalekim Astar (Primer)
- 3 / Ultratech
- 4 / İzoline 100
- 5 / Ultratech
- 6 / İzoline 100
- 7 / Ultratech
- 8 / Ceramic Tile
- 9 / Fugaflex Rapid



Surface Preparation

Before waterproofing and Ceramic tile application on gypsum boards and plaster applied surfaces, it must be ensured that gypsum boards are sound. Gypsum boards or plaster applied surfaces are the absorbent and that are exposed to flexing movement. Prior to the waterproofing application, the substrate should be primed with Kalekim Astar (Primer) to reduce its absorbency and a proper adhesion surface should be formed. Expansion joints between the panels should be filled with 8001 Kalemastik against possible cracking.

Waterproofing Application

Before ceramic tile application on plaster surface or gypsum board in wet areas such as bathroom, shower, WC etc., İzoline 100, which is a 3 layer extra elastic waterproofing membrane that is composed of modified polyethylene films laminated in between polypropylene seals with high alkali resistance, should be applied. Kalekim Waterproofing Tape and İzoline 100 Complementary Components should be installed with 1059 Ultratech tile adhesive mortar (minimum C2 and S1 class) at critic areas such as gypsum boards or plaster surface floor wall and corners, pipe details (inner corner, outer corner, pipe and drain cuffs). Depending on the area to be applied, İzoline 100 waterproofing membrane is cut to appropriate sizes and installed on 1059 Ultratech ceramic adhesive mortar (minimum C2 and S1 class) applied with by means of a 4 mm or 6 mm notched trowel. 100% surface adhesion of İzoline 100 must be ensured by removing the excessive mortar underneath by applying force from the center to the edges by means of a trowel in a way that no air bubbles remain on the surface. When applying İzoline 100 side-by-side, two membranes must be overlapped by at least 5 cm and these parts must be fixed together with the ceramic adhesive used for bonding. After the surface dries, it must be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

In cases where no immediate ceramic tile application will be made on İzoline 100, the surface must be protected from direct sunlight and rain. After application of İzoline 100, tiling can be started without waiting. 1059 Ultratech, the quick setting tile adhesive mortar with S2 class, should be used for tile application. Regarding the grouting mortar application, 2400 Fugaflex Rapid, high performance cementitious flexible grouting mortar with high resistance to abrasion and reduced water absorption, will be a perfect system complement in the bathrooms.

RENOVATION

Solutions for Waterproofing & Ceramic Tile Application over Existing Tiles



- 1 / Existing Tile
- 2 / Kalekim Dolgulu Astar (Smooth Surface Primer)
- 3 / İzolatex Plus (1st Layer)
- 4 / Kalekim Waterproofing Tape
- 5 / İzolatex Plus (2nd Layer)
- 6 / Granitech White
- 7 / Ceramic Tile
- 8 / Ultrafuga



Alternative Solution
(For quick solution)
3-5 / Ultratech & İzoline 100
6 / Ultratech
8 / Fugaflex Rapid

Surface Preparation

It is important to check the strength of old tiles. If there are any broken or displaced tiles, these tiles should be removed and the gap must be filled with 4002 Tamirart 30 thick repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 and/or 4005 Tamirart 40 should be used. The empty space can also be repaired by bonding a solid tile.

4506 Kalekim Dolgulu Astar (Smooth Surface Primer) should be used to increase the bonding strength before waterproofing application.

Waterproofing Application

3024 İzolatex Plus, which is a two component, flexible, under-tile waterproofing material must be applied before tile application on existing tiles in wet areas such as bathroom, shower, WC etc. Existing tile floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape must be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer must be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it must be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

High performance granite adhesive mortar 1055 Granitech should be used in ceramic bonding application on waterproofing material. 2200 Ultrafuga high performance grouting mortar, which is resistant to dirt thanks to its silicone additive, should be applied for the application of a long-lasting grouting mortar in continuously wet areas such as bathrooms, showers, WC.

READY TO USE IN 1 DAY!

Rapid Solutions for Waterproofing & Ceramic Tile Application on Concrete / Plastered Surfaces



- 1 / Concrete Surface
- 2 / Kalekim Astar (Primer)
- 3 / Ultralastic (1st Layer)
- 4 / Kalekim Waterproofing Tape
- 5 / Ultralastic (2nd Layer)
- 6 / Ultratech
- 7 / Ceramic Tile
- 8 / Fugaflex Rapid



Alternative Solution
(At standard speed)
3-5 / İzolatex 1K
6 / Technoflex
8 / Ultrafuga

Surface Preparation

First of all, it should be ensured that the reinforced concrete or plastered surface is free of residues that will prevent adhesion, clean, dry and sound. If there are defects on the application sub-surface, it should be repaired with 4002 Tamirart 30 thick repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 or 4005 Tamirart 40 should be used. 4505 Kalekim Astar (Primer) should be applied before application of waterproofing material for extremely absorbent surfaces.

Waterproofing Application

3025 Ultralastic, which is a cement based, two component, waterproofing material should be applied for under-tile waterproofing in wet areas such as bathroom, shower, WC etc. which are required to be opened for use in a day. Existing floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 2 hours between layer application depending on the ambient temperature. After the surface dries leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

Extra flexible (S2 class), two component adhesive mortar 1059 Ultratech, which sets extremely fast in 3 hours, should be used in ceramic bonding application on waterproofing material. 2400 Fugaflex Rapid, high performance cementitious flexible grouting mortar with high resistance to abrasion and reduced water absorption, will be a perfect system complement in the bathrooms.

RENOVATION

Solutions for Waterproofing & Ceramic Tile Application on Gypsum Boards and Plaster Surfaces



- 1 / Gypsum Board / Gypsum Surface
- 2 / Elastiser (1st Layer)
- 3 / Kalekim Waterproofing Tape
- 4 / Elastiser (2nd Layer)
- 5 / Technoflex
- 6 / Ceramic Tile
- 7 / Ultrafuga Flex



Alternative Solution for Waterproofing
2-4 / İzolatex (Recommended to be used with Kalekim Astar)

Surface Preparation

Before waterproofing and ceramic tile application on gypsum boards and plaster applied surfaces, it must be ensured that gypsum boards are sound. Gypsum boards or plaster applied surfaces are the absorbent and that are exposed to flexing movement. Prior to the waterproofing application, the substrate should be primed with Kalekim Astar (Primer) to reduce its absorbency and a proper adhesion surface should be formed. Expansion joints between the panels should be filled with 8001 Kalemastik against possible cracking.

Waterproofing Application

A single component, acrylic based, under-tile waterproofing material 3111 Elastiser, which can be easily applied on gypsum boards or plaster surfaces, should be applied in wet areas such as bath, shower, WC. Gypsum boards or plaster surface floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape must be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer must be applied after waiting for 4-6 hours between layer application depending on the ambient temperature. After the surface dries, it must be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

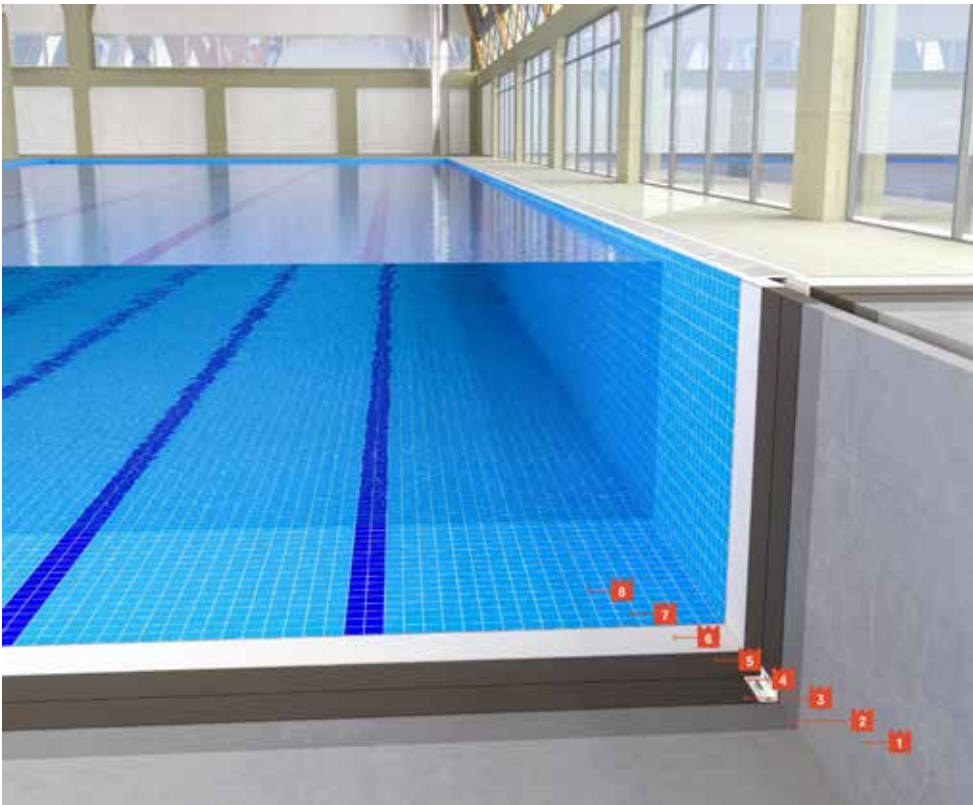
Tiling and Grouting

In tiling application on waterproofing material S1 class flexible adhesive mortar 1054 Technoflex should be used at least in order to tolerate the flexing movements of the gypsum board. 2500 Ultrafuga Flex grouting mortar, which is resistant to dirt and flexible thanks to its silicone additive, should be used for the application of a long-lasting grouting mortar in continuously wet areas such as bathrooms, showers, WC.



SWIMMING POOL

Solutions for Waterproofing & Ceramic Tile Application in Swimming Pools



- 1 / Reinforced Concrete or Plastered Surface
- 2 / Kalekim Astar (Primer)
- 3 / İzolatex Plus (1st Layer)
- 4 / Kalekim Waterproofing Tape
- 5 / İzolatex Plus (2nd Layer)
- 6 / Technopool
- 7 / Ceramic Tile
- 8 / Fugapool



Surface Preparation

It should be ensured that the reinforced concrete or plastered surface is free of residues that will prevent adhesion, clean, dry and sound. If there are defects on the application sub-surface, it should be repaired with 4002 Tamirart 30 thick repair mortar. If there are structural cracks on the surface, sulfate and chlorine resistant 4004 Tamirart S40 should be used. 4505 Kalekim Astar (Primer) should be applied before application of waterproofing material for extremely absorbent surfaces.

Waterproofing Application

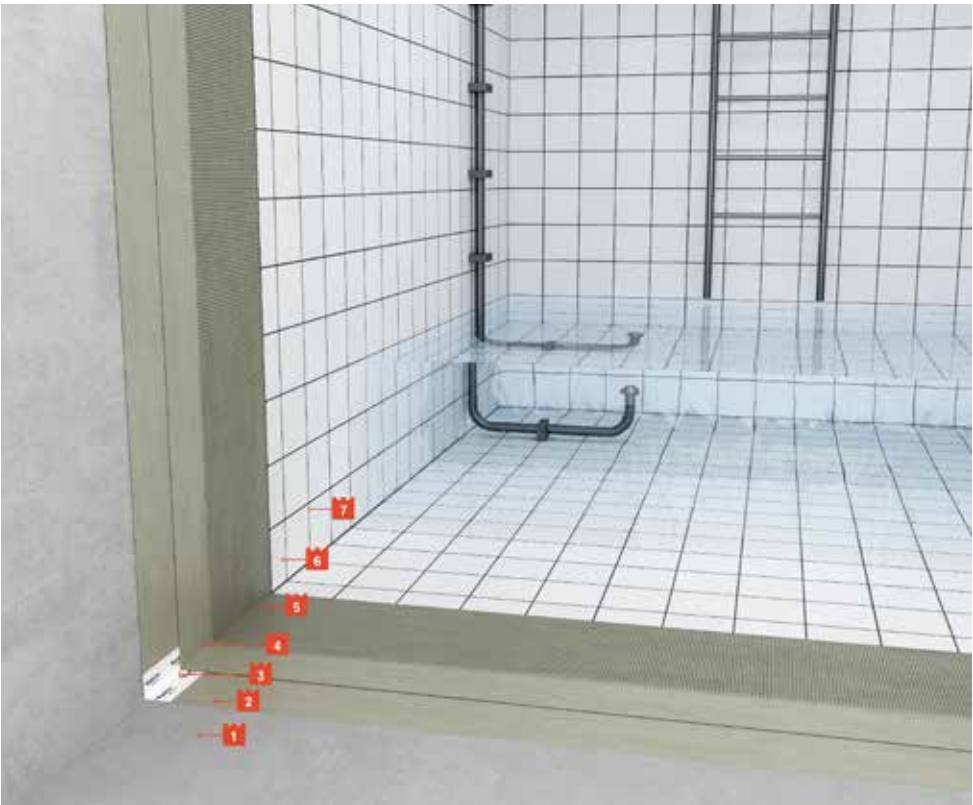
3024 Izolatex Plus, which is a cement based, one component, waterproofing material and has certificate of compliance for use in drinking water reservoirs, should be applied for under-tile waterproofing in water reservoirs. Existing floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

1062 Technopool S2 class flexible tile adhesive mortar, which is especially developed for pools and contributes to water impermeability thanks to its high polymer content, should be used for tile bonding application on flexible waterproofing material. Regarding the grouting mortar application, 2900 Fugapool grouting mortar, which is again especially developed for pools and features high performance and flexibility, will be a perfect system complement in pools.

WATER TANK

Solutions for Waterproofing & Ceramic Tile Application in Water Tanks



- 1 / Concrete Surface / Plastered Surface
- 2 / İzolatex Plus (1st Layer)
- 3 / Kalekim Waterproofing Tape
- 4 / İzolatex Plus (2nd Layer)
- 5 / Technoflex
- 6 / Ceramic Tile
- 7 / Fugaflex



Surface Preparation

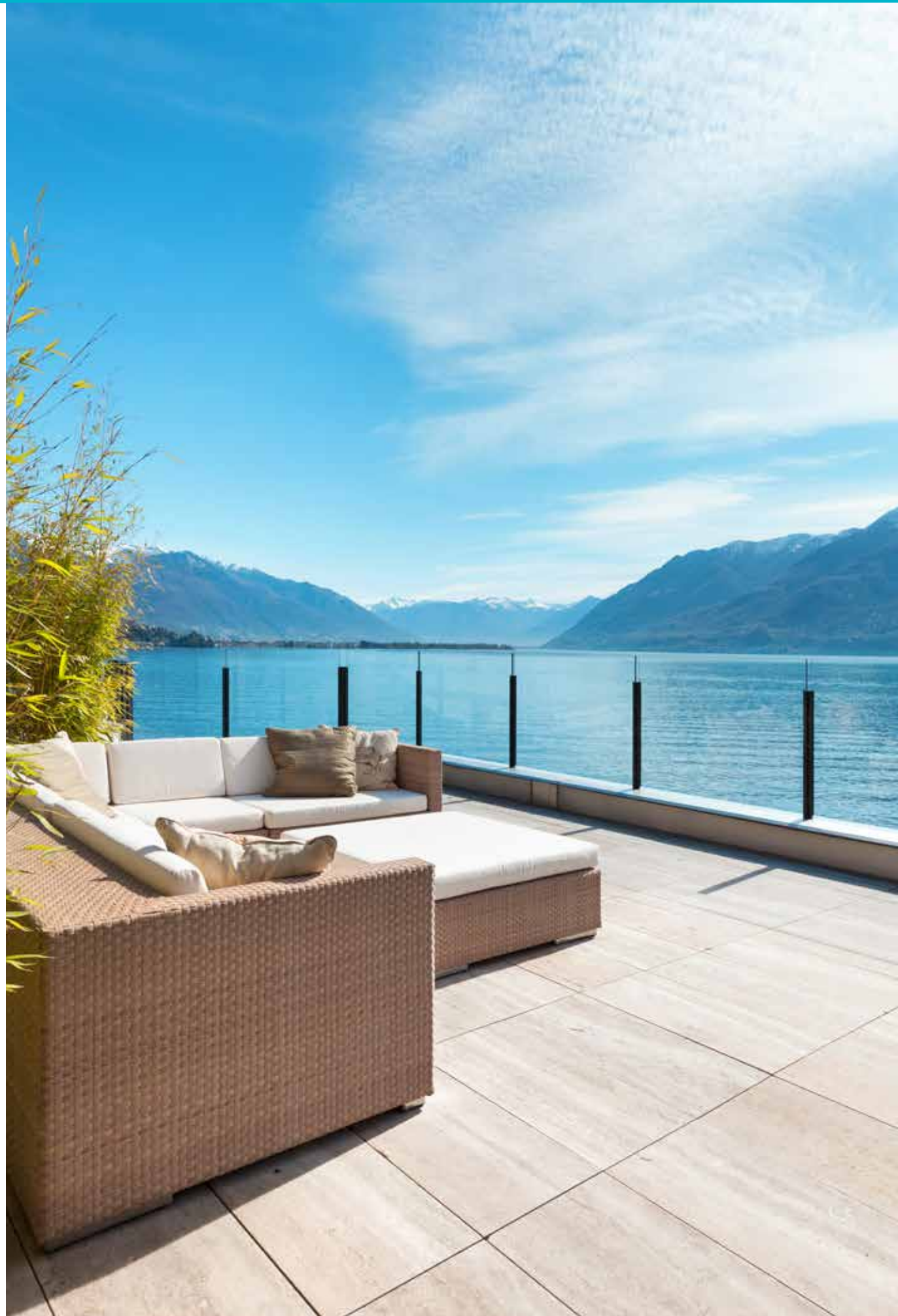
It should be ensured that the reinforced concrete or plastered surface is free of residues that will prevent adhesion, clean, dry and sound. If there are defects on the application sub-surface, it should be repaired with 4002 Tamirart 30 thick repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 and/or 4005 Tamirart 40 should be used. 4505 Kalekim Astar (Primer) should be applied before application of waterproofing material for extremely absorbent surfaces.

Waterproofing Application

3024 Izolatex Plus, which is a cement based, two component, waterproofing material and has certificate of compliance for use in drinking water reservoirs, must be applied for under-tile waterproofing in water reservoirs. Existing floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

In the ceramic tile bonding application on waterproofing material S1 class flexible, high performance adhesive mortar 1054 Technoflex should be used. For grouting, 2300 Fugaflex, which is a high performance, flexible grouting mortar with certificate of compliance for use in drinking water reservoirs, should be applied since there will be contact with water.



TRAFFICABLE TERRACE

Waterproofing and Coating Solutions for UV Resistant Terrace Roofs



- 1 / Slope Concrete
- 2 / Izopur P
- 3 / Izopur (1st Layer)
- 4 / Izopur (2nd Layer)
- 5 / Izopur C



Surface Preparation

The reinforced concrete application surface must be checked before waterproofing. The surface is free of residues that will prevent adhesion, clean, smooth and sound. The roof terrace slope should be designed as min 2%. Waterproofing system with protection and supporting layers (if any); should be able to withstand the effects of roof slope. The points (sieves and pipes) where the water onto the roof terrace to be discharged should be determined according to the roof area and annual rainfall quantity of the area where the application is made. Reinforced concrete surface should be properly levelled for homogeneous application of the waterproofing product. If there are defects on the application sub-surface, it should be repaired with 4005 Tamirart 40 repair mortar. If there are structural cracks on the surface, 4005 Tamirart 40 should be used. Waterproofing must be ensured by using 4004 Tamirart S40 repair mortar on inner corners for sustaining the sealing. Before application, the surface should not be washed with water and the surface moisture should be below 5%. 3452 Izopur P should be applied after surface preparation.

Waterproofing Application

The most important feature of Izopur System components, that distinguishes them from other waterproofing products, is the high elasticity. Thanks to its easy and fast application it creates a water impermeable waterproofing layer at any place in need of waterproofing such as terraces, balconies, roof and terraces of the carparks. It provides long-lasting and reliable waterproofing with different compositions offered in the system for any areas with light vehicle traffic such as pedestrian crossings, pedestrian areas and with heavy vehicle traffic such as stadium, sports fields, industrial areas etc., with no needs to cover such areas. Before application on flat roof terraces, 2 layers of 3451 Izopur one component, ready to use, extra elastic, polyurethane based waterproofing material should be applied by means of a brush, roller or by spraying on the reinforced concrete prepared surface primed with 3452 Izopur P. Risky areas such as large planes, floor-wall joints, parapet corners, chimney bottoms should be strengthened with a special waterproofing textile mesh. The second layer should be applied 12 hours after the application of the first coat (within 36 hours at the latest). After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Finishing Coat Application

When surface finishing resistant to UV rays and light pedestrian traffic is desired, 2 layers of 3453 Izopur C, elastic, yellowing-free, easy to clean, finishing material must be applied on 3451 Izopur waterproofing material. The waiting period between two layer applications must be 3-4 hours.

NON - TRAFFICABLE TERRACE

Waterproofing Solutions for UV Resistant Terrace Flat Roofs



- 1 / Slope Concrete
- 2 / Kalekim Astar (Primer)
- 3 / İzolatex UV (1st Layer)
- 4 / Kalekim Waterproofing Tape
- 5 / İzolatex UV (2nd Layer)



Surface Preparation

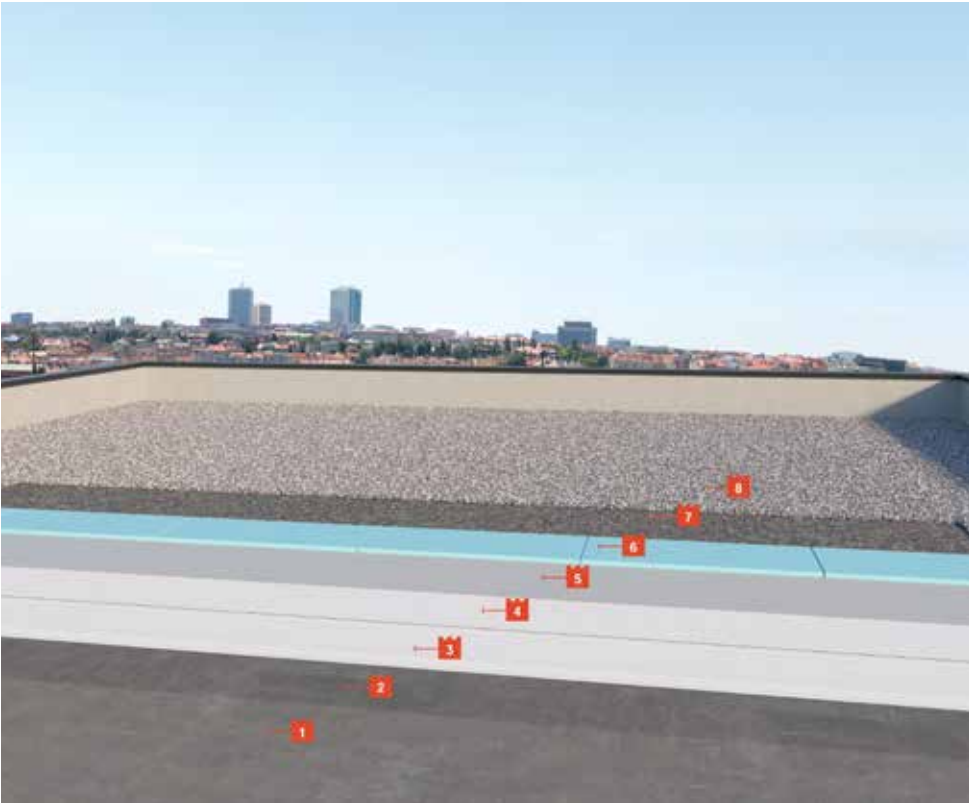
The reinforced concrete application surface should be checked before waterproofing. The surface is free of residues that will prevent adhesion, clean, smooth and sound. The roof terrace slope should be designed as min 2%. Waterproofing system with protection and supporting layers (if any); should be able to withstand the effects of roof slope. The points (sieves and pipes) where the water onto the roof terrace to be discharged should be determined according to the roof area and annual rainfall quantity of the area where the application is made. Reinforced concrete surface should be properly levelled for homogeneous application of the waterproofing product. If there are defects on the application sub-surface, it should be repaired with 4005 Tamirart 40 repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 should be used. Waterproofing should be ensured by using 4004 Tamirart S40 repair mortar on inner corners for sustaining the sealing. 4505 Kalekim Astar (Primer) should be applied after surface preparation.

Waterproofing Application

3027 İzolatex UV, which is a white coloured, cement based, UV ray resistant, two component, waterproofing material should be applied in primed, reinforced concrete surfaces where pre-application preparations have completed for balconies and terraces. Existing floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours. A long-lasting and secure waterproofing resistant to sunlight is ensured without any cover-up by using 3027 İzolatex UV applied as 2 layers on the terraces.

NON - TRAFFICABLE TERRACE

Waterproofing Solutions for Non-Exposed Covered with Ballast Terrace Flat Roofs



- 1 / Slope Concrete
- 2 / İzopur P
- 3 / İzopur (1st Layer)
- 4 / İzopur (2nd Layer)
- 5 / Vapor Barrier Coat
- 6 / XPS
- 7 / Geotextile Felt
- 8 / Gravel



Surface Preparation

The reinforced concrete application surface must be checked before waterproofing. The surface is free of residues that will prevent adhesion, clean, smooth and sound. The roof terrace slope should be designed as min 2%. Waterproofing system with protection and supporting layers (if any); should be able to withstand the effects of roof slope. The points (sieves and pipes) where the water onto the roof terrace to be discharged should be determined according to the roof area and annual rainfall quantity of the area where the application is made. Reinforced concrete surface should be properly levelled for homogeneous application of the waterproofing product. If there are defects on the application sub-surface, it should be corrected with 4005 Tamirart 40 repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 should be used. Waterproofing should be ensured by using 4004 Tamirart S40 repair mortar on inner corners for sustaining the sealing. Before application, the surface should not be washed with water and the surface moisture should be below 5%. 3452 İzopur P should be applied after surface preparation.

Waterproofing Application

The most important feature of İzopur System components, that distinguishes them from other waterproofing products, is the high elasticity. Thanks to its easy and fast application it creates a water impermeable waterproofing layer at any place in need of waterproofing such as terraces, balconies, roof and terraces of the carparks. Before application on flat roof terraces, 2 layers of 3451 İzopur one component, ready to use, extra elastic, polyurethane based waterproofing material should be applied by means of a brush, roller or by spraying on the reinforced concrete prepared surface primed with 3452 İzopur P. Risky areas such as large planes, floor-wall joints, parapet corners, chimney bottoms should be strengthened with a special waterproofing textile mesh. The second layer should be applied 12 hours after the application of the first coat (within 36 hours at the latest). After the surface dries, it must be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Waterproofing Protection

Izopur System waterproofing components applied on the pebble covered terrace insulation should be protected from external factors. Thermal insulation should be done according to the details calculated according to the details in the specification. Thermal insulation is covered with mesh and ballet and the water insulation system is protected.

COOL ROOF

Elastomeric, Reflective Cool Roofing Solutions



- 1 / Metal Roof / Old Bitumen / Concrete
2 / Elasticool (Applied as 3 layers)



Surface Preparation

The application subsurface should be checked before waterproofing. The surface is free of residues that will prevent adhesion, clean, smooth and sound. If there are defects and cracks on the application surface (if it is concrete), Tamirart series repair products should be used for repairing. Joints or horizontal vertical joints on subsurface should be sealed with flexible Kalepolymas.

Waterproofing Application

3151 Elasticool, which is a waterproofing and coating material featuring high solar reflectivity, protects the building from excessive heat by reducing the surface temperature of roofs and terraces and reduces the temperature inside the building. It saves energy by reducing the need for electric energy used for cooling. 3151 Elasticool, which is a ready to use liquid coating material particularly preferred for cold roof applications thanks to its special polymerization formula, should be applied as minimum 3 layers by means of a brush or roller. The total thickness of the application should be 2.0 mm. The second layer should be applied after the first layer completely dries. The waiting period between the layer applications should be between 4-8 hours depending on the air temperature and relative humidity.

RENOVATION

Transparent Waterproofing Solutions for Application over Existing Ceramic Tiles



- 1 / Existing Ceramic Tile
2 / İzopur Trans P
3 / İzopur Trans



Surface Preparation

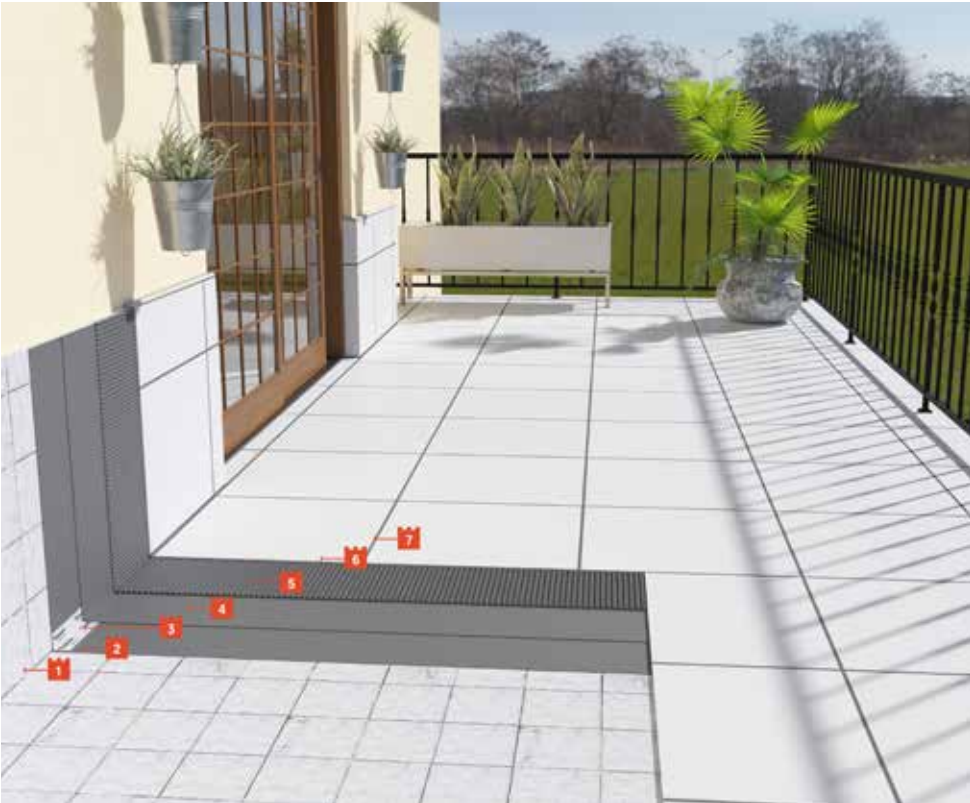
Izopur Trans System application, which allows waterproofing on the existing ceramic tiles in balconies and terraces, should be started with 3455 Izopur Trans P, which is a ceramic surface primer. The existing ceramic surface to be treated must be clean, dry, sound and free from residues that will prevent adhesion such as dust, dirt, oil and etc. and surface moisture should be below 5%. One component, ready to use, easy and fast to apply 3455 Izopur Trans P, increases the retention strength of 3454 Izopur Trans waterproofing material to be applied on it in bright and non-absorbent surfaces. 3455 Izopur Trans P should be applied to the entire surface by means of a clean and dry cloth.

Waterproofing Application

3454 Izopur Trans is a polyurethane based waterproofing material that provides waterproofing without the need for laborious renovation like dismantling and crushing, by applying on surfaces such as ceramics, tiles and glass on balconies and terraces thanks to its special formula. 3454 Izopur Trans should be applied as minimum two layers by means of a brush or roller until it covers the entire surface and the joints. The second layer should be applied 12 hours after the application of the first coat (within 36 hours at the latest). It is recommended to apply 3454 Izopur Trans also as the third layer for better waterproofing and higher resistance to weather conditions.

RENOVATION

Solutions for Waterproofing & Ceramic Tile Application on Existing Tile Surfaces



- 1 / Existing Ceramic Tile
- 2 / Ultralastic (1st Layer)
- 3 / Kalekim Waterproofing Tape
- 4 / Ultralastic (2nd Layer)
- 5 / Technoflex
- 6 / Ceramic Tile
- 7 / Ultrafuga Flex



Surface Preparation

It is important to check the strength of existing tiles. If there are any broken or displaced tiles, these tiles should be removed and the gap must be filled with 4002 Tamirart 30 or 4005 Tamirart 40 repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 should be used. The empty space can also be repaired by bonding a solid tile.

It must be ensured that the surface existing tile is free of residues that will prevent adhesion, clean, smooth and sound.

Waterproofing Application

3025 Ultralastic, which is a two component, flexible, under-tile waterproofing material should be applied before tile application on existing tiles in balconies and terraces. Existing tile floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

In ceramic bonding application on waterproofing material, ceramic application should be made with S1 class flexible, cement based 1054 Technoflex ceramic adhesive mortar on large balconies and terraces. In the application of grouting, high performance 2500 Ultrafuga Flex with silicone additives should be used in places where there is heavy pedestrian and high traffic in outdoor areas such as balcony and terrace.

RENOVATION

Solutions for Waterproofing & Thin and Large Size Ceramic Tile Application on Concrete / Plastered Surfaces



- 1 / Slope Concrete
- 2 / Kalekim Astar (Primer)
- 3 / İzolatex Plus (1st Layer)
- 4 / Kalekim Waterproofing Tape
- 5 / İzolatex Plus (2nd Layer)
- 6 / Ultratech
- 7 / Ceramic Tile
- 8 / Ultrafuga Flex



Alternative Solution for Waterproofing
3-5 / İzolatex 1K

Surface Preparation

The reinforced concrete application surface should be checked before waterproofing. The surface is free of residues that will prevent adhesion, clean, smooth and sound. The roof terrace slope should be designed as min 2%. Waterproofing system with protection and supporting layers (if any); should be able to withstand the effects of roof slope. The points (sieves and pipes) where the water onto the roof terrace to be discharged should be determined according to the roof area and annual rainfall quantity of the area where the application is made. Reinforced concrete surface should be properly levelled for homogeneous application of the waterproofing product. If there are defects on the application sub-surface, it should be repaired with 4002 Tamirart 30 thick repair mortar. If there are structural cracks on the surface, 4004 Tamirart S40 should be used. Waterproofing should be ensured by using 4004 Tamirart S40 repair mortar on inner corners for sustaining the sealing. 4505 Kalekim Astar (Primer) should be applied after surface preparation.

Waterproofing Application

3024 İzolatex Plus, which is a cement based, two component, waterproofing material should be applied for under-tile waterproofing in primer applied reinforced concrete surfaces where pre-application preparations have completed for balconies and terraces. Existing floor wall and corner joints should be reinforced with Kalekim Waterproofing Tape. The tape should be installed carefully on the waterproofing material, the first layer of which has been applied with a brush or a roller, in a way that the center of the tape matches with the joint. The second layer should be applied after waiting for 5-6 hours between layer application depending on the ambient temperature. After the surface dries, it should be waited for 7 days for full setting and leak-tightness tests should be carried out for 24 hours.

Tiling and Grouting

Extra flexible (S2), two component adhesive mortar 1059 Ultratech, which sets extremely fast in 3 hours, should be used in thin and large size ceramic tile bonding application on flexible waterproofing material. 2500 Ultrafuga Flex grouting mortar, which is resistant to dirt and also flexible thanks to its silicone additive, should be applied for the application of a long-lasting grouting mortar in spaces such as balconies and terraces.



FOUNDATION WATERPROOFING

External Waterproofing Solutions for Foundation Walls



- 1 / Concrete Shear Wall
- 2 / Tamirart S40
- 3 / Izoline Astar (Primer)
- 4 / İzoblok 2K+ (1st Layer)
- 5 / Waterproofing Mesh
- 6 / İzoblok 2K+ (2nd Layer)
- 7 / XPS
- 8 / Drainage Board



Surface Preparation

The application surface should be checked before waterproofing. The surface should be clean, smooth, solid and primed with 4701 Izoline Primer. Before applying the rod holes used for administering the iron rod used for fixing the forms during reinforced concrete fabrication, iron rods and/or plastic parts should be removed from their places and if this is not possible, they should be cut minimum 2 cm below the concrete surface and the top part should be filled with 4004 Tamirart S40 structural repair mortar. On the surfaces subjected to segregation (concrete-aggregate decomposition), the decomposed area should be free of loose particles by applying mechanical methods, the gaps and pores on the surface should be filled with 4002 Tamirart 30 and/or 4005 Tamirart 40 repair mortar and repaired before the waterproofing layer application.

Waterproofing Application

Two-component, polymer modified bitumen rubber based, solvent-free 3401 İzoblok 2K+ should be applied as the waterproofing layer in foundation shear walls in accordance with the instructions stated in the product specifications.

Waterproofing Protection

Earth filling should not be performed before the polymer modified bitumen based waterproofing materials completely dry. Waterproofing layer should be protected against the thermal insulation boards, drainage boards etc. and sharp objects inside the soil and mechanical effects during the filling process, before earth filling.

FOUNDATION WATERPROOFING

Internal Waterproofing Solutions for Foundation Walls



- 1 / Concrete Shear Wall
- 2 / İzoseal 2K (1st Layer)
- 3 / İzoseal 2K (2nd Layer)
- 4 / Kalekim İnce Sıva Beyaz (Finish Plaster White)



Alternative Solution for Waterproofing
2-3 / İzoseal 2K+
2-3 / İzoseal

Surface Preparation

Wet or damp basement floors cannot be used as comfortable living spaces and they reduce the life and value of the building. The best solution is to perform external waterproofing of the parts of the buildings that will remain under the ground during the construction phase of the building. In cases where external insulation is not made, it is possible to tolerate this situation and to insulate from inside to provide the necessary waterproofing. The application surface should be checked before waterproofing. The surface should be clean, smooth and sound. It is necessary to clean loose particles, residues that will prevent adhesion and penetration of the product into the concrete, such as dust, dirt, oil, soil, on the concrete surface where crystalized waterproofing materials give high performance, thoroughly by using water jet, sand blasting or wire brush. Defective applications such as cracks, capillary cracks and segregation on the concrete surface should be opened by breaking and cleaned and 3031 İzoseal 2K should be applied to the cleaned areas, followed by the rectification phase by using 4005 Tamirart 40 or 4004 Tamirart S40 structural repair mortar. The surface must be saturated with water before proceeding with waterproofing application. It should be noted that the surface is not wet but humid during the application.

Waterproofing Application

3031 İzoseal 2K two component crystalline waterproofing and protection mortar should be applied on the concrete surface with brush or roller as 2 or 3 layers. 3031 İzoseal 2K, when applied to concrete surface, penetrates through the cavities into the concrete and active chemicals in its formula react with free lime and moisture in the capillary cavities of concrete and form insoluble crystal structures. These crystals fill the cavities and shrinkage cracks in the concrete to prevent the passage of water and make the concrete resistant to water pressure from inside and outside.



Protection is in its Chemistry!

Impermeability, trust, comfort!

Products

İzostop
İzostop Rapid
İzoseal
İzoseal 2K
İzoseal 2K+
İzoflex
İzolatex
İzolatex Plus
İzolatex UV
İzolatex 1K
Ultralastic
Durex
Profesyonel Durex
Elastiser
Elastikor
Elasticool
İzoline Astar
İzoblok 1K
İzoblok 2K+
İzopur P
İzopur
İzopur C
İzopur Trans P
İzopur Trans
İzoline 100
Kalekim Waterproofing Tape
Kalekim Dilatation Tape
İzoswell



3001 İzostop Plug Mortar

Waterproofing, rapid setting cement based plug mortar containing mineral fillers which can be applied in powder and mortar form to stop active water leaks.

Fields of Application

- To plug and dry the water leakages in foundations, basements, concrete walls of water tanks and concrete pipes, tunnels, reservoirs, etc. before the application of waterproofing materials.
- Repairing and waterproofing of cable and pipe holes.
- Repairing and waterproofing of tie rod holes.
- Used for internal waterproofing of basement floors with Kalekim İzoseal.

General Data
Appearance: Grey powder
Shelf Life: 12 months when stored in the original sealed packaging.
Packaging: 5 kg plastic pails.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 0.18 lt water / 1 kg powder
Pot Life: 1 min
Ready to Use: 2 min
Consumption: 2 kg for a hole having a volume about 1 lt volume.

Performance Data (23°C and 50% RH)
Flexural Strength (EN 12190): ≥ 3 N/mm²
Compression Strength (EN 12190): ≥ 20 N/mm²
Shrinkage (EN 12617-4): Max. 2% mm/m



3026 İzoseal Crystalline Waterproofing Mortar

One component, capillary effect, cementitious waterproofing compound applicable from both inside (negative) and outside (positive) directions, for interior and exterior concrete and masonry structural elements.

Fields of Application

In waterproofing of all structurally sound concrete, either from negative or positive side on;

- Basements.
- Foundations and basement retaining walls.
- Swimming pools and reservoirs.
- Sewage and water treatment plants.
- Tunnels, channels and bridges.
- Elevator shaft basements.
- Wet areas like bathrooms, WC etc.
- Underground garages and warehouses.



Moisture control,
increasing resistivity by
limiting moisture content,
coating.



EN 1504-2 Class MC, IR-C
Hacettepe University Doping Control Center Approval Report according to BS 6920 (suitable for use in contact with water intended for human consumption)

General Data
Appearance: Grey powder
Shelf Life: 12 months when stored in the original sealed packaging.
Packaging: 25 kg multi-ply paper bag.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 7 - 7.5 litres water / 25 kg powder(roller application)
12 - 12.5 litres water / 25 kg powder (power spray application)
Pot Life: 40 minutes
Waiting Time Between the Coats: 3 - 6 hours
Time to Waterproof: 7 days
Consumption: 2 kg/m² for 2 coats

Performance Data (at 23°C and 50% RH)
Density: 2100 ± 100 kg /m³
Impermeability to Water: 7 bar (both positive and negative water pressure)
Adhesion Strength (EN 1542): ≥ 1.00 N/mm²
Adhesion Strenght After Cycling Without De-icing Salts Impact (EN 13687-3/ EN 1542): ≥1.00 N/mm²
Adhesion Strenght After Heat Ageing (EN 1062-11/EN 1542): ≥1.00 N/mm²
Permeability to Water Vapour (EN ISO 7783-2): Class I; Sd <5 (Sd: equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3): < 0.1 kg/m² h^{0.5}
Dangerous Substances: See SDS.
Reaction to Fire: A1

NEW



3005 İzostop Rapid Very Fast Setting Plug Mortar

Waterproofing, cement based plug mortar that sets very fast when in contact with water, containing mineral fillers which can be applied in powder and mortar form to stop active water leaks.

Fields of Application

- To plug and stop the water leakages in foundations, basements, concrete walls of water tanks and concrete pipes, etc. before the application of waterproofing materials.
- Repairing and waterproofing of tie-rod holes.
- Waterproofing of cable and pipe holes.
- Used for internal waterproofing of basement floors with Kalekim İzoseal.

General Data
Appearance: Grey powder
Shelf Life: 12 months when stored in the original sealed packaging.
Packaging: 5 kg plastic pail.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 0.23 - 0.25 lt water / 1 kg powder
Pot Life: Max. 30 seconds
Mixing Time: 30 seconds
Heating Time: 15-30 seconds
Consumption: 2 kg for a hole having a volume about 1 lt

Performance Data (23°C and 50% RH)
Flexural Strength: > 3 mm/m²
Compression Strength: > 25 N/mm²
Shrinkage: Max. 3% mm/m



3031 İzoseal 2K Two Component Crystallized Waterproofing Mortar

Crystalline waterproofing material consisting of emulsion polymer based liquid and cement based powder components that contain chemical additives to increase water impermeability and workability, which is applicable from both negative and positive directions of interior and exterior concrete and masonry structural elements.

Fields of Application

- For interior and exterior areas, in vertical and horizontal directions,
- Waterproofing of;
 - Bathrooms, showers,
 - Water basins,
 - Foundations, retaining walls, basement walls,
 - Tunnels,
 - Elevator shaft basements,
 - Marinading pools,
 - Fishponds,
 - Concrete, plaster and screed surfaces.



Moisture control,
increasing resistivity by
limiting moisture content,
coating.



EN 1542, Class MC, IR-C

General Data
Appearance: 1st component: Grey powder, 2nd component: White liquid.
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging
Packaging: Powder component: 25 kg multi-ply paper bags,
Liquid component: 3 lt drums.
Set of 28 kg.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 3 lt liquid / 5-6 lt water / 25 kg powder
Mixing: ~3 mins. with max. 500 rpm mixer
Pot Life: ~2 hours
Waiting Time Between the Coats: 3 - 6 hours
Time to Waterproof: 7 days
Consumption (per 1 mm thickness): For humidity: 0.70 kg/m²
For Non-Pressurized Water: 1.00 kg/m²
For Pressurized Water: 1.35 kg/m²

Performance Data (at 23°C and 50% RH)
Density: 1850 ± 100 kg/m³
Impermeability to Water: 4 bar (negative), 7 bar (positive)
Adhesion Strength (EN 1542): ≥1.00 N/mm²
Adhesion Strength After Cycling Without De-icing Salts (EN 13687-3 / EN 1542): ≥1.00 N/mm²
Adhesion Strength After Heat Ageing /Em 1062-11 / EN 1542): ≥1.00 N/mm²
Permeability to Water Vapour (EN ISO 7783-2): Class I; Sd < 5 m
Capillary Water Absorption (EN 1062-3): < 0.1 kg/m² h^{0.5}
Heat Resistance: (-30°C) - (+80°C)
Dangerous Substances: See SDS.
Reaction to Fire: European classification Bs1d0



Protection against ingress, moisture control, increasing resistivity by limiting moisture content, coating.



EN 1542 Class PI, MC, IR-C

3032 İzoseal 2K+ Two Component Crystallized Waterproofing Mortar

Crystalline waterproofing material consisting of emulsion polymer based liquid and cement based powder components that contain chemical additives to increase water impermeability and workability, which is applicable from both negative and positive directions of interior and exterior concrete and masonry structural elements.

Fields of Application

- For interior and exterior areas, in vertical and horizontal directions,
- Waterproofing of;
 - Bathrooms, showers,
 - Terraces and balconies,
 - Water basins,
 - Foundations, retaining walls, basement walls,
 - Tunnels,
 - Pools,
 - Elevator shaft basements,
 - Brine pools,
 - Fishponds,
 - Turkish baths, SPA's,
 - Concrete, plaster and screed surfaces.

General Data

Appearance: 1st component: Grey powder; 2nd component: White liquid.
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging
Packaging: Powder component: 25 kg multi-ply paper bags,
Liquid component: 10 lt drums.
Set of 35 kg.

Application Data

Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 10 lt liquid / 25 kg powder
Mixing: ~3 mins. with max. 500 rpm mixer
Pot Life: 45 minutes
Waiting Time Between the Coats: 3 - 6 hours
Time to Waterproof: 7 days
Consumption (per 1 mm thickness): 1.4 kg/m²

Performance Data (at 23°C and 50% RH)

Density: 1550 ± 100 kg/m³
Impermeability to Water: ≥ 1 bar (negative), ≥ 7 bar (positive)
Adhesion Strength (EN 14891): ≥ 1.00 N/mm²
Adhesion Strength (EN 1504-2): ≥ 0.80 N/mm²
Permeability to Water Vapour (EN ISO 7783): Class I; Sd < 5 m
Capillary Water Absorption (EN 1062-3): < 0.1 kg/m² h^{0.5}
Crack Bridging (EN 1062-7) (21 °C): ≥ 0.75 mm (Class A3)
Crack Bridging with Mesh (EN 1062-7) (21 °C): > 2.50 mm
Heat Resistance: (-30°C) - (+80°C)
Dangerous Substances: See SDS.
Reaction to Fire: European classification Cs1d0



Moisture control, increasing resistivity by limiting moisture content, coating.



EN 1504-2 Class MC, IR-C
Hacettepe University Doping Control Center Approval Report according to BS 6920 (suitable for use in contact with water intended for human consumption)

3023 İzolatex Semi-Flexible Waterproofing Mortar

Semi-flexible waterproofing and concrete protection mortar consisting of emulsion polymer-based liquid component and cement-based powder component containing chemical additives that increase water impermeability and workability for interior and exteriors.

Fields of Application

- Waterproofing of bathrooms, showers, balconies, terraces before laying ceramic tiles.
- Waterproofing of swimming pools, Turkish baths before laying ceramic tiles.
- Can be applied on surfaces such as concrete, plaster, screed.

General Data

Appearance: 1st component: Grey and white powder; 2nd component: White liquid.
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging
Packaging: Powder component: 20 kg multi-ply paper bags,
Liquid component: 5 lt drums.
Set of 25 kg.

Application Data

Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 5 lt liquid / 20 kg powder
Mixing: ~3 mins. with Max. 500 rpm mixer
Pot Life: 2 hours
Waiting Time Between the Coats: 5 - 6 hours
Waiting Time / Overcoatibility: Min.3 days
Time to Waterproof: 7 days
Consumption: 1.7 kg/m² (per 1 mm. thickness)

Performance Data (at 23°C and 50% RH)

Density (EN 1015-6): 1900 ± 100 kg/m³
Impermeability to Water (for 3 mm thickness): ≥ 2 bar (positive)
Adhesion Strength (EN 1542): ≥ 1.0 N/mm²
Adhesion Strength After Cycling Without De-icing Salts Impact (EN 13687-3/ EN 1542): ≥ 1.00 N/mm²
Adhesion Strength After Heat Ageing (EN 1062-11/EN 1542): ≥ 1.00 N/mm²
Permeability to Water Vapour (EN ISO 7783-2): Class I; Sd < 5 (Sd: Equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3): < 0.1 kg/m² h^{0.5}
Heat Resistance: (-30°C) - (+80°C)
Dangerous Substances: See SDS.
Reaction to Fire: European classification Bs1d0

3021 İzoflex Waterproofing Mortar

One component, flexible cementitious mortar for waterproofing and protection of concrete structures, renders and cementitious screeds against water and humidity.

Fields of Application

- Waterproofing of;
 - Bathrooms, showers, balconies, terraces before laying ceramic tiles.
 - Small scale concrete basins of potable water and decorative pools.
 - Small scale terraces, balconies.
 - Places subject to small deformations.



Moisture control, increasing resistivity by limiting moisture content, coating.



Conforms TS EN 1504-2
Class MC, IR-C
Hacettepe University Doping Control Center Approval Report according to BS 6920 (suitable for use in contact with water intended for human consumption)

General Data

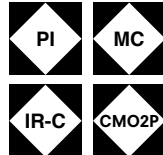
Appearance: White/Grey Powder
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging
Packaging: 25 kg multi-play paper bags.

Application Data

Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 5-5.5 lt water / 25 kg powder (for roller or trowel application)
7.5 - 8 lt water / 25 kg powder (for brush application)
Pot Life: 1 hour
Waiting Time Between the Coats: 5 - 6 hours
Waiting Time / Overcoatibility: Min.3 days
Time to Waterproof: 7 days
Consumption: 2 kg/m² (per 1 mm. thickness)

Performance Data (at 23°C and 50% RH)

Density (EN 1015-6): 1850 ± 90 kg/m³
Impermeability to Water (for 3 mm thickness): 1.5 bar (positive)
Adhesion Strength (EN 1542): ≥ 1.0 N/mm²
Adhesion Strength After Cycling Without De-icing Salts Impact (EN 13687-3/EN 1542): ≥ 1.00 N/mm²
Adhesion Strength After Heat Ageing (EN 1062-11/EN 1542): ≥ 1.00 N/mm²
Permeability to Water Vapour (EN ISO 7783-2): Class I; Sd < 5 (Sd: Equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3): < 0.1 kg/m² h^{0.5}
Heat Resistance: (-30°C) - (+80°C)
Dangerous Substances: See SDS.
Reaction to Fire: A1



Protection against ingress, moisture control, increasing resistivity by limiting moisture content, coating.



EN 14891 Class CMO2P.
EN 1504-2 Class PI, MC, IR-C
Hacettepe University Doping Control Center Approval Report according to BS 6920 (suitable for use in contact with water intended for human consumption)

3024 İzolatex Plus Highly Flexible Waterproofing Mortar

Highly flexible waterproofing mortar composed of emulsion polymer-based liquid component and cementitious powder component containing additives that improve waterproofing and workability, which is resistant to salts and suitable for interior and exterior applications.

Fields of Application

- Swimming pools, water tanks, basins, pipes etc.
- Bathrooms, showers, WC, like wet areas before the tiling.
- Balconies and terraces before laying ceramic tiles.
- Underground concrete elements like foundations, retaining walls and basement walls.
- Places subject to deformation, pedestrian and load traffic.
- Concrete basins subject to sea water and De-icing salts.
- Can be applied on surfaces such as concrete, plaster, screed.

General Data

Appearance: 1st component: Grey powder; 2nd component: White liquid.
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging
Packaging: Powder component: 20 kg multi-ply paper bags,
Liquid component: 10 lt drums.
Set of 30 kg.

Application Data

Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 10 lt liquid / 20 kg powder
Mixing: ~3 mins. with max. 5000 rpm mixer
Pot Life: 5 hours
Waiting Time Between the Coats: 5 - 6 hours
Waiting Time / Overcoatibility: Min. 3 days
Time to Waterproof: 7 days
Consumption: 1.7 kg/m² (per 1 mm. thickness)

Performance Data (at 23°C and 50% RH)

Density: 1580 ± 100 kg/m³
Impermeability to Water (for 3 mm thickness): 7 bar (positive)
Adhesion Strength (EN 14891): ≥ 0.50 N/mm²
Adhesion Strength (EN 1542): ≥ 1.00 N/mm²
Adhesion Strength After Water Immersion (EN 14891): ≥ 0.50 N/mm²
Adhesion Strength After Freeze-Thaw Cycles (EN 14891): ≥ 0.50 N/mm²
Adhesion Strength After Cycling Without De-icing Salts Impact (EN 13687-3/ EN 1542): ≥ 1 N/mm²
Adhesion Strength After Heat Ageing (EN 14891): ≥ 0.50 N/mm²
Adhesion Strength After Heat Ageing (EN 1062-11/EN 1542): ≥ 1.00 N/mm²
Adhesion Strength After Contact with Lime Water (EN 14891): ≥ 0.50 N/mm²
Adhesion Strength After Contact with Chlorinated Water (EN 14891): ≥ 0.50 N/mm²
Crack Bridging (23°C) (EN 14891): ≥ 0.75 mm
Crack Bridging (-20°C) (EN 14891): ≥ 0.75 mm
Crack Bridging (-21°C) EN 1062-7): ≥ 2.5 mm (A5)
Chloride Diffusion (ASTM C1202): ≤ 200 Coulomb (Class: Very low permeability)
Carbon Dioxide Permeability (EN 1062-6): Sd >50 m (Sd: Equivalent air thickness)
Permeability to Water Vapour (EN ISO 7783-2): Class I ; Sd <5 (Sd: Equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3): < 0.1 kg/m² h^{0.5}
Heat Resistance: (-40°C) - (+80°C)
Dangerous Substances: See SDS.
Reaction to Fire: European classification Cs1d0

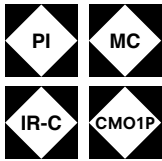


3027 İzolatex UV
UV Resistant Waterproofing Mortar

Two component, highly flexible, UV resistant waterproofing mortar with effective resistance against salt and carbon dioxide used for interior and exterior concrete and masonry structural elements, composed of emulsion polymer based liquid component and cement based white powder, containing chemical additives that increase water impermeability and workability.

Fields of Application

- Waterproofing of balconies, terraces and roofs subject to light pedestrian and load traffic without additional covering.
- Waterproofing of swimming pools, bathrooms, showers, hammam before laying ceramic tiles.
- Applied on surfaces such as concrete, plaster, screed.



Protection against ingress, moisture control, increasing resistivity by limiting moisture content, coating.



EN 14891 Class CMO1P.
EN 1504-2 Class PI,MR,IR-C

General Data

Appearance: 1st component: White powder; 2nd component: White liquid.
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging
Packaging: Powder component: 25 kg multi-ply paper bags,
Liquid component: 8 lt drums.
Set of 33 kg.

Application Data

Application Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 8 lt liquid / 25 kg powder
Mixing: ~3 mins. with max. 500 rpm mixer
Pot Life: 3 hours
Waiting Time Between the Coats: 5 - 6 hours
Waiting Time / Overcoatibility: Min. 3 days
Time to Waterproof: 7 days
Consumption: 1.7 kg/m² (per 1 mm. thickness)

Performance Data (at 23°C and 50% RH)

Density (EN 1015-6): 1700 ± 100 kg/m³
Impermeability to Water (for 3 mm thickness): ≥ 7 bar (positive)
Adhesion Strength (EN 1542): ≥ 1.00 N/mm²
Adhesion Strength After Freeze-Thaw Cycles (EN 1542): ≥ 1.00 N/mm²
Adhesion Strength After Water Immersion (EN 1542): ≥ 1.00 N/mm²
Resistance to Accelerated Ageing (EN 1062-11): No visual change.
After 2000 hours UV radiation and humidity
Adhesion Strength After Contact With Lime Water(EN 14891): ≥ 0.50 N/mm
Adhesion Strength After Contact With Chlorinated Water (EN 14891): ≥ 0.50 N/mm²
Chemical Resistance (EN ISO 2812-1): No visible deformation after 30 days
Crack Bridging (23 °C) (EN 14891): ≥ 0.75 mm
Crack Bridging (-5 °C) (EN 14891): ≥ 0.75 mm
Crack Bridging (EN 1062-7) (21 °C): ≥ 1.25 mm (A4)
Chloride Diffusion (ASTM C1202): ≤ 200 Coulomb (Class: Very low permeability)
Carbondioxide Permeability (EN 1062-6): Sd > 50 m (Sd: Equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3): < 0.1 kg/m² h^{0.5}
Heat Resistance: (-40°C) - (+80°C)
Dangerous Substances: See SDS.
Reaction to Fire: European classification Csl d0

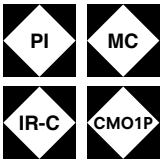


3025 Ultralastic
Ultra Flexible Rapid Curing
Waterproofing and Concrete
Protection Mortar

Rapid curing, highly flexible, resistant to sulphate and durable waterproofing and concrete protection mortar for interior and exterior applications, composed of emulsion polymer based liquid component and powder component including waterproofing, and workability improving mineral additives, and special elements.

Fields of Application

- Waterproofing of;
 - Underground concrete elements like foundations, retaining walls, basement walls.
 - The soil contacting areas of concrete elements.
 - Permanently wet areas like swimming pools and water basins.
 - Wet areas like bathrooms, showers.
 - Wall interfaces.
 - Balconies and terraces.
 - The areas subject to saline water.
 - Concrete basins subject to sea water and de-icing salts.
 - Concrete, plaster and screeds.
- Waterproofing under ceramic tiling.
- Waterproofing over old tiling.
- All places where quick installation is needed.



Protection against ingress, moisture control, increasing resistivity by limiting moisture content, coating.

EN 14891 Class CMO1P.
EN 1504-2 Class PI, MC, IR-C

General Data

Appearance: 1st component: Grey powder, 2nd component: White liquid.
Shelf Life (Powder and liquid): 12 months when stored in the original sealed packaging

Application Data

Application Temperature Range: (+5°C) - (+25°C)
Mixing Ratio: 8 lt liquid / 12 kg powder
Mixing: ~3 mins. / 400-600 rpm
Pot Life: 45 minutes
Consumption:

- Areas subject to water at a normal level: 2.4 kg/m² (2 layer)
- Waterproofing against permanent water pressure at balconies and terraces, pools and water tanks: 3.2 kg/m² (2 layers)
- Soil contacting concrete elements and foundations: 4.5 kg/m² (3 layers)

Waiting Time Between Coats: 1.5 hours
Waiting Time Before Tiling: 3.0 hours
Curing Time: Max. 12 hours (regardless of weather conditions)

Performance Data (at 23°C and 50% RH)

Density (mixture): 1.45 ± 0.1 g/cm³
Impermeability to Water (EN 14891): ≥ 7 bar after 6 hours (positive 28 days)
Tensile Adhesion Strength (EN 14891): ≥ 0.5 N/mm²
Tensile Adhesion Streghth After Water Contact / Heat Treating / Freeze Thaw Cycle (EN 14891): ≥ 0.5 N/mm²
Crack Bridging (EN 14891): ≥1.50 mm (+23 °C)
≥1.00 mm (-5 °C)
Adhesion Strength (EN 1542): 3 hours: ≥ 0.5 N/mm²
24 hours: ≥ 1.0 N/mm²
28 days: ≥ 1.5 N/mm²
Adhesion Strenght After Cycling Without De-icing Salts Impact (EN 13687-3 / EN 1542): ≥ 1.0 N/mm²
Crack Bridging (EN 1062-7): ≥ 3.0 mm (A5) (21 °C)
Capillary Water Absorption (EN 1062-3): < 0.1 kg/m² h^{0.5}
Heat Resistance: (-40 °C) - (+80 °C)
Dangerous Substance: See SDS.



3022 İzolatex 1K
One-Component Cementitious Mortar
for Flexible Waterproofing & Concrete
Protection

One-component, crack-bridging, flexible mortar, based on cement modified with waterproofing and workability improving additives used for interior and exterior applications.

Fields of Application

- Bathrooms, showers, WC, Turkish baths, spa-like wet areas before the tiling.
- Balconies and terraces before laying ceramic tiles.
- Swimming pools, water tanks, basins, pipes etc.
- Internal wall floors against leakage and surface water.
- External wall surfaces to be backfilled in the ground.
- It is applied on concrete surfaces which must be protected against sea water salts.

General Data

Appearance: Grey colour cement modified powder
Shelf Life: 12 months when stored in the original sealed packaging.
Packaging: 20 kg multi-ply paper bag.

Application Data

Application and Surface Temperature Range: (+5°C) - (+35°C)
Mixing Ratio: 5.5 - 6.3 lt water per 20 kg bag (by brush)
3.2 - 4.0 lt water per 20 kg bag (by trowel)
Mixing: ~3 mins. with max. 500 rpm mixer
Pot Life: ≥ 120 min. at +20 °C
Consumption: 0.85 - 1.00 kg/m²/mm
Waiting Time / Overcoating: 3 days
Time to Waterproof: 7 days

Performance Data (23°C and 50% RH)

Fresh Mortar Density: 1.35 ± 0.1 g/cm³
Initial Tensile Adhesion Strength and After Water Contact, Heat Aging, Freeze-Thaw Cycles (EN 14891): ≥ 1 N/mm²
Tensile Adhesion Strength (EN 1542): ≥ 2 N/mm²
Freeze Thaw De-icing Salt Resistance (EN 13687-3): ≥ 1 N/mm²
Water Penetration under Pressure (EN 14891): 7 bar (positive)
Crack Bridging Ability (EN 14891): ≥ 0.75 mm (+23 °C)
≥ 0.75 mm (-5 °C)



3351 Durex
Impregnation Waterproofing and
Surface Protection Material

Silicone based concentrated impregnation and surface protection material, providing water impermeability without decreasing the water vapor permeability of the surface applied on and without giving any color or sheet to it.

Fields of Application

- Impregnation of porous mineral surfaces such as concrete, lime-sand stone and brick where waterproofing is required.
- Protecting concrete surfaces against abrasion caused by water, salt, chlorine and alkali.
- Impregnation of surfaces coated with any kind of paint or plasters having relatively low water resistance.
- Priming of surface before application of the paints and plasters.



Moisture control, increasing resistivity by limiting moisture content, hydrophobic impregnation.



EN 1504-2 Class MC, IR-C



3353 Profesyonel Durex
Impregnation Waterproofing and
Surface Protection Material

Silane / Siloxane emulsion based, solvent-free, ready to use surface protection and water repellent primer.

Fields of Application

- Impregnation of porous mineral surfaces such as concrete, lime-sand stone, decorative brick, clinker, where waterproofing is required.
- Priming surfaces of unpolished, absorbent, natural and unnatural stones for protection.
- Priming of surfaces before application of paints and plasters.

General Data
Appearance: White colour liquid
Density: 1.0 g/cm³
Shelf Life: 12 months when stored in the original sealed packaging.
Packaging: 10 lt plastic drum.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Consumption: Approximately 0.2 - 1.0 lt/m² (Depending on the porosity of the substrate.)
Application Layer: 2 coats (wet on wet)
Drying Time: 24 hours
Penetration: Good

Performance Data (23°C and 50% RH)
Density: 1.0 ± 0.03 gr/cm³
Water Absorption: < 0.050 kg/m² h^{1/2}



3131 Elastikor
Elastomeric Resin Based
Waterproofing Material Resistant to
UV Rays

Elastomeric resin based, one component, 600% elastic, waterproofing liquid plastic coating.

Fields of Application

- Waterproofing of all types of flat or sloping roofs made of concrete, plaster, asbestos cement, tile, aluminum, zinc, PVC, asphalt (at least one year old).
- Exterior waterproofing of buildings.
- For crack bridging.



Protection against ingress, moisture control, increasing resistivity by limiting moisture content, coating.



EN14891 Class DMO1P.
EN 1542 Class PI,MC,IR-C



3111 Elastiser
Elastomeric Resin Based
Waterproofing Material

Acrylic emulsion elastomeric resin based, one component, ready to use, 250% elastic and liquid under-tile waterproofing material.

Fields of Application

- Under-tile waterproofing of wet areas such as bathrooms, toilets, balconies and terraces.
- In horizontal and vertical applications.
- Interior and exterior.
- Suitable for use on concrete, cement-based plaster and screed surfaces, gypsum based surfaces and panels.

General Data
Appearance: White & Grey liquid waterproofing material
Shelf Life: 12 months when stored in the original sealed packaging.
Packaging: 5 kg and 20 kg plastic pails.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Waiting Time Between Coats (23°C): 4 - 6 hours
Ready to Use: 3 - 7 days
Consumption: 1.5 - 2 kg/m² (for 1 mm thickness)

Performance Data (23°C and 50% RH)
Initial Tensile Adhesion Strength (TS EN 14891): ≥ 0.5 N/mm²
Tensile Adhesion Strength After Water Contact (TS EN 14891): ≥ 0.5 N/mm²
Tensile Adhesion Strength After Heat Ageing (TS EN 14891): ≥ 0.5 N/mm²
Tensile Adhesion Strength After Freeze - Thaw Cycles (TS EN 14891): ≥ 0.5 N/mm²
Tensile Adhesion Strength After Contact With Lime Water (TS EN 14891): ≥ 0.5 N/mm²
Waterproofing (TS EN 14891): No penetration, ≤ 20 gr mass increase
Crack Bridging Abilities Under Standard Conditions (TS EN 14891): ≥ 0.75 mm
Service Temperature Range: (-30°C) - (+80°C)
Dangerous Substances: See SDS



3151 Elasticool
Waterproofing and Coating Material
with Solar Reflectance

One component, highly elastic, liquid plastic coating and waterproofing material which is formulated with high technology polymerization for waterproofing of roof surfaces and providing energy saving by reflecting radiant heat energy.

Fields of Application

- Waterproofing of all types of flat or sloped roofs and terraces covered with concrete, plaster, asbestos cement, galvanized steel, zinc, aluminum, PVC, polyester and wood.
- Exterior waterproofing of buildings.
- Surfaces of concrete, plaster, stone, clinker, decorative coatings etc.
- Old bitumen, bituminous membrane or asphalt covered surfaces.
- On spray polyurethane foam.
- Used as waterproofing and energy saving material.



Protection against ingress, moisture control, increasing resistivity by limiting moisture content, coating.



EN 1504-2 Class PI,MC,IR-C

General Data
Appearance: White liquid
Shelf Life: 24 months when stored in the original sealed packaging
Packaging: 1 kg, 3 kg, 10 kg and 20 kg plastic pails.

Application Data
Application Temperature Range: (+5°C) - (+35°C)
Waiting Time Between Coats (23°C): 4 hours
Ready to Use: 3 - 7 days
Consumption: ~1.5 kg/m² (for 1 mm thickness)
Application (vertical): 2 layers. Thickness: 0.75 - 1.00 mm
Application (horizontal): 3 layers. Thickness: 1.00 - 1.50 mm

Performance Data (23°C and 50% RH)
Tensile Strength (EN 1542): ≥ 0.8 N/mm²
Tensile Adhesion Strength After Cycling Without De-icing Salts Immersion (EN 13687-3/ EN 1542): ≥ 0.8 N/mm²
Tensile Adhesion Strength After Heat Ageing (EN 1062-11/EN 1542): ≥ 0.8 N/mm²
Resistance to Accelerated Ageing (EN 1062-11): No visible change. (2000s UV and condensation)
Crack Bridging (EN 1062-7) (21 °C): ≥ 2.5 mm (A5) / ≥ 1.5 mm (A4)
Flexibility: Highly flexible
Permeability to Water-Vapour (EN ISO 7783-2): Class I; Sd < 5 (Sd: equivalent air thickness)
Carbon Dioxide Permeability (EN 1062-6): Sd > 50 m (Sd: equivalent air thickness)
Capillary Water Absorption (EN ISO 1062-3): < 0.1 kg/m² h^{0.5}
Service Temperature Range: (-30°C) - (+80°C)
Dangerous Substances: See SDS
Reaction to Fire: European classification Cs1d0



4701 İzoline Astar Bitumen Primer

Bitumen emulsion-based, ready-to-use primer applied only from the positive side and used to protect the underground or ground level building elements against ground moisture and water leakage.

Fields of Application

- Building foundations, basements, underground garages,
- For treating surfaces before laying bitumen membranes to improve bonding.
- In horizontal and vertical applications
- As a primer prior to application of İzoblok series.

General Data
Appearance: Dark brown in can, black after drying.
Density: 1.00 g/cm³
Shelf Life: 24 months when stored in the original sealed packaging
Solid Material Ratio: 48 %
Packaging: 17 lt plastic pail.

Application Data
Application Temperature: (+5°C) - (+35°C)
Mixing Ratio (İzoline Astar/Water): 5/1-4/1
Drying Time: 1 hour
Ready to Use: 5-6 hours
Consumption: ~400g/m²



3401 İzoblok 2K+ Two Component Bitumen Rubber Based Waterproofing Material

Flexible, two component, solvent free, fiber reinforced bitumen rubber based waterproofing material used on the positive side only for protection against water leakage of construction elements under the ground or in the floor level.

Fields of Application

- Waterproofing of sub-base building structure surfaces (horizontal/vertical) which are permanently contact with leaking or pressurized water and moisture.
- Waterproofing of foundations, retaining walls and basement walls, green terraces, sub-base car parking areas, basement floors,
- Waterproofing of interior and exterior mineral surfaces like concrete, stone, brick, plaster, mortar etc.

General Data
Appearance: 1st component: Black-brown liquid; 2nd component: Grey powder
Shelf Life: 12 months when stored in original sealed packaging.
Solid Content Ratio: 71% ± 1
Packaging: Available in A+B component 30 kg plastic pails.
Liquid: 22 kg, Powder: 8 kg.

Application Data
Application Temperature: (+5°C) - (+35°C)
Application Thickness:
- For moisture resistant insulation: Min. 3 mm dry film thickness
- For non-pressure water resistance: Min. 3 mm dry film thickness
- For pressure water resistance: Min. 4 mm dry film thickness
Consumption: Approx. 1.0 – 1.5 kg / m² for each 1 mm thickness. (The consumption amounts are theoretical and it varies by the condition of application surface)
Mixing Ratio: 22 kg liquid / 8 kg powder
Pot Life: 2 - 4 hours
Tack-Free Drying Time: 6 hours
Waiting Time Between the Coats: 1 - 2 hours (depending on the weather conditions)
Complete Drying Time: 1 - 5 days
Ready to Use Time: 7 days (depending on the curing time)

Performance Data (23°C and 50% RH)
Density: 1.13 ± 0.03 gr/ml
Crack Bridging (EN 15812): Class CB2
Waterproofing Capacity: Class W1 (3 mm dry film thickness)
Resistance to Water (EN 15817): Pass
Low Temperature Flexibility (EN 15813): Pass
High Temperature Dimensional Stability(EN 15818): Pass
Reaction to Fire (EN 13501-1): Class E



Conforms EN 15814



3410 İzoblok 1K One Component Bitumen-Rubber Based Waterproofing Material

Flexible, one component, solvent free, fiber reinforced, ready to use bitumen rubber based waterproofing material used on the positive side only for protection against water leakages of construction elements under the ground or in the floor level.

Fields of Application

- Waterproofing of sub-base building structure surfaces (horizontal/vertical) which are permanently contact with leaking or pressurized water and moisture,
- Waterproofing of foundations, retaining walls and basement walls, green terraces, sub-base car parking areas, basement floors,
- Waterproofing of interior and exterior mineral surfaces like concrete, stone, brick, plaster, mortar etc.
- Adhesion of polystyrene heat insulation panels.

General Data
Appearance: Black-brown viscous liquid
Shelf Life: 12 months when stored in original sealed packaging.
Solid Content Ratio: 70% ± 1
Packaging: Available in 30 kg plastic pails.

Application Data
Application Temperature: (+5°C) - (+35°C)
Application Thickness:
- For moisture resistant insulation: Min. 3 mm dry film thickness
- For non-pressure water resistance: Min. 3 mm dry film thickness
- For pressure water resistance: Min. 4 mm dry film thickness
Consumption: Approx. 1.0 – 1.5 kg / m² for each 1 mm thickness. (the consumption amounts are theoretical and it varies by the condition of application surface)
Application Thickness: Min. 3 mm
Tack-Free Drying Time: 5 hours
Waiting Time Between the Coats: 1 - 2 hours (depending on the weather conditions)
Complete Drying Time: 1 - 3 days
Ready to Use Time: 7 days (depending on the curing time)

Performance Data (23°C and 50% RH)
Density: 1.26 ± 0.01 gr/ml
Crack Bridging (EN 15812): Class CB2
Waterproofing Capacity: Class W1 (3 mm dry film thickness)
Resistance to Water (EN 15817): Pass
Low Temperature Flexibility: Pass
High Temperature Dimensional Stability: Pass
Reaction to Fire (EN 13501-1): Class E



3452 İzopur P Polyurethane Primer for Absorbent Surfaces

One component, transparent polyurethane primer material for absorbent surfaces. It is used as primer material before İzopur application.

Fields of Application

- Priming of old and dusty surfaces.
- To increase the abrasion resistance of mineral based surfaces.
- Before İzopur application, priming of absorbent surfaces like wood, concrete, cement screed, cement based mortars etc.

General Data
Appearance: Yellow color, transparent liquid
Shelf Life: 9 months when stored in the original packaging
Packaging: 5 kg tin pails.

Application Data
Tack Free Time (20 °C, 50% BN): 2 - 3 hours
Set to Light Traffic: 12 hours
Final Curing Time (20 °C, 50% BN): 7 days
Consumption: 200 - 250 g/m² in one coat, depending on porosity of the surface and application method.



Conforms EN 15814



3451 İzopur Polyurethane Waterproofing Material

One component, ready-to-use, polyurethane-based waterproofing material that has high elasticity and mechanical strength.

Fields of Application

- Waterproofing of roofs, balconies and terraces.
- Protection of polyurethane foam insulation.
- Waterproofing and protection of concrete constructions like bridge decks etc.

General Data
Appearance: White and grey liquid
Shelf Life: 9 months when stored in the original packaging
Packaging: 25 kg tin pails.
Application Data
Application Temperature: (+10°C) - (+35°C)
Set to Light Traffic: 12-18 hours
Final Curing Time: 7 days
Consumption: 1.0 - 1.2 kg/m² in a single layer, depending on porosity of the surface and application method.
Performance Data (23°C and 50%)
Density: 1.35-1.45 gr/ml
Elongation Break (ASTM D 412): 200 ± 50 %
Tensile Strength (ASTM D412): ≥ 2.5 MPa
Resistance to Water Pressure (DIN 1928): No leak (1m. water column, 24 hours)
Adhesion to Concrete (EN 1542): > 1.5 N/mm²
Hardness (Shore A Scale) (ASTM D2240) (15"): 70 ± 5
Crack Bridging (EN 1504-2) -23 °C: ≥ 2.5 mm
Fire Class (DIN 4102-1): B2
Chemical Properties: Good resistance against acidic and alkali solutions (10%), detergents, seawater and oils.



3455 İzopur Trans P Transparent Polyurethane Waterproofing System

One component, transparent and ready to use polyurethane based primer which enhances adherence for polyurethane waterproofing materials to be applied on glossy surfaces.

Fields of Application

- In preparation of glossy surfaces like glass and glazed ceramic tiles before İzopur Trans application.

General Data
Appearance: Transparent liquid
Shelf Life: 9 months when stored in the original packaging
Packaging: 1 kg tin pails.
Application Data
Application Temperature: (+10°C) - (+35°C)
Consumption: 30 - 60 g/m²



3453 İzopur C Polyurethane Topcoat

One component, ready-to-use, UV-resistant, high elasticity and mechanical strength, polyurethane-based topcoat material.

Fields of Application

- On İzopur polyurethane based waterproofing membrane applied surfaces, like roofs, balconies, terraces etc.
- Protection of concrete constructions like bridges, etc.

General Data
Appearance: White and grey liquid
Shelf Life: 9 months when stored in the original packaging
Packaging: 5 kg tin pails.
Application Data
Application Temperature: (+10°C) - (+35°C)
Tack Free Time: 1 - 3 hours
Set to Light Traffic: 12 hours
Final Curing Time: 7 days
Consumption: 1.0 - 1.2 kg/m² in one coat, depending on porosity of the surface and application method.
Performance Data (23°C and 50% RH)
Density: 0.95 - 1.1 gr/ml
Elongation Break (ASTM D 412): ≥ 150%
Tensile Strength (ASTM D 412): ≥ 4 MPa
Adhesion to İzopur (ASTM D903): > 2 N/mm²
2000 hours Accelerated Aging Test Results (DIN EN ISO 4892-3, 400MJ/m²)
Surface chalking: No chalking observed.



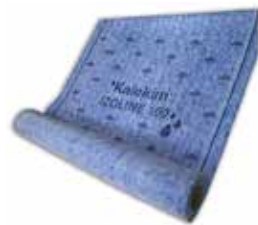
3454 İzopur Trans Polyurethane Based, Transparent Waterproofing Material

One component, transparent, ready-to-use, UV-resistant, polyurethane-based waterproofing material that has high elasticity and mechanical strength.

Fields of Application

- Waterproofing of balconies and terraces, coated with all kinds of materials.
- Waterproofing of ceramic, glass, glass brick, natural Stone, wood and bamboo surfaces without any change in appearance, thanks to its transparency.

General Data
Appearance: Yellow color transparent liquid
Shelf Life: 9 months when stored in the original packaging
Packaging: 10 kg tin pails.
Application Data
Application Temperature: (+10°C) - (+35°C)
Tack Free Time: 8 hours
Set to Light Traffic: 24 - 48 hours
Final Curing Time: 7 days
Consumption: 0.4 - 0.6 kg/m² in two or three coats, depending on porosity of the surface and application method.
Performance Data (23°C and 50% RH)
Elongation at Break (DIN EN ISO 527): 250%
Tensile Strength (DIN EN ISO 527): ≥ 5 N/mm²
Hardness (Shore D Scale) (ASTM D2240): 60
Water Vapor Permeability (EN ISO 12572): 6 g/m² (24 hours)
Resistance to Water Pressure (DIN EN 1928): No leak (1m. water column, 24 hour)
Adhesion to Absorbent Ceramic Tile (ASTM D 903 (ELCOMETRI): > 2.0 N/mm² (concrete surface failure)
Chemical Properties: Good resistance against acidic and alkali solutions (10%), detergents, seawater and oils.



Izoline 100

Under Tile Waterproofing Membrane

3-layer, super-elastic waterproofing membrane consisting of modified polyethylene film laminated in between polypropylene felt of high alkali resistance to be applied prior to the coating of materials, such as tile and natural stones, both in internal and external environments.

Fields of Application

- In areas subject to water such as bathrooms, showers and Turkish baths,
- In continuously wet areas such as pools and small water tanks,
- In terraces and balconies,
- On surfaces that are subject to activity (pedestrian, load traffic, expansion),
- In food at industry (milk, beer, wine, meat integrated facilities, slaughter houses, cafeterias and restaurants), in facilities that require chemical resistance such as the ones textile industry, hospitals, laboratories and pharmaceuticals industry,
- On plaster and cement based panels, and on concrete, plaster, screed surfaces.

General Data
Appearance: Polyethylene blue colored membrane with both sides coated in felt
Width: 1 meter
Thickness: ~ 0.5 mm
Roll Length: 30 meters
Shelf Life: 24 months in an unopened package in a dry environment.
Packaging: Polyethylene foil wrapped in a 30 m roll.

Application Data
Application Temperature: (+5°C) - (+35°C)
Temperature Resistance: (-30°C) - (+80°C)

Performance Data (23°C and 50% RH)
Water Impermeability: ≥ 1.5 bar (positive)
Explosion Pressure: > 2 bar
Tensile Strength - Lengthwise: 335 N/50 mm
Tensile Strength - Widthwise: 225 N/50 mm
Elongation at Rupture - Lengthwise: 87%
Elongation at Rupture - Widthwise: 133%
Adhesion Strength (EN 1348): > 0.5 N/mm² (with Technoflex)
Water Vapor Permeability (EN 1931): Sd > 50 m (Sd: Equivalent air layer thickness)
UV Resistance: > 450 hours
Dangerous Substances: See SDS.
Reaction to Fire: European Class Cs1d0



3502 Kalekim Dilatation Tape

Elastic Waterproofing Tape for Dilatation

Thermoplastic elastomeric dilatation tape for wall and base connections, expansion and construction joints.

Fields of Application

- Waterproofing of;
- Underground concrete elements like foundations, retaining walls, basement walls.
 - Waterproofing of permanently wet areas like pools.
 - Waterproofing of water depots, treatment plants, tunnels.
 - Waterproofing of terraces, balconies, paraphets, roof finishings.

General Data
Appearance: Grey, perforated edges
Width: 200 mm
Thickness: 1.0 mm ± 0.1
Packaging: > 20 m roll in paper box.

Application Data
Shore A Hardness: -90
Burst Pressure: > 4.0 bar
Breaking Strength (lengthwise) (DIN EN 12311-2 Method B): > 15 N/mm²
Breaking Strength (widthwise) (DIN EN 12311-2 Method B): > 15 N/mm²
Elongation at Break (long.) (DIN EN 12311-2 Method B): > 600 %
Elongation at Break (trans.) (DIN EN 12311-2 Method B): > 650 %
Bond Strength (DIN EN 1348): > 4.5 Bar
Resistance to Water Pressure (DIN EN 1928-B-400 kPa/72 Std.): > 4 Bar
Resistance to UV (DIN EN ISO 4892-2): ≥ 6500 hour
Reaction to Fire: Class E
Temperature Resistance: (-30°C) - (+90°C)



3501 Kalekim Waterproofing Tape

Waterproofing Tape

Thermoplastic elastomeric waterproofing tape with polyester knit fabric reinforcement for wall and base connections, expansion and construction joints.

Fields of Application

- Waterproofing of water depots, wet areas (bathroom, kitchen, wc).
- Waterproofing of terraces, balconies, paraphets, roof finishings.
- Waterproofing of construction and expansion joints.

Technical Properties			
General Data			
Type	I	II	III
Property	Polyester knit fabric reinforced	Polyester textile reinforced	Polyurethane membrane covered by polyester textile
Appearance	Grey	Grey	White
Width	120 mm / 70 mm	120 mm / 70 mm	120 mm / 70 mm
Thickness	0.54 mm	0.63 mm	0.44 mm
Packaging	10 and 50 m roll in a paper box.		
Application Data			
Burst Pressure	≥1.5 bar	≥1.5 bar	≥1.5 bar
Water Pressure Resistance	≥1.5 bar	≥1.5 bar	≥1.5 bar
Elongation at Break (long.)	18%	15%	10%
Elongation at Break (trans.)	90%	100%	120%
Temperature Resistance	(-30°C) - (+90°C)	(-30°C) - (+90°C)	(-30°C) - (+90°C)



3503 İzoswell

Hydrophilic Swelling Tape

Hydrophilic swell strip consisting of an acrylate based polymer swelling substance embedded in a butylene copolymer based thermoplastic elastomer.

Fields of Application

- Waterproofing around all sorts of lead-throughs and construction joints (stationary joints).
- Waterproofing of foundations and basement walls.
- Water and drinking water tanks.
- In swimming pools.
- Waterproofing joints between precast concrete elements.
- Used in steel and concrete pipes.

General Data
Appearance: White strip
Density: 1.256 ± 0.08 g/cm³
Shore A: 26 ± 2
Dimensions: 20x5 mm - 20x10 mm
Packaging: (20x5 mm): 9 rolls of 20 m per box (180 m / box)
30 boxes (5400 m) per euro pallet.
(20x10 mm): 10 m / rolls - 9 rolls of 10 m per box (90 m / box)
30 boxes (2700 m) per euro pallet.
Performance Data
Volumetric % swelling (14 days later):
Demineralised Water
20x5 mm: 1200% ± 100
20x10 mm: 700% ± 100
Tap Water
20x5 mm: 1000% ± 100
20x10 mm: 600% ± 100
Melting Point: 110 °C
Tensile Strength (Unswollen state) (EN ISO 527): ≥ 0.3 MPa
Elongation at Rupture (Unswollen state) (EN ISO 527): ≥ 300%
Resistant to Permanent Water: 2 bar (20 m)
Bursting Pressure: 2.8 N/mm²

Complementary Products for Waterproofing Solutions

4001 Tamirart 5
Fine Repairing Mortar

4002 Tamirart 30
Coarse Repairing Mortar

4003 Tamirart W
White Color Surface Smoothing and Repairing Mortar

4004 Tamirart S40
High-Strength Structural Repairing Mortar

4005 Tamirart 40
High-Strength Structural Repairing Mortar



4041 İnce Siva
Finish Plaster Applicable Manually or Mechanically

4101 Tamirart EP
Epoxy Based Repair, Anchorage, Assembly Mortar

4110 Groutart EP
Epoxy Based Grout Mortar

4201 Mastar 10
Self Leveling Screed

4210 Groutart
High-Strength Grout Mortar



4211 Groutart Rapid
Fast Setting High Strength Grout

4410 Tamirart AC
Corrosion Inhibitor, Adhesion Improver Coating and Primer Mortar

4505 Kalekim Astar
Acrylic Primer



4506 Kalekim Dolgu Astar
Smooth Surface Primer

4507 B-Tone
Smooth Concrete Surface Primer

4510 Gypsastar
Acrylic Primer

8001 Kalemastik
Acrylic Sealant



8011-8015 Kalesilikon
Bathroom and Kitchen Silicone Sealant

8017 Kalesilikon Plus
Shower Cabin Silicone

8018 Kalesilikon NS
Neutral Facade Silicone

8021 Kalepolymas
Polyurethane Sealant



8022 Kalepolymas MS
MS Polymer Based Joint Selant

1401 Technobond PU
Polyurethane Adhesive and Sealant

1404 Technobond MS
MS Polymer Adhesive

8101 Kalefoam
Polyurethane Foam





Technical Information and Drawings

Preparation and Application Rules for Waterproofing

Surface Preparation

It is extremely important to ensure that the surfaces on which waterproofing products will be applied are prepared appropriately. Care should be taken to ensure the surface is cured. If there are any distortions on the surface, use the appropriate Tamirart 5, Tamirart 30 repair mortar in non-structural regions, or use Tamirart 40 or Tamirart S40, which are structural repair mortars in load bearing parts to properly smooth out any cracks, gaps, depressions and similar discrepancies. On which waterproofing is going to be applied should be smooth, level and preferable glazed with wooden trowel and should be cleaned of any dirt or debris that may prevent adhesion and damage waterproofing such as oil, diesel, etc. Priming is recommended with one of the Kalekim Astar (Primer), B-Tone, Gypsastar products by taking into consideration the surface type, absorbency and desired adhesive strength.



Rod (Anchorage support element) Holes

These are the holes through which iron rods pass, which are used in fixing of casts during fortified concrete manufacturing. If there are any plastic casing pipes and conic cap pieces, these too should be removed. In case reinforcement iron has been used for fixing and these have been left in the concrete, the surface should be opened up to 2 cm deep and the irons should be cut off in a fashion ensuring they are embedded 2 cm deep. Such types of holes and gaps should be remedied with Tamirart S40, or Kalekim Grout that do not cause any contraction and have high adhesion strength prior to the initiation of waterproofing and in accordance with the dimensions and locations of holes.

Segregation (segregation of cement mortar - aggregate)

Segregations, which occur during the manufacturing of concrete, should be repaired prior to the application of waterproofing layer. As the concrete will both weaken and also absorb water, pouring conditions should be given as much attention as the particle size analysis (size distribution) of the material.

The area, which has undergone segregation, should be cleared of loose particles with mechanical methods and should be repaired with the right product by selecting from among Tamirart 5, Tamirart 30, Tamirart 40 or Tamirart S40, by taking into consideration the size of the area and resistance requirements.

Stopping Active Water Leakages

In case there are active water leakages on the concrete surface where the application will be performed, the area where the leakage is, should be sufficiently expanded and filled with rapid setting İzostop and İzostop Rapid waterplug and the leakage should be halted.



Forming of Chamfers and Rounding of Sharp Edges

In order to ensure smooth turns of waterproofing materials at joints of all vertical and horizontal elements chamfers with 45 degrees of inclination and with a minimum of 8x8 cm width should be made, or else waterproofing tape, Kalekim Waterproofing Tape should be used.



Waterproofing of Structural Grouts

In the waterproofing of structural grouts, Kalepolymas or Kalekim Waterproofing Tape should be used depending on the size of the grout. If required, the grout should be opened and expanded and deepened. The depth of the grout should be 10-15 mm and its width should be 20-25 mm. The grout, which is opened and cleaned, should be filled with Kalepolymas. In case Kalekim Dilatation Tape is preferred; a band should be placed on top of the grout, to which application will be performed and Epotech+ should be applied and fixed to the bottom parts and over the places, where side sections with holes coincide. Hot air should be blown at places where joining is required, until the band melts and welds into another dilatation band. In the welding process, a low temperature setting should be selected that will be sufficient for only melting of the band without causing any deformation.



Waterproofing of Different Elements Like Structural Joints, Wide Cracks, Parapets and Chimney Base

After the wide cracks are assessed for their size and location, they should be repaired. If they are not shifting, they can be corrected by using the right repair mortar. However if there are shifting cracks, these should be insulated by using Kalepolymas or Kalekim Waterproofing Tape. The same situation is also valid for connection points of different elements at parapets and chimney bases.

The waterproofing in parapets that are not high should be brought above coping and then turned, while in high parapets they should be fixed with press profile after being brought up to 30 cm height. As press profile, flat metal sheets manufactured from aluminum with approximately 5 cm wide and with a minimum 3 mm thickness should be used and these should be fixed with a nut or pin at each 25-30 cm. The upper opening part of the press profile should be insulated with appropriate mastic.

Frequently Encountered Application Mistakes

As in other jobs, to avoid loss of labour as well as material losses in waterproofing applications, the work must be performed carefully in the initial application stage so that large outlays for repairs in the later stages can be prevented.

The Application Surface

A weakness in the waterproofing system can fail if the full contact and homogenous application of the waterproofing material on the surface cannot be achieved due to loose, damaged, dusty, greasy or dirty surface. To prevent such eventuality, surface preparation work must be performed diligently.

Deficiency or defectiveness in repair work and waterproofing of details like structural joints and wide cracks, is another factor related to the surface preparation. On highly absorbent or glossy surfaces failing to use a primer may result in the weakness of the adhesion which may result a failure in waterproofing.

Selection of Materials

When the waterproofing material is used in areas where it is not recommended requiring performance specifications different than the the product can provide, the waterproofing may not be achieved or the performance may decrease before the end of the expected lifetime.

Product Application Instructions

When the application instructions for the products are not complied with, or the products are used in a manner that is not compliant with the recommended quantity or method of utilization, then they may not be able to attain the declared degree of performance and moreover their performance may start declining earlier.

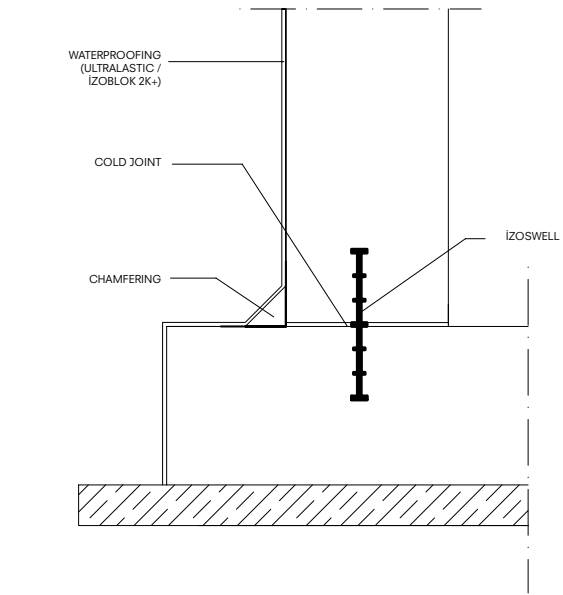
Coating the Waterproofing Application

Not covering the products that are recommended not to be left uncoated may lead to early corrosion and performance loss of waterproofing. When coating is being performed, failure to use an adhesive with required degree of flexibility may lead to an intolerance to the expansion and contraction taking place on the surface causing deformation of the coating as well as the waterproofing material.

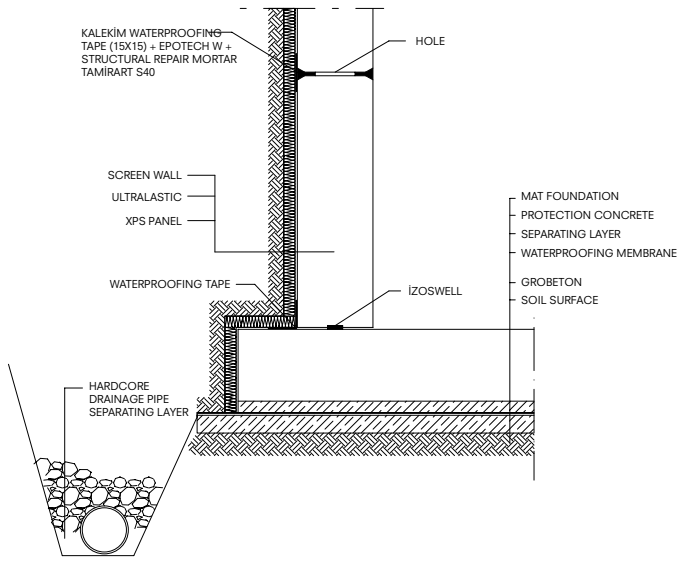


Technical Drawings

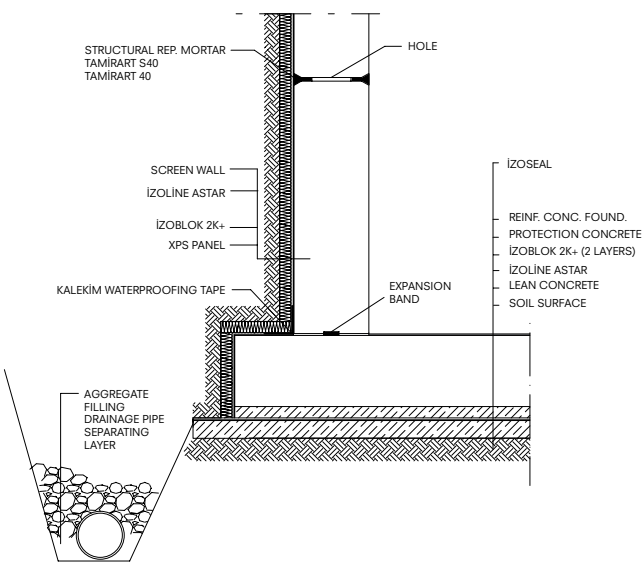
Exterior Waterproofing of Foundations



Drawing 1

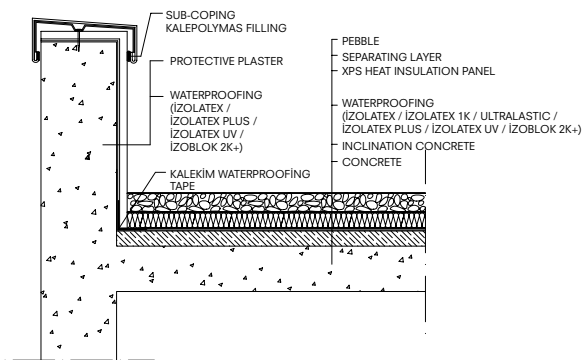


Drawing 2

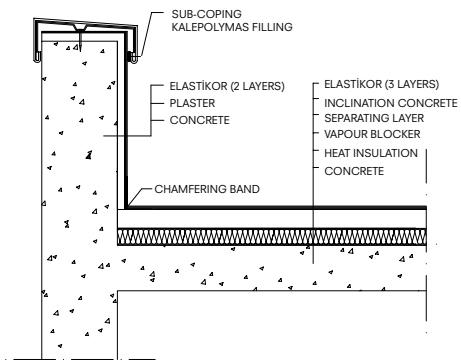


Drawing 3

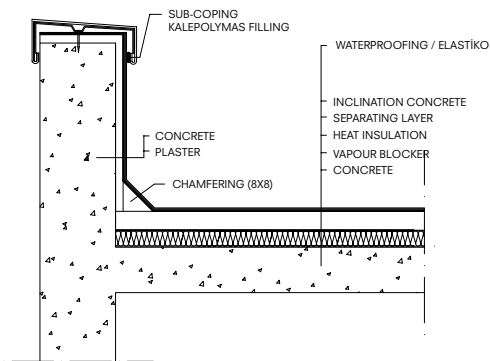
Waterproofing of non - trafficable terrace roofs



Drawing 4

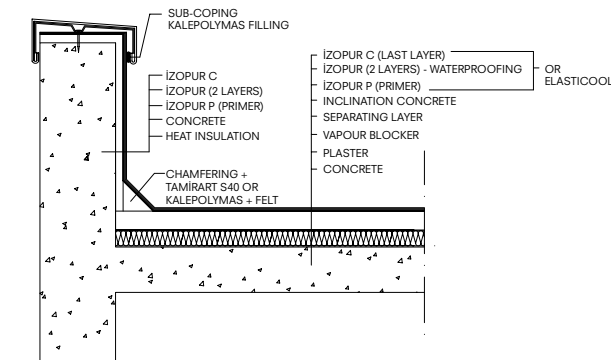


Drawing 5

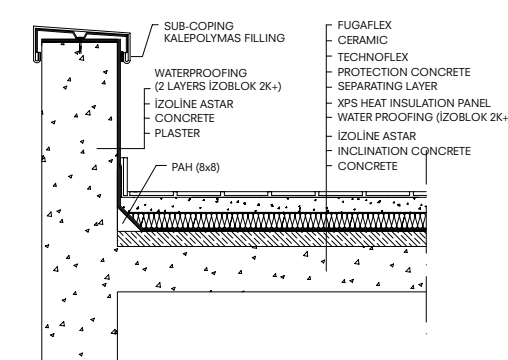


Drawing 6

Waterproofing of trafficable terrace roofs



Drawing 7

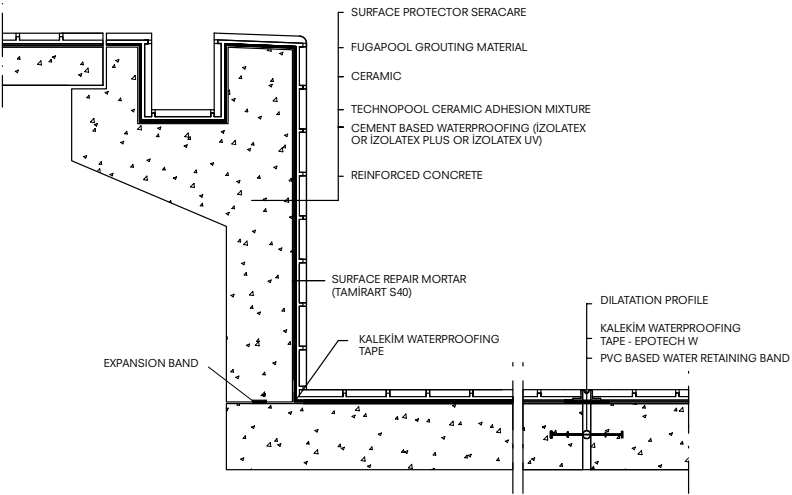


Drawing 8

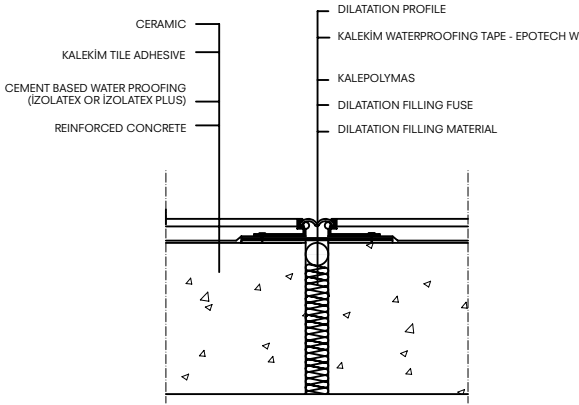
— Please refer to the Technical Data Sheets for technical specifications of the products.
— Drawings are not to scale

Technical Drawings

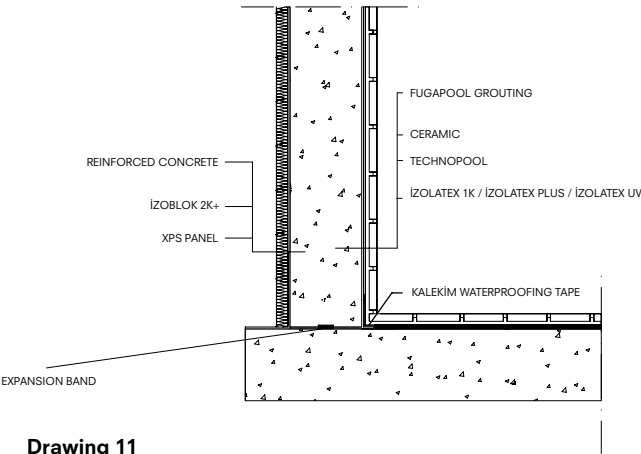
Waterproofing of water tanks and pools



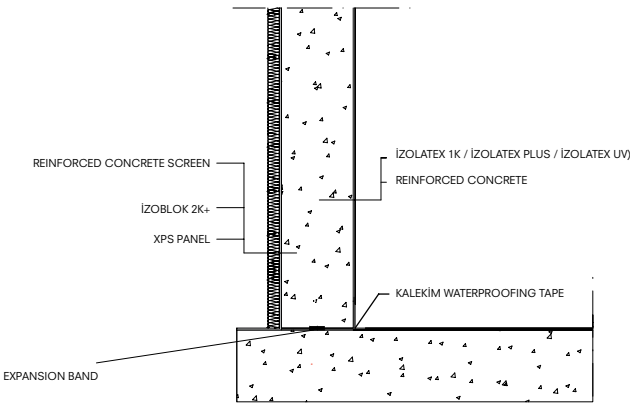
Drawing 9



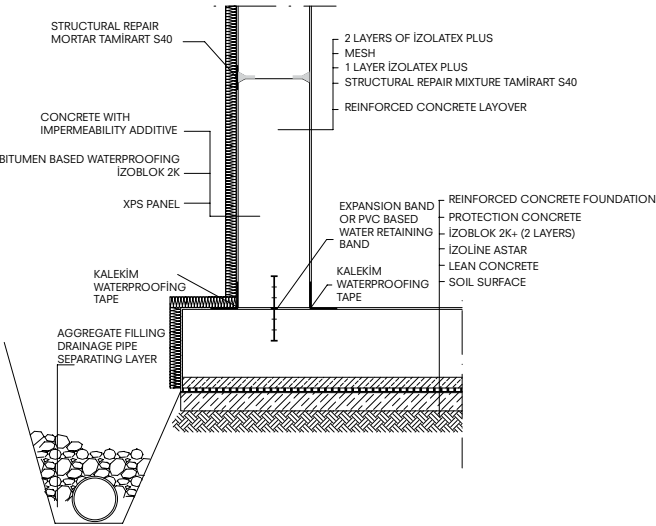
Drawing 10



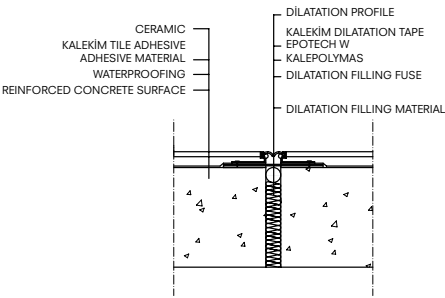
Drawing 11



Drawing 12

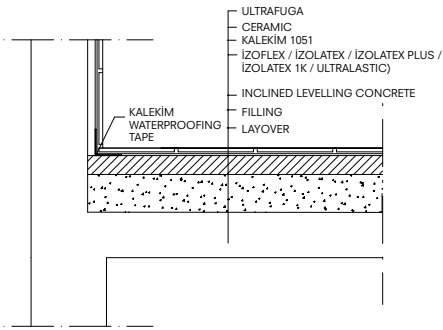


Drawing 13



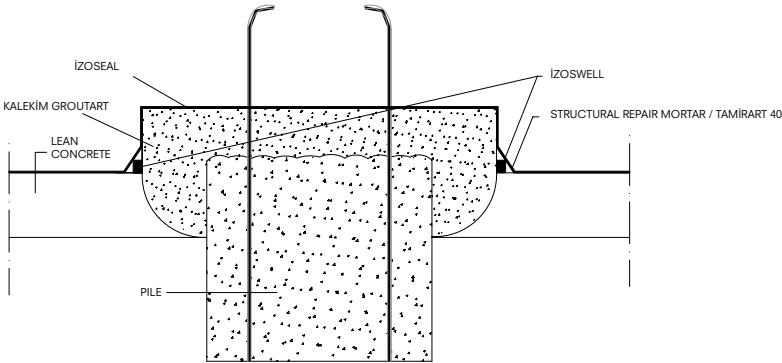
Drawing 14

Waterproofing in wet areas

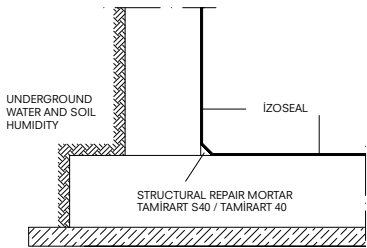


Drawing 15

Waterproofing in Negative Direction

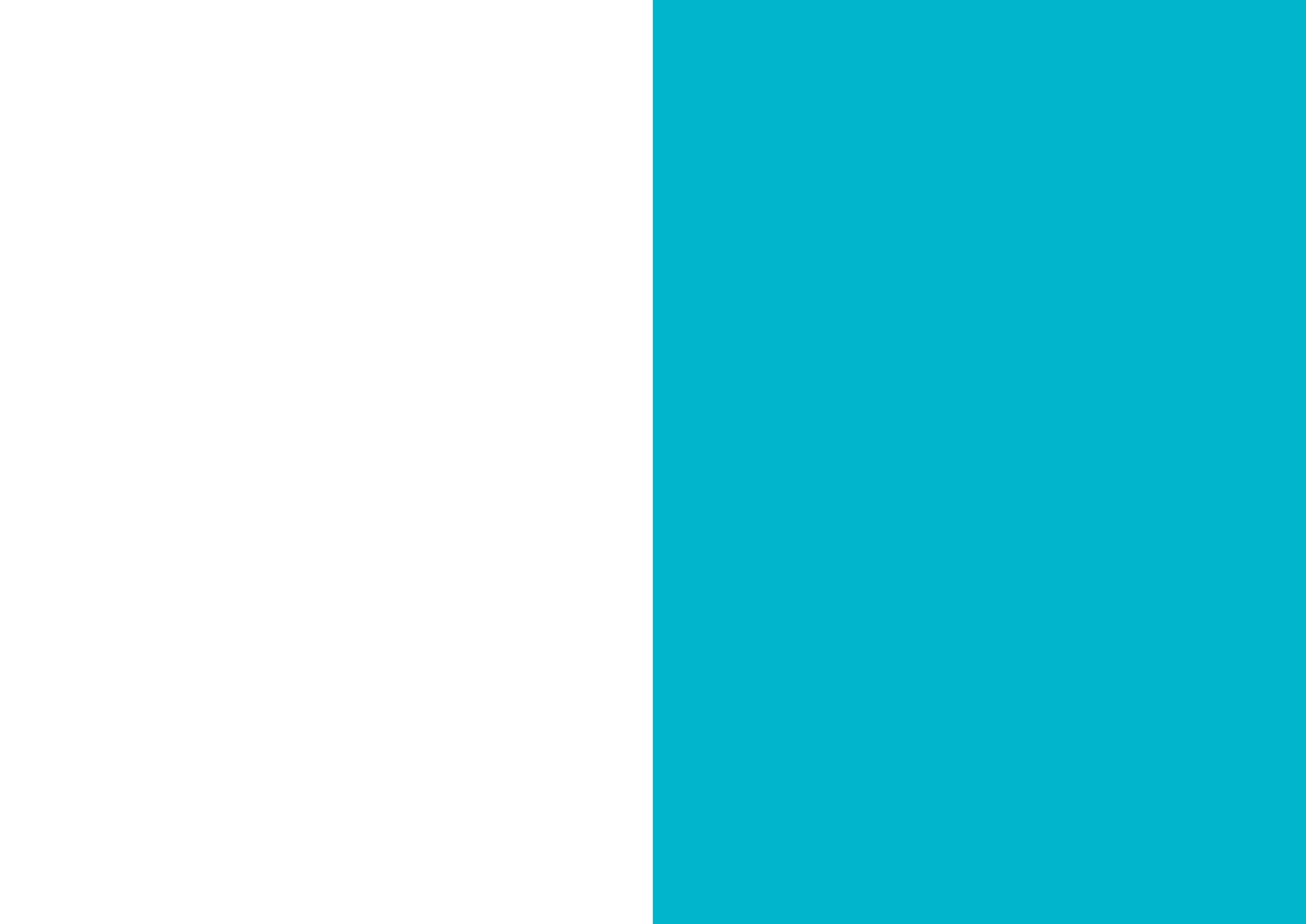


Drawing 16



Drawing 17

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