



Products and
Applications

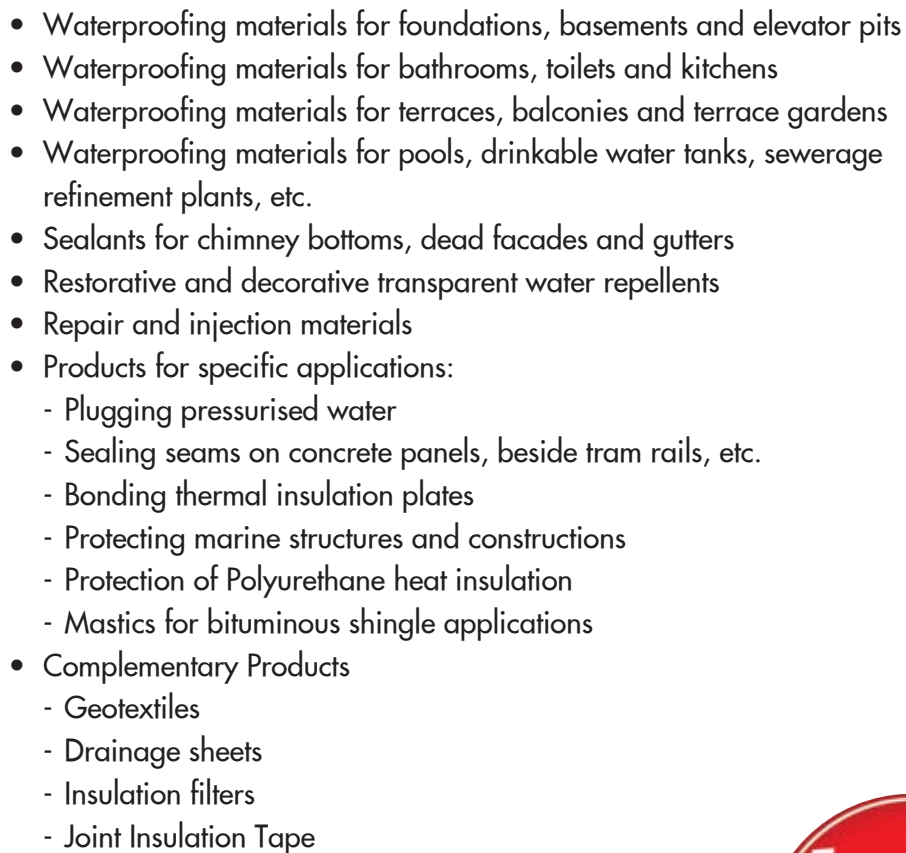
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INFORMATIONS

- Emülzer® has right to change and develop the given technical specifications and packaging without a notice which are given in this leaflet.
- Product specifications and our application details may be obtained free of charge from our company.
- It is the user's responsibility to ensure the up-to-date technical bulletin.
- Emülzer® has no responsibility to user; when products used out of purpose for the given instructions in the catalog.
- Emülzer® has no responsibility to user; when products stored in unsuitable conditions and used outside of the standard test methods.
- Application faults which occur because of missing information are not responsibility of Emülzer®.
- Emülzer® ensure the the products with insurance when there is a flaw because of production.
- This warranty is just for product quality. User should ensure the the proper products for their application.
- Written and oral usage and consumption values are our technical advices which are owing to our lab test experiences.
- The application information given in the catalog are suitable for normal weather conditions and surface alternatives
- Tone differences may occur in Colored products.
- If there is a various products for certain application please consult to your distributor.
- Weight of packages are net weights.
- Emülzer® is not liable for consumption ratios. Actual consumption may change depending on workmanship, surface condition and environmental conditions.
- Emülzer® is not responsible for typographical mistakes.
- After the publication of new Emülzer® catalog, old product catalogs remains invalid.



Waterproofing Since 1935

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AMOUNTS OF CONSUMPTION

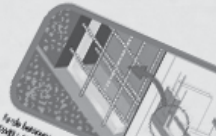
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Suyla Şişen S
Expans

SWELL-FLEX

7m x 7mm x 20mm



The Emülzer® Approach...

Emülzer® started up as a manufacturer of waterproofing products in mid 30s when the young Turkish Republic was ambitiously laying the foundations of industry. It was the dream of this Turkish firm as well to become a part of this achievement by proving itself as a strong, reliable, professional business in future.

Today, heading for and reaching new milestones with its dedicated employees, satisfied customers, and honored suppliers, Emülzer® embraces its valued legacy as well as looking to a brilliant future.

Catering for its vision "to be the leader of liquid waterproofing technology" Emülzer® also delivers the promise of turning the satisfaction of its employees, suppliers, and customers into the well-being of the whole society.

Approach to Customers...

Emülzer® believes in a customer-centered and value-focused marketing notion. Always trying to understand the needs of its customers, it looks to develop products targeting to meet and exceed their expectations, and create value for them.

- It manufactures easy-to-apply products for the customers' convenience enabling them to save money, time and labor.
- It consistently follows improvement policies for its products and services.
- It is capable to develop a wide range of innovative, high quality products thanks to its R&D department.
- It is very selective about raw materials and strictly avoids using defective or low quality ingredients.
- Its quality is certified with TSE, ISO 9001:2015 standards with CE certification.
- It offers continuous technical support to its customers.
- Product liability insurance covers any damage which may occur in spite of following instructions.
- On-time and complete delivery is one of the basic service principles of Emülzer®.
- It is always considerate in listening to recommendations, advices, or complaints of customers.
- It aids dealers, wholesalers, home improvement markets and other vendors in marketing its products and provides them with product literature as well as training programs and technical support.
- It contributes to the growth of the market and the improvement of the industry as a founder and member in trade associations.
- It looks to and encourages sound, frank, and effective communication and interaction.

Approach to Society...

Emülzer® believes in the key role each and every individual plays in the well-being of his or her country and community. And businesses are no exception. That's why Emülzer®:

- Consistently changes, improves, and grows.
- Respects and values society.
- Understands work ethics.
- Complies with the laws and regulations.
- Competes very fairly.
- Contributes to Turkish economy by exportation as a 100% local firm.
- Contributes to the investment and employment capability of Turkish economy, thanks to its solid equity capital.
- Represents both its industry and country in the best way by attending international trade shows.

Leading and Innovative

As the first company of waterproofing industry in Turkey, Emülzer® has been producing and supplying the most reliable liquid waterproofing materials since its foundation in 1935. Its brand name and high quality got so identified with waterproofing that Emülzer® became, and still is, the generic name for some of the waterproofing materials widely used in the construction industry in Turkey. Relying on its well established corporate culture based on stability and sustainable growth, Emülzer® maintains its position as an innovator and leader in liquid waterproofing technology in Turkey.



Photo: Ara GÜLER



All around Turkey



Emülzer® products are easily available through a wide network of wholesalers and dealers all around Turkey, not to mention all those masters and workers who are qualified in the application. Please visit us at www.emulzer.com.tr to find your local Emülzer® dealer. Our sub dealers are able to sign up to benefit from our digital platform.

On-Time Delivery



Thanks to our high quality and efficiency standards in production as well as rich supplies of raw materials and improved stock management, we are always able to meet your needs on time.

A Wide Range of Certified Products



Based in İstanbul, Turkey, Emülzer® manufactures ISO-9001:2015 and CE certified waterproofing products, and it has the widest range of products in waterproofing industry in Turkey. Bitumen, acrylic, silicon, polyurethane and cement based products of Emülzer® are offered with clear technical specifications and instructions and they are guaranteed against production defects.

Built on Research and Development



Developing innovative products to meet the rapidly changing needs of the construction industry, research and development department of Emülzer® looks to improve and perfect our existing products as well. Some products such as Bituminous Fillet and Swell-Flex have been developed in our own laboratories and Emülzer® is still the only manufacturer of these products in Turkey. Our research and development studies provide the construction industry with a wide range of products as well as great cost advantages.

Best References for Each and Every Application



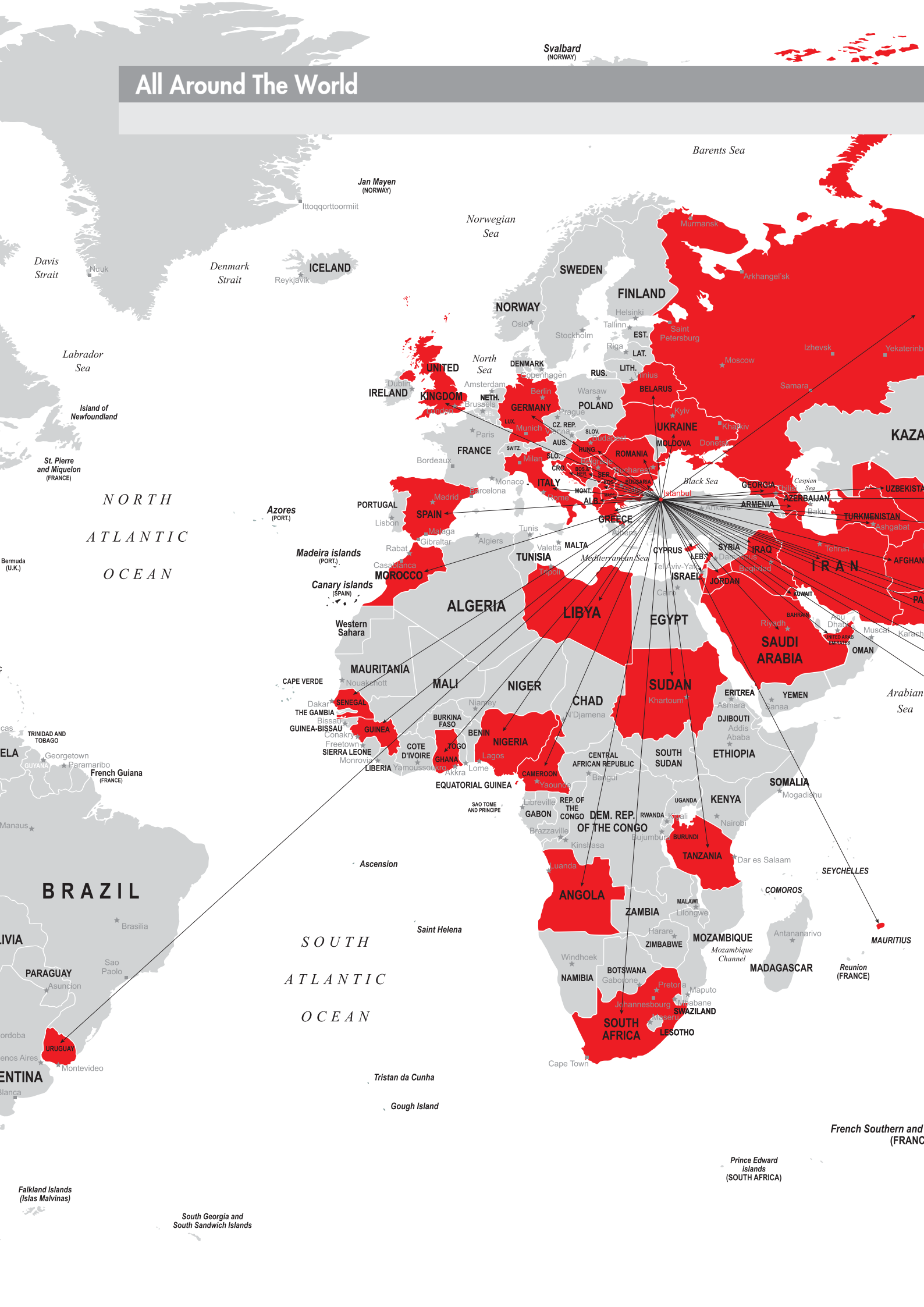
Since 1935 Emülzer® products have been used in all scales of projects from bottom to top, from the suspension bridges of Bosphorus to the largest irrigation projects of Southeast Anatolia, in motorways, inter-urban highway tunnels and at undersea metro tunnels. Architects, engineers, and technicians increasingly prefer our specialized waterproofing materials in construction sites, and in renovation, for all kinds of projects including housing, business centers, factories, hotels, swimming pools and various landscaping applications.

Training and Support



Emülzer® is able to share knowledge and information through its extensive product literature, newsletters and regularly updated Web site as well as trade fairs. Emülzer® organizes and contributes to training activities and workshops to increase awareness both among consumers and in the industry. Besides organizing technical seminars, it supports construction firms directly on-site.

All Around The World





- Angola
- Albania
- Azerbaijan
- Australia
- Belarus
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Georgia
- Germany
- Ghana
- Greece
- Guinea
- Hungary
- India
- Iraq
- Iran
- Israel
- Italy
- Jordan
- Kyrgyzstan
- Kosovo
- Kuwait
- Libya
- Lebanon
- Macedonia
- Malaysia
- Mauritius
- Morocco
- New Zealand
- Nigeria
- Pakistan
- Romania
- Russia
- Saudi Arabia
- Senegal
- Spain
- South Africa
- Sudan
- Tajikistan
- Tanzania
- Thailand
- Turkmenistan
- United Arab Emirates
- United Kingdom
- Uruguay
- Ukraine
- Uzbekistan
- Vietnam



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ELASTOKOTE 2K
Su Bazlı Elyafli Likit Membran
Fiber Reinforced Liquid Membrane

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Su Bazlı Elyafli Likit Membran
Fiber Reinforced Liquid Membrane



Bituminous Waterproofing Liquids

İzola Export (Anionic Bitumen Emulsion)

Emilkote® (Anionic Bitumen Emulsion)

Elastokote 1K (Bitumen-Rubber Based,
Single Component Liquid Membrane)

Emülzer® ALC (Water Based Liquid Coating With Rubber Additive)

Elastokote 2K AR (Bitumen-Rubber Based, Cement Polymer Modified,
Double-Component Liquid Membrane)

Elastokote 2K (Bitumen-Rubber Based, Cement and Fiber Modified
Double-Component Liquid Membrane)

Elastorene (Water-Based, Super Elastic Liquid Membrane)

Styrokote (Liquid Membrane with Thermal Insulation)

Emüler® C (Bituminous Solution with Rubber Additive)

Emülzer® Plus (Liquid Membrane)

Alütec® (Bitumen-Aluminum Based Reflective Paint)

Emülzer® Plus Antiroot (Root Inhibiting Liquid Membrane)

Emülzer® CSP (Rubber Added Bituminous Solution)

Membrane Primer (Bituminous Membrane Primer)





Description

It is a ready-to-use waterproofing material obtained by mixing water and bitumen by using special methods. It adheres firmly to the surface it is applied, forming a waterproof layer.

Usage Areas

- İzola can be used as an undercoat prior to all bituminous membrane applications. Thanks to its superior adherence characteristics, it allows the bituminous membranes under which it is applied to adhere firmly to the surface they are applied, leaving no gap in between.
- It is used to insulate water leakage on all horizontal and vertical surfaces in closed spaces such as foundations, underground storehouses and basements, and in damp environments such as bathrooms, kitchens and toilets, etc. For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as fiber glass, polyester felt, reinforcing fabric, etc.
- The alum material obtained by mixing İzola with sieved fine sand and cement is applied with a trowel to smooth out and level the surface, or to provide a protective coat over insulation.
- In parquet flooring applications with hot bituminous materials, it is applied over the alum as an undercoat.
- It is applied onto construction molds for easy demolding, and to provide a smooth surface. It prevents concrete curing water from damaging molds.

Advantages

- It is very economical.
- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces.
- Because it is thinned with water, it adheres perfectly to all kinds of surfaces, even when the surface is moist.
- By the evaporation of the water it contains, it forms a waterproof and water-insoluble layer.

Application

- İzola is a cold applied material.
- After having mixed with water with a ratio of approximately 20%, it is applied with a bitumen brush, roller, or pistol.
- Depending on weather conditions, it dries in approximately 4-5 hours.
- It should not be applied in rainy weather, or at temperatures below +5°C.
- Each coat must be applied only after the preceding one is completely dry.

Consumption

400 g/m² for each coat

Packaging

17 kg Metallic case - 45 Pieces / Pallet
200 kg Sheet iron barrel





Description

It is a ready-to-use waterproofing material obtained by mixing water and bitumen by using special methods. By the evaporation of the water it contains, it forms a waterproof layer on the surface it is applied.

Usage Areas

- It is used on all horizontal and vertical surfaces in closed damp environments such as foundations, underground storehouses, and basements to insulate water leakage. For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as fiber glass, polyester felt, reinforcing fabric, etc.
- Emilkote® can be used as an undercoat prior to bituminous membrane applications of any brand. Thanks to its superior adherence characteristics, it allows the bituminous membranes under which it is applied to adhere firmly to the surface they are applied, leaving no gap in between.
- The alum material obtained by mixing Emilkote® with sieved fine sand and cement is applied with a trowel to smooth out and level the surface, or to provide a protective coat over insulation.
- In parquet flooring applications with hot bituminous materials, it is applied over the alum as an undercoat.
- It is applied onto construction molds for easy demolding, and to provide a smooth surface. It prevents concrete curing water from damaging molds.

Advantages

- It is very economical.
- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces.
- Because it contains water, it enables good adhesion even when the surface is moist.
- By the evaporation of the water it contains, it forms a waterproof and water-insoluble layer.
- Can be easily applied by anyone
- Creates a seamless insulation layer.
- Because it is water based, it is environmentally friendly.
- Must be applied cold. Does not require heating or thinning.

Application

- Emilkote® is a cold applied material.
- After having mixed with water with a ratio of approximately 20%, it is applied with a bitumen brush, roller, or pistol.
- Depending on weather conditions, it dries in approximately 4-5 hours.
- It should not be applied in rainy weather, or at temperatures below +5°C.
- Each coat must be applied only after the preceding one is completely dry.

Consumption

400 g/m² for each coat

Packaging

4,5 kg Metallic case - 140 Pieces / Pallet
17 kg Metallic case - 45 Pieces / Pallet
200 kg Sheet iron barrel





Description

Elastokote is a bitumen-rubber based, ready to use, single component liquid membrane with elastomeric additives, and it is used for insulating water and humidity. By the evaporation of the water it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

- It can be used on all horizontal and vertical surfaces.
- It is used for the insulation of foundations, underground storehouses, and basements.
- It is used for insulating water leakages in closed damp environments such as bathrooms, kitchens, toilets, etc.
- For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as polyester felt, reinforcing fabric, etc.
- The alum material obtained by mixing Elastokote with sieved fine sand and cement is applied with a trowel to smooth out and level the surface, or to provide a protective coat over insulation.

Advantages

- It can be easily applied by anyone.
- It provides a seamless insulation layer.
- As a water-based material it is environment friendly.

- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces.
- Because it contains water, it enables good adhesion even when the surface is moist.
- It provides permanent elasticity.
- It is ready to use.
- It is applicable with trowel up to 20 m²/hour.
- As a cold applied material, it does not require heating or thinning.
- It can cover capillary cracks.

Application

- The surface must be undercoated with Emilkote® or İzola.
- As a cold applied material, Elastokote should not be used with thinner.
- It can be applied with a bitumen brush, or trowel.
- Depending on weather conditions, it dries in approximately 4-5 hours.
- It should not be applied in rainy weather, and at temperatures below +5°C.
- Each coat must be applied only after the preceding one is completely dry.

Consumption

1 kg/m² for each coat (with trowel)

Packaging

23 kg Pail - 33 Pieces / Pallet



Elastokote 1K
Application Film



Description

Emülzer® ALC is single component, water based, ready-to-use liquid coating with rubber additives. It contains elastomeric polymer resin additives. By the evaporation of the water it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

- It can be used on all horizontal and vertical surfaces.
- It is used for the external insulation of foundations, underground constructions, basements. etc.
- It is used for insulating water leakages in closed damp environments such as bathrooms, kitchens, toilets, etc.
- For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as polyester felt, reinforcing fabric, fibermesh, etc.
- The alum material obtained by mixing Emülzer® ALC with sieved fine sand and cement is applied with a trowel to smooth out and level the surface, or to provide a protective coat over insulation.

Application

- As a cold applied material, Emülzer® ALC should not be used with thinner. After mixing, it can be applied with a bitumen brush, airless pump or trowel. Depending on weather conditions, it dries in approximately 5-6 hours.

- It should not be applied in rainy weather, and at temperatures below +5°C.
- Next layer should not be applied before preceding one completely dries.

Advantages

- It can be easily applied by anyone.
- It provides a seamless insulation layer.
- As a water-based material it is environment friendly.
- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces. Because it contains water, it enables good adhesion even when the surface is moist.
- It provides permanent elasticity.
- It is ready to use.
- As a cold applied material, it does not require heating or thinning.
- It can cover capillary cracks.
- It's resistance to chemicals and salt solution in the soil is excellent.
- As a water based material, it can be safely used indoors.

Surface Preparation

- The application surface should be without dust, rust, dirt, grease and oil and the loose parts should be scrapped out.
- Emilkote® bitumen emulsion on concrete surfaces and Emülzer C® on metal surfaces can be used as primer to ensure good adhesion.
- The sharp corners should be rounded and horizontal-vertical cants subject to cracking should be angled with Emülzer® Bituminous Fillet.
- The large pores and the cracks should be filled with Emülzerz® bituminous elastic joint paste.

Cleaning of Tools

The cleaning of the tools is accomplished with soapy water just after the usage but with industrial type of solvents after curing.

Consumption

Depending on surface and workmanship 1-3 kg/m².

Ambalaj

Net: 16 kg Plastic Pail
27 Pieces / Pallet



Emülzer ALC
Application Film



Description

Elastokote 2K AR is a bitumen-rubber based, cement polymer modified, double-component liquid membrane. It dries fast. Its elasticity and tensile strength is highly improved with additives. By the evaporation of the water it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

Elastokote 2K AR is used on all horizontal and vertical surfaces for the exterior insulation of foundations, underground store-houses and basements, and for insulating water leakages in closed damp environments such as bathrooms, kitchens, toilets, etc. For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as polyester felt, reinforcing fabric, etc.

Advantages

- It provides a seamless insulation layer.
- As a water-based material, it is environment friendly.
- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces.
- Because it contains water, it enables good adhesion even when the surface is moist.
- It provides permanent elasticity.
- It covers capillary cracks.
- As a cold applied material, it does not require heating, and thinning.



Surface Preparation

- Pointed tips and corners must be bevelled.
- The surface to be treated must be free from dust, dirt, rust and grease; loose particles must be scraped off.
- The surface must be undercoated with Emillkote® before Elastokote 2K AR application.

Application

- Elastokote 2K AR is a cold applied material.
- Powder component in the bag is poured into liquid component and they are mixed by using a low speed mixer until no lump remains.
- The mixture is applied with a trowel and bitumen brush.
- Depending on weather conditions, it dries in approximately 1 -2 hours.
- It can be applied on moist surfaces, but not on wet surfaces.
- It should not be applied in rainy weather, or at temperatures below +5°C.
- Each coat must be applied only after the preceding one is completely dry.

Consumption

1,5 kg/m² for each coat (with trowel) min. 2 coats.

Packaging

22 kg bituminous emulsion +
8 kg powder component =
30 kg Set - 12 Sets / Pallet

18



Elastokote 2K AR
Application Film



Description

Elastokote 2K is a bitumen-rubber based, cement and fiber modified, double-component liquid membrane. It dries fast. Its elasticity and tensile strength is highly improved with fibre and other additives. By the evaporation of the water it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

Elastokote 2K is used on all horizontal and vertical surfaces for the exterior insulation of foundations, underground storehouses and basements, and for insulating water leakages in closed damp environments such as bathrooms, kitchens, toilets, etc. For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as polyester felt, reinforcing fabric, etc.

Advantages

- It provides a seamless insulation layer.
- As a water-based material, it is environment friendly.
- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces.
- Because it contains water, it enables good adhesion even when the surface is moist.
- It provides permanent elasticity.
- It covers capillary cracks.
- As a cold applied material, it does not require heating, and thinning.

Surface Preparation

- Pointed tips and corners must be bevelled.
- The surface to be treated must be free from dust, dirt, rust and grease; loose particles must be scraped off.
- The surface must be undercoated with Emillkote® before Elastokote 2K application.

Application

- Elastokote 2K is a cold applied material.
- Powder component in the bag is poured into liquid component and they are mixed by using a low speed mixer until no lump remains.
- The mixture is applied with a trowel and bitumen brush.
- Depending on weather conditions, it dries in approximately 1 -2 hours.
- It can be applied on moist surfaces, but not on wet surfaces.
- It should not be applied in rainy weather, or at temperatures below +5°C.
- Each coat must be applied only after the preceding one is completely dry.

Consumption

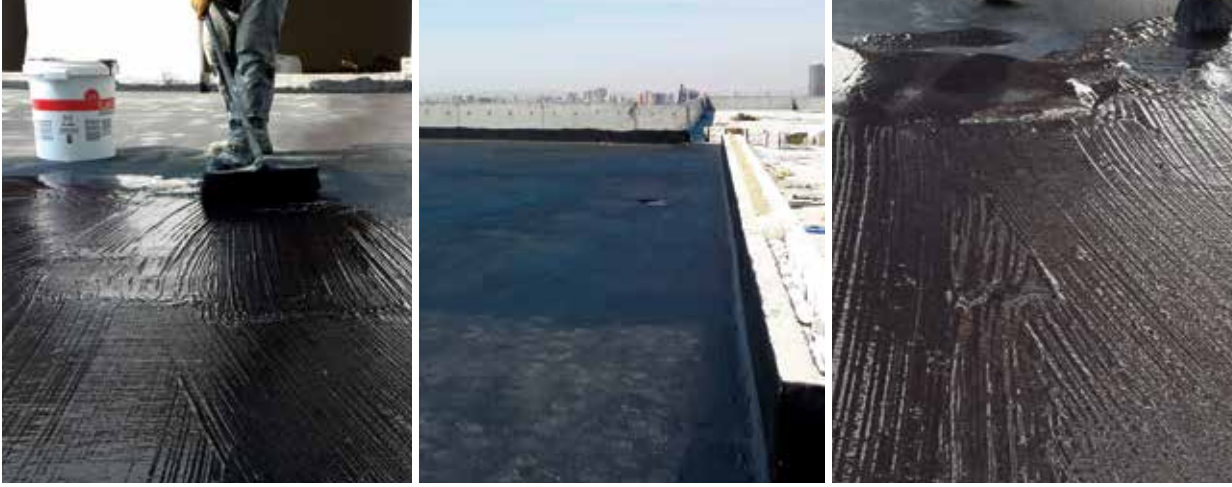
1.5 kg/m² for each coat (with trowel) min. 2 coats.

Packaging

24 kg bituminous emulsion +
8 kg powder component
= 32 kg Set - 12 Sets / Pallet

Elastokote 2K
Application Film





Description

Elastorene is a fast-setting waterproofing material, offering high performance and elasticity. In addition to its high elasticity properties, this material also has excellent adherence to metal and concrete surfaces.

Usage Areas

- Building foundations,
- Basement floor and walls,
- Sustaining walls,
- Tunnels and canals,
- Closed roof and porches

Advantages

- Easy to apply material.
- Provide a seamless insulation layer.
- As a water-based material, it is environment friendly.
- Due to its inflammable and non-toxic characteristics it can be safely used indoor areas.
- It provides permanent elasticity.
- Ready to use.
- As a cold applied material it does not require heating and thinning.
- It has ability to cover up capillary cracks.
- Instantly applicable, no need to wait for concrete curing.

Surface Preparation

- The application surface should be without dust, rust, dirt, grease and oil and the loose parts should be scrapped out.
- Emilkote® bitumen emulsion on concrete surfaces and Emülzer® C on metal surfaces can be used as primer.
- The sharp corners or horizontal-vertical joints subject to cracking should be rounded with Emülzer® Bituminous Fillet.
- The large pores and the cracks should be filled with Emülzer® bituminous elastic joint filler.

Application

- As a cold applied material, Elastorene should not be used with thinner.
- It can be applied with a bitumen brush, airless gun or trowel.
- Depending on weather conditions, it dries in approximately 5-6 hours.
- It should not be applied in rainy weather, and at temperatures below +5°C.
- Next layer should not be applied before preceding one completely dries.
- For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with materials such as polyester felt, reinforcing fabric, fibermesh, etc.

Consumption

1 kg/m² at each layer. Min. 2 coats.

Packaging

23 kg Metallic Pail - 33 Pails / Pallet





Description

Styrokote is a modified bitumen-water based, ready to use, single- component waterproofing liquid membrane, providing also thermal insulation. By the evaporation of the water it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

- It is used on all horizontal and vertical surfaces.
- It is used for insulating the walls of foundations, underground storehouses, and basements from outside.
- It is used for insulating water leakage in closed damp environments such as bathrooms, kitchens, and toilets, etc.
- For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with polyester felt.
- It can be used for adhering thermal insulation boards.

Advantages

- If the application is thick enough, it also provides thermal insulation.
- It can cover cracks up to 7 mm. It can be also used on unplastered brick walls.
- It provides a seamless insulation layer.

- Due to its inflammable and non-toxic characteristics it can be safely used in closed spaces.
- Because it contains water, it enables good adhesion even when the surface is moist.
- It is elastic.
- It is ready to use.
- As a cold applied material, it does not require heating, or thinning.

Application

- Styrokote is a cold applied, prepared material.
- As ready to use material, it does not require thinning.
- After having mixed, it should be applied with a trowel.
- Each coat must be applied only after the preceding one is completely dry.
- Depending on weather conditions, it dries in approximately 4-5 hours.
- It should not be applied in rainy weather, or at temperatures below +5°C.

Consumption

2-4 kg/m² for each coat

Packaging

10 kg Metallic pail - 33 Pieces / Pallet





Description

Emülzer® C is a ready-to-use waterproofing bituminous solution with a rubber additive. It does not contain any filling material. By the evaporation of the solvent it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

- Emülzer® C is used against ground humidity and leakage in foundations, terrace roofs made of reinforced concrete, balconies, water ducts, secret gutters, and retaining and pitch walls, and for pool insulation from outside.
- To protect metallic surfaces (casting, sheet iron, etc.) against corrosion, it can be applied by dipping, brushing, or spraying.
- It is used as an undercoat in all kinds of bituminous membrane applications on metallic surfaces.

Advantages

- It is ready to use.
- It is a cold applied material.
- It does not require heating, or thinning.
- It dries very fast.
- It provides a seamless insulation layer.
- It has high sulfate resistance.

Application

- Emülzer® C is applied only onto the side exposed to water. (positive insulation) Ready to use, it does not require heating or thinning. It can be applied with a brush, roller, or pistol. To avoid dust and improve durability, non-metallic surfaces can be undercoated with Emilkote®.
- Although Emülzer® C dries fast (in as little as 2 hours) it is recommended to wait 24 hours before applying a second coat.
- To provide durability against higher pressure, it must be reinforced with materials such as fiber glass, geotextile felt, reinforcing fabric, etc.
- When it is used on the roofs which are continuously exposed to outdoor conditions (except walking), it is recommended to apply Alütec® over Emülzer® C to provide improved aesthetics as well as protection against sunlight.

Consumption

500 g/m² for each coat

Packaging

4,5 kg Metallic case - 140 Pieces / Pallet
17 kg Metallic case - 45 Pieces / Pallet
200 kg Sheet iron barrel





Description

Emülzer® Plus is a modified bitumen and solvent based, single-component, ready-to-use waterproofing liquid membrane. By the evaporation of the solvent it contains, it adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Usage Areas

Emülzer® Plus is used in retaining and pitch walls, galleries, drainage and piles, terrace roofs made of reinforced concrete, balconies, water ducts, and secret gutters against ground moisture and leakage, and in pools it is used under coatings against water and damp.

Advantages

- It can be easily applied by anyone.
- It provides a seamless insulation layer.
- It is very elastic. (1000%)
- It is ready to use.
- As a cold applied material, it does not require heating, or thinning.
- It dries very fast.

Application

- Emülzer® Plus applied only onto the side exposed to water. (positive insulation) As a ready to use product, it does not require heating, or thinning.
- It can be applied with a brush, rake, or airless sprayer.
- To avoid dust, provide excellent adherence, and improve durability, non-metallic surfaces can be undercoated with Emilkote®, and metallic surfaces can be undercoated with Emülzer® CSP.
- Although Emülzer® Plus dries fast-in as little as 2 hours-it is recommended to wait 24 hours before applying a second coat.
- To provide durability against higher pressure, it must be reinforced with materials such as polyester felt, netting, reinforcing fabric, etc.
- When it is used on the roofs which are continuously exposed to outdoor conditions (except walking), it is recommended to apply Alütec® over Emülzer® Plus to provide improved aesthetics as well as protection against sunlight.

Consumption

600 g/m² for each coat, and min. 2 coats

Packaging

16 kg Metallic pail - 33 Pieces / Pallet





Description

As a single-component bituminous solution offering excellent adherence, it contains reflective aluminum to provide UV-protection.

Usage Areas

- It protects bituminous waterproofing materials against harmful effects of UV light. During daytime, it controls heat increase on the surfaces of metal and concrete tanks as well as other building elements.
- Applied on bituminous waterproofing materials in domes, vaults, north walls and prefabricated gutters it provides solar protection as well as an aesthetic look.
- As a topcoat preferably on Emülzer® CSP, Emülzer® Plus it protects metallic, iron or cast elements such as tanks, pipes, and channels against corrosion.

Advantages

- By reflecting UV rays it ensures the durability of bituminous insulation for years.
- Due to its reflective properties, it provides a cool and more comfortable atmosphere in the interior of the building.
- Covering the black color of bitumen completely, it improves the aesthetic look of the building.
- It is economical. 1 kg of Alütec® can cover 4-5 m².
- It helps you to detect cracks on the waterproofing layer earlier and prevents you from unexpected paint expenses.

- It is highly resistant to abrasion due to its excellent adhesion to bituminous surfaces.
- It dries very fast. It is resistant to pollution and atmospheric conditions.

Application

- The mixture should not be thinned, and it should be applied cold.
- After opening the can, the content must be stirred thoroughly before as well as during application.
- The surface to be treated must be bituminous, dry, clean, and free from dust and grease. It must be applied with a brush or pulverizer, and in one coat.
- If it is going to be applied on Bituminous Membranes, protective PE coating on membranes must be removed or burned with torch.

Consumption

Approximately 200 g/m² depending on the surface

Packaging

4,5 kg Metallic can - 140 Pieces / Pallet
17 kg Metallic can - 45 Pieces / Pallet



Alütec
Application Film





Description

Emülzer® Plus Anti-Root is a single-component, modified bitumen and solvent-based, ready-to-use waterproofing liquid membrane containing root inhibiting additives. By the evaporation of the solvent it contains, it adheres firmly to the surface it is applied, forming a seamless, durable, waterproof, and anti-root film.

Usage Areas

- Against rainfall and roots in terrace gardens, roofs, and balconies,
- For waterproofing underground garages and other structures which are covered with soil,
- Against ground humidity and leakage in foundations, foundation piles, retaining walls and curtain walls,
- For waterproofing galleries, and drainage and water channels.

Advantages

- By inhibiting growth of plant roots, it protects the insulation system and the building from any damage which may be caused by root formation.
- It can be easily applied by anyone.
- It provides a seamless insulation coat.
- It is very elastic. (1000%)
- It is ready to use.
- As a cold application, it does not require heating, or thinning.
- It dries fast.

- To ensure perfect durability against higher pressure, it can be reinforced by glass fabric, geotextile felt, or fiber mesh.

Application

- It is applied only onto the side exposed to water.
- As a ready-to-use material it does not require heating, or thinning.
- It can be applied with a brush, roller, rake or airless pump.
- To ensure strong adherence, avoid dust, and improve durability, non-metallic surfaces must be undercoated with Emilkote®, and metallic surfaces must be undercoated with Emülzer® CSP.
- Although Emülzer® Plus Anti-Root dries fast-in as little as 2 hours- it is recommended to wait 24 hours before applying a second coat.
- To ensure perfect durability against higher pressure, it must be reinforced with materials such as fiber glass, geotextile felt, fiber mesh, etc.

Consumption

600 g/m² for each coat, and min. 3 coats.

Packaging

17 kg Metallic pail - 33 Pieces / Pallet



**Description**

Emülzer® CSP is a ready-to-use waterproofing bituminous solution with a rubber additive. It does not contain any filling material. By the evaporation of the solvent it contains, it adheres firmly to the surface it is applied, forming a waterproof layer.

Usage Areas

- It is used in grounds, piles, and retaining and pitch walls against ground moisture and water leakage.
- It is used in the terrace roofs made of reinforced concrete, in balconies, and in secret gutters against rainwater.
- It is used for the insulation of galleries, drainage and sewage channels, and collectors.
- It is used for the insulation of pools, and service water storage tanks with open top.
- To protect metallic surfaces (casting, sheet iron, etc.) against corrosion, it can be applied by dipping, brushing, or spraying.
- It is used as an undercoat in all kinds of bituminous membrane applications on metallic surfaces.

Advantages

- It is ready to use.
- As a cold applied material, it does not require heating, or thinning.
- It dries very fast.
- It provides a seamless insulation layer.
- It has high sulfate resistance.

Application

- Emülzer® CSP is applied only onto the side exposed to water (positive insulation). As a prepared material, it does not require heating, or thinning.
- It can be applied with a brush, roller, or pistol.
- To avoid dust and improve durability, non-metallic surfaces can be undercoated with Emillkote®.
- Although Emülzer® CSP dries fast-in as little as 1 hour-it is recommended to wait 24 hours before applying a second coat.
- To provide durability against higher pressure, it must be reinforced with materials such as glass fibre, felt, reinforcing fabric, etc.
- When it is used on the roofs which are continuously exposed to outdoor conditions (except walking), it is recommended to apply Alütec® over Emülzer® CSP to provide improved aesthetics as well as protection against sunlight.

Consumption

500 kg/m² for each coat

Packaging

4,5 kg Metallic case - 140 Pieces / Pallet
17 kg Metallic case - 45 Pieces / Pallet
200 kg Sheet iron barrel





Definition

It is a ready to use primer for bituminous membranes obtained by mixing water and bitumen by using special methods.

Usage Areas

It is only used as a priming coat before the application of all brands of bitumen membranes. Thanks to the superior sticking property, it provides a stronger and spaceless surface sticking for the bitumen membranes applied on it. It can be used on all horizontal and vertical surfaces and in closed areas like basement, cellar, etc.

Advantages

- It is very economical.
- Can be easily applied by anyone.
- It can be used in closed areas for not containing toxic and flammable substances
- Because it is water based, it is environmentally friendly.
- Because it is thinned with water, it adheres perfectly to all kind of surfaces, even when the surface is moist.
- Ready to use.
- Must be applied cold. Does not require heating or thinning.

Surface Preparation

- The application surface should be without dust, rust, dirt, grease and oil and the loose parts should be scrapped out.
- The sharp points or horizontal-vertical joint places subject to cracking should be rounded.
- The large pores and the cracks should be filled with an appropriate repair mortar.

Application

It should be applied as cold. After mixing with the water with 20%, it is applied by grass brush, roller or airless gun. It dries within about 4-5 hours depending on the weather conditions. It should not apply in rainy days or with the temperatures lower than +5°C.

Consumption

0,250 kg/m²

Packaging

16 kg Metal Can - 45 Pieces / Pallet







Sealants and Joint Fillers

Bituminous Fillet (Bitumen Based, Triangle Shaped Filleting Tape)

Bitumen Mastic SA / Shingle Mastic KZ (Bitumen Based Waterproofing and Adhesion Mastics)

Emulseal PU Mastic (Pu Based, Single Component, Elastometric Mastic)

BibaFlex (Elastic Bituminous Waterstop)

Em-Poxy 420 Epoxy Repair and Anchorage Paste
(A Triple Component Anchorage Fixing and Filling Mortar)

Em-Poxy 310 Epoxy Fixing and Adhesive Mortar
(A Two Component Epoxy Based Fixing Paste)

DDM 2K B (Two component, Polyurethane Based
Liquid Joint Filler for Wide Joints)

DDM 2K (Dilatation Filling Paste)

HDM PU 2K (Coal-Tar Modified, Two Component
Polyurethane Sealant with Jet Fuel Resistance)

HDM PU 2K THIX (Thixotropic Joint Filler For Vertical Applications)

Soderz-5 (Cold Applied Joint Filler)

Swell-Flex Acrylic (Swelling Waterstop)

Swell-Flex (Swelling Waterstop)

Pur-Wet Hybrid Mastic (One Component Hybrid Mastic)

Thioseal (Polysulfide Based, Pourable Grade Joint Sealant)

Thioseal Thix (Polysulfide Based, Thixotropic Joint Sealant)

Emülderz Ray (Bituminous Joint Filler)

Emülderz® (Joint Filler)

Cable Insulation Putty





Description

It is a bitumen-rubber based, triangle shaped elastomeric filleting tape used for preparing internal edges at vertical and horizontal seams for insulation applications.

Usage Areas

- It is used at the internal edges of hot-applied or self-adhesive bituminous membranes.
- It is used at the edge intersections of building components with different expansion characteristics.
- It is used with water or solvent based bituminous liquid membranes.

Advantages

- Easy and fast application.
- Very elastic. Maintains its elasticity between -20°C and +95°C.
- It perfectly adjusts to different construction materials.
- Can be applied under all weather conditions.

Surface Preparation

- The surface to be treated must be dry and clean.
- For perfect adherence, the surface must be primed with a coat of Emilkote® or Emülzer® C prior to application.

Application

- After having cut the tape into desired length, protective polyethylene foil is melted by welding torch or burner.
- The tape is firmly pressed and applied onto the edge.
- You can start the insulation application immediately after.

Consumption

It depends on footage.

Dimension

25 x 25 x 35 mm

40 x 40 x 57 mm

Packaging

25 x 25 x 35 mm

- 1.20 meters x 44 Bars = 52,80 m/box
- 27 Boxes (1425,6 m) / Pallet

40 x 40 x 57 mm

- 1.20 meters x 21 Bars = 25,2 meters
- 27 Boxes (680,4 m) / Pallet



Bitum Mastic SA 2043 / Shingle Mastic KZ 2040

Bitumen Based Waterproofing and Adhesion Mastics



Description

Bitumen-based, elastic waterproofing and adhesion mastics used for different purposes.

Usage Areas

- Used at intersection joint gaps and chimney bottoms for waterproofing, filling and repair.
- Used for waterproofing roof windows as well as ventilation, antenna and pipe outlets.
- Used for adhering, installing, and repairing bituminous membranes.
- Used for adhering and repairing bituminous shingles.

Advantages

- Can be used on bituminous membranes, shingles, asphalt-based materials, concrete, bricks, wood and metals.
- As a cold applied material, it is ready to use.
- It is a highly economical adhesive.
- It does not creep in hot weather and it maintains its elasticity in cold weather.
- Shingle Mastic KZ is an economical adhesive used on dry grounds.

- Bitum Mastic SA can be applied even under rainy weather conditions thanks to its special formula, and it adheres perfectly to wet, and even underwater surfaces.

Application

- Please cut out the tip of the cartridge to the size of the joint.
- Squeeze the material into the joint spacing and in not more than 10-15 minutes, smooth out the surface by using a moist spatula.
- In any adhesion process it is best to apply the product onto one of the surfaces and then to wait for 10-15 minutes before adhering the two.

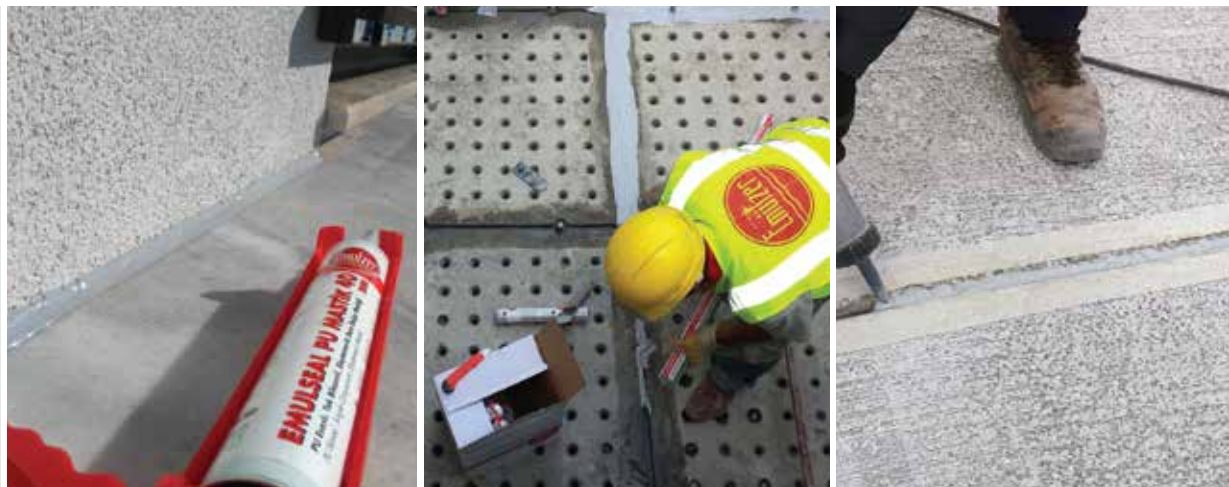
Consumption

Depends on the dimensions of the profile.

Packaging

290 ml Cartridge
25 Cartridges / Box
1200 Cartridge / Pallet





Description

Emulseal PU Mastic is a single component, humidity cured, polyurethane based elastic grouting mastic with high mechanic resistance. It is suitable for use in outdoor and indoor applications.

Usage Areas

- In vertical and horizontal indoor and outdoor expansion joints of buildings
- In flooring movement and hinge joints
- In Parapet corner joints of roofs and terraces
- In joint details of prefabricated elements
- In joints that can be maneuvered up to 25%
- In roof conduits and parapet joints
- On edges of windows and doors

Technical Specifications

Contents of the material	Single component, humidity cured polyurethane
Color	White, grey and special color
Density (mixture)	1,15 g/m ³
Elasticity	>500%
Shore A Rigidity	35-40 Shore A
Working Temperature	+5°C / +30°C
Max. Joint Interval	4 cm
Curing Speed	~1 mm / 24 hours (+23°C / 50% r.h.)
Service Temperature	-40°C / +70°C
Drying Time	60 minutes to the touch
Full dryness	24 hours

Advantages

- It is elastic and preserves its elasticity between -40°C to +70°C.
- It has single component composition. It is applied easily and quickly.
- It can be painted after it's curing period.
- It is ready for use and applied cold.
- It is cured by means of the humidity in the air.
- It has high elasticity.
- Achieves excellent adherence with concrete, metal, wood and other construction materials.
- It can be applied on many surfaces without a primer. Its adherence to the application surface is very high.
- It is cured without formation of bubbles.
- It has chemical resistance.
- It is suitable to contact with potable water.

(ODTÜ Report No.: 2014.03.04.451 / Report Date: 16.07.2014)

Surface Preparation

The joints must be free of oil, dust, dirt and previously used materials. Emulseal PU Mastic is affected from water therefore the joints must be dry and contact with water must be avoided until the product is fully dry.

Application

- It can be applied without using a primer. By means of polyethylene cords the adhesion of Emulseal PU Mastic on the joint bottoms is prevented. This provides two directional movement capability.
- The diameter of the polyethylene cord must be 20 to 25% wider than the width of the joint.
- The width and depth of the joint must not be less than 5 mm. Up to 15 mm the width of the joint must be equal to its depth. For wider joints, the depth must be arranged to be between 20-25 mm.
- In manual applications, the material is placed in an application gun and injected into the joint without causing the formation of any air bubbles.
- The joints on the edges of the windows must at least be 10 mm wide.

Cleaning of Tools

The tools can be cleaned with cellulosic thinner immediately after application. Dried product can only be removed mechanically.

Consumption

1,150 kg/dm³

Packaging

- 600 ml Sausage - 24 Sausages / Box
- 45 Boxes (1080 Sausages) / Pallet





Description

It is a continuously elastic bitumen-based waterstop specially formulated for cold joints. As an easy-to-apply alternative to usual waterproofing tapes, it does not require additional materials. BibaFlex is not an expanding tape.

Usage Areas

It is used in dams, ponds, irrigation ditches, water tanks, water purification facilities, swimming pools, docks, water supply tunnels, hydroelectric and thermoelectric power plants, bridges, refineries, subway constructions, retaining walls, and industrial buildings. Besides typical usage areas, it can be used as a waterstop sealant in mounting prefabricated concrete plates. It is not resistant to petrol and petroleum products

Advantages

- It does not expand upon contact with water.
- Because its waterstop characteristics are durable against rain and water it is more convenient than traditional systems.
- It can be applied under all weather conditions, including rain.
- There is no need to utilize special tools at joints.
- Because it not expand it can be used in thin concrete structures as well.
- It can be easily applied even in case of close rebar spacing.
- BibaFlex binds to concrete during hydration.
- It is very light, and because it can be transported and applied very easily and quickly it is very economical.
- It is not active against acids and lye.

- No visible damage observed in 30 day tests with %5 potassium hydroxide solution, hydrochloric acid, and saturated hydrogen sulphide solution.

Application on Fresh Concrete

The simplest method is to place Bibaflex directly over concrete. In this method BibaFlex binds to concrete during setting. The protective foil should be on top and it should not be pressed and sunk into concrete. At the connection points, 2-3 cm of both tape ends are brought together, pressed and adhered airtight. Protective foil is separated just before second concreting.

Application on Cured Concrete

The surface to be treated must be dry and clean, and free from dust, dirt, rust, grease, and loose particles. BibaFlex is fixed by pressing firmly into the concrete. No other equipment is required to fix it. Tapes are placed by bringing them together side by side and overlapping 2-3 cm and then pressed and adhered airtight. Prior to concrete placement it should be checked whether BibaFlex is properly adhered. BibaFlex can be removed from the surface about 30 minutes after concreting only by pulling strongly. Otherwise, the adhesion process have to be repeated. Separator foil must be removed prior to the placement of the new concrete.

Packaging

6 rolls (35 mm x 20 mm) x 4 meters = 24 meters / package
24 Boxes (576 m) / Pallet





Description

A triple component anchorage, fixing and filling mortar, containing epoxy resin, hardener, and filler. First type is for horizontal applications with fluid form and other one is for vertical applications with thixotropic properties.

Usage Areas

- To fix iron stones and bolts into concrete and rocks.
- To fill quilting seam holes.
- To repair columns, shear walls, and joists.
- To fill and fillet mortar in joint insulation.
- Thanks to its high resistance and superior adherence characteristics, it offers excellent results in patching and repairing landing fields and field concrete.

Advantages

- Extremely resistant to corrosion and chemicals.
- Resistant to vibration.
- Does not contract.
- Waterproof and gasproof.
- Allows rapid loading thanks to rapid curing.
- Has high resistance and adherence.
- Very easy to apply.
- Used in overhead and horizontal applications.

Application

- The concrete must be highly durable and resistant. The dimensions of the holes must be 15 times bigger than anchorage irons.
- Holes must be cleaned up by air pressure, and they must be free from grease, dust, dirt, plastic particles and water.
- Anchorage irons must be ribbed, dry, and free from grease and rust. Product components are dosed according to the amount required.
- The hardener is poured into epoxy, and to avoid air bubbles, it is mixed by using a low speed mixer (400 rpm) until it reaches a homogenous gray color.
- The mixture is poured into cartridge and pressed into holes. Pot life must be considered in order to prepare just the required amount of mixture. Because it does not contain any solvent, it cannot be diluted with thinner.
- During application the temperature must be +5°C minimum.

Consumption

1,8 kg/dm³.

For example, to ore Ø16 mm iron (into Ø20 mm hole), approximately 50 g of Em-Poxy 420 is required.

Packaging

1,550 kg Resin (Component A)
0,350 kg Hardener (Component B)
3,100 kg Filler (Component C)
= 5 kg Set - 60 Sets/Pallet



Em-Poxy 420
Epoxy Anchorage Paste
Application Film



Em-Poxy 310 Epoxy Fixing and Adhesive Mortar 2072

A Two Component Epoxy Based Fixing Paste



Description

It is a double-component, epoxy resin-based, non-solvent, thixotropic repair and mounting mortar.

Usage Areas

- It is used; for mounting expansion tapes,
- For filling tie rod holes,
- For repairing columns, curtains and girders,
- As a mounting, filling and bevelling mortar for waterproofing joints,
- For repairing and waterproofing concrete cracks,
- For repairing all types of structural concrete,
- For mounting and adhering all types of metal elements onto concrete or steel elements.

Technical Properties

Colour	: Grey
Density	: 1,6 kg/dm ³
Pressure strength	: 75 MPa
Adhesion to concrete	: >4 MPa (Breaking from concrete)
Pot life	: 30 minutes (+30°C)
Initial setting	: 8 hours (+30°C)
Loading	: 24 hours (+30°C)
Actual strength	: 7 days

Advantages

- Highly resistant to corrosion, abrasion and chemicals.
- Resistant to vibration.

- Does not shrink.
- Waterproof and gas-proof.
- Due to fast curing, allows loading in a very short period of time.
- Has high adherence.
- Non-solvent.
- Easy-to-mix and easy-to-apply.
- Has perfect adhesion to concrete, steel and many other building materials.
- Thixotropic; does not creep in horizontal and overhead applications.

Surface Preparation

The concrete should be firm and strong. Holes must be cleared with pressured air, leaving behind no grease, dust, plastic particles or water. Cement based surfaces must be cleared from all dirt and dust prior to application. Metal surfaces must also be cleared from rust and dirt. The material must be mixed to a homogenous consistency with a low speed mixer for at least 2-3 minutes; it should not at all be mixed manually or with a trowel. It must be applied with a trowel or spatula. During application surface, ambient and material temperatures must be between +5°C and +30°C.

Application

- The dosage of the components are designed according to application requirements.
- The hardener is poured into the epoxy and mixed to a homogenous consistency and gray colour; to prevent air bubbles a low speed mixer must be used.
- Pot life must be considered in the preparation of the material and only required amount of it must be mixed. Because it is non-solvent, it cannot be thinned with a thinner.
- During application the air temperature must be +5°C minimum.

Cleaning the Equipment

The equipment used should be cleaned with a detergent and warm water if possible, otherwise with a cellulosic thinner.

Consumption

1,6 kg/dm³

Approximately 2 kg for 1 meter of expansion tape.

Packaging

Epoxy resin + Hardener = Net 5 kg as a set
60 Sets / Pallet



Em-Poxy 310
Application Film

Two component, Polyurethane Based Liquid Joint Filler for Wide Joints

**Description**

It is a two component, polyurethane based, high performance joint filler material which is developed for wide horizontal joints.

Usage Areas

- Wide dilatation joints (Joints with a width of at least 2 cm)
- Joints of water tank
- Joints of irrigation canals
- Joints of airport runways

Advantages

- It is cold applicable.
- Resistant to abrasion.
- It is self leveling, easy and fast applicable
- Its adherence to the application surface is very high. It is resistant to aging.
- It has great resistance to different climate and heat conditions.
- In addition to its effective waterproofing properties, it also exhibits very good resistance to chemical and other destructive factors.
- Excellent performance against abrasion.
- It has excellent resistance against microorganisms, fungus and various chemicals.
- Resistant to cold.
- It is resistant to sweet and salt water.
- It has effective mechanical properties.
- It's elastic.

Surface Preparation

Joint surfaces must be clean and dry. Joint edges should be cleaned by wire brush, spiral motor or sandblasting. If it is possible, joint should be cleaned with compressed air. If Emülzer DDM 2K B is applied on wet or damp surfaces it will make foaming. Surface humidity should be measured by suitable humidity meter. If the joint substructure is exposed, backer rod should be used and should be placed at a depth of about half of the joint width.

Application

PU ASTAR should be used according to the surface condition and the climatic conditions in the application process. After pouring Component B into the Component A, it is mixed with low-rotation drill after until providing homogeny mixture and the mixture is poured into the joint. A spatula or a suitable crotch gun may also be used. The mixture should be used approximately in 30 minutes; otherwise it turns to be gelatin and can not be improved again. The application surface should be kept away the water minimum 6-8 hours.

Consumption

WIDTH DEPTH	2 cm	4 cm	8 cm
1 cm	0,280 kg/m ²	0,560 kg/m ²	1,12 kg/m ²
2 cm	0,560 kg/m ²	1,12 kg/m ²	2,24 kg/m ²

Packaging

- 4 kg + 1 kg (Component A + Component B)
60 Sets / Pallet



DDM 2K B
Application Film



Description

It is a double-component, polyurethane-bitumen based, cold-applied, self-levelling dilatation and joint filler with high mechanical and chemical strength.

Usage Areas

- It is used for waterproofing and filling horizontal dynamic dilatations and joints.

Advantages

- It is elastic. It maintains its elasticity between -20°C and +120°C.
- It is a cold-applied material.
- It is resistant to abrasion.
- As a self-levelling material, it is applied easily and quickly.
- It has very high adherence to the surface if is applied.
- It is very durable.

Application

- The surface to be treated must be clean and dry.
- The joints must be cleaned with a wire brush, spiral engine or sandblasting.
- If possible joint spacing must be treated with compressed air.
- PU ASTAR should be used as a primer to achieve better adhesion.
- DDM 2K applied onto damp surfaces results in foaming.
- It is used only on horizontal joints.
- All the hardener contained in the small pail is mixed with all the main material contained in the big pail by using a low speed mixer until it becomes homogenous.
- The mixture has to be consumed within 30 minutes.
- Otherwise gelling occurs and it cannot be recovered.
- After the application the surface must be protected from water exposure for at least 6-8 hours.

Consumption

1,3 kg/dm³.

Example: For joints with 20 meters lenght 5 cm width and 3 cm depth $20 \text{ m} \times 0,05 \text{ m} \times 0,03 \text{ m} \times 1,3 \text{ kg/dm}^3 \times 1000 = 39 \text{ kg}$ of product used.

Packaging

4 kg + 1 kg = 5 kg Set
60 Sets / Pallet





Description

Emülzer® HDM PU 2K is a two component, cold applied, chemically curing, self leveling type, polyurethane based, coal tar modified, elastomeric mastic. It has resistance to jet fuels, oils, diluted acids/bases and various chemicals.

Usage Areas

Emülzer® HDM PU 2K has been specifically developed for sealing joints in concrete pavements where fuel and chemical spillages are likely, i.e. the airfield aprons, runways, taxiways, cargo handling areas, parking areas, petrol stations and service roads.

Advantages

- It remains flexible between -35°C and +85°C
- Impermeable to water
- Easy to mix and apply - pours easily and self-levels
- Excellent resistance against mechanical influences, oils, jet fuels, petrol base solvents, acids, alkalies, organic and inorganic chemicals
- Emülzer® HDM PU 2K is suitable for joints of expressways and roads with heavy traffic conditions in all seasons as well as for joints of airfield runways, taxiways, aprons, bridges, etc.
- With it's the super elastic structure, it completely adapts to the work of the joints.
- Excellent adhesion - Emülzer® HDM PU 2K has excellent adhesion to common surfaces, for example concrete, stone, artificial stone, epoxies, steel, wood, etc.
- Cold applicable.
- Resistance to abrasion.
- Maintains its properties shock temperature up to 120°C.
- Forms smooth surface.
- It has UV resistance.

Preparation Of Joints

The width of expansion joints must be at least 4 times of concrete work value. If this value less than 6 mm, the joint's width should be at least 6 mm.

In case the joint width is up to 5 mm, the joint depth and joint width should be equal. If the joint width is between 15-30 mm, the joint thickness should be 80% of the joint width. For wider joints, the joint sealant depth must be determined according to special conditions. We recommend that joint sealant depth is the half of the joint width. Substrate material should be used to obtain suitable joint thickness. The substrate material's thickness must be more than 10-25% of the joint's width and the material should be replaced by pressing. To paste a tape to the edge of the joint avoids the staining due to sealant and primer overflow.

Surface Preparation

Joint surfaces must be clean and dry. Oil, grease, bitumen or sealant remains must be completely removed. Loose materials on the joint walls must be removed; broken joint walls must be repaired. The joint should be cleaned with compressed air, if it is possible. Emülzer® HDM PU 2K can be applied on new cement joints without primer. If Emülzer® HDM PU 2K is applied on wet surfaces, it may cause foaming. The cement joint to be filled must have 80% of its whole resistance (min. 14 days). In case dust and dirt can not be removed, special Emülzer® PU ASTAR should be used. Emülzer® HDM PU 2K adheres perfectly clean and dry joints. If primer is used, the primer must be waited to dry. Emülzer® HDM PU 2K is affected from water before curing like all other polyurethane materials. Therefore the joints must be dry and the sealant must not contact water until chemical curing occurs.

Application

Mixing: Each set includes proper amount of component A and B. Entire quantity of component B is added to component A and mixed. Component B is a viscous liquid so it flows hardly in cool weather. The mixture is prepared by stirring for 3-5 min. and using a low speed electric stirrer (200-400 rpm). The stirrer is adducted to sides of the can to achieve a homogenous mixture. The stirrer must be at a sufficient depth in the packaging to prevent air admission. In case the stirrer is brought very closer to the surface, air bubbles may occur and waterproofing properties of Emülzer® HDM PU 2K may be reduced. The pot life is between 30-45 min. at 20°C temperature. However, it is recommended to work with applicable amount in 1/2 hour. The mixture must be used in 30 minutes, otherwise irreversible gelation will begin. Reduction of viscosity and elongation show the end of the pot life. The material that is in this situation should not be used.

Filling The Joints: The joint must be filled from the bottom to the top with a suitable tool, also the material should be completely in contact with side surfaces. The joints which are filled should be checked in 10-20 min. Excess of the material must be scraped with a spatula and the empty places must be filled immediately. If the slope of the joint is greater than 2%, the horizontal barrier bars should be placed at regular intervals. When the material that is applied between the bars is tolerably cure, the bars are taken off and the resulting gaps are filled. Emülzer® HDM PU 2K has resistance to traffic after it has been cured (approximately 48 hours later), also it has resistance to chemicals 7 days later (at 20°C). The area which is applied with Emülzer® HDM PU 2K must be prevented from water for 6-8 hours.

Consumption

1,250 kg/dm³

Packaging

A + B = 5 kg Set - 60 Sets / Pallet





Description

It is a bitumen-neoprene based, cold applied sealant used for horizontal and vertical joints.

Usage Areas

- It is used for waterproofing, filling, repairing and adherence in: The joints of walls made up of materials such as concrete, brick, gas concrete, briquette, etc.
- Vertical and horizontal building dilatations up to 5 cm.
- Dilatations of prefabricated building precasts.
- Building cracks.
- The joints of water drain pipes of building terraces.
- It is used for repairing bituminous membrane applications.

Advantages

- It can be easily applied by anyone.
- It is ready to use.
- As a cold applied material it does not require heating or thinning.

Surface Preparation

The surface to be treated must be dry and clean. Do not apply onto wet, icy, greasy or dusty surfaces.

Application

- Soderz-5 is applied only onto the side exposed to water (positive insulation).
- It can be applied with a trowel or spatula.
- Under normal weather conditions, it starts rubberizing after 72 hours.

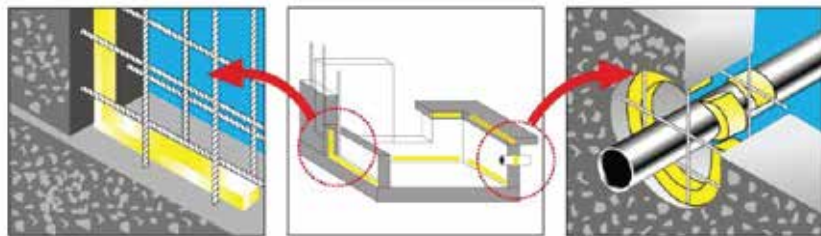
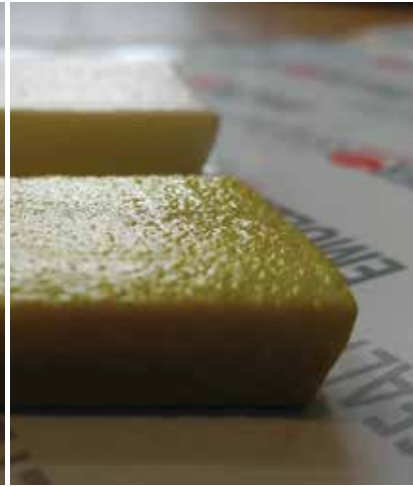
Consumption

0,900 kg/dm³

Packaging

16 kg Metallic pail
33 Pieces / Pallet





Description

Swell-Flex Acrylic is a new generation high performance acrylic polymer based expanding tape. It expands up to 300% when in contact with water.

Usage Areas

Swell-Flex Acrylic is used in concrete construction for sealing of construction joints including wall/base connections, pipe entry systems, sealing of openings and interface sections between existing and new concrete.

Advantages

- Conformable, can be used on a variety of irregular substrates.
- Forms an impermeable barrier against water in concrete.
- Excellent compliance with deformed surfaces and joints.
- Saves time and labour.
- Simple overlap jointing on site.

Application

Roll out required amount of Swell-Flex Acrylic and apply exposed face to concrete, noting that Swell-Flex must be given a minimum of 75 mm of concrete cover on all sides. Firmly press the entire length of it onto concrete. In vertical and overhead applications, press for at least 15 seconds for perfect adherence. Make sure waterstop covers all parts of the surface, especially for surfaces which are not perfect in shape. Use swell-fix primer when necessary. Put together coil ends side by side or end to end; do not overlap. When sufficient Swell-Flex has been positioned remove backing paper and pour concrete carefully and indirectly. When installing Swell-Flex vertically, work from the base up to prevent material deformation/ elongation. It is not suitable for use in joints prone to movement. In totally dry state it will shrink to original dimensions and re-expand in contact with water.

Packaging

5x20 mm	- 20 m Box	- 2700 m
10x20 mm	- 10 m Box	- 1800 m
20x25 mm	- 5 m Box	- 900 m





Description

Swell-Flex is an active sodium bentonite/butyl rubber-based waterstop. It fills all the cracks, pores and capillaries on the concrete by expanding upon contact with water, and waterproofs concrete joints.

Usage Areas

- Swimming pools,
- Foundations,
- Shear concrete,
- Tunnels,
- Manholes,
- Retaining walls,
- Garages,
- Water storage tanks,
- Old and new concrete joints,
- Sewage systems,
- Underground pipe and cable inlets,
- Water purification facilities.

Advantages

- Very easy installation.
- Offers easy application even with great amounts of rebar.
- To connect seams it is sufficient to bring them together side by side and press.
- One person can install up to 130 meters per hour.
- It is suitable to contact with potable water. (Middle East Technical University Report No: 2014.03.04.147/04 - Date: 24.03.2014)

Surface Preparation

The surface to be treated must be dry and clean. Do not apply onto wet, icy, greasy or dusty surfaces.

Application

- Roll out required amount of Swell-Flex.
- Press it onto concrete. For best adherence in vertical and overhead applications, press it firmly for at least 15 seconds.
- Apply primer when necessary.
- Place seams side by side or end to end; do not overlap.
- Make sure waterstop covers all parts of the surface, especially for surfaces which are not perfect in shape.
- Remove silicon paper and pour concrete carefully.

Caution

- The length between Swell-Flex and the outer surface of the concrete must be 5 cm minimum.
- It is not suitable for the joints of precast building elements. Use our unique BibaFlex for this type of applications.
- Swell-Flex should be protected from humidity and rain prior to application.
- Upon contact with excessively salty water Swell-Flex may not expand sufficiently.
- Swell-Flex can be used underwater up to a depth of 12 meters.

Packaging

5x20 mm - 15 m Box	- 2700 m / Pallet
7x20 mm - 15 m Box	- 2700 m / Pallet
10x20 mm - 10 m Box	- 1800 m / Pallet
15x20 mm - 5 m Box	- 900 m / Pallet
20x25 mm - 5 m Box	- 900 m / Pallet





Description

Emülzer PUR-WET Mastic is hybrid polyurethane based, single component, solvent free, ready to use sealing material.

Usage Areas

It is safely applicable on concrete, stone, fibre-cement sheets and metals, in rain gutters, canals and water ducts, terrace roofs, cold storage depots against water and moisture.

Technical Properties

COLOR	: Grey, White, Black
BASE	: Hybrid
SKIN FORMATION TIME	: 45 min. (23°C / %50 relative humidity)
CURING TIME	: 3 hours (for 3 mm thickness)
THERMAL RESISTANCE	: Between (-40°C) - (+85°C)
SHORE A HARDNESS	: 30
SOLID CONTENT	: %100
APPLICATION TEMPERATURE	: Between +5°C and 35°C
DENSITY	: 1,3 g/cm ³
PULL-OUT RESISTANCE	: 1.1 [N/mm ²]
TENSILE STRENGTH	: >1 MPa
ELONGATION AT BREAK	: 450 (%)

Advantages

- It can be applied to wet surfaces.
- It adheres perfectly to all kind of surfaces like concrete, wood, glass, aluminium, steel, zinc etc.
- It has a excellent workability and fast curing characteristic.
- It can be applied between +5°C and +35°C
- Highly adhesive. Does not require primer application. Provides perfect adherence for aged coatings as well.
- Highly resistant to aging, mold and weather conditions.
- Sustains its original properties for years.
- Single component, easy to use, an elastic material.
- It can fill the cracks perfectly.
- Resistant to sunlight because of producing from UV resistant resins.
- It protects its elasticity for permanent time. Cracks on the surfaces does not occur after application.

Surface Preparation

The surface to be treated must be dry, clean and free from all types of grease. Moist and wet surfaces do not cause application problems.

Application

Before the application, the tip of the cartridges is cut and a plastic cap is fixed. The tip of the cap is cut according to the width of the surface and fixed to the cartridge gun. The joints should be filled at one time and without gaps during the application.

Cleaning The Equipment

The equipment can be cleaned by industrial type solvents immediately after application.

Consumption

See page 179.

Packaging

Net 280 ml Cartridge
1200 Cartridges / Pallet



**Description**

Emülzer Thioseal is polysulfide-based, two component, pourable grade, elastic, cold applied sealant for horizontal joints.

Emülzer Thioseal Thix is polysulfide-based, two-component, thixotropic, cold applied elastic sealant for vertical joints.

Usage Areas

Airports, aprons and hangars, garage floors, fuel facilities, factory floors, terraces, in general flooring joints, expansion joints, aqueous acid and caustic tanks, prefabricated structure joints.

Advantages

- Cold applicable, heating is not required.
- Resistant to fuel oil and hydraulic fluid.
- Thioseal is used for horizontal joints and Thioseal Thix is used for vertical joints.
- Tough rubbery seal that is not affected by climatic variations.
- Resistant to dilute acids, dilute alkalis, petroleum, aviation fuel, diesel fuel, kerosene and white spirit.

Surface Preparation

Joint surfaces must be clean and dry. Oil, grease, bitumen or sealant remains must be completely removed. Loose materials on the joint walls must be removed; broken joint walls must be repaired. The joint should be cleaned with compressed air, if it is possible. After surface cleaning, Emülzer POLYSULFIDE PRIMER or PU PRIMER should be used as primer.

Application

Each set includes proper amount of component A and B. Firstly Component B must be stirred in its own package. Then entire quantity of component B is added to component A. The mixture is prepared by stirring Component A and B for 5 min. with a low speed electric stirrer (200-400 rpm). The mixture should be applied immediately.

Consumption

Thioseal : 1,45 kg/dm³

Thioseal Thix : 1,60 kg/dm³

Packaging

Thioseal : Net 4 kg Set

Thioseal Thix : Net 3,5 kg Set





Description

It is an elastomeric, bitumen-based, hot-applied filling paste especially used for filling joint gaps in rails.

Usage Areas

- At level crossings, it prevents water and other substances from entering into the joint gaps in rails.
- It is used for reducing vibration caused by the traffic over the rails.

Advantages

- It considerably increases the durability of the rail bearing.
- It decreases the vibration of the rails as well as its negative impact on the buildings all around.
- It is very elastic. It maintains its elasticity between -20°C and +90°C.
- It is offered in a very practical cardboard packaging.

Application

- The surface to be treated must be clean and dry.
- The joints must be cleaned with a wire brush, spiral engine or sandblasting.
- If possible joint spacing must be treated with compressed air.
- To provide excellent adherence, and improve durability, non-metallic surfaces can be undercoated with Emilkote®, and metallic surfaces can be undercoated with Emülzer® C.

- If you use a boiler you should first fill the half of it, heat it up to approximately 160°C, and allow Emülderz Ray to melt, and then you can add the remaining amount.
- If you decrease the temperature, the product reaches an excessive consistency, loses its flowability and cannot fill the joint gaps properly.
- If the product is overheated, that is up to temperatures over 180°C or if it is heated up and cooled back for a few times it will be segregated and spoiled, and cannot be recovered.
- During heating up process the product is stirred occasionally and after having reached the appropriate consistency, it is poured into joint gaps.
- The surface treated will be ready to use after approximately 1 hour.

Consumption

1,300 kg/dm³

Packaging

20 kg easy-to-separate Cardboard box
48 Boxes / Pallet



Emülderz Ray
Application Film



Description

It is an elastomeric, hot-applied, bitumen-rubber based joint filler used at horizontal and vertical joints.

Usage Areas

- It is used for waterproofing, filling, repair and adherence in:
- Dilatations, joints,
- Intersections of cement coatings with wide surfaces,
- Dams, channels and ducts,
- And other locations where any dilatation may occur.
- It is used for installing reflective road buttons onto asphalt.

Advantages

- It is very elastic. It maintains its elasticity between -20°C and +80°C.
- It is heated up either in a special double walled boiler or directly on a furnace.
- It is suitable to contact with potable water. (Hacettepe University Report No.: 2003-381)

Surface Preparation

- The surface to be treated must be clean and dry.
- The joints must be cleaned with a wire brush, spiral engine or sandblasting.
- If possible joint spacing must be treated with compressed air.

Technical Properties Essential Characteristics

Reaction to fire (EN 11925-2:2010)	E
Softening point (EN 1427)	88°C
Density (EN 13880-1)	1,16 kg/dm ³
Cone penetration (25°C) (ASTM D 5329)	33 dmm
Penetration and recovery (resilience) (EN 13880-3)	% 36,5
Change in Penetration Value (EN 13880-4)	16 dmm
Flow resistance (EN 13880-5)	1,75 mm
Compatibility with asphalt pavements (EN 13880-9)	Compatible
Fraas Brittle Point	- 25°C
Application Temperature	160-180°C

Application

- To provide excellent adherence, and improve durability, non-metallic surfaces can be undercoated with Emilkote®, and metallic surfaces can be undercoated with Emülderz® C.
- Emülderz® is heated up to approximately 160-180°C, mixed thoroughly and poured into joint gaps.
- The surface treated will be ready to use after approximately 1 hour.
- If the product is overheated, that is up to temperatures over 160-180°C or if it is heated up and cooled back for a few times it will be spoiled and cannot be recovered.

Consumption

1,17 kg/dm³

Example: For joints with 1 meters lenght 5 cm width and 3 cm depth 1 m x 0,05 m x 0,03 m x 1,17 kg/dm³ x 1000 = 1,755 kg of product used.

Packaging

17 kg Metallic case - 45 Pieces / Pallet
Bulk in easy-to-separate cardboard box



Emülderz
Application Film



Description

It is a bitumen-based, hot-applied insulation putty used for waterproofing underground junction boxes and electrical cables.

Usage Areas

- It is used as a hot-applied waterproofing material at connection points of electrical cables and junction boxes.
- It is used as a supplementary material in battery production.

Advantages

- It is the most economical material for this application.
- It has resistance to acids.

Application

- The surface to be treated must be dry and clean, and free from dust, dirt, rust, and grease.
- The cable pitch is warmed up to approximately 180°C and poured onto the surfaces to be applied.

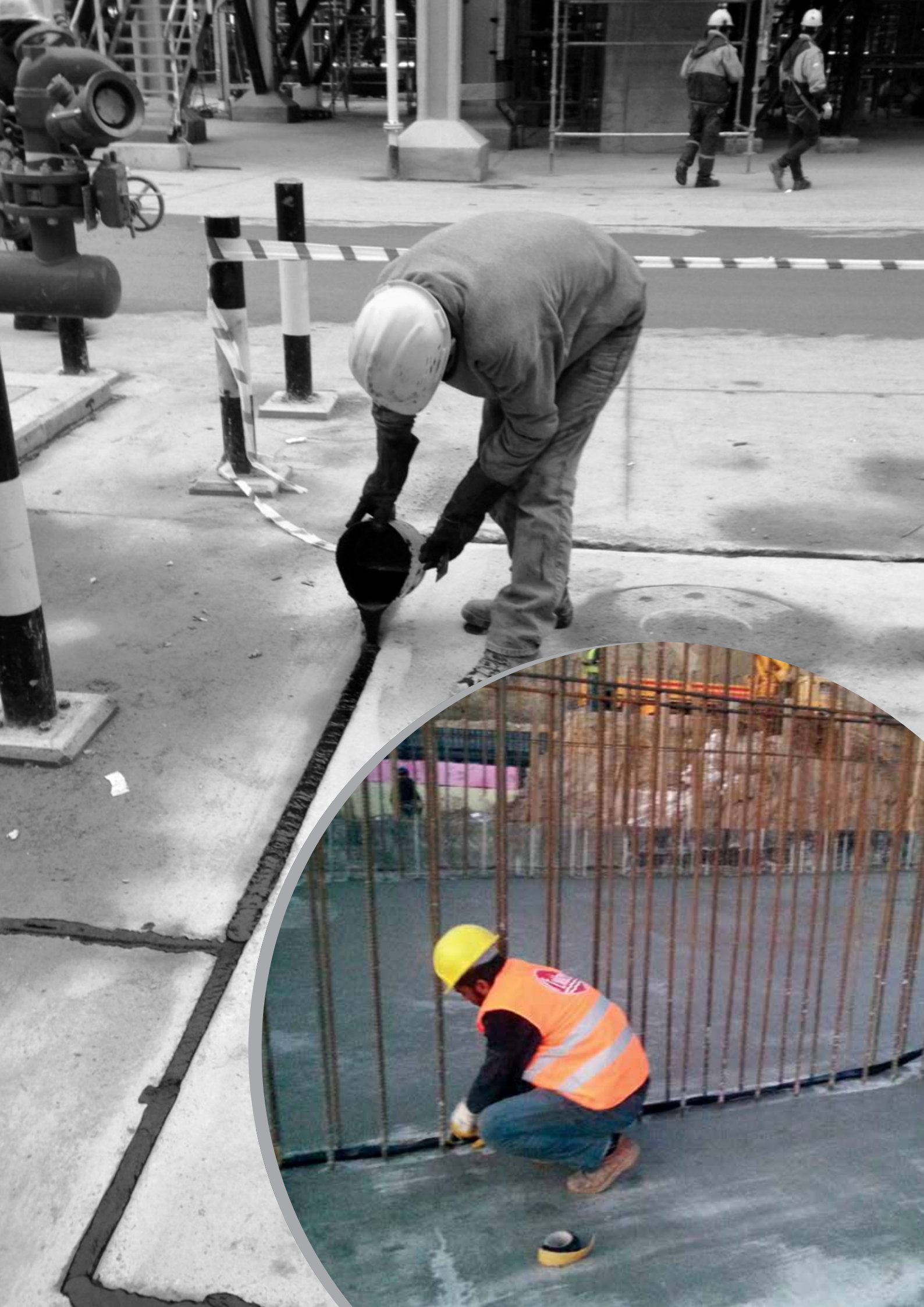
Consumption

1 kg/dm³

Packaging

17 kg Metallic Case
45 Pieces / Pallet









Bitumen and Tar Products

Asphalt - 75/100 Penetration Bitumen

40/50 Blown Asphalt

10/20 Blown Asphalt

Coal Tar

Epoxy Coal Tar 85/15

(Solvent-Free, Epoxy - Coal Tar Based Coating)

Epoxy Coal Tar 100/10

(Epoxy - Coal Tar Based Coating with Solvent)





Description

Bituminous materials obtained as a result of distillation in petroleum refineries.

Usage Areas

- It is used as a hot-applied waterproofing material.
- It is used for adhering wooden parquets.
- It is used as a skidder in the machines operating at very high temperatures.
- It is used as a supplementary material in battery and rubber production.
- It is used for highway surfacing.

Advantages

- It is easily available.
- It is a most economical adhesive.

Surface Preparation

- The surface to be treated must be clean and dry.
- The loose particles, dust, excess water and ice, if any must be cleaned.
- To provide excellent adherence, and improve durability, surfaces can be primed with Emilkote®, or Emülzer® CSP.
- Cracks and pores must be filled with Emülderz Joint Filler.

Application

For insulation:

- It is heated up to approximately 180°C and applied to the surface with a brush.

For parquetry:

- The parquets are dipped into melted asphalt, and adhered to the surface one by one.
- It is heated up to approximately 180°C and applied to a small area with a brush or trowel, and then the parquets are adhered before it gets cold.

Consumption

1-1,5 kg/m³ for each coat

Packaging

17 kg Metallic case
Bulk in sheet iron barrel
Bulk in truck



Asphalt
Application Film

Technical Properties

ASPHALT TYPE	70/100	40/50	10/20		
TYPE	I	II	III		
PENETRATION AT 25°C, 100 g, 5 SEC	70/100	40/50	10/20	ASTM D 5	EN 1426
SOFTENING POINT (0°C)	43-51°C	60-70	80-100	ASTM D 36	EN 1427
MASS CHANGE (LOSS ON HEATING) (MAX.)	%0,8			ASTM D 6	
FLASH POINT (MIN.)	230	230	232	ASTM D 92	EN 22592
RETAINED PENETRATION	%46 en az			ASTM D 5	EN 1426
(Penetration of residue after RTFOT as compared to penetration before heating)					
DUCTILITY (25°C, 5 CM/MIN.) (MIN.)	10 cm	3 cm	1,3 cm	ASTM D 113	
SOFTENING POINT AFTER HARDENING	45°C			ASTM D 36	EN 1427
SOLUBILITY IN TRICHLOROETHYLENE	99	99	99	ASTM D 2042	EN 12592

Coal Tar



Definition

It is a black colored , thick consistency, water-insoluble product obtained from coal by dry distillation. Does not contain water and solvents.

Usage Areas

In Epoxy Coal Tar paint systems, it is used as a raw material in the production of Coal Tar Enamel.

Application

- It is used as an additive in the Coaltar epoxy paint system. It plays a role in increasing the elasticity and resistance to acids in Coaltar epoxy paints. It is used to protect steel pipe piles against sea water and similar areas.

- Does not dissolve in Petroleum product solvents (gasoline, kerosene, diesel, motor oils, etc.)
- Coaltar Enamel; It is produced in accordance with BS-4164-1980 and AWWA-C.203-78 standards. It absorbs very tiny amount water, does not contain bacteria, has high electrical resistance and is a good binder. With these features, it is a hot-applied material in high-quality steel pipe coatings and similar places..

Packaging

Net 225 kg Barrel



Definition

Epoxy Coal Tar 85/15 is a two component, epoxy-coal tar based, solvent free, low viscosity coating material.

Usage Areas

Epoxy Coal Tar 85/15 has been specifically developed for coating and waterproofing on concrete, metal, wood and likely materials.

Advantages

- It fills the pores on concrete and metal surfaces.
- It is easy to use material. After it is cured, it becomes hard and firm paint.
- Excellent resistance against mechanical influences, oil and chemicals.
- Solvent free. Can be used in closed areas.
- Excellent adhesion to common surfaces like steel, concrete, stone, artificial stone, wood, etc. Adhesion does not deteriorate if product submersed in water, sea water, sewage and oils.

Surface Preparation

Surfaces must be clean and dry. Oil, grease, bitumen or sealant remains must be completely removed. Loose materials on the surface must be removed; broken surface must be repaired. Humidity must be max %5.

Application

Mixing : Mix the content of Part A thoroughly for 1 minute before adding Part B. Mix together until a smooth even consistency is achieved. It is important that the entire quantity of part B is added to part A.

Mixing Time : Mix thoroughly for a minimum of 3 minutes.

Mixing Tools : Use a low speed electric stirrer (300-500 rpm).

Application Method /Tools: Immediately after mixing, the coating material is applied on the prepared surface by roll, brush or spray. Applied surface must be protected from water for 4-5 hours.

Consumption

At each layer 0,300 - 0,450 kg/m²

Packaging

8,5 kg Bitum + 1,5 kg Hardener = 10 kg Set





Definition

Epoxy Coal Tar 100/10 is a two component, tar-epoxy based, low viscosity paint and waterproofing material with solvent.

Usage Areas

Epoxy Coal Tar 100/10 has been specifically developed for coating and waterproofing on concrete, metal, wood and likely materials.

Advantages

- It fills the pores on concrete and metal surfaces.
- It is easy to use material. After it is cured, it becomes hard and firm paint.
- Excellent resistance against mechanical influences, oil and chemicals.
- Excellent adhesion to common surfaces like steel, concrete, stone, artificial stone, wood, etc. Adhesion does not deteriorate if product submersed in water, sea water, sewage and oils.

Surface Preparation

Surfaces must be clean and dry. Oil, grease, bitumen or sealant remains must be completely removed. Loose materials on the surface must be removed; broken surface must be repaired. Humidity must be max %5.

Application

Mixing : Mix the content of Part A thoroughly for 1 minute before adding Part B. Mix together until a smooth even consistency is achieved. It is important that the entire quantity of part B is added to part A.

Mixing Time : Mix thoroughly for a minimum of 3 minutes.

Mixing Tools : Use a low speed electric stirrer (300-500 rpm).

Application Method /Tools: Immediately after mixing, the coating material is applied on the prepared surface by roll, brush or spray. Applied surface must be protected from water for 4-5 hours.

Consumption

At each layer 0,300 - 0,450 kg/m²

Packaging

10 kg Bitum + 1 kg Hardener = 11 kg Set











Road Repair and Maintenance Products

Road Repair Asphalt

(Cold Applied Asphalt for Road Repair)

Road Crack Filler

(Hot-Applied Joint Filler For Repair And Maintance)

BibaFlex

(Elastic Bituminous Waterstop)





Description

It is ready-made cold asphalt - aggregate mixture, which is used to repair the damaged sections of asphalt coatings.

Usage Areas

On highways, and surface treated roads, at airports, sports complexes, car parks, in short in any kind of repair work where hot asphalt was previously used.

Technical Specifications

Base	Asphalt / Aggregate
Color	Black
Briquette Volume Specific Weight	2,26 kg/dm ³
Viscosity (25°C)	2,8 mm
Stability (25°C)	1075 kg

Advantages

- It is applied cold.
- Ensures the handling of small repairs conveniently even when the asphalt plant is not operational.
- Possible to make repairs regardless of the prevailing weather conditions.
- Easy to apply.
- Does not require an adhesive use.
- Not harmful on the environment as it does not include solvents.

Surface Preparation

The edges of the application area must be vertically raised to the extent possible. The loose particles, dust, excess water and ice, if any must be cleaned.

Application

- Poured and compacted onto the area requiring repair.
- The application depth must at least be 5 cm.
- Leave the surface a little raised by taking into account the compaction allowance. Compact the material by using a roller, compactor or hand hammer. After the compaction process is completed the road can be opened to traffic.
- In filling the concrete holes, Emilkote® must be used as a primer.

Consumption

Maximum 2,26 kg/dm³ (compacted density)

Packaging

Net 25 Kg Plastic Bucket
30 Plastic Buckets / Pallet





Definition

Bituminous material obtained as a result of distillation in petroleum refineries. By adding filler, its compressive strength has been increased and its fluidity has been reduced.

Usage Areas

- It is used as a hot-applied waterproofing material.
- It is used for filling road asphalt abrasion layer cracks, asphalt / asphalt and asphalt / concrete joints.
- It is used as a skidder in the machines operating at very high temperatures.

Advantages

- Easily available.
- The most economical material for these applications.

Surface Preparation

- The surface must be clean and dry, and free from dust, dirt, rust and grease.
- Spikes and horizontal / vertical joints which are suitable for cracking should be rounded by chamfering. To provide excellent adherence, and improve durability, surfaces should be primed with EMİLKOTE® or EMÜLZER® C.
- No primer is required for application on asphalt.

Application

After having heated up to approximately 180°C, bitumen is applied onto the surface to be insulated.

Cleaning The Equipment

After the application the equipment must be cleaned by industrial solvents.

Consumption:

1- 1,50 kg/m² for each layer.

Packaging:

Net 17 kg Metallic Canister or easy pack





Description

It is a continuously elastic bitumen-based waterstop specially formulated for cold joints. As an easy-to-apply alternative to usual waterproofing tapes, it does not require additional materials. BibaFlex is not an expanding tape.

Usage Areas

It is used in dams, ponds, irrigation ditches, water tanks, water purification facilities, swimming pools, docks, water supply tunnels, hydroelectric and thermoelectric power plants, bridges, refineries, subway constructions, retaining walls, and industrial buildings. Besides typical usage areas, it can be used as a waterstop sealant in mounting prefabricated concrete plates. It is not resistant to petrol and petroleum products.

Advantages

- It does not expand upon contact with water.
- Because its waterstop characteristics are durable against rain and water it is more convenient than traditional systems.
- It can be applied under all weather conditions, including rain.
- There is no need to utilize special tools at joints.
- Because it not expand it can be used in thin concrete structures as well.
- It can be easily applied even in case of close rebar spacing.
- BibaFlex binds to concrete during hydration.
- It is very light, and because it can be transported and applied very easily and quickly it is very economical.
- It is not active against acids and lye.

- No visible damage observed in 30 day tests with %5 potassium hydroxide solution, hydrochloric acid, and saturated hydrogen sulphide solution.

Application on Fresh Concrete

The simplest method is to place BibaFlex directly over concrete. In this method BibaFlex binds to concrete during setting. The protective foil should be on top and it should not be pressed and sunk into concrete. At the connection points, 2-3 cm of both tape ends are brought together, pressed and adhered airtight. Protective foil is separated just before second concreting.

Application on Cured Concrete

The surface to be treated must be dry and clean, and free from dust, dirt, rust, grease, and loose particles. BibaFlex is fixed by pressing firmly into the concrete. No other equipment is required to fix it. Tapes are placed by bringing them together side by side and overlapping 2-3 cm and then pressed and adhered airtight. Prior to concrete placement it should be checked whether BibaFlex is properly adhered. BibaFlex can be removed from the surface about 30 minutes after concreting only by pulling strongly. Otherwise, the adhesion process have to be repeated. Separator foil must be removed prior to the placement of the new concrete.

Packaging

6 rolls (35 mm x 20 mm) x 4 meters
= 24 meters / package
24 Boxes (576 m) / Pallet



BibaFlex
Application Film





Concrete Additives and Curing Materials

Permo Stop (Powder Admixture)

Emülzer® F (Waterproof Additive for Plaster and Alum)

Permo Flow CW (Liquid Crystallizing Additive for Concrete)

Permo Flow Süper (Super Plasticizer for Concrete)

Permo Flow Hiper (Hyper Plasticizer for Concrete)

Latex (Admixture for Adherence Improvement)

Permo Acryl (Acrylic Based Concrete Curing Material)

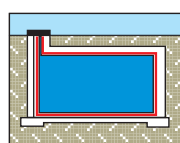
Permo Parafin (Paraffin Based Concrete Curing Material)

Antifrost -10° C (Antifrost Admixture)

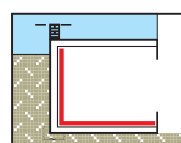
Permo-Chim Crystal Mix Plus

(New Generation Reactive Crystallized Powder Concrete Additive)

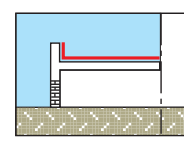




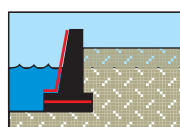
Underground Tanks



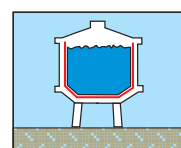
Basements



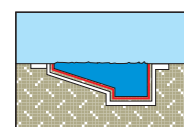
Roofs



Retaining Walls



Drinking Water Tanks



Swimming Pools

Description

It is a high-quality water-repellent powder admixture used for waterproofing and damp-proofing in plaster, alum, and concrete applications.

Usage Areas

It is used as a waterproofing concrete additive in plaster and alum for interior and exterior surfaces; in undercoat alum for the surfaces continuously exposed to water such as bathrooms, kitchens and balconies; in mass concrete in water tanks, swimming pools, basements, cesspit, galleries, foundations, shear walls, ponds, and dams; in prefabricated and precast building elements.

Advantages

- It is non-toxic and non-corrosive.
- It is very easy to apply. You prepare mortar with ordinary methods, but you just use Permo Stop added concrete instead of common concrete.
- The lime does not have any negative impact on Permo Stop.
- It is highly economical. The shipment cost is very low.
- It provides heat economy by protecting concrete from wetting. (5% humidity results in a loss of 30% in thermal insulation value of that material).

- It protects iron rebar found in the building structure from rust and decay caused by moisture. It is also chloride free.
- For ease of use, it is packed in proportion with a bag of cement.
- It does not affect the setting period of ordinary portland cement.

Application

To prepare mortar, fresh cement and Permo Stop must be batched first, and then sand aggregate, and finally water must be added. The result will be only as good as the batching. For mortar, minimum dosing must be 300 kg/m².

Technical Specifications

Shape : Powder
Color : White
Chloride : Not contains
Specific Weight : 0,50 kg/dm³

Consumption

1 bag (50 kg) of cement requires 1 pack (330 g) of Permo Stop.

Packaging

330 g Package - 1200 Bags / Pallet
8 kg Kraft Bag - 50 Bags / Pallet



Permo Stop
Application Film

**Description**

It is a liquid waterproofing admixture for plaster and alum applied onto exterior facades.

Usage Areas

- It is used for waterproof plastering of terraces, roofs, secret gutters, and exterior facades exposed to atmospheric conditions.

Advantages

- It is highly economical.
- Lime can be used in mortar preparation.
- It does not lose its characteristics due to freeze, and can be normally used after thawing.

Application

- Emülzer® F is mixed with water thoroughly (with the amount of water = 17 x the weight of Emülzer® F).
- The dry cement batch is mixed to the consistency required.
- Emülzer® F should not be added to ready mixed mortar.
- To avoid cracks on plaster and alum, damping process is critical during setting.

Technical Specifications

Color	: Light Yellow
Consistency	: Liquid
Density	: 1,01 kg/dm ³ at +25°C
Application Temperature	: +5°C to +35°C

Consumption

0,150 kg of Emülzer® F is required for 1 m² of plaster at 1 cm thickness.
For example; 30 kg of Emülzer® F is used for 100 m² of plaster at 2 cm thickness.

Packaging

5,5 kg Plastic drum - 90 Drums / Pallet
21 kg Plastic drum - 33 Drums / Pallet





Description

Emülzer® Permo Flow CW is a liquid crystallizing waterproofing additive for concrete. Its chemicals react with the moisture and free lime found in the concrete, thus permeating deep into its structure.

Usage Areas

- Concrete applications requiring crystallized capillary waterproof effect such as;
- Floor, foundation and field concrete
- Curtains, girders and columns
- Reinforced concrete elements with thin and thick reinforcement
- All types of engineering buildings, ready-mixed concrete production and/or production at site.

Advantages

- During curing period and whenever exposed to water, it provides a permanent waterproof effect by filling capillary pores.
- As a liquid product it is superior to powder alternatives in that it can be easily mixed without getting pelletized.
- Concrete insulated by Emülzer® Permo Flow CW is resistant to both negative and positive water pressure.
- As a non-toxic product it can be safely used to insulate water tanks.
- It can be very easily used for single side molding applications in concreting areas.

- Added to concrete up to 1/3 of foundation height in raft foundations, it ensures waterproof concrete.

Application

- First of all the product itself should be mixed in its own container prior to application.
- The amount of Permo Flow CW added to concrete should be 2-3% of the weight of concrete.
- It is applied in two ways depending on the usage area.

At Concrete-Mixing Plants:

In the production of ready-mixed concrete, it is added to concrete mixing water found in the mixer. For best results, it is preferably better to feed water simultaneously with the additive. Concrete mixer should run at high speed for 3 minutes.

At Construction Sites:

The additive dosed as required is poured into the concrete found in the mixer. Concrete mixer should run at high speed for 5 minutes.

Concrete prepared with mixing water should not be fed with extra water. Each 10 litres of extra water added leads to a decrease of 10 kgf/cm² in the the pressure strength of concrete.

At high temperatures and in cases where the distance between the concrete-mixing plant and the site takes more than half an hour Permo Flow CW may lead to instant slump losses, so it is recommended to carry out the application at site.

Consumption

- If Water/Cement $\leq 0,45$; 2,0% of the weight of cement found in the mixture.
 - If Water/Cement $\leq 0,50$; 2,5% of the weight of cement found in the mixture.
 - If Water/Cement $\leq 0,55$; 3,0% of the weight of cement found in the mixture.
- (Water/Cement ratio should not be higher than 0,55.)

Packaging

Net: 30 kg Plastic drum
27 Drums / Pallet



Permo Flow CW
Application Film



Description

Permo Flow Süper is a super plasticizer ensuring an effective fluidity in concrete production and retardation in setting in hot climate conditions. It also decreases the ratio of water to acquire a high final strength. Due to this decreased water/cement ratio, the waterproof characteristic of the concrete is improved.

Usage Areas

- Floor, foundation and field concrete
- Curtains, girders and columns
- Reinforced concrete elements with thin and thick reinforcement
- All types of engineering buildings
- Ready-mixed concrete production and/or production at site, in summer, to be able to transport for a longer period of time.

Advantages

Its super plasticizing characteristic;

- Improves fluidity significantly without increasing the ratio of water and with no risk of segregation.
- Decreases segregation in concrete.
- Ensures consistency protection for a long period of time.
- Increases the concrete strength at 7 days and concrete strength at 28 days.
- Improves the appearance of the surface .
- Simplifies the placement of the concrete, decreases vibration, and reduces labour.

By decreasing the ratio of water significantly;

- It also improves final strength greatly.
- It decreases shrinkage and creeping.
- With lower water/cement ratios, provides lower insulation.

Application

At Concrete-Mixing Plants:

In the production of ready-mixed concrete, it is added to concrete mixing water found in the mixer. For best results, it is preferably better to feed water simultaneously with the additive. Concrete mixer should run at high speed for 3 minutes.

At Construction Sites:

The additive dosed as required amount and poured into the concrete found in the mixer. Concrete mixer should run at high speed for 5 minutes. Concrete prepared with mixing water should not be fed with extra water. Each 10 litres of extra water added leads to a decrease of 10 kgf/cm² in the the pressure strength of concrete.

Consumption

The amount of the product to be used should be 0,8% to 1,5% of the weight of the cement. That is 0,800 to 1,500 kg for 100 kg of cement. Optimum dose depends on the quality of the binder and aggregate, the water/binder ratio and the ambient temperature. So it is recommended to determine the optimum dose by trying different mixtures and testing them beforehand.

Packaging

IBC 1200 kg

Permo Flow Süper
Application Film





Description

Permo Flow Hiper is a hyper plasticizer ensuring a very effective fluidity in concrete production and retardation in setting in hot climate conditions. It also decreases the ratio of water significantly to acquire a high final strength. Due to this decreased water/cement ratio, the waterproof characteristic of the concrete is improved.

Usage Areas

- Allows the production of Self-Compacting Concrete (SCC).
- Floor, foundation and field concrete; curtains, girders and columns
- Reinforced concrete elements with thin and thick reinforcement
- All types of engineering buildings
- Ready-mixed concrete production and/or production at site, in summer, to be able to transport for a longer period of time.

Attention:

- The concrete obtained has a very high fluidity, so the mold system should be chosen accordingly.
- The speed of concreting should also be managed very carefully. Otherwise the mold may be destroyed.

Advantages

- Because it decreases the amount of mixing water significantly the concrete obtained is partly waterproof.
- Ensures high unit weight and resistance.
- Provides the concrete with a self-compacting characteristic.

- Protects the consistency of the concrete and allows the production of pumpable concrete which is consistent even in hot summer.
- Increases the frost resistance.
- Because it does not contain any chloride, there is no risk of damage for the reinforcement of the concrete.
- Decreases the carbonation rate of the concrete.
- Decreases concrete shrinkage significantly.
- Because it eliminates vibration, it also prevents noise pollution.

Application

At Concrete-Mixing Plants:

In the production of ready-mixed concrete, it is added to concrete mixing water found in the mixer. For best results, it is preferably better to feed water simultaneously with the additive. Concrete mixer should run at high speed for 3 minutes. Concrete prepared with mixing water should not be fed with extra water. Each 10 litres of extra water added leads to a decrease of 10 kgf/cm² in the the pressure strength of concrete.

For instance:

Quality Kontrol Tests	Unit	Result
Consistency Loss	ΔS	1
Slump 0'	cm	23
Slump 0'	cm	22
Spread Loss	ΔF	4
Spread 0'	cm	50
Spread 0'	cm	46

Consumption

Depending on the performance expected; the amount of the product to be used should be 0,4% to 1,0% of the weight of the binder for plastic and fluid concrete. That is 400 to 1000 g for 100 kg of binder. For self-compacting concrete, the amount of the product to be used should be 1,0% to 2,0% of the weight of the binder. That is 1000 to 2000 g for 100 kg of binder. In determining the consistency, it is critical to avoid adding extra water. The concrete contains slag and silica fume as well as cement. Optimum dose depends on the quality of the binder and aggregate, the water/binder ratio and the ambient temperature. So it is recommended to determine the optimum dose by trying different mixtures and testing them beforehand.

Packaging

IBC 1100 kg



Permo Flow Hiper
Application Film



Description

It is a synthetic rubber emulsion added to cement mortars to provide waterproofing and improve adherence.

Usage Areas

It is used in thin layer repair mortars, floor alum, concrete repair mortars, plasters, coatings with abrasive strenght, ceramic adhesive mortars, and as an alum undercoat.

Advantages

- It is ready-to-use in liquid form.
- It provides superior adherence.
- It improves elasticity.
- It decreases shrinkage.
- It increases abrasive strenght.
- It increases chemical resistance.
- It is non-corrosive.

Surface Preparation

- The surface to be treated must be free from dust, dirt, rust and grease. Loose particles must be scratched out.
- Lime, salt and cement foam residues must be cleared by using Emulzer lime and cement residue remover.
- Absorbant surfaces must be wetted thoroughly prior to application.

1) To improve adherence:

1 unit fresh cement is mixed with 2 units of sand. Emülzer Latex is added and mixed to the consistency of slurry. It is applied onto wet surface using a brush with hard bristles. Mortar must be applied before this coat solidifies. Emülzer Latex cannot and must not be used alone.

2) As a mortar additive:

The amount of Emulzer Latex must be 10 to 20% of the amount of cement used. Emülzer Latex must be diluted with clean mixing water, and added to mortar.

Application

- Emülzer® Latex is diluted with clean mixing water with a ratio of 1:1 to 1:4 (Water:Latex), and then mixed with fresh cement and sand.
- As an undercoat, it is applied to the surface with a brush, and if you are going to apply mortar onto Emülzer® Latex layer, it should not be dry.
- It definitely should not be used alone.

Consumption

To improve adherence : 250 gram/m²,
As a mortar and concrete additive: 10 to 20% of cement.

Packaging

4,5 kg Plastic drum - 90 Drums / Pallet
19 kg Plastic drum - 33 Drums / Pallet



Latex
Application Film





Description

Permo Akryl is ready to use, easy to apply, liquid acrylic based curing compound for preventing rapid water loss in concrete.

Usage Areas

Permo Akryl is sprayed onto newly laid concrete surfaces to form a thin film barrier against premature water loss. Without disturbance to the normal setting action, the concrete is the allowed to cure and achieve maximum properties.

Permo Akryl is particularly useful in large areas of exposed concrete, such as:

- Projects like residential and business complexes, shopping malls etc.
- General concrete applications that curing is necessary
- Roof decks
- Retaining walls
- Irrigation canals / channels

Advantages

- Reduces incidence of plastic cracking.
- Ensure achievement of desired strengths.
- Reduces dusting.
- Increases frost resistance.
- Alleviates other costly methods such as hessian-watering.
- It is used for surfaces to be coated with plaster, screed, paint, ceramic or epoxy coating.
- Suitable for exterior and interior application.
- It is solvent-free, so it does not harm human health.

Surface Preparation

Horizontal application should be proceed immediately after the desired concrete surface finish has been attained, ensuring all surface bleed water has disappeared before hand (between ½ to 2 hours depending on temperature etc). Vertical surface applications must be made right after demoulding.

Application

Permo Akryl is ready to use so it shouldn't be dilute with water. Stir the Permo Akryl well before use! Permo Akryl curing membrane has been designed that it can be applied to the whole surface as a thin film layer with hand or motor operated spray gun to the newly laid concrete. Apply with low pressure spray equipment preventing Permo Akryl from being collected at the surface. Suitable spray equipment must be determined with trials. For large areas and concrete "trains", application can be carried out by power driven automatic equipment. Permo Akryl should be protected from rain and traffic after application until the membrane has completely dried.

Consumption

The consumption depends on wind, humidity and temperature. As a general guide: 0,25 kg/m²

Packaging

Net: 25 kg Plastic drum
200 kg Barrel



Permo Akryl
Application Film



Description

As a paraffin-based, non-solvent, ready-to-use concrete curing material applied onto fresh concrete surface, Permo Parafin prevents instant water losses as well as the formation of cracks and retreats and ensures optimum strength in concrete.

Usage Areas

Permo Parafin is sprayed onto fresh concrete to form a film layer, thus preventing rapid water loss. It ensures concrete curing with no effect on normal setting reactions and helps it reach maximum performance.

Permo Paraffin is especially suitable for large and open concrete surfaces such as:

- Motorways,
- Common concrete production which requires curing,
- Industrial floors,
- Terraces,
- Battered walls,
- Prestressed girders and piles,
- Irrigation channels,
- Locations with low humidity and high vaporization and air circulation.

Advantages

- Decreases cracks caused by plastic retreat.
- With the formation of the film layer, contributes to the hydration of concrete.
- Minimizes shrinkage.
- Decreases dust formation on the surface.
- Increases the frost resistance.
- It is a more effective and economic alternative compared to other curing methods such as geo-textiles or irrigation.
- Suitable to indoor applications.
- It is easy to apply and decreases labour costs.
- Because it does not contain any solvent, it is not harmful for human health.

Application

Surface Conditions

On horizontal surfaces, it should be applied after the disappearance of sweating water and completion of surface repairments (0,5 to 2 hours later depending on the temperature). On vertical surfaces, it should be applied after the removal of the molds. For best results, it may be tested on a small area.

Application

Permo Parafin is ready to use, so it should not be diluted with water. Shake well before use. Permo Parafin is designed to be sprayed with a pistol or a spraying machine with an air compressor as a continuous thin film layer. It should be applied with a low pressured spraying equipment and it is critical to avoid puddling. The most suitable spraying equipment should be determined by testing. If it will be applied onto a large area or onto a set of concrete elements serially, it can be applied with an automatic system. The area treated with Permo Parafin should be protected from rain and foot traffic for at least 3 hours or until it is completely dry.

Cleaning the Equipment

The equipment used should be cleaned with warm water as soon as the application is over. Hard and dry residues can be cleaned out with warm water or by mechanical ways.

Consumption

Consumption depends on wind, humidity and temperature. It is commonly 0,15 to 0,25 kg/m².

Packaging

Net: 25 kg Plastic drum



Permo Parafin
Application Film



Description

As an anti-gel universal concrete additive it prevents fresh concrete from freezing by increasing the heat of hydration.

Usage Areas

It is used for concreting at low temperatures up to -10°C, and when frost is expected at night.

Technical Specifications

Type	: Calcium Nitrate Based
Form	: Liquid
Color	: Dark Brown
Density	: 1,25 kg/ltr
Baume	: 30
pH	: 8
Freeze Point	: -18°C

Advantages

- Because it does not contain any calcium chloride, it is not harmful for the rebar.
- It is non-corrosive. Anti Frost -10°C provides a plastic and more fluid concrete.
- Its workability increases, and water/cement ratio decreases.
- It provides early strength, and increases final strength and pull-out resistance.

Application

- Preferably Anti Frost -10°C is either added to mixing water or poured into concrete mixer simultaneously with the mixing water. It is not recommended to be added to dry concrete mix. Subsequently the usual process recommended for a good concrete production is carried on.
- Cement, aggregate and water must be protected from freeze, and no ice particles must be left between aggregate and water. Water must be heated up if necessary.
- The temperature of fresh concrete must not be under +5°C. To maintain hydration temperature, concrete must be covered, especially under windy weather conditions.
- It should not be used in thin or exterior concrete elements.
- It is recommended to keep water/cement ratio at minimum.
- Portland cement must be used in the production.
- Wooden mold must be preferred.

Consumption

1% of cement between +5°C and -5°C.

2% of cement between -5°C and -10°C.

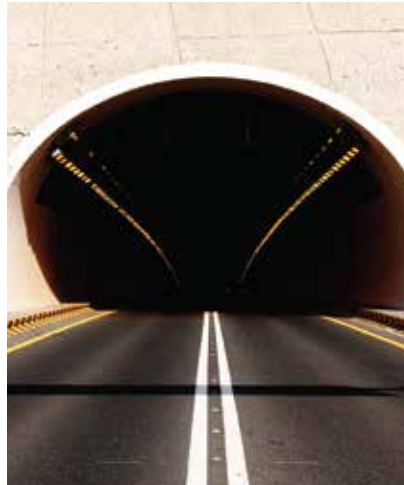
Adding a greater amount of antifreeze is not helpful in concreting at temperatures below -10°C.

Packaging

25 kg Plastic drum - 33 Drums / Pallet



Antifrost -10°C
Application Film



Description

It is a new generation waterproofing additive that makes the concrete impermeable by creating an insoluble crystalline structure within the capillary cracks and pores in the concrete as a result of its reaction with moisture in the concrete.

Usage Areas

Foundations, reinforced concrete curtains, tunnels, dams, on bored pile foundations, in precast concrete elements, in water tanks, in treatment water plants, in swimming pools, in elevator pits, in underground passages, in water channels, in all kinds of underground concrete facilities, In structures exposed to the sea, in the production of key paving stones, in HEPP tunnels, concrete walls and floors, in underground car parks.

Advantages

It protects concrete and reinforcing iron by preventing corrosion. It is resistant to freeze-thaw cycle. It provides a permanent waterproofing that does not wear, tear, puncture, separate from the surface, seamless and uninterrupted, by integrating with the structure it is applied to. It is a concrete admixture containing crystalline-based, reactive, water impermeability that does not contain sand and cement, containing special polymers mixed with natural rock fibers. With these properties, no lumps occur in the mixture. Its application is practical. It consists of mixing the product in an amount appropriate to the mortar, and there is no possibility of experiencing problems arising from the workmanship error. It provides high efficiency, low costs and durability. It provides a very economical solution. It protects concrete against positive and negative water pressure. It is water vapor permeable and allows the concrete to breathe. It is resistant to high hydrostatic pressure. It is constantly active during the curing period and in every contact with water, and it provides continuous sealing by filling the capillary spaces in the concrete with nano-sized crystals that do not dissolve. It prevents moisture penetration into the concrete. Since it does not contain toxic materials, it can be used safely in drinking water tanks, food and grain silos.

There is no harm in the contact of PERMO CHIM CRYSTAL MIX PLUS reinforced concrete with drinking water. It reduces the cost in terms of labor and time. Bored pile raft is ideal for foundation insulation. It protects its protection properties even when the concrete surface is damaged. It does not require any other waterproofing application. It does not harm the environment and human health. Reduces chloride permeability and carbonation. It protects concrete by preventing water-borne salts and various harmful chemicals from entering and moving in concrete. It does not require protection concrete on concrete. It does not require protection before filling in curtain concrete.

Effect

During setting-hardening of cement-based products, salts that are easily dissolved in water are released. Active chemicals of PERMO CHIM CRYSTAL MIX PLUS reach cracks and capillary spaces in concrete and react with minerals in concrete, producing insoluble crystals. These crystals fill the capillary spaces in the cement-based structure, creating a healthy texture that is absolutely water-proof and does not prevent the structure from breathing. Thanks to the natural rock fibers it contains, it prevents sudden cracks in the concrete.

Application

To ensure an effective mixture, always mix at high speed for 1.5 minutes before pouring. If a thickener additive is also desired, add PERMO CHIM CRYSTAL MIX PLUS and then add the other additive. Do not add water to the mixture to increase the slump feature. It is sufficient to lay the first 25 cm of the raft concrete horizontally as PERMO CHIM CRYSTAL MIX PLUS admixed concrete. However, in order to ensure the integrity of the insulation on the curtains, the areas of the radye jeneral that are in contact with the soil should also be added with PERMO CHIM CRYSTAL MIX PLUS. In addition, it is necessary to pour all of the horizontal and vertical areas of the radye jeneral with added additives at risky points such as the elevator pit.

In order to prevent cold joints, the upper raft concrete (concrete without admixture) layer should be poured before taking the 25 cm reinforced concrete layer socket. If the application area is high, if two pumps are used, the first pump will pour the admixed concrete while the second pump will complete the concrete without admixture and cold joint formation will be prevented. In order to ensure impermeability in cold joint formations in cases where concrete casting is paused and remains for the next day or days, before the new concrete is poured on these surfaces, a grout consisting of a mixture of cement with PERMO CHIM CRYSTAL MIX PLUS additive should be prepared and applied to the surface with a brush. While the grout applied is still wet, concrete will be removed and adherence will be increased, while the cold joint will be impermeable. In curtain concretes, continuity in impermeability should be ensured by applying Swell-Flex bentonite / acrylic based swelling bands in suitable sizes based on curtain width and concrete class at cold joint points. Points such as rod holes in the concrete of the curtain and segregation caused by vibration should be repaired by filling with Emülzer Grout and Repair Mortars.

Consumption

3 kg/m³

Packaging

Net 15 kg kraft bag

Permo-Chim Crystal Mix Plus
Application Film







Cement Based Insulation Materials

Permo-Chim Duo NP

(Two Component, Super Elastic Waterproofing Coating Mortar
With Crystallization Effect)

Permo-Chim Duo SDH

(Two Component, Super Elastic, Waterproofing Mortar)

Permo-Chim Duo BMT

(Two Component, Fully Elastic, Waterproofing Mortar)

Permo-Chim Duo BK

(Two Component, Elastic, Waterproofing Mortar)

Permo-Chim Crystal

(Single-Component Crystallizing Waterproof Mortar)

Permo-Chim Monocorr

(Corrosion Protection and Bonding Agent Mortar)





Description

It is a cement and acrylic based two component super flexible waterproofing coating with crystallization effect used on concrete surfaces for negative-positive applications.

Usage Areas

- Interior and exterior areas for vertical and horizontal applications.
- Terraces (coating which is grey color should be protected).
- Soft water (pH 3 to 7) tanks used in textile industry.
- Water tanks and swimming pools.
- Elevator pits.
- Wetrooms like WC, bathroom, kitchen, and balcony.
- To protect concrete from water, carbonation and salts.
- Facilities like spa and hamams.

Advantages

- Easy to prepare and apply.
- Applied by brush or spraying machine.
- Long working time.
- Resistant to negative and positive water pressure (1 bar negative-1,5 bar positive)
- Water vapor permeable.
- Forms a perfect water impermeable, nondeformable coating under screeds and ceramic tiles with high adhesion performance and flexible structure.
- High durability.
- It forms a moisture barrier and provides waterproofing against the water and humidity that comes from opposite side. It fills the capillary gaps of concrete with its insoluble crystallized structure.
- Permo Chim DUO NP covers cracks up to 0,50 mm when applied as 2 mm thick and up to 1,20 mm when reinforced with waterproofing net.
- Suitable for pedestrian traffic.
- Highly resistant to carbon dioxide ions. Does not crack.
- Resistant to freeze-thaw cycle.

Surface Preparation

Before the application, concrete surface must be fully cured. Cement based surfaces of the structures contacting with water have to be strong, dry, dustless, clean, and also on scale. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin residue that can weaken adherence and no loose particles must be present. Static cracks on the building must be repaired with suitable Emülzer Repair Mortars or Emülzer Grout Mortars. The surface must be saturated with water and must be kept moist during the application.

If there is water accumulation or ponding, it should be removed from the surface. Iron and wooden wedges on the surface have to be removed, and if there is an active water leakages and cracks; they must be repaired. Corners and edges must be beveled with minimum 4 cm bevels, a joint tape and Permo Chim DUO NP should be applied on this bevel. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating surface appearance seems matte, this means that material loses its water rapidly and surface is not saturated well or dried quickly. In the instances like hot weather conditions or coatings which are exposed to wind; water can be added with a ratio of 10% of the component B to the mixture just for the first layer of application.

Application

Liquid component of Permo Chim DUO NP is poured into a clean container. The powder component is slowly added to the container and mixed with a 400-600 RPM mixer at least for 3-5 minutes until a homogenous and lumpless mixture is obtained. Mixture should be rest for 3-5 minutes and again mixed for approximately 30 seconds, then it becomes ready to use. Water must not be added to Permo Chim DUO NP. The powder component must always be added to the liquid component, not vice versa. Permo Chim DUO NP is applied on the surface at least in 2 layers. Each layer should be applied when the previous layer starts to harden and is not completely cured. In case the first layer is dry, the surface must be moisturized again before the application of the second layer. Consecutive layers must be perpendicular to each other. Fiber Mesh, Joint Tape etc. must be used between 2 coats as reinforcement. Joint Insulation Tape 120/70 should be applied to the corners and horizontal / vertical joints where the application is made. Extra attention should be given when Permo Chim DUO NP is planned to be applied on perlite (pearl-stone) concrete, gas concrete or high porosity concrete. In such surfaces Permo Chim DUO NP should be applied after plaster or alum laid. It has to be protected against any impact and puncture until and during over-coating. The mixture in the pot must be used within 30 minutes. Floor covering products such as tile, ceramic, granite are a building material, not a waterproofing material. Ceramics cracks in itself, even though if you preferred to use flexible joint fillers, the joint filler also crack as a result of the structure being seated. Waterproofing must be done under the floor covering materials. If Permo Chim DUO NP planned to be used on the terrace which will be opened to human traffic; it must be covered and protected with flooring materials such as ceramics, tiles and so on.

Watch Points

If surface temperature is below +5°C or over +25°C in Permo Chim DUO NP application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers. In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours. For example if Permo Chim DUO NP applied in +23°C gains mechanic strength after 3 days, becomes impermeable to water after 7 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time. Working and reaction time of cement and acrylic based systems are affected by environment and ground temperature, and relative humidity in the air. Low temperatures slow down the chemical reaction, and increase working period, coating time, and work time. Also coverage decreases because viscosity increases. High temperatures accelerate the chemical reaction and times stated above are reduced depending on this. Environment and ground temperatures must not fall down below the minimum allowed value in order Permo Chim DUO NP to complete its curing period. Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers. Places to be walked on must be covered with alum or ceramic.

Consumption

Depending on the surface condition, a minimum of two layers is applied, 1-1,5 kg/m² per layer. It is recommended to apply a minimum of 3 coats in areas which needs high protection such as water tank, swimming pool.

Packaging

25 kg Kraft Bag + 10 Lt Plastic Drum = 35 kg Set
20 Sets / Pallet





Description

It is cement based, polymer modified, super elastic, two component waterproofing and concrete protection mortar. The liquid component is pure elastomeric resin emulsion. The powder component is hydraulic connective that is a composition of additive and filling materials.

Usage Areas

- Used in inner and outer areas for vertical and horizontal applications on the direction which water comes from.
- In insulation of foundations.
- On retaining walls.
- Grounds which are planned to make sagging.
- As an undercoat in the insulation of terrace roofs and balconies.
- In wet areas like WC, bathroom, kitchen, and balcony.
- In swimming pools.
- In water tanks.
- In facilities like spa and hamams.
- Used for waterproofing the inside of planter boxes.

Advantages

- Easy to prepare and apply.
 - Applied by brush or spraying machine.
 - Long working time.
 - Permo Chim DUO SDH covers up to 0,92 mm crack when it is applied with a thickness of 2 mm, according to TS EN 14891.
 - Ability to bridge shrinkage cracks with its highly flexible structure.
 - Forms a seamless, permanent, moisture and water proof coating.
 - Resistant to chemicals and salt solutions in soil.
 - Water vapor permeable.
 - High durability.
 - Resistant to freezing - thawing cycle.
 - Can be used in areas affected by movement and vibration.
 - Forms a perfect water impermeable, nondeformable layer under grouts and ceramics with high adhesion performance and flexible structure.
 - It is non toxic material which can be applied on potable water tanks.
- (Middle East Technical University Report No: 2014.03.04.147/02 - Report Date: 24.03.2014)

Surface Preparation

Before the application, concrete surface must be fully cured. Cement based surfaces of the structures contacting with water have to be strong, dry, dustless, clean, and also on scale. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin residue that can weaken adherence and no loose particles must be present. Static cracks on the building must be repaired with suitable Emülzer Repair Mortars or Emülzer Grout Mortars.

The surface must be saturated with water and must be kept moist during the application. If there is water accumulation or ponding, it should be removed from the surface. Iron and wooden wedges on the surface have to be removed, and if there is an active water leakages and cracks; they must be repaired. Corners and edges must be beveled with minimum 4 cm bevels, a joint tape and Permo Chim DUO SDH should be applied on this bevel. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating surface appearance seems matte, this means that material loses its water rapidly and surface is not saturated well or dried quickly. In the instances like hot weather conditions or coatings which are exposed to wind; water can be added with a ratio of 10% of the component B to the mixture just for the first layer of application.

Application

Liquid component of Permo Chim DUO SDH is poured into a clean container. The powder component is slowly added to the container and mixed with a 400 -600 RPM mixer at least for 3-5 minutes until a homogenous and lumpless mixture is obtained. Mixture should be rest for 3-5 minutes and again mixed for approximately 30 seconds, then it becomes ready to use. Water must not be added to Permo Chim DUO SDH. The powder component must always be added to the liquid component, not vice versa. Permo Chim DUO SDH is applied on the surface at least in 2 layers. Each layer should be applied when the previous layer starts to harden and is not completely cured. In case the first layer is dry, the surface must be moisturized again before the application of the second layer. Consecutive layers must be perpendicular to each other. Fiber Mesh, Joint Tape etc. must be used between 2 coats as reinforcement. Joint Insulation Tape 120/70 should be applied to the corners and horizontal / vertical joints where the application is made. Extra attention should be given when Permo Chim DUO SDH is planned to be applied on perlite (pearl-stone) concrete, gas concrete or high porosity concrete. In such surfaces Permo Chim DUO SDH should be applied after plaster or alum laid. It has to be protected against any impact and puncture until and during over-coating. The mixture in the pot must be used within 30 minutes. Floor covering products such as tile, ceramic, granite are a building material, not a waterproofing material. Ceramics cracks in itself, even though if you preferred to use flexible joint fillers, the joint filler also crack as a result of the structure being sealed. Waterproofing must be done under the floor covering materials. If Permo Chim DUO SDH planned to used on the terrace which will be opened to human traffic; it must be covered and protected with flooring materials such as ceramics, tiles and so on.

Watch Points

If surface temperature is below +5°C or over +25°C in Permo Chim DUO SDH application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers. In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours. For example if Permo Chim DUO SDH applied in +23°C gains mechanic strength after 2 days, becomes impermeable to water after 7 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time. Working and reaction time of cement and acrylic based systems are affected by environment and ground temperature, and relative humidity in the air. Low temperatures slow down the chemical reaction, and increase working period, coating time, and work time. Also coverage decreases because viscosity increases. High temperatures accelerate the chemical reaction and times stated above are reduced depending on this. Environment and ground temperatures must not fall down below the minimum allowed value in order Permo Chim DUO SDH to complete its curing period. Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers. Places to be walked on must be covered with alum or ceramic.

Consumption

Depends on surface condition, for each layer 1-1.5 kg/m²; minimum two layers. It is recommended to apply minimum 3 layers in areas where high protection is necessary such as water tanks and swimming pool.

Packaging

20 kg Kraft Bag + 10 kg Plastic Drum = 30 kg Set
20 Sets / Pallet





Description

It is cement based, polymer modified, fully elastic, two component waterproofing and concrete protection mortar. The liquid component is pure elastomeric resin emulsion. The powder component is hydraulic connective that is a composition of additive and filling materials.

Usage Areas

- It is especially used for preventing water leakage balconies, between floors and in wet surfaces such as bathrooms, kitchens, toilets, etc.
- Used on surfaces such as concrete, plaster, screed.
- In inner and outer areas for vertical and horizontal applications.
- It is used as an undercoat in the insulation of terrace roofs and balconies.
- It is used for waterproofing the inside of planter boxes.

Advantages

- Provides an economical solution.
- Can be applied to moist surfaces.
- It forms a seamless layer.
- Easily applied on horizontal and vertical surfaces with brush, roller, trowel or spraying machine.
- Application is practical. Powder and liquid components are mixed and poured easily.
- It is elastic and does not shrink or crack.
- Even though it is waterproofing material, it has water-vapour permeability and allows the surface to breathe.
- Protect concrete and plaster surfaces from carbonation, chlorine and air pollution.
- Thanks to its high adhesion and flexibility it provides an economical insulation before ceramic coating or screed.

Surface Preparation

Before the application, concrete surface must be fully cured. Cement based surfaces of the structures contacting with water have to be strong, dry, dustless, clean, and also on scale. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin residue that can weaken adherence and no loose particles must be present. Static cracks on the building must be repaired with suitable Emülzer Repair Mortars or Emülzer Grout Mortars. The surface must be saturated with water and must be kept moist during the application.

If there is water accumulation or ponding, it should be removed from the surface. Iron and wooden wedges on the surface have to be removed, and if there is an active water leakages and cracks; they must be repaired. Corners and edges must be beveled with minimum 4 cm bevels, a joint tape and Permo Chim DUO BMT should be applied on this bevel. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating surface appearance seems matte, this means that material loses its water rapidly and surface is not saturated well or dried quickly. In the instances like hot weather conditions or coatings which are exposed to wind; water can be added with a ratio of 10% of the component B to the mixture just for the first layer of application.

Application

Liquid component of Permo Chim DUO BMT is poured into a clean container. The powder component is slowly added to the container and mixed with a 400 -600 RPM mixer at least for 3-5 minutes until a homogenous and lumpless mixture is obtained. Mixture should be rest for 3-5 minutes and again mixed for approximately 30 seconds, then it becomes ready to use. Water must not be added to Permo Chim DUO BMT. The powder component must always be added to the liquid component, not vice versa. Permo Chim DUO BMT is applied on the surface at least in 2 layers. Each layer should be applied when the previous layer starts to harden and is not completely cured. In case the first layer is dry, the surface must be moisturized again before the application of the second layer. Consecutive layers must be perpendicular to each other. Fiber Mesh, Joint Tape etc. must be used between 2 coats as reinforcement. Joint Insulation Tape 120/70 should be applied to the corners and horizontal/vertical joints where the application is made. Extra attention should be given when Permo Chim DUO BMT is planned to be applied on perlite (pearl-stone) concrete, gas concrete or high porosity concrete. In such surfaces Permo Chim DUO BMT should be applied after plaster or alum laid. It has to be protected against any impact and puncture until and during over-coating. The mixture in the pot must be used within 30 minutes. Floor covering products such as tile, ceramic, granite are a building material, not a waterproofing material. Ceramics cracks in itself, even though if you preferred to use flexible joint fillers, the joint filler also crack as a result of the structure being seated. Waterproofing must be done under the floor covering materials. If Permo Chim DUO BMT planned to used on the terrace which will be opened to human traffic; it must be covered and protected with flooring materials such as ceramics, tiles and so on.

Watch Points

If surface temperature is below +5°C or over +25°C in Permo Chim DUO BMT application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers. In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours. For example if Permo Chim DUO BMT applied in +23°C gains mechanic strength after 3 days, becomes impermeable to water after 7 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time. Working and reaction time of cement and acrylic based systems are affected by environment and ground temperature, and relative humidity in the air. Low temperatures slow down the chemical reaction, and increase working period, coating time, and work time. Also coverage decreases because viscosity increases. High temperatures accelerate the chemical reaction and times stated above are reduced depending on this. Environment and ground temperatures must not fall down below the minimum allowed value in order Permo Chim DUO BMT to complete its curing period. Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers. Places to be walked on must be covered with alum or ceramic.

Consumption

Depends on surface condition, for each layer 1 - 1.5 kg/m²; minimum two layers.

Packaging

25 kg Kraft Bag + 6 kg Plastic Drum = 31 kg Set
30 Sets / Pallet



Two Component, Elastic, Waterproofing Mortar



Description

It is cement based, polymer modified, elastic, two component waterproofing and concrete protection mortar. The liquid component is pure elastomeric resin emulsion. The powder component is hydraulic connective that is a composition of additive and filling materials.

Usage Areas

- It is especially used for preventing water leakage balconies, between floors and in wet surfaces such as bathrooms, kitchens, toilets, etc.
- It is used as an undercoat in the insulation of terrace roofs.
- It is used in bridges, viaducts, and engineering structures as a protective coating to provide resistance against defrosting salts.
- In inner and outer areas for vertical and horizontal applications on the direction which water comes from.
- In insulation of foundations.
- On retaining walls.
- Waterproofing the inside of planter boxes.

Advantages

- Elastic and water impermeable.
- Applied to wet surfaces.
- Provides an economical solution.
- Practical to apply. Liquid and powder components are simply mixed and applied.
- Applied by brush or spraying machine.
- Long working time.
- It is applied only to the side that contacts with water (positive water pressure).
- Can be walked on it.
- Protects concrete and plaster surfaces against air pollution and acid gases found in the atmosphere.
- While it is waterproof, it provides breathability for the surface.
- Protects concrete and plaster surfaces against carbonization and chloride.
- Forms a water impermeable layer under grouts and ceramics with high adhesion performance and half-flexible structure.
- Forms a jointless, seamless, permanent, water impermeable coating.
- Resistant to chemicals and salt solutions in soil.
- Water vapor permeable.
- Resistant to freezing - thawing cycle.

Surface Preparation

Before the application, concrete surface must be fully cured. Cement based surfaces of the structures contacting with water have to be strong, dry, dustless, clean, and also on scale. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin residue that can weaken adherence and no loose particles must be present.

Static cracks on the building must be repaired with suitable Emülzer Repair Mortars or Emülzer Grout Mortars. The surface must be saturated with water and must be kept moist during the application. If there is water accumulation or ponding, it should be removed from the surface. Iron and wooden wedges on the surface have to be removed, and if there is an active water leakages and cracks; they must be repaired. Corners and edges must be beveled with minimum 4 cm bevels, a joint tape and Permo Chim DUO BK should be applied on this bevel. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating surface appearance seems matte, this means that material loses its water rapidly and surface is not saturated well or dried quickly. In the instances like hot weather conditions or coatings which are exposed to wind; water can be added with a ratio of 10% of the component B to the mixture just for the first layer of application.

Application

Liquid component of Permo Chim DUO BK is poured into a clean container. The powder component is slowly added to the container and mixed with a 400 - 600 RPM mixer at least for 3-5 minutes until a homogenous and lumpless mixture is obtained. Mixture should be rest for 3-5 minutes and again mixed for approximately 30 seconds, then it becomes ready to use. Water must not be added to Permo Chim DUO BK. The powder component must always be added to the liquid component, not vice versa. Permo Chim DUO BK is applied on the surface at least in 2 layers. Each layer should be applied when the previous layer starts to harden and is not completely cured. In case the first layer is dry, the surface must be moisturized again before the application of the second layer. Consecutive layers must be perpendicular to each other. Fiber Mesh, Joint Tape etc. must be used between 2 coats as reinforcement. Joint Insulation Tape 120/70 should be applied to the corners and horizontal/vertical joints where the application is made. Extra attention should be given when Permo Chim DUO BK is planned to be applied on perlite (pearl-stone) concrete, gas concrete or high porosity concrete. In such surfaces Permo Chim DUO BK should be applied after plaster or alum laid. It has to be protected against any impact and puncture until and during over-coating. The mixture in the pot must be used within 30 minutes. Floor covering products such as tile, ceramic, granite are a building material, not a waterproofing material. Ceramics cracks in itself, even though if you preferred to use flexible joint fillers, the joint filler also crack as a result of the structure being sealed. Waterproofing must be done under the floor covering materials. If Permo Chim DUO BK planned to used on the terrace which will be opened to human traffic; it must be covered and protected with flooring materials such as ceramics, tiles and so on.

Watch Points

If surface temperature is below +5°C or over +25°C in Permo Chim DUO BK application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers. In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours. For example if Permo Chim DUO BK applied in +23°C gains mechanic strength after 2 days, becomes impermeable to water after 7 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time. Working and reaction time of cement and acrylic based systems are affected by environment and ground temperature, and relative humidity in the air. Low temperatures slow down the chemical reaction, and increase working period, coating time, and work time. Also coverage decreases because viscosity increases. High temperatures accelerate the chemical reaction and times stated above are reduced depending on this. Environment and ground temperatures must not fall down below the minimum allowed value in order Permo Chim DUO BK to complete its curing period. Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers. Places to be walked on must be covered with alum or ceramic.

Consumption

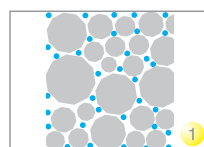
Depends on surface condition, for each layer 1-1.5 kg/m²; minimum two layers.

Packaging

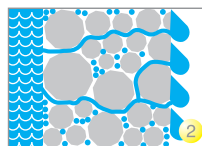
20 kg Kraft Bag + 5 kg Plastic Drum = 25 kg Set
40 Sets / Pallet



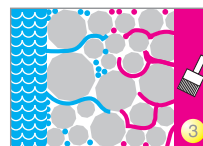
Permo-Chim Duo BK
Application Film



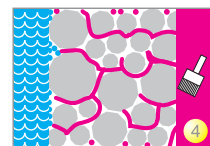
Humidity In Concrete



Water moves to capillary space and creates moisture and humidity.



PERMO CHIM CRYSTAL starts reaction with humidity and lime then moves into water.



PERMO CHIM CRYSTAL, capillary spaces are filled with crystallized particles and makes the surface waterproofed.

Description

As a single-component, cement-based, crystallized waterproofing mortar with capillary effect, Permo Chim Crystal works by penetrating the concrete and forming crystals within. It is not a coating material. It is a waterproofing mortar containing high quality cement, silica and various chemicals which are activated by moisture. As the chemical additives react with the free lime found in the concrete, they permeate deep into the concrete and block water by forming water-insoluble crystals in the capillary cracks and pores, providing a very durable insulation that will be effective for years. The extent of crystal formation and permeability depends on the density of the concrete and absorption of the surface.

Usage Areas

- Effective against water pressure in the direction of the application surface (positive water pressure) as well as in the opposite direction (negative water pressure).
- It is used in pools, water tanks, cisterns and basements with rough or plastered concrete.
- Against ground humidity and water leakage in slabs, foundations, retaining and shear walls, walls cast from a single mould, and elevator shafts.
- For waterproofing concrete planter boxes from outside.
- On the floors of damp environments such as bathrooms, kitchens, toilets, etc. to prevent water leakage to the storeys below.
- In mass concrete in dams.

- In the construction and waterproofing of galleries, and drainage, concrete pipe, and water channels.
- As a protective coating against defrosting salts in bridges, viaducts, and engineering works.
- Permo-Chim Crystal should be applied on concrete. It can only be used as moisture barrier on plaster and screed.

Advantages

- It is applied onto damp surfaces.
- It can be applied onto the side exposed to water (positive water pressure) as well as the opposite side (negative water pressure).
- It forms a durable coating against negative water pressure.
- With perfect bonding to the structure it is applied, it provides a seamless, durable waterproofing, resistant to abrasion as well as to the formation of tears and holes.
- Because it does not contain any toxic materials, it can be safely used in potable water tanks.
- It is very practical. You just mix the product with the required amount of water and apply.
- It provides an economical solution.
- It is UV resistant.

Surface Preparation

- The application surface must be cured. Loose particles must be removed or repaired with suitable Emülzer Repair or Grout Mortars before the application. Holes or cracks with water leakages must be plugged with Speed X Powder. The surface to be treated must be clean and solid, and free from water repellent materials such as grease, rust, cement foam, paint residues, curing materials, moulding oil and silicon.
- Before the application surface must be full filled with appropriate amount of water and must stay damp during the application.



- Puddles must be cleaned. The surface may not be smooth. In such case, it must be roughened. The cracks found in the static, or non-moving parts of the building must be first enlarged and moisturized, and then repaired with Emulzer Latex added plaster and repair mortar.
- Any dynamic, or moving cracks must be insulated with elastic joint fillers applied onto moving joints.
- The areas prone to cracking such as pointed tips or horizontal / vertical intersections must be filleted.

Application

Permo-Chim Crystal can be applied in different methods like below;

- For brush applications 10 lt, for trowel applications 7 lt of water is added to 25 kg of Permo-Chim Crystal. And mixed with slow speed mixer until homogenous mixture is obtained. Water must be added to Permo Chim Crystal; never vice versa. And water must be added gradually, not all at once. This mixture must be consumed within 20-30 minutes. It is useless to add water to solidified mixture.
- Each coat must be applied as the former coat starts to solidify, and before it dries up. Each coat must be applied at right angle to the application of the former coat. After the application of the last coat, the surface must be levelled with a soft, damp sponge.

Plaster: Permo-Chim Crystal is added to a plaster with a thickness of 5-10 mm on old concrete, brick walls and briquettes.

Powder Strewing: On construction joints Permo-Chim Crystal spread as powder form. Applied in powder form areas like raft foundations and below the foundations before pouring the concrete.

Powder Strewing on Lean Concrete: Before the foundation concrete is poured, Permo-Chim Crystal is spread by hand on the lean concrete or on the raft foundation spread between reinforcement bars.

With Tray Trowel Machine: It is applied on slab concrete of wide terraces, on raft foundations, on floor concretes, on lean concrete. When the reinforced concrete does not get its final setting, when there is no footprint on the concrete when pressed with the foot Permo-Chim Crystal is applied with a consumption of 3-3,5 kg/m² by spreading with hand. The product is interpenetrate into the concrete using a tray trowel. (Surface hardener can not be used.)

- After the application it is critical to prevent Permo-Chim Crystal from drying fast, it must be kept damp for 5-7 days. This can be achieved by laying a damp burlap, plastic, etc. and damping the concrete.
- Permo-Chim Crystal must be protected from sun, freeze, wind and other undesirable weather conditions during the curing period.
- If paint will be applied onto Permo-Chim Crystal, it must be first plastered when it is still wet, and paint must be applied onto this plaster. And if ceramic or tile will be applied, a tile adhesive should be applied directly onto newly applied Permo-Chim Crystal.

Ready-mixed concrete: 25 kg Permo-Chim Crystal slowly poured into a container filled with 25 kg of water. It is mixed with low speed mixer. After obtaining a homogeneous mixture, the mixture poured in concrete mixer. 1 bag (25 kg) Permo-Chim Crystal is enough for 1m³ of concrete. Since it will reduce the slump of the concrete, it should be mixed for at least 5 minutes after it is added to the concrete mixer.

Consumption

Liquid : Positive water pressure : 1-2 kg/m² (in two coats)

Negative water pressure: 2 kg/m² (in two coats)

Plaster : 2-3 kg/m² (5 mm thick plaster)

Powder : 2 kg/m²

Packaging

25 kg Kraft Bag

48 Bags / Pallet





Description

Permo-Chim MONOCORR is a cement based, one component, polymer modified, anti-corrosion coating and bonding agent mortar.

Using Areas

- As a corrosion protection for steel reinforcement in concrete
- Bonding agent for concrete repair mortars.

Advantages

- Mixed with water only, easy to apply.
- Active corrosion inhibitors for added protection
- Sprayable by wet spray method
- Adjustable consistency
- It provides high adherence to concrete and reinforcement.
- High mechanical strength.
- Protects reinforcing steel against moisture.

Surface Preparation

- Before the application, concrete surface must be fully cured.
- Cement based surfaces of the structures contacting with water have to be strong, dry, dustless, clean, and also on scale.
- Surface must be cleaned off all kinds of oil, grease, rust, and paraffin residue that can weaken adherence and no loose particles must be present.
- Static cracks on the building must be repaired with suitable EMÜLZER Repair Mortars or EMÜLZER Grout Mortars. The surface must be saturated with water and must be kept moist during the application. If there is water accumulation or ponding, it should be removed from the surface.

Application

Proper amount of water, clean with the help of a scale is poured into the mixing bucket. Permo-Chim MONOCORR slowly added 400 - 600 rpm homogenous and lump-free mixture with a mixer. The mixture is stirred for 4 minutes. After resting for about 4 minutes and mixing again for 30 seconds, the material is ready for use.

Application Method As Primer

The prepared mortar is applied to the surface by brush or spraying in a thickness not exceeding 1 mm in one layer. On highly absorbent surfaces, the second coat may be applied after the first coat has dried (after 3 -4 hours). 30 minutes after the application is completed, concrete surfaces can be covered with repair mortar.

As Anti-Corrosion Coating

The prepared mortar should be applied all over the prepared iron reinforcement with a soft paint brush. To obtain a 2 mm thick coating, the application should be done in two coats. The second layer should be applied after the first layer has been dried by scratching (3-4 hours at +23°C) while cleaning the surface with a brush.

Consumption

1,55 kg powder product for 1 liter mortar.

Packaging

25 kg Kraft Bag
5 kg Plastic Pail









Reinforcement, Repair And Injection Materials

EM 70 T

(Polymer Modified Fine Repair Mortar)

EM 80 T

(Polymer and Fiber Modified Coarse Repair Mortar)

Em-Grout N

(Cement Based, High Strength, Non-Shrinking Plastic Mortar
For Normal Weather Conditions)

Em-Grout R

(Cement Based, High Strength, Non-Shrinking, Fast Setting Plastic Mortar)

Speed-X Powder

(Stopper for Accelerated Setting)

Speed-X Flash

(Powder Formed Leak Stopper With Fast Setting Properties)

Emülzer PU Injection Systems

(Two Component Injection System)





Description

Emülzer® EM-70 T is a polymer added, single-component, thixotropic fine repair mortar produced with high quality cement and special granulometric siliceous sand and it is used for applications up to 5 mm thick.

Usage Areas

- Used for the repair of surfaces impaired due to site conditions.
- Used for the repair of surface flaws and segregated areas.
- Used for bevelling corners.

Advantages

- It is especially produced for preparing surfaces for water-proofing applications.
- Does not lead to crack or dust formation.
- Minimizes shrinkage.
- Ensures high adherence without undercoating.
- Resistant to water and frost.

Surface Preparation

- The area to be treated should be clean and in good condition.

- The surface to be treated should be free from water repellent chemicals, mold grease, dust, cement foam, paint residues, detergent, curing materials, silicon and any other substances which may impede adherence.
- Static cracks must be first enlarged in V shape.
- The surface must be saturated with water and must be kept damp all through the application.

Application

- Emülzer® EM-70 T is poured into a clean container, combined with 7 liters of water for trowel application and mixed to a homogenous consistency (approximately for 3 minutes with a low speed mixer). Water must be added to Emülzer® Repair Mortar; never vice versa.
- Water must be added gradually, not all at once.
- The mixture must be consumed within 25-40 minutes.
- It is not possible to use solidified mixture by adding extra water.
- After the application of the last coat, the surface must be levelled with a soft, damp sponge.
- After the application it is critical to prevent Emülzer® EM-70 T from drying fast, it must be kept damp for 1-3 days. This can be achieved by laying a damp burlap, plastic, etc. or damping the concrete. Emülzer® EM-70 T must be protected from sun, frost, wind and other undesirable weather conditions during the curing period.
- The applications thicker than 5 mm must be performed in coats.
- It must be applied at temperatures between +5°C and +35°C.
- Full curing occurs after 2 weeks at 23°C. It is not recommended to apply a final coat before this period.

Consumption

Depending on the condition of the surface 3 to 4 kg/m² of powder repair mortar for an application of 2 mm.

Packaging

Net: 25 kg Kraft bag
48 Bags / Pallet



EM-70 T
Application Film

Polymer and Fiber Modified Coarse Repair Mortar

**Description**

Emülzer® EM-80 T is a polymer and fiber added, single-component, thixotropic coarse repair mortar produced with high quality cement and special granulometric siliceous sand and it is used for filling holes up to 40 mm.

Usage Areas

- Used for the repair of surfaces impaired due to site conditions.
- Used for the repair of surface flaws and segregated areas.
- Used for bevelling corners.

Advantages

- It is fast curing material.
- It is especially produced for preparing surfaces for water-proofing applications.
- Does not lead to crack or dust formation.
- Minimizes shrinkage.
- Ensures high adherence without undercoating.
- Resistant to water and frost.
- It has fiber additives.
- It is resistant to chlorine sulfate and oils.

Surface Preparation

- The area to be treated should be clean and in good condition.

- The surface to be treated should be free from water repellent chemicals, mold grease, dust, cement foam, paint residues, detergent, curing materials, silicon and any other substances which may impede adherence.
- Static cracks must be first enlarged in V shape.
- The surface must be saturated with water and must be kept damp all through the application.

Application

- Emülzer® EM-80 T is poured into a clean container, combined with 4-5 liters of water for trowel application and mixed to a homogenous consistency (approximately for 3 minutes with a low speed mixer). Water must be added to Emülzer® Repair Mortar; never vice versa.
- After homogenous mixture obtained mixture will rest for 3 minutes and then mixed for 1 minutes to be ready for application.
- Water must be added gradually, not all at once.
- The mixture must be consumed within 60 minutes.
- It is not possible to use solidified mixture by adding extra water.
- After the application of the last coat, the surface must be levelled with a soft, damp sponge.
- After the application it is critical to prevent Emülzer® EM-80 T from drying fast, it must be kept damp for 1-3 days. This can be achieved by laying a damp burlap, plastic, etc. or damping the concrete. Emülzer® EM-80 T must be protected from sun, frost, wind and other undesirable weather conditions during the curing period.
- The applications thicker than 30 mm must be performed in coats.
- It must be applied at temperatures between +5°C and +35°C.
- It is fully curing occurs after 2 weeks at +23°C.
- It is not recommended to apply a final coating material before fully curing.

Consumption

Depending on the condition of the surface 3 to 4 kg/m² of powder repair mortar for an application of 2 mm.

Packaging

Net: 25 kg kraft bag
48 Bags / Pallet



EM-80 T
Application Film



Description

As a cement-based, single-component, non-shrink repair mortar Em-Grout N offers flexibility in application time with its plasticity and ensures high adherence.

Usage Areas

- Floor, foundation and field concrete,
- Curtains, girders and columns,
- To repair reinforced concrete elements with thin and thick reinforcement,
- In mounting rail bottoms,
- In the joints of prefabricated elements.
- All types of engineering buildings such as metro, tunnel, dam, motorways and port.

Advantages

- It is easy to apply. It will be ready to use by the addition of water.
- Has high plasticity.
- It can ensure high compressive strength.

Application

- The area to be treated should be clean and in good condition.
- The surface to be treated should be free from cement foam, dust and any other substances which may impede adherence.
- Absorbant surfaces should be saturated with water beforehand.
- There shouldn't be any puddling or water drops.
- Having poured water into a clean container first, grout should be added in powder form.
- 25 kg of Em-Grout N is mixed with 3,5 liters of water for a plastic consistency and with 4 liters of water for a more fluid consistency. (The amounts may change depending on weather conditions.)
- It must be mixed with a low speed mixer for 2-3 minutes.
- After resting it for 3 minutes, it must be mixed once more, again with a low speed mixer and for 1 minute.
- The mixture prepared should be placed within 45 minutes.
- No water should be added once the material is in reaction.
- It is not possible to use solidified mixture by adding extra water.
- The thickness of the application should be 10-15 mm in a single coat. For the applications thicker than 50 mm, aggregate with a calibre of 5-12 mm must be added in an amount of 25% of Em-Grout N.

Consumption

Powder density in dry form: 1,70 kg/l \pm 2%

Density mixed with water : 2,25 kg/l \pm 2%

Packaging

Net: 25 kg kraft bag

48 Bags / Pallet





Description

Em-Grout R is cement-based, single-component, fast setting, non-shrink repair mortar developed for ensuring high compressive strength within short period of time.

Usage Areas

- Floor, foundation and field concrete,
- Curtains, girders and columns,
- To repair reinforced concrete elements with thin and thick reinforcement,
- In mounting rail bottoms,
- In the joints of prefabricated elements.
- All types of engineering buildings such as metro, tunnel, dam, motorways and port.

Advantages

- It is easy to apply. It will be ready to use by the addition of water.
- Has high plasticity.
- It can ensure high compressive strength.

Application

- The area to be treated should be clean and in good condition.
- The surface to be treated should be free from cement foam, dust and any other substances which may impede adherence.
- Absorbant surfaces should be saturated with water beforehand.
- There shouldn't be any puddling or water drops.
- Water poured into a clean container first, grout should be added in powder form.
- 25 kg of Em-Grout R is mixed with 4-4,5 liters of water (The amounts may change depending on weather conditions.)
- It must be mixed with a low speed mixer 400-600 Rpm
- The mixture prepared should be consumed within 7 minutes.
- No water should be added once the material is in reaction.
- It is not possible to use solidified mixture by adding extra water.
- The thickness of the application should be 10-15 mm in a single coat. For the applications thicker than 50 mm, aggregate with a calibre of 5-12 mm must be added in an amount of 25% of Em-Grout R

Consumption

20 kg/m²

Powder density in dry form: 1,70 kg/lit±2%

Packaging

Net: 25 kg kraft bag

48 Bags / Pallet





Description

It is an accelerated setting powder stopper for water leakages. It contains mineral fillers, special cements and polymer catalyst additives. It is not a waterproofing product. After the application of Speed-X Powder, a waterproofing product must be applied on the surface.

Usage Areas

- It is used for stopping pressured water leakages, strong water flows, and capillar water leakages as well as inhibiting humidity.
- It is an immediate solution to stop water leakage in foundation curtain walls, basements, water tanks, elevator shafts and damaged water pipes.
- It can be used on concrete, plaster, alum, and bricks.

Advantages

- It is easy and fast applied product.
- It is an ideal material for urgent insulation applications.
- It dries very fast. It stops water leakage in a very short period of time.
- The curing time can be obtained between 30 seconds and 2 minutes by checking.
- Any type of waterproofing product can be applied on to Speed-X Powder after 15-20 minutes.
- It does not shrink or crack.
- It does not contain any chloride.
- It can be applied from the opposite direction of water flow (negative water pressure).

Application

- 1 unit of water is mixed with 2,5-3 units of Speed-X Powder until it becomes homogenous. (Quantity should be arranged as to consume 2-3 minutes.) The paste form of Speed-X Powder must be pressed onto leakage area with rubber gloves for approximately two minutes.
- Reaction occurs just 1 minute after adding water, so the mixture must be prepared in small amounts and consumed immediately.
- In case of dense leakage, Speed-X Powder can be applied directly in powder form. If it has to be applied onto a large surface, the direction of the application must be from outer sides to the middle.
- After the Speed-X Powder application finished, Emülzer® Permo-Chim Crystal must be applied directly.
- At low temperatures the mortar must be prepared with hot water.

Consumption

1,600 kg - 2 kg for 1 lt of filling mixing with 0,5 lt water

Packaging

5 kg Plastic Pail
75 Pails / Pallet



Speed-X Powder
Application Film



Description

Speed-X Flash is ready-to-use, powder form leak stopper with fast setting properties. It is applied in powder form without mixing with water. It is not a waterproofing material. Waterproofing application is required after stopping the leakage by Speed-X Flash.

Usage Areas

- Speed-X Flash which provides waterproofing by curing in 2-5 seconds to the point where it contacts with water is used indoors and outdoors; on all kinds of mineral based surfaces such as concrete, plaster, screed, briquette, etc.
- Used for blocking existing water leaks before waterproofing.
- For stopping active water leaks and to dry the surface waters and moisture on the surface.
- Used to quickly cut off water that has leaked or pressurized from cracks and gaps.
- Used for the inner insulation of basement floors.
- It is used for stopping or blocking pressurized water leaks, strong water leakages and capillary water leaks before sealing.
- Used for immediately stopping leakage on foundation walls, basements, tunnels, water deposits, elevator pits and damaged water pipes.
- Used at urgent sewage connections.

Advantages

- Easy and fast to apply.
- It is an ideal supporting material for emergency insulation applications.
- The mixture is made of fast cement, chemical and polymer additives.
- Speed-X Flash expands to the opposite direction of water flow and does not shrink and crack after it has cured.
- It does not contain soda or chlorine, so it does not rust steel reinforcements and provides excellent adherence to any kind of mineral based surface.
- It freezes rapidly and stops the flow of water in a very short period of time.
- 15-20 minutes after application all types of waterproofing material can be applied on it.
- It is applied from opposite direction of water flow (negative water pressure).

Surface Preparation

The surfaces to be applied must be moistured. The surfaces must be clean and free from loose particles. Layers to reduce adherence such as oil, grease, dirt, paint, cement foam, rust, salt efflorescence must be thoroughly cleaned before application. Cracks and holes should be scraped to a depth of 2 cm before application.

Application

Speed-X Flash is applied in powder form. It must not contact with water before application. Gloves should be used during application. Take some powder in your hand, squeeze it and push it in the crack or hole towards the source of the active water leak. Hold it until Speed-X Flash hardens and water flow is ended. Negative waterproofing (with Permo Chim Crystal) is required immediately after the Speed-X Powder application. Speed-X Flash is not flexible. Cracks can be occurred in areas exposed to vibrations where motion or seating is observed.

Consumption

Approximately 2 kg Speed-X Flash for each 1 liter gap.

Packaging

5 kg Plastic Pail
75 Pails / Pallet



EMÜLZER PU INJECTION SYSTEMS

Two Component Injection System



Description

PU injection foam is a solvent free PU injection system which designed for quickly and temporarily stopping water when repairing cracks. Injection foam resin is characterized especially by its strong increase in volume. Its formed by PU resin and catalyzer.

Application Areas

- Crack repair in concrete.
- Filling cavities in masonry and concrete in case of water ingress.
- Sealing of foundation pits (material curtain - curtain injection in adjacent foundation soil): sheet pile wall, bore pile wall, underwater concrete.
- Sealing of anchor heads in special civil engineering.
- Sealing in hydraulic engineering e.g. (potable) water tanks.

Advantages

- Mixing Ratio 10 : 1 (Volume).
- Fast and highly expanding foam.
- Foam structure not too rigid.
- Universally applicable, reliable application.

Classic polyurethane resins are characterized by their high elasticity and good adhesion. Cracks injected with PU injection resins remain leak proof also in case of limited crack width modifications and if exposed to dynamic stress. PU injection resins are also suitable for the restoration of gypsum- based masonry or building constructions (sealing, stabilization and solidification). Based on the active principle of hydrophobizing capillary obstruction PU injection resins have a durable sealing effect also in case of high water load classes. An even, closed and therefore watertight pore structure forms upon contact with or when mixed with water.

Preparation

Structural analysis before the injection:

- Structural condition
- Hydrodynamic and hydrostatic conditions.
- Water loads
- In case of pressing water it must be decided depending on the object if a preliminary injection of PU injection foam resin is required.

Please also note when repairing cracks:

- Crack characteristics (crack type, crack course, crack width, crack width modification, etc.)
- Significance of cracks for building structure.

This provides information on:

- Cause of damage.
- Selection of suitable filling materials.
- The consumption depends on the theoretically calculated crack or cavity volume.
- Choice of drill-hole packers.
- Positioning of drill holes.

All loose plaster layers in the area of the injection level must be removed and all porous joints and defective brickwork areas be patched with quick-setting cement. The cracks and voids to be filled must be free of dirt, oil, grease and other seperative substances. Clean the crack edges.

Application

The injection pressure depends on the nature and condition of the building structure, the hydrodynamic and hydrostatic conditions and the desired filling level. Carry out the injection at intervals. Conclusions can thus be drawn from the reaction of the material, e.g. surface emergence, as to whether to continue or to stop the injection process. The reaction speed is influenced by the temperature of the material and the structural element: higher temperatures accelerate, lower temperatures slow down the reaction.

Application by 1Component pump:

Add both A and B components to a clean and empty pail and mix homogenously. Transfer the mixed material to the pump's tank. Stir briefly. Upon conclusion of the injection and the curing process of PU INJECTION FOAM remove the packers and close the drill holes with suitable repair mortars.

Storage

- PU INJECTION FOAM has a shelf life of 6 months starting from production date when stored unopened, in dry and cool conditions and between 10°C to 30°C.
- PU INJECTION FOAM should be protected from moisture in its original, sealed package.







Bituminous Membranes

EMP SELF

(Elastomeric Modified Bituminous Self Adhesive Waterproofing Membranes)

EMC SELF

(Elastomeric Modified Bituminous Self Adhesive Waterproofing Membranes)

EM 300P

(Polyester Felt Reinforced Bituminous Membrane)

EM 400P

(Polyester Felt Reinforced Bituminous Membrane)

EM 300PAR

(Slate Coated Bituminous Membrane)

EM 400PAR

(Slate Coated Bituminous Membrane)

EM 300PAL

(Aluminium Foil Coated Bituminous Membrane)

EM 400PAL

(Aluminium Foil Coated Bituminous Membrane)

EM 300PS

(Silica Sand Coated Bituminous Membrane)

EM 400PS

(Silica Sand Coated Bituminous Membrane)

Membrane Primer

(Bituminous Membrane Primer)

Bituminous Fillet

(Bitumen Based, Triangle Shaped Filling Tape)

Bitüm Bant AL

(Self Adhesive Aluminium Laminated Bitumen Tape)

Bitüm Bant G

(Self Adhesive Geotextile Laminated Bitumen Tape)



EMP SELF / EMC SELF – Self Adhesive Membranes

Elastomeric Modified Bituminous Self Adhesive Waterproofing Membranes



Definition

It is an elastomeric modified, highly flexible, self adhesive bituminous waterproofing membrane with polyester or fiberglass reinforcement. One side covered with PE film other side covered with peelable PP Film. Product thickness varies from 1,5 mm to 4 mm.

Usage Areas

Used in terraces, concrete roofs, metal roofs and foundations first layer and/or second layer.

Advantages

- Easy to use.
- Flexible and long lasting.
- Self-adhesive, no torching needed.
- It can adhere on different surfaces like wood, plastic, glass.
- It has high elongation and tensile strength.
- It has excellent performance at cold weather conditions.

Surface Preparation

Surface must be dry and clean before application. Any loose pieces, dust, oil, grease should be removed. Cracks, fissures should be repaired with suitable mortar. Emülzer® C should be used as a primer.

Application

Since it is a ready to use product; remove the PP film firmly and adhere the membrane on the surface.

Package

1,5 mm and 2 mm - 1 x 15 m/Rolls
3 mm and 4 mm - 1 x 10 m/Rolls



APP Bituminous Membranes EM 300 P / EM 400 P

Polyester Felt Reinforced Bituminous Membranes (EM 300 P = 3mm / EM 400 P = 4mm)



Definition

3-4 mm thick APP bituminous membranes reinforced with polyester felt. Both sides are covered with PE film.

Usage Areas

Used in 2 coats in foundation packaging insulation, and as the first coat in shingle, slated or aluminum foiled membrane applications.

Advantages

Thanks to polyester felt reinforcement, they offer high tensile strength and extension strength.

Surface Preparation

Surface must be dry and clean before application. Any loose pieces, dust, oil, grease should be removed. If necessary use "Emilkote" as a primer.

Application

They can be adhered to Emülzer® C or Emilkote primed surfaces by torch application. At seams they should overlap 10 cm horizontally, and 15 cm vertically. They are used as the first coat in shingle, slated or aluminum foiled membrane applications. Bituminous membranes must be applied at least two layers and second layer must overlap the first one 50 cm sideways and 5 meters longitudinally.

Package (1x10m = 10 m² roll)

EM 300P 30 Roll / Euro Pallet
EM 400P 25 Roll / Euro Pallet



APP Bituminous Membranes
EM 300 P / EM 400 P
Application Film

Technical Specifications

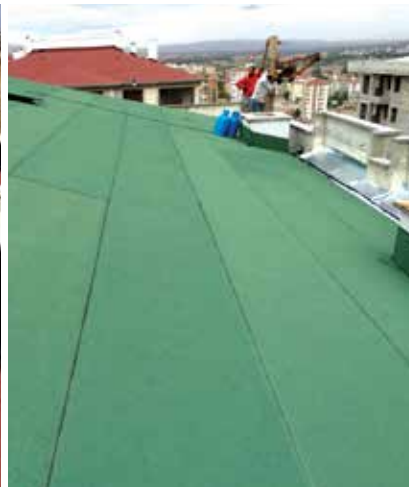
TECHNICAL FEATURES

	METRIC UNIT	STANDARD	300P	400P
Bearing	gr/m ²	TS 11758-1	Polyester	Polyester
Artificial Ageing By Long Term Exposure To Elevated Temperature	kPa	TS EN 1296	Type A 2 kPa; kPa Type T 60 kPa	Type A 2 kPa; Type T 60 kPa
Determination To Tearing (Width/Height)	N	TS EN 12310-1	35/75 N (+-%50)	50/100 N (+-%50)
Resistance to Static Loading	kg	TS EN 12730	min.5 kg	min.5 kg
Tensile Strength (Lengthwise)	N/5cm	TS EN 12311-1	400 N/5 cm (+-%50)	600 N/5 cm (+-%50)
Elongation at Break (Lengthwise)	%	TS EN 12311-1	% 30 (+-%50)	% 30 (+-%50)
Resistance to Impact	mm	TS EN 12691 method A	min.300 mm.	min.300 mm.
Tensile Strength (Transverse)	N/5cm	TS EN 12311-1	300 N/5 cm (+-%50)	400 N/5 cm (+-%50)
Elongation at Break (Transverse)	%	TS EN 12311-1	% 30 (+-%50)	% 30 (+-%50)
Shear Resistance of Joints	N/5cm	TS EN 12317-1	300N/5cm (+-%50)	400N/5cm (+-%50)
Flexibility at Low Temperature	°C	TS EN 1109	max. - 5 °C	max. - 5 °C
Reaction to Fire	-	TS EN ISO 11925-2	Class E	Class E
Thickness	mm	TS EN 1849-1	3 mm (+-0,5 mm)	4 mm (+-0,5 mm)
Deviation from Straightness	mm	TS EN 1848-1	Max. 20 mm for 10 m	Max. 20 mm for 10 m
Width	m	TS EN 1848-1	min. 1 meter	min. 1 meter
Length	m	TS EN 1848-1	min. 10 meter	min. 10 meter
Mass Per Unit Area	kg/m ²	TS EN 1849-1	3,9(+1) kg/m ²	4,9(+1) kg/m ²



APP Bituminous Membranes EM 300 PAR / EM 400 PAR

Slate Coated Bituminous Membranes (EM 300 PAR = 3,5mm / EM 400 PAR = 4,5mm)



Definition

It is the APP (Atactic Polypropylene) doped plastomeric water isolation membranes with polyester felt; one side coated with polyethylene film the other side coated mineral stone.

Usage Areas

It is used in groundwork bundling, parking area, terrace and pitched roofs, balconies, plant stands, garden terrace, concrete flumes, eaves trough and concealed gutter, retaining and basement walls, sewage treatment plants and under the coating against artesian in wet areas such as water tanks, ponds, swimming pools and ornamental pools, kitchen, bathroom, wc.

Advantages

It is flexible, long-lasting, resistant to the aggressive effects that may occur in the soil, can easily be applied to different types of surfaces and can easily be applied to the details such as dilation, edges of chimney and parapet returns, it has high tensile and breakage stability.

Surface Preparation

Surface must be dry and clean before application. Any loose pieces, dust, oil, grease should be removed. If necessary use "Emilkote" as a primer.

Application

They can be adhered to Emülzer® C or Emilkote primed surfaces by torch application. At seams they should overlap 10 cm horizontally, and 15 cm vertically. Bituminous membranes must be applied at least two layers and second layer must overlap the first one 50 cm sideways and 5 meters longitudinally.

Package (1x10m = 10 m² roll)

EM 300PAR 25 Roll / Euro Pallet
EM 400PAR 20 Roll / Euro Pallet



APP Bituminous Membranes
EM 300 PAR / EM 400 PAR
Application Film

Technical Specifications

TECHNICAL FEATURES

	METRIC UNIT	STANDARD	300 PAR	400 PAR
Bearing	gr/m ²	TS 11758-1	Polyester	Polyester
Thickness ± 0.2	mm	TS EN 1849-1	3.5 (+0,5 mm)	4.5 (+0,5 mm)
Temperature Resistance	C	TS 11758-1	>110	>110
Cold Bending (Maximum)	C	TS EN 1109	-5 max.	-5 max.
Tensile Strength (Height/ Width)	N/5 cm	TS 1908	400/300 (+-%50)	600/400 (+-%50)
Elongation at Break (Height/ Width)	%	TS 1908	30/30 (+-%50)	30/30 (+-%50)
Top Surface Coating	-	TS 11758-1	Mineral Stone	Mineral Stone
Sub-Surface Coating	-	TS 11758-1	Pe	Pe
Roll Sizes	m x m	TS 11758-1	1 X 10	1 X 10

APP Bituminous Membranes EM 300 PAL / EM 400 PAL

Aluminium Foil Coated Bituminous Membranes (EM 300 PAL = 3mm / EM 400 PAL = 4mm)



Definition

EM300-400PAL are 3-4 mm thick, APP (Atactic Polypropylene) doped, plastomeric waterproofing membranes with polyester felt; one side coated with polyethylene film the other side aluminium foil.

Usage Areas

It is used in rainfalls, hidden decks and chimney edges.

Advantages

It is flexible, long-lasting, resistant to the aggressive effects that may occur in the soil, can easily be applied to different types of surfaces and can easily be applied to the details such as

dilatation, edges of chimney and parapet returns, it has high tensile and breakage stability.

Surface Preparation

Surface must be dry and clean before application. Any loose pieces, dust, oil, grease should be removed. If necessary use "Emilkote" as a primer.

Application

They can be adhered to Emülzer® C or Emilkote primed surfaces by torch application. At seams they should overlap 10 cm horizontally, and 15 cm vertically. They are used as the first coat in shingle, slated or aluminum foiled membrane applications. Bituminous membranes must be applied at least two layers and second layer must overlap the first one.

Package (1x10m = 10 m² roll)

EM 300PAL 30 Roll / Euro Pallet

EM 400PAL 25 Roll / Euro Pallet



APP Bituminous Membranes
EM 300 PAL / EM 400 PAL
Application Film



Technical Specifications

TECHNICAL FEATURES

	METRIC UNIT	STANDARD	300 PAL	400 PAL
Bearing Type	-	-	Polyester	Polyester
Top Surface Coating	-	-	AL	AL
Sub-Surface Coating - PE Foil	-	-	PE Film	PE Film
Length	meter	TS EN 1848-1	10	10
Width	meter	TS EN 1848-1	1	1
Thickness	mm	TS EN 1849-1	3	4
Tensile Strength (Height/ Width)	N/5 cm	TS 1908	800/600	800/600
Elongation at Break (Height/ Width)	%	TS 1908	35/35	35/35
Cold Bending (Maximum)	C	TS EN 1109	-10	-10
Temperature Resistance	C	TS 11758-1	>120	>120

Bituminous Membranes EM 300 PS / EM 400 PS

Silica Sand Coated Bituminous Membranes (EM 300 PS = 3mm / EM 400 PS = 4mm)



Definition

3-4 mm thick bituminous membranes reinforced with polyester felt. One side coated with silica sand and other side covered with PE film.

Usage Areas

It is used at flat roofs ,terraces ,inclined roofs, balconies, plant stands, garden terrace against UV degradation. Also can be used in wet areas such as, kitchen, bathroom, wc under tile applications.

Advantages

Thanks to polyester felt reinforcement, they offer high tensile strength and extension strength.

Surface Preparation

Surface must be dry and clean before application. Any loose pieces, dust, oil, grease should be removed. If necessary use "Emilkote" as a primer.

Application

They can be adhered to Emulzer® C or Emilkote primed surfaces by torch application. At seams they should overlap 10 cm horizontally, and 15 cm vertically. They are used as the first coat in shingle, slated or aluminum foiled membrane applications. Bituminous membranes must be applied at least two layers and second layer must overlap the first one 50 cm sideways and 5 meters longitudinally.

Package (1x10m = 10 m² roll)

EM 300 PS 30 Roll / Euro Pallet
EM 400 PS 25 Roll / Euro Pallet



Bituminous Membranes
EM 300 PS / EM 400 PS
Application Film

Technical Specifications

TECHNICAL FEATURES

	METRIC UNIT	STANDARD	300 PS	400 PS
Bearing Type	-	-	Polyester	Polyester
Bearing Weight	gr/m ²	-	160	180
Top Surface Coating	-	-	Silica Sand	Silica Sand
Sub-Surface Coating - PE Foil	-	-	PE Film	PE Film
Length	meter	TS EN 1848-1	10	10
Width	meter	TS EN 1848-1	1	1
Thickness	mm	TS EN 1849-1	3	4
Deviation from Straightness	mm	TS EN 1849-1	Max. 20 for 10 m	Max. 20 for 10 m
Cold Bending (Maximum)	C	TS EN 1109	-10	-10



Definition

It is a ready to use primer for bituminous membranes obtained by mixing water and bitumen by using special methods.

Usage Areas

It is only used as a priming coat before the application of all brands of bitumen membranes. Thanks to the superior sticking property, it provides a stronger and spaceless surface sticking for the bitumen membranes applied on it. It can be used on all horizontal and vertical surfaces and in closed areas like basement, cellar, etc.

Advantages

- It is very economical.
- Can be easily applied by anyone.
- It can be used in closed areas for not containing toxic and flammable substances
- Because it is water based, it is environmentally friendly.
- Because it is thinned with water, it adheres perfectly to all kind of surfaces, even when the surface is moist.
- Ready to use.
- Must be applied cold. Does not require heating or thinning.

Surface Preparation

- The application surface should be without dust, rust, dirt, grease and oil and the loose parts should be scrapped out.
- The sharp points or horizontal-vertical joint places subject to cracking should be rounded.
- The large pores and the cracks should be filled with an appropriate repair mortar.

Application

It should be applied as cold. After mixing with the water with 20%, it is applied by grass brush, roller or airless gun. It dries within about 4-5 hours depending on the weather conditions. It should not apply in rainy days or with the temperatures lower than +5°C.

Consumption

0,250 kg/m²

Packaging

16 kg Metal Can - 45 Pieces / Pallet





Description

It is a bitumen-rubber based, V-shaped elastomeric filleting tape used for preparing internal edges at vertical and horizontal seams for insulation applications.

Usage Areas

- It is used at the internal edges of hot-applied or self-adhesive bituminous membranes.
- It is used at the edge intersections of building components with different expansion characteristics.
- It is used with water or solvent based bituminous liquid membranes.

Advantages

- Easy and fast application.
- Very elastic. Maintains its elasticity between -20°C and +95°C.
- It perfectly adjusts to different construction materials.
- Can be applied under all weather conditions.

Surface Preparation

- The surface to be treated must be dry and clean.
- For perfect adherence, the surface must be primed with a coat of Emilkote® or Emülzer® C prior to application.

Application

- After having cut the tape into desired length, protective polyethylene foil is melted by welding torch or burner.
- The tape is firmly pressed and applied onto the edge.
- You can start the insulation application immediately after.

Consumption

It depends on footage.

Dimension

25 x 25 x 35 mm
40 x 40 x 57 mm

Packaging

25 x 25 x 35 mm

- 1.20 meters x 44 Bars = 52,80 m/box
27 Boxes (1425,6 m) / Pallet

40 x 40 x 57 mm

- 1.20 meters x 21 Bars = 25,2 meters
27 Boxes (680,4 m) / Pallet



Bitüm Bant AL

Self Adhesive Alüminyum Laminated Bitumen Tape

/ Bitüm Bant G

Self Adhesive Geotextile Laminated Bitumen Tape



Definition

Bitüm bant AL is an cold applied bituminous based self adhesive tape. Upper face coated with aluminum foil and lower face is self adhesive waterproofing tape. Bitüm bant G is an cold applied bituminous based self adhesive tape. Upper face coated laminated with geotextile and lower face is self adhesive waterproofing tape.

Usage Areas

Adheres perfectly to the surfaces like wood, metal, glass, plastic, plaster and concrete and makes surface waterproofed.

Advantages

- It has UV resistance due to its aluminum or geotextile coated upper face.
- It can be easily applied on the inclined surfaces thank to its elastic properties.
- It is suitable to contact with bitumen.
- Self adhesive.
- Easy to apply.
- Wide range of application.

Surface Preparation

The application surface must be dry. Application surface should be cleaned from anti-adhesion materials such as dust, grease, paint, curing agents, cement grout, rust, detergent, mold oil and silicone. After sweeping the floor thoroughly with a stiff broom or wire brush, clean the surface from dust with a soft broom or a vacuum cleaning device. Surface must be primed with Emülzer® C if it is planned to be applied on the absorbent surfaces like concrete plaster or hardboard

Application

Tape should be adhered to the surface by opening the rolls. Peelable film should be removed and tape must be pressed with the roll to ensure perfect adhesion.

Packaging

1 mm x 10 cm x 10 meter





Polyurethane and Acrylic Based Waterproofing Materials

Purready (UV Resistant Polyurethane Liquid Coating)

Purready-AL (Polyurethane-Aluminum-Based
UV-Resistant Reflective Paint)

Purready B (Bitumen-Polyurethane-Based
Single-Component Waterproofing Material)

Purready PB 2K
(Two-Component, Bitumen Enriched Polyurethane Based Liquid Coating)

Purready WB
(UV Resistant, Water Based, Single Component Polyurethane
Liquid Insulation Material)

Purready 2K
(Two - Component Polyurethane Based Liquid Coating)

PU-Coat II (Double-Component Polyurethane Coating)

PU-Coat II SKM / SKP
(Matte and Gloss Aliphatic Polyurethane Top Coat Paint)

Beyazcoat SOLAR (Acrylic Based, Heat Reducing
Liquid Plastic Coating)

Beyazcoat (Liquid Plastic Coating)

Fiber Added Beyazcoat (Fiber Added Liquid Plastic Coating)

Pur-Wet (Hybrid Polyurethane Liquid Coating)

Pu-Astar (Polyurethane Concrete Primer)

Em-Poxy WB (Water-Based Epoxy Primer)





Description

It is a single-component, polyurethane-based waterproofing and coating material with high ultraviolet stability. It is ready-to-use in liquid form, and it is suitable to pedestrian traffic.

Usage Areas

It can be safely used for waterproofing and damp-proofing purposes on materials such as concrete, stone, fibre cement, and metal; in gutters, channels and ducts, terrace roofs; for protecting polyurethane foam applications; in water tanks, cold stores, damp environments, and swimming pools.

Advantages

- It has very high adherence. It offers perfect adherence even on aged coatings.
- It is highly resistant to diluted acids, bases, salt, chemicals, mildew and weather conditions. As a very durable material it maintains its original characteristics for years.
- As a single-component, easy-to-apply, elastic material it does not creep in vertical surfaces. It can cover capillary cracks.
- Because it is produced from UV-resistant resins it is resistant to sunlight. It is stable against depolymerization.
- It can be applied individually, or as a protective coat onto double-component polyurethane materials.
- Because it is an ever elastic material, no cracks occur on the surfaces it is applied.

- Its solid component ratio is high.
- It is resistant to plant roots.
- After having cured, it is suitable to walk on.

Technical Specification

Color	: Gray/White/Special
Basis	: Modified Polyurethane
Thermal Resistance	: Between -35°C and +110°C
Viscosity	: 3000 mPa.s (at 25°C)
Solid Ratio	: 86%
Application Temperature	: Between 5°C and 35°C
Density	: 1.4 gr/cm ³
Pull Out Adherence	: 9.19 Kg/cm ²
Slipping Adherence	: 75.06 Kg/cm ²
Hardness	: 65 Shore A
Elongation at Break	: at 20°C % 600
Wear Resistance	: 354 mg (TS EN ISO 5401-1)
Carbondioxide Permeability	: 29,59 m (TS EN 1062-6)
Water Vapor Permeability	: 2,810 m (TS EN ISO 7783:2011)
Water Permeability	: 0,004 kg/m ² .h ^{0.5} (TS EN 1062-3)
Impact Resistance	: ≥10Nm (CLASS II) (TS EN ISO 6272-1)
Bond Strength By Pull-Off	: 2,0 N/mm ³ (TS EN 1542)

Application

- The surface to be treated must be dry, clean and free from all types of grease.
- Maximum surface humidity must be max. 5%. Otherwise the product results in foaming and swelling on wet parts.
- It takes at least 28 days for fresh concrete surfaces to dry up as required before application
- Before the Purready application, PU-ASTAR must be applied to the surface as one layer.
- After having mixed thoroughly, it must be applied at least in two coats.
- It is recommended to wait for approximately 12 hours before applying the next coat. It is strictly recommended to wear gloves during application.
- It can be applied very easily by using a brush, roller or sprayer.
- Curing period is 5 to 7 days.

Consumption

Min. 2 kg/m². It must be applied at least in two coats.

Packaging

5 kg Metallic pail - 80 Pieces / Pallet
25 kg Metallic pail - 33 Pieces / Pallet



**Description**

It is a single-component, polyurethane-based reflective paint containing reflective aluminum and offering high ultraviolet stability. It is ready-to-use in liquid form, and it is suitable for pedestrian traffic.

Usage Areas

- To protect surfaces insulated by Purready from UV rays,
- To control heat increase on the surfaces of metal and concrete tanks and other building elements during daytime,
- As a reflective and decorative element applied on preventive waterproofing materials in domes, vaults, north walls and prefabricated gutters,
- As a topcoat preferably on Purready to protect metallic, iron or cast elements such as tanks, pipes, and channels against corrosion.

Advantages

- By reflecting UV rays it ensures the durability of the insulation for many years.
- Due to its reflective properties, it provides a cooler and more comfortable atmosphere in the interior of the building.
- It is highly resistant to lubrication, diluted acids, bases, salt, chemicals, mildew, air pollution and atmospheric conditions. As a very durable material it maintains its original characteristics and elasticity for many years.

- As a single-component material it is easy to use.
- Because it is produced from UV-resistant resins it is resistant to sunlight.
- It is stable against depolymerization.
- It can be applied onto single or double-component polyurethane materials as a protective coat.
- After having cured (for approximately 72 hours), it is suitable to walk on.
- It helps you to detect cracks and renovate waterproofing earlier and thus saves you from unexpected paint expenses.
- It is highly resistant to wearing due to its excellent adhesion characteristics.
- It dries very fast.

Surface Preparation

The surface to be treated must be well insulated, in good condition and sloping downstream to avoid puddling. There shouldn't be any damp areas on the surface to be treated. Otherwise the product leads to foaming and blistering.

Application

- The mixture should not be diluted and should be applied cold.
- The surface to be treated must be clean, dry and free from dust and grease.
- It must be applied with a roller, brush or pulverizer, and in a single coat.
- During application it is strictly recommended to wear gloves.
- It takes 3 days to complete its cure.

Consumption

Approximately 0,150-0,250 kg/m²

Packaging

Net: 15 kg Metallic pail -
33 Pieces / Pallet



Purready - AL
Application Film





Description

As a single-component, polyurethane-based, bitumen-added waterproofing and coating material it is ready-to-use in liquid form, and it is suitable for pedestrian traffic.

Usage Areas

It can be safely used against humidity on materials such as concrete, stone, eternit, metal; in gutters, channels and ducts, and terrace roofs.

Advantages

- Upon setting, it forms an impermeable, seamless, and protective layer.
- With high adherence, ensures perfect results even with the previous coatings.
- It is highly resistant to aging, diluted acids, bases, salt, chemicals, mildew and atmospheric conditions. As a very durable material it maintains its original characteristics for many years.
- It is an elastic, single-component, easy-to-use material and it does not creep on vertical surfaces. It covers capillary cracks.
- It is stable against depolymerization. It can be applied onto single or double-component polyurethane materials as a protective coat.

- It is an ever elastic material so the surfaces treated with it do not crack.
- Has a high solid ratio.
- It is resistant to plant roots.
- After having cured (for approximately 72 hours), it is suitable to walk on.

Surface Preparation

- The surface to be treated must be dry, clean and free from all types of grease.
- Maximum surface humidity must be max. 5%. Otherwise the product results in foaming and swelling on wet parts.
- Fresh concrete surfaces should be left to setting for at least 28 days.

Application

- Before the Purready application, PU-ASTAR must be applied to the surface as one layer
- After having been stirred thoroughly, the material must be applied with a brush, roller or sprayer.
- It should not be applied in a single coat, but in a couple of fine coats to avoid bubbling.
- The consumption must be 2,00 kg/m² minimum.
- It requires mesh application between the coats.
- It is recommended to wait for approximately 12 hours before the application of each coat.
- During application it is strictly recommended to wear gloves.
- It takes 5-7 days to complete its cure.

Cleaning the Equipment

The equipment used should be cleaned with industrial solvents as soon as the application is over.

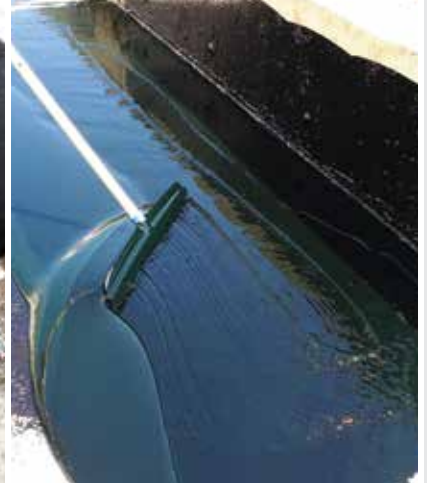
Consumption

Minimum 2,00 kg/m² minimum.

Packaging

Net: 25 kg Metallic pail -
33 Pieces / Pallet





Description

It is a two-component, bitumen modified polyurethane-based liquid coating. It forms a fast curing, super elastic film with strong adhesion to almost any surface.

Usage Areas

It is used; in foundation and curtain wall insulation, in underground structures, in the insulation of retaining walls, on old bituminous and EPDM covers, in green roof applications, on bridges, on balconies and terraces, for external insulation of water tanks.

Advantages

- It will be easy to mix 2 components when both of them equal in volume fast curing,
- Thick layer can be applied, does not form bubbles,
- It has excellent crack bridging feature due to its low modulus.
- Excellent adhesion to almost any surface.
- It has excellent thermal resistance,
- It is resistant to cold.
- It has excellent mechanical properties; elongation ability, high tensile, tear and abrasion resistance, good resistance to many chemicals,
- It functions effectively as a water vapor barrier.

Surface Preparation

- The surface should be cleaned using a high pressure washer, if possible; Oil, grease, fuel and paraffin residues should be removed, moreover, it should be completely free of mold release agents, cement residues, chips, loose particles and should be allowed to dry.
- There should be absolutely no wet areas on the application surface. Otherwise, the product will foam and swell. The moisture content of the surface should be maximum 5%.
- Fresh concrete floors must be left to dry for at least 28 days before application.
- Before applying Purready PB 2K, 1 coat of PU-PRIMER or moisture tolerant Epoxy WB should be applied to the surface. PURREADY application should be started 24 hours after the primer application.

Application

Mix equal amounts of A and B components with a low speed mixer (300 rpm) and apply immediately. Pot life of the mixture is 30-45 minutes at 20°C.

Cleaning the Equipment

The equipment can be cleaned by industrial solvents immediately after application.

Consumption

1,0 - 1,5 kg/m² for each layer.

Packaging

9 kg A Component + 9 kg B Component = 18 kg Set





Description

Emülzer Purready WB is a water-based, anionic polyurethane dispersion with high ultraviolet stability, containing polyether polyol.

Usage Areas

It is safely applicable on concrete, stone, fibre-cement and metal sheets, in rain gutters, canals and water ducts, terrace roofs, protection of polyurethane foam applications, water tanks, damp bulks, and swimming pools against water and moisture. It is used to provide UV resistance of PU foam coatings. It can be used indoors as it is water-based.

Advantages

- Due to its aliphatic structure does not form yellowing.
- It has high hydrolysis resistance and adhesion performance.
- Provides a seamless, waterproof and protective coat.
- Provides perfect adherence for aged coatings as well.
- Sustains its original properties for years.
- As an elastic, easy to use single component material it does not flow on vertical surfaces.
- It covers capillary cracks.
- Resistant to sunlight since it is produced from UV resistant resins. Stable to depolymerization. It can be applied simply.
- It can also be applied, as a protective coat, onto polyurethane foam.

- Ever elastic; does not result in cracks on the surfaces it is applied.
- Resistant to pedestrian traffic after it has been cured (approximately 72 hours later.)

Surface Preparation

- The surface to be treated must be dry, clean and free from all types of grease.
- It takes at least 28 days for fresh concrete surfaces to dry up as required before application.

Application

- The material must be mixed thoroughly and applied by a brush, roller or spray at least two layers.
- The application must be several thin layers instead of one thick layer to prevent occurrence of air bubbles.
- Consumption must be min. 1,500 kg/m².
- Final curing takes 5-7 days depending on temperature and humidity.

Cleaning the Equipment

The equipment can be cleaned by industrial solvents immediately after application.

Consumption

At least 1,5-2,5 kg/m² for two layers.

Packaging

Net 20 kg Plastic bucket





Description

It is a specially developed, two-component, polyurethane- based liquid waterproofing and coating material. It is fast- curing, high-performance coating which forms a super-elastic film, by providing strong adhesion to almost any surface.

Usage Areas

- In the insulation of balconies and terraces, In metal or concrete roof streams,
- On bridges,
- In pools,
- In all kinds of engineering structures,
- It is used for external insulation of reinforced concrete water tanks.
- When used outdoors, aliphatic paint should be applied on it for protection against UV.

Advantages

- It is easy to apply.
- It is cold applied, ready to use after mixing.
- It creates a flexible, elastic film layer.
- It does not create a joint.
- It cures very quickly, the applied surfaces can be ready for use after 24 hours. They can be used over a wide temperature and humidity range.
- It is applied by roller, brush or spraying method.
- It adheres perfectly to almost any surface.
- Depending on the quantity, it is produced in the desired color.
- Does not contain solvent.
- Shows good resistance to various chemicals.
- Crack bridging is excellent due to its low modulus of elasticity.

- The cured material has excellent hydrolysis stability and is unaffected by water. It is resistant to cold. The film maintains its elasticity even at -40°C.

Surface Preparation

- The application surface should be cleaned using a high pressure washer; Oil, grease, detergent, fuel and paraffin residues should be removed, as well as free from mold release agents, cement residues, shavings, loose particles and allowed to dry.
- Cement grout and glossy screed on concrete surfaces; The surface should be roughened and wiped with tools such as sandblasting, notching machine, diamond drum wiping machine, driven grinder.
- Cracks and potholes should be repaired with Em-Poxy 310 Repair Mortar beforehand.
- There should be absolutely no wet areas on the floor to be applied. Otherwise, the product will foam and swell. Surface max. humidity should be 5%.
- Fresh concrete floors should be allowed to dry for at least 28 days before application.

Application

- 24 hours before, during and after application in open areas
- No precipitation after 24 hours
- Before applying Purready 2K, 1 coat of PU-PRIMER or EMPOXY WB should be applied to the surface.

Preparation of the mixture:

Component A should be mixed in itself with a mechanical mixer, and hardener (component B) should be added by paying attention to the mixing ratio. A and B components should be applied immediately after mixing with a low speed (300 rpm) mixer until homogeneous. The pot life of the mixture is 20-30 minutes at 20°C.

Application:

The mixture, which is made ready for application, is applied with a roller or trowel in such a way that the surface is saturated and the pores are closed. The application time of the new coat on top of the coat is minimum 8 hours (20°C), maximum 1 day. It is very important that the second coat is applied within the specified new coat application time.

Cleaning the Equipment

The equipment can be cleaned by industrial solvents immediately after application.

Consumption

At least 1,5-2,5 kg/m² for two layers.

Packaging

Net 10 + 5 kg Plastic bucket



**Description**

As a double-component, polyurethane-based, solvent-free waterproofing material in liquid form, it is especially ideal for potable water tanks.

Usage Areas

- It is especially developed for waterproofing metallic or concrete water tanks. It can be used on concrete, marble, plaster, stone, wooden, and metallic surfaces as well.
- It is used for waterproofing concrete or ceramic coated terraces provided that a UV resistant top coat added.
- It is used for providing a waterproof coating resistant to light vehicle traffic and foot traffic.

Advantages

- Because it does not contain any solvent, it can be safely used in closed spaces.
- It is suitable to contact with potable water.
(Environment Lab. Report: 01.09.2006, No: 04130-04131, İSKİ Water Quality Control Management: 21.02.2007, Report of Middle East Technical University for the conformity to BS 6920 and use in drinking water systems Report No: 2014.03.04.147/03)
- It is waterproof; protects from corrosion; is resistant to friction, strokes and certain chemicals.
- It has strong adherence to the surfaces it is applied.
- It is safe; it has no harmful effect on health.
- It is very durable.

Surface Preparation

- The surface to be treated must be dry, clean, and free from dust, dirt, rust, and grease.
- There shouldn't be any damp areas on the surface to be treated. Otherwise the product leads to foaming and blistering. Em-Poxy WB must be used as a primer on concrete surfaces.

Application

- All the hardener contained in the little pail is mixed with all the main component contained in the big pail to a homogenous consistency. Product mixed for 2-3 minutes.
- The mixture must be consumed within 30-45 minutes; otherwise it will lose its workability due to jelling.
- It must be applied at least in two coats, and each coat must be applied 6 hours later than the preceding coat.
- If this interval exceeds 24 hours, the first coat must be sandpapered prior to the application of the other coat.
- After the application the surface must be protected from rain and water exposure for at least 6-8 hours. It can be applied with a brush or roller.
- In flooring application dry sand must be added to Pucoat II.
- Application temperature must be between +5°C and +30°C.

Technical Properties

Density	: 1,55 (±0,05) g/cm ³ (Comp. A)
	1,10 (±0,05) g/cm ³ (Comp. B)
	1,45 (±0,05) g/cm ³ (Comp.A+B)
Pot Life	: 30-45 minutes (20°C)
Setting Time	: Touch: 6 hours
	Bone-dry: 24 hours
Thermal Resistance	: (-10°C) - (+85°C)
Abrasion Resistance	: 85 mg (TS EN 5470-1)
CO ₂ Permeability	: 808,63 m (TS EN 1062-6)
Water Vapour Permeability:	7.116 m (TS EN ISO 7783:2011)
Water Permeability	: 0,002 kg/m ³ .h ^{0.5} (TS EN 1062-3)
Bond Strenght By Pull-Off	: 2,1 N-mm ² (TS EN 1542)

Consumption

600 g/m² minimum for one coat, and it must be applied in two coats minimum.

Packaging

5 kg + 1 kg set - 60 Sets / Pallet
20 kg + 4 kg set - 20 Sets / Pallet



**Description**

Aliphatic, UV-resistant, double component, polyurethane based, matte and glossy top coat paints which can be applied onto epoxy coatings, concrete and metal indoor and outdoor surfaces.

Usage Areas

- As a top coat floor or wall paint; on concrete and metal surfaces,
- On surfaces with Pu and epoxy coating,
- In industrial steel buildings,
- In production and storage areas, garages, hangars and loading ramps,
- In parking areas,
- In outdoor sporting fields,
- In tennis courts,
- In data processing and control centers.

Advantages

- It is resistant to water, sea water, salt, numerous chemicals, outdoor weather conditions, weak acids and bases.
- It is resistant to scratch and abrasion.
- It has high ultraviolet stability. It does not lead to chalking and colour change.
- It is suitable to sterile conditions. It is hygienic and easy to clean.
- The surface treated becomes waterproof.

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- The humidity ratio in the concrete must be lower than 5%.

- The surface to be treated must be clean and dry and free from any other substance such as dirt, grease, old coatings and curing materials.
- Gaps and holes must be completely cleared first and then filled to smooth the surface.
- Any swelling must be sandpapered and levelled.
- All dust and loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- During application relative humidity must not exceed 50% when the ambient temperature is +10°C, and 80% when the ambient temperature is +30°C.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Pu-Coat II SKM/SKP containers must be kept under +20°C the previous night.
- Direct Pu-Coat II SKM/SKP applications on concrete does not require undercoating.
- If former Pu-Coat II SKM/SKP coating has been applied more than 12 hours ago, the surface must be sandpapered thoroughly before the application of Pu-Coat II SKM/SKP.

Application

First stir Component A and Component B separately, and then add Component B to Component A and stir the mixture continuously to a homogenous consistency with a low speed mixer for 3 minutes. To minimize air drag avoid stirring too much. The mixture should be applied to the prepared surface with a merino roller. The first coat can be thinned with 10% cellulosic thinner. The thickness of each coat must not exceed 100 microns. 2 coats will be sufficient. It is critical to apply the second coat on time. Otherwise decreased adherence may lead to cleavage. If the edges match 'wet' during application, a seamless effect can be created.

Consumption

Approximately 0,300 kg/m² in two coats.

Packaging**Pu-Coat II SKM (Matte)**

7 kg Component A + 0,5 kg Component B = Net 7,5 kg as a set

Pu-Coat II SKP (Gloss)

6,5 kg Component A + 1 kg Component B = Net 7,5 kg as a set





Description

Beyazcoat Solar is an economic surface heat reducing waterproofing product which reflects the radiant heat energy before reaching the surface with the help of its microsphere particles. It minimizes the surface temperature.

Usage Areas

- On the roof and walls of buildings and special structures,
- It is used on surfaces such as all kinds of concrete, plaster, stone, metal, brick, wood, decorative coatings.

Advantages

- It is single component, ready to use and easy to apply.
- Reduces the internal temperatures of the buildings, reduces energy consumption in cooling and reduces costs.
- Prevents mold and fungus formation.
- Has high adhesion strength.
- Creates a crack bridge, remains elastic.
- Resistant to UV rays.
- Water based, not toxic and non-flammable.
- There are many color options.

Usage Areas

The entire surface must be clean, free from cement foam, loose particles, dirt, oil and dust. The surface should be abraded by water jet or mechanical abrasion to provide better adhesion. If old coatings and coatings are adhered to the surface well, application can be made on it. Bubbles, holes and cracks on the surface should be cleaned and repaired with an elastic filling. The very fine cracks that can be found on the surface can be repaired with Beyazcoat Solar in several layers and by brushing and filling into the cracks. According to the condition of the surfaces, Beyazcoat Solar should be thinned with water at a ratio of 1:1 and a primer coat should be applied. Rusted parts on metal surfaces should be cleaned by sandblasting or other methods and then primed with an anticorrosive primer. Adhesion to other metal surfaces must also be ensured by proper surface preparation (priming, degreasing, abrasion).

Application

Apply the selected primer according to the surface to be applied and let it dry. Apply Beyazcoat Solar with brush, roller or by spraying with airless gun in two or more layers to obtain the total coating thickness recommended. Wait 4-8 hours between coats, then apply and let the surface dry overnight after finishing the last coat.

Consumption

1-1,3 kg/m² for two layers.

Packaging

Net: 20 kg Plastic Drum
33 Pieces / Pallet





Description

As an asphalt and solvent-free superior waterproofing material, Beyazcoat is applied in liquid form, and upon setting, it becomes a very elastic, impermeable, seamless, and durable coating. Fiber Added Beyazcoat is reinforced with strengthening fibres.

Usage Areas

- Beyazcoat can be used for waterproofing and damp-proofing a wide range of building materials such as concrete, plaster, brick, glazed tile, cement brick, gas concrete, wood, galvanize, iron sheet and zinc.
- It can be safely used on all vertical and horizontal surfaces made of these materials; on roofs and terraces; for repairing window frames, drip moldings, water ducts, eaves, raindrops, strainers and chimney bottoms.
- It can be used in wet areas like bathrooms and kitchens.

Advantages

- Beyazcoat is fully impermeable.
- Beyazcoat is a highly durable, inflammable, tar, asphalt and solvent-free waterproof sealant. It can be painted.
- It is very easy to apply, and as a semi-fluid material it works very good even on the hardest-to-cover surfaces.
- It is elastic. Its elongation is up to 300% at 1 to 1,5 mm thickness.

- It has perfect adherence to all types of building materials.
- Its elasticity is resistant to temperature changes.
- It is resistant to light chemicals.
- Its microporosity provides breathability for the surfaces.
- Thanks to biocids, it inhibits bacteria and mildew growth.
- As a decorative material, it is produced in white, but it can be easily tinted by using tube colorants which are easily available in the market.

Application

- Depending on the condition of the surface, Beyazcoat, 1:1 diluted with water, is applied as an undercoat, and over this undercoat Fiber Added Beyazcoat is applied at least in two coats without thinning.
- Each coat must be applied after 24 hours maximum, and each application must be vertical to former application.
- Beyazcoat requires a protective topcoat when it is applied to water storage tanks, or any surfaces exposed to foot traffic or other mechanical strokes.

Application of Terraces

- The surface to be treated must be dry, clean, and free from dust, dirt, rust, and grease.
- There must be slope to prevent water pods.
- Filleting and repairing on the surface must be done with cement mortar without lime.
- 1:1 diluted with water, is applied as an undercoat.
- After 24 hours, Beyazcoat must be applied with roller or brush in two coats.
- Vertical and horizontal connection points must be reinforced with corner tape, when the first layer is still wet.

Consumption

0,750 kg/m² in vertical application and 1,500 kg/m² in horizontal application.

Packaging

4,5 kg Pail - 80 Pieces / Pallet
19 kg Pail - 33 Pieces / Pallet



Beyazcoat /
Fiber Added Beyazcoat
Application Film





Description

Hybrid Polyurethane based, single component, ready-to-use, self-spreading water insulation and coating material that does not contain solvents and can be applied on wet surfaces.

Usage Areas

It is applied safely against water and humidity on materials such as concrete, stone, roofing material and metal, in eaves trough, channels and canalettes, terrace roofs, cold storage depots.

Technical Properties

Color	: Grey
Base	: Hybrid polyurethane
Shell Formation	: 45 minutes (+23°C/50% relative humidity)
Curing Time	: 3 hours (for 1 mm thickness)
Resistance to Heat	: -40°C - +80°C
Viscosity	: 7000 mPas (20°C Brookfield Spindle 6)
Shore A Rigidity	: 40 Shore A
Crack Bridging	: 3 mm
Resistance to Vapor	: 6 Bar (film thickness: 3 mm /24 h)
Solid substance ratio	: 100%
Application Temperature:	+5°C - +40°C
Density	: 1.4 g/cm ³
Tensile strength	: 1.1 (N/mm ²)
Tearing Strength	: 6.2 N/mm
Elongation at Break	: 200%



Advantages

- Can be applied on wet and humid surfaces
- It has excellent adhesive strength on many different surfaces such as concrete, wood, ceramic, aluminum, glass, steel and zinc.
- It can be processed and dries fast
- Upon application it forms a seamless, water proof and protective layer
- It can be applied between temperatures of +5°C to +40°C
- It has high adherence power. Does not require the primer coat. Adheres perfectly even on old finishes.
- It is highly resistant against oil, rust and weather conditions. It preserves its initial properties for years to come.
- It is a single component, easy to use elastic material.
- It can form crack bridging.
- It is resistant to sun light due to the fact that it is manufactured of UV resistant resins.
- Due to its sustained elasticity, cracks do not form on the surfaces of application.
- Can be stepped on after being cured (approximately 24 hours).
- It is suitable to contact with potable water.

(Middle East Technical University
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Report Date : 24.03.2014)

Surface Preparation

The application surface must be durable, clean and free of oil. The wetness or humidity of the application surface would not be a problem.

Application

- PUR-WET is a ready to use material and it would be sufficient to stir it for a short time prior to application.
- It must be applied in two layers and in total of 2 mm thickness by a roller, brush or airless spray gun.
- Low temperatures or adverse weather conditions may slow down the curing process.

Consumption

2,8 kg/m² in two coats.

Packaging

Net 20 kg Metallic pail - 33 Pieces / Pallet



Pur-Wet
Application Film



**Description**

It is a transparent, polyurethane-based, single-component concrete primer with a high solid ratio.

Usage Areas

It is used for preparing concrete and other types of surfaces for the application of polyurethane-based top coat ground paints, polyurethane-based parquet adhesives and all kinds of polyurethane-based ground coating materials.

Advantages

- As a single component material it contains solvent. It is cured as a result of chemical reaction with moisture.
- It fills the pores found on the concrete and other surfaces treated.
- It is easy to use, and is highly durable and solid after being cured.
- It is resistant to water and chemical materials.
- With perfect adherence, it prepares surfaces for the application of polyurethane materials.

Application

- It must be applied with a roller.
- To cover pores perfectly on absorbant surfaces, the second coat must be applied at least 6 hours after the application of the first coat.
- For best results in polyurethane applications the pores found on the surface must be perfectly covered with Emülzer® PU -ASTAR.
- Very absorbant surfaces may require 2-3 coats.
- Emülzer® PU -ASTAR primed surfaces must be protected from water for 4-5 hours.

Consumption

Depending on the absorption characteristics of the applied surface, approximately 0,150-0,250 kg/m².

Packaging

4 kg Metallic pail - 80 Pieces / Pallet
15 kg Metallic pail - 33 Pieces / Pallet





Description

It is a double-component, epoxy and water based, easy-to-clean material with humidity tolerance and resistant to some chemicals.

Usage Areas

It is used as an primer on concrete, metal, wood, asphalt, etc. before the application of polyurethane and epoxy-based top coats.

Advantages

- It is water based.
- Fills the holes found on the concrete and other surfaces treated.
- It is easy-to-use and it becomes a hard and durable undercoat after having been cured.
- It is resistant to water and chemicals.
- With perfect adherence, it prepares the surface perfectly for the application of polyurethane and epoxy materials.

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- The surface to be treated must be clean, dry and free from any other substance such as dirt, grease, old coatings and curing materials.

- Gaps and holes must be completely cleared first and then filled with Em-Poxy WB which is prepared in paste form by adding sand.
- To ensure a smooth surface any swelling must be levelled.
- All dust loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Em-Poxy WB containers must be kept under +20°C the previous night.

Application

First, Component A is mixed to a homogenous consistency in its original packaging using a low speed mixer for approximately 1 minute and then Component B is added into it to continue mixing for approximately 3 minutes again with the low speed mixer. The application should be performed with a roller or brush. The mixture can be applied within approximately 40 minutes depending on the air temperature. The surface treated must be protected from water for 4-5 hours. For perfect adhesion the concrete surface should be a little humid and it will be sufficient to wipe the surface with a damp cloth. As the undercoat completes its cure, the application of the top coat must be performed within minimum 12 and maximum 18 hours.

Consumption

0,150 kg/m² for a single coat. Depending on the absorbance of the surface to be treated the application of a second coat may be required.

Packaging

Component A + Component B = Net 10 kg Set









Invisible Waterproofing Materials

Saysilox (Invisible Transparent Repellent)

Saysilan (Water-Based Invisible Repellent)

Cliolite (Surface Hardening Impregnation Solution)

Cliolite CIT (Corrosion Inhibitor Treatment)

izobalkon (Invisible Transparent Repellent)



WATERPROOFERS ASSOCIATION





Description

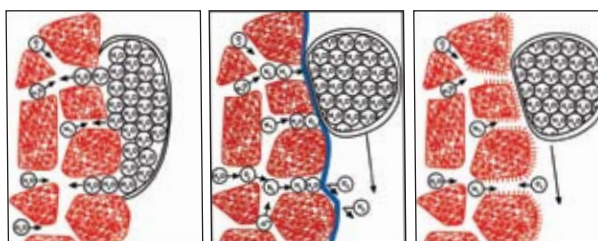
Saysilox is a solvent and silan-siloxan based surface impregnating and priming material providing an invisible waterproof barrier in capillaries when it is absorbed by the surface it is applied. It does not have any impact on water vapor permeability of the surface, and therefore it provides breathability.

Usage Areas

- The surface to be treated must definitely have a sharp downstream slope.
- It is used for all types of concrete surfaces; mineral plasters; highly absorbant surfaces such as gas concrete, bricks, roofing tiles, etc.; mineral based natural and artificial stones; surfaces with mineral based paints; monuments and statues constructed with these materials.
- It can be used as an undercoat prior to painting.
- It can be used in restoration applications.
- It is not approved to be used under pressure water, on glazed and glass surfaces, in underground conditions with high hydrostatic pressure or on painted surfaces.

Advantages

- It is an invisible material.
- It is an excellent material to protect the appearance of the surfaces.
- Thanks to fast water-repellent effect, it provides self-washing surfaces.
- Has excellent penetration properties.
- It is ready-to-use in liquid form.
- It dries solid without causing stickiness.
- It does not form a layer on the surface.



- Water absorption on uncoated surface.
- Most of the coatings are not breathable products.
- Saysilox and Saysilan does not form a layer on the surface.
- Surface can be breathable.

- Its water vapor permeability provides breathability for the surface.
- It protects the surface from mold, mildew, fungus and moss formation by avoiding moisture that would be an excellent environment for microorganism reproduction.
- It is resistant to alkali environments.
- It provides heat economy by protecting walls from wetting. (5% humidity results in a loss of 30% in thermal insulation value of that material.)
- Its water-repellent effect protects building elements from any damage which may be caused by expansion due to freeze and thaw cycles.
- It has excellent UV-resistance.

Application

Saysilox must be mixed thoroughly prior to application. It must be applied coat after coat without waiting for the former coat to dry up. It must be applied at least in two coats. It is recommended to wait 24 hours before applying any coating material onto Saysilox. Prior to any application into joints of non-porous building materials such as ceramic, faience, glass brick, glass tile, etc., the joints must be repaired and filled. Saysilan is applied into joints in wet coats by using a thin tipped brush or rake. After the application, any material smeared onto bright surfaces must be wiped off with a damp cloth. Otherwise, these surfaces will become slippery. Saysilox is not approved to be used on painted surfaces, under pressure water (pool, water tank, etc.), or in underground conditions with high hydrostatic pressure.

Consumption

Depending on the absorption of the surface, 200-600 g/m² for each application.

Packaging

3,5 kg Metallic case - 140 Pieces / Pallet
15 kg Metallic case - 45 Pieces / Pallet





Description

Saysilan is a water-based invisible repellent and undercoat which provides an invisible waterproof barrier in capillaries when it is absorbed by the surface it is applied.

Usage Areas

- It is used on all types of concrete surfaces; mineral plasters; highly absorbant surfaces such as gas concrete, bricks, roof tiles, terra cotta, travertine, etc.; mineral based natural and artificial stones; surfaces with mineral based paints; monuments and statues constructed with these materials.
- It can be used to protect these surfaces (around pools, in balconies and terraces) from stains caused by liquids.
- It can be used as an undercoat prior to painting.
- It can be used in restoration applications.
- It is not approved to be used on painted surfaces, glazed glass surfaces and in underground conditions with high hydrostatic pressure.

Advantages

- It is an invisible material.
- It is an excellent material to protect the appearance of the surfaces.
- It has excellent UV-resistance.
- Thanks to fast water-repellent effect, it provides self-washing surfaces.
- It has excellent penetration properties.
- Ready to use in liquid form.

- Does not form any film on the surface.
- Water vapor permeability provides breathability for the surface.
- Protects the surface from mold, mildew, fungus and moss formation by avoiding moisture which is an excellent environment for microorganism reproduction.
- Avoids the formation of white salty stains on building materials.
- Resistant to alkali environments.
- Provides heat economy by protecting walls from wetting. (5% humidity results in a loss of 30% in thermal insulation value of that material).
- Dries solid without causing stickiness.
- Its water-repellent effect protects building elements from any damage which may be caused by expansion due to freeze and thaw cycles.
- It is non-explosive and inflammable.
- Causes no toxic and ecological damage.

Application

Saysilan must be mixed thoroughly prior to application. It must be applied coat after coat without waiting for the former coat to dry up. It must be applied at least in two coats. It is recommended to wait 24 hours before applying any coating material onto Saysilan. Prior to any application into joints of non-porous building materials such as ceramic, faience, glass brick, glass tile, etc., the joints must be repaired and filled. Saysilan is applied into joints in wet coats by using a thin tipped brush or rake. After the application, any material smeared onto bright surfaces must be wiped off with a damp cloth. Otherwise, these surfaces will become slippery. Saysilan is not approved to be used on painted surfaces, under pressure water (pool, water tank, etc.), or in underground conditions with high hydrostatic pressure.

Consumption

Depending on the absorption of the surface, 200-700 g/m² for two coats.

On gas concrete, for instance: 450 g/m² for the first coat and 250 g/m² for the second coat.

Packaging

5 kg Plastic drum - 90 Drums / Pallet
20 kg Plastic drum - 27 Drums / Pallet





Description

It is a styrene acrylic co-polymer based solution used for surface hardening and impregnation.

Usage Areas

- It is used on all kinds of concrete surfaces as well as highly absorbent surfaces such as bricks, eternit, plaster panels, polyester, gas concrete and roofing tiles, and on painted surfaces.
- It is used on alkali (calcareous) surfaces.
- It is used as an undercoat prior to painting.
- It is not approved to be used under water pressure, and in underground conditions with high hydrostatic pressure.

Advantages

- Adheres perfectly to porous and chalky surfaces.
- Can be cured free from atmospheric conditions. Allows application in the regions with high humidity or frequent rain fall.

- It is resistant to acids and alkalies.
- Has breathability.
- Self-clean.
- UV resistant.
- Allows application in a wide temperature range.
- Can be applied onto surfaces with little humidity as well.

Application

- It can be applied with a brush, roller or pistol.
- Cliolite must be mixed thoroughly prior to application.
- It must be applied in two coats.
- The interval between the application of two coats must be 3-6 hours.

Consumption

100 g/m² for each coat

Packaging

200 kg Barrell



Description

A surface-applied clear liquid that penetrates concrete and provides an organofunctional silane molecule to inhibit the electrochemical corrosion process between the rebar and the chloride ions, and oxygen and moisture within the concrete.

Usage Areas

- Steel-reinforced cast-in-place, precast, post tension, GFRC, prestressed or other steel-reinforced concrete.
- Parking decks, facades, balconies, walkways, piers, bridge decks, beams, columns and other steel-reinforced concrete structures.
- Marine environments with high relative humidity and areas where deicer salts are used.

Advantages

- Inhibits corrosion of carbon and galvanized steel rebar.
- Is effective in both marine and high-humidity environments.
- Is easy to apply.
- Is effective in heavily chloride-contaminated concrete.
- Is effective in carbonated concrete.
- Complies with VOC regulations.
- Is vapor permeable.
- Dries quickly.
- Prevents ingress of additional chlorides.

Surface Preparation

Concrete surface must be cleaned to remove all traces of dirt, dust, efflorescence, mold, grease, oil, asphalt, laitance, paint, coatings, curing compounds and other foreign materials that would inhibit penetration. Acceptable cleaning methods include shotblasting, sandblasting, waterblasting, grinding and chemical cleaning. In some instances, the use of a power broom or street sweeper can be utilized. Check with your Protectosil representative determine what method is appropriate to verify that surface preparation is adequate prior to treatment.

Application

Apply multiple coats of Cliolite CIT to entire concrete surface, including repaired areas. Allow a minimum of 15 minutes between coats (or until visibly dry). Most applications require two or three coats at 230 to 180 ml/m² for each coat. The exact amount of Cliolite CIT will depend on the present corrosion rate, the chloride ion level and the service environment of the structure. Cliolite CIT should be applied to concrete using low pressure pumping equipment with a wet fan type spray nozzle. Alternate methods include roller, brush or pouring (in crack for example). Do not alter or dilute the material. Do not apply to a wet or damp substrate. The proper application conditions are between 40°F and 100°F (5°C to 38°C). Lower or higher application temperatures require prior written approval from our technical service department. Do not apply if rain is expected within 4 hours following application, or if high winds or other conditions prevent proper application. The substrate should be as dry as possible prior to application. Depending on weather conditions, allow between 24 and 72 hours for the substrate to dry after rain or cleaning with water.

Consumption

Each layer 180-230 ml/m²

Packaging

Net: 200 lt Barrel



Invisible Transparent Repellent



Description

Izo Balkon is an undercoat repellent providing excellent water-repellent effect by impregnating the surface and forming an invisible water barrier in capillaries.

Usage Areas

- It is used for temporary waterproofing of the balconies and terraces which are not insulated yet, but already coated with ceramic, faience, etc. This application does not cause any damage for these coatings.
- It provides water-repellent effect in the joints of non-porous building elements such as ceramic, faience, glass tile, glass mosaic (BTB), etc.
- It is used as a surface protector for porous, dust and stain sensible coating materials such as cotto and clinker and it is applied before filling the joints.
- It is used on all types of concrete surfaces, mineral plasters, highly absorbant surfaces such as gas concrete, bricks, roof tiles, terracotta, travertine, and on monuments and statues constructed with these materials.
- It can be used to protect these surfaces (around pools, balconies, terraces) from the stains which may be caused by mortar.

Advantages

- It is an invisible material.
- It is an excellent material to protect the appearance of the surfaces.
- Thanks to fast water-repellent effect, it provides self-washing surfaces.

- It is highly penetrating.
- It is ready-to-use in liquid form.
- It dries solid without causing stickiness.
- It does not form any film on the surface.
- Its water vapor permeability provides breathability for the surface.
- It protects the surface from mold, mildew, fungus and moss formation by avoiding moisture that would be an excellent environment for microorganism reproduction.
- It avoids salt efflorescence.
- It is resistant to alkali environments.
- It provides heat economy by protecting walls from wetting. (5% humidity results in a loss of 30% in thermal insulation value of that material).
- Its water-repellent effect protects building elements from any damage which may be caused by expansion due to freeze and thaw cycles.
- It is non-explosive and inflammable.
- It causes no toxic and ecological damage.
- It has excellent UV-resistance.

Application

- İzobalkon should be mixed thoroughly prior to application. It must be applied with saturation technique, coat after coat, without waiting for the former coat to dry up.
- It must be applied at least in two coats. It is recommended to wait 24 hours before applying any coating material onto Izo Balkon.
- Prior to any application into joints of non-porous building materials such as ceramic, faience, glass brick, glass tile, etc., the joints must be repaired and filled.
- Izo Balkon is applied into joints in wet coats by using a thin tipped brush or rake.
- After the application, any material smeared onto bright surfaces must be wiped off with a damp cloth.
- Otherwise, these surfaces will become slippery. Izo Balkon is not approved to be used on painted surfaces, under pressure water (pool, water tank, etc.), or in underground conditions with high hydrostatic pressure.

Consumption

Depending on the absorption of the surface, 200-700 g/m² for two coats.

Packaging

1 kg Plastic bottle
408 Bottles / Pallet

126



Izo Balkon
Application Film







Epoxy Floor Coatings

Em-Poxy A (Epoxy Primer)

Em-Poxy PK (For Textured Applications)

Em-Poxy KY (Self Levelling Type)

Em-Poxy WB (Water-Based Epoxy Primer)

Pu-Coat II SKM (Matte Aliphatic Polyurethane Top Coat Paint)

Pu-Coat II SKP (Gloss Aliphatic Polyurethane Top Coat Paint)





Description

It is a double-component, epoxy-based, non-solvent, transparent primer with low viscosity.

Usage Areas

It is used as a primer on concrete, metal, wood, asphalt, etc. before the application of polyurethane coatings and epoxy-based top coating systems.

Advantages

- Non-solvent.
- Fills the holes found on the concrete and other surfaces treated.
- It is easy-to-use and it becomes a hard and durable primer after having been cured.
- It is resistant to water and chemicals.
- With perfect adherence, it prepares the surface perfectly for the application of polyurethane and epoxy materials.

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- The humidity ratio in the concrete must be lower than 5%.
- The surface to be treated must be clean, dry and free from any other substance such as dirt, grease, old coatings and curing materials.

- Gaps and holes must be completely cleared first and then filled with Em-Poxy A which is prepared in paste form by adding sand.
- To ensure a smooth surface any swelling must be levelled.
- All dust and loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- During application relative humidity must not exceed 50% when the ambient temperature is +10°C, and 80% when the ambient temperature is +30°C.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Em-Poxy A containers must be kept under +20°C the previous night.

Application

First stir Component A and Component B separately, and then add Component B to Component A and stir the mixture continuously to a homogenous consistency with a low speed mixer for 3 minutes. To minimize air drag avoid stirring too much. The mixture should be applied to the prepared surface with a roller or trowel. It may require a second coat if it is applied onto an absorbant surface. It is critical to apply the second coat on time. Otherwise decreased adherence may lead to cleavage.

Cleaning the Equipment

The equipment used should be cleaned with industrial solvents as soon as the application is over.

Consumption

Approximately 0,150-0,300 kg/m² depending on the absorbance of the surface to be treated.

Packaging

10 kg (Component A) + 5 kg (Component B) =
Net 15 kg as a set





Description

It is a double-component, epoxy resin-based, textured (orange peel effect) floor coating containing a very small amount of solvent.

Usage Areas

- As a top coat; on concrete surfaces,
- In base coated systems rugged with sand,
- In areas requiring a nonskid and easy-to-clean surface,
- In production and storage areas, garages, hangars and loading ramps,
- In parking areas,
- At hospitals,
- In kitchens,
- In data processing and control centers.

Advantages

- Contains a very small amount of solvent.
- Has a high chemical and mechanical strength.
- Has a high adhesion strength.
- Has a high abrasive strength.
- It is liquid-proof.
- It is economical.
- Can provide nonskid surfaces.
- It is suitable to sterile conditions. It is hygienic and easy to clean.

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- The humidity ratio in the concrete must be lower than 5%.
- Potential movements must be considered in designing joints and wherever necessary joints must be transferred to coating.
- The surface to be treated must be clean and dry and free from any other substance such as dirt, grease, old coatings and curing materials.
- Gaps and holes must be completely cleared first and then filled with Em-Poxy A or Em-Poxy WB which is prepared in paste form by adding sand.
- To ensure a smooth surface any swelling must be levelled.
- All dust and loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- Concrete surfaces must be undercoated with Em-Poxy A. (Make sure the surface is primed with a seamless and poreless undercoat. Apply the undercoat with a brush or roller.)
- During application relative humidity must not exceed 50% when the ambient temperature is +10°C, and 80% when the ambient temperature is +30°C.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Em-Poxy PK containers must be kept under +20°C the previous night.

Application

First stir Component A and Component B separately, and then add Component B to Component A and stir the mixture continuously to a homogenous consistency with a low speed mixer for 3 minutes. To minimize air drag avoid stirring too much. The mixture should be applied to the prepared surface with a coral roller in two coats and the thickness of each coat must be 200 microns. It is critical to apply the second coat on time. Otherwise decreased adherence may lead to cleavage. If the edges match 'wet' during application, a seamless effect can be created.

Consumption

Approximately 0,600 kg/m² in two coats depending on the absorbance of the surface to be treated.

Packaging

Component A + Component B
= Net 12,5 kg as a set





Description

Emülzer® Em-Poxy KY is a double-component, epoxy-based, non-solvent paint and coating ensuring a smooth and bright surface.

Usage Areas

- Pharmaceutics,
- Food,
- Automotive industry,
- Beverage industry,
- Kitchens,
- Hospitals,
- All types of production, packaging and storage areas,
- Data processing and control centers,
- Hangars,
- Parking areas.

Advantages

- Non-solvent.
- Has a high chemical and mechanical strength.
- Has a high adhesion strength.
- Has a high abrasive strength.
- Easy-to-clean with its poreless and smooth surface.
- It is suitable to sterile conditions and it is hygienic.

Physical Properties

Colour	: RAL colours
Batch density	: 1,6 g/cm ³
Adhesion strength	: > 3 N/mm ²
Pot life	: 50 minutes at 20°C
Waiting period for another coat	: 12-18 hours at 20°C
Complete curing period	: 7 days

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- Potential movements must be considered in designing joints and wherever necessary joints must be transferred to coating.
- The surface to be treated must be clean and dry and free from any other substance such as dirt, grease, old coatings and curing materials.
- Gaps and holes must be completely cleared first and then filled with Em-Poxy A or Em-Poxy WB which is prepared in paste form by adding sand.
- To ensure a smooth surface any swelling must be levelled.
- All dust and loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- During application relative humidity must not exceed 50% when the ambient temperature is +10°C, and 80% when the ambient temperature is +30°C.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Em-Poxy WB containers must be kept under +20°C the previous night.

Application

First stir Component A and Component B separately, and then add Component B (hardener) to Component A and stir the mixture continuously to a homogenous consistency with a 300-400 rpm mixer for 3 minutes minimum. The mixture should be applied to the prepared surface with a merino roller in two coats and the thickness of each coat must be 250 microns. For a thick coating, up to 1:1 sand (0,1-0,3 mm) may be added into the mixture. In this case, Component A and Component B must be mixed first and then sand must be added slowly. It is applied with a trowel. It is critical to apply the other coats on time. Otherwise decreased adherence may lead to cleavage of the top coat.

Curing

Emülzer® Em-Poxy KY may be ready to walk on (under control) after having completed its initial setting period. It takes 7 days at 25°C to become fully resistant to heavy load and chemical effects.

Consumption

800 g/m² in two coats, the thickness of each coat being 250 microns. A greater amount of material is required for sand applications and rough surfaces.

Packaging

Component A + Component B
= Net 12,5 kg as a set





Description

It is a double-component, epoxy and water based, easy-to-clean priming material with humidity tolerance and resistant to some chemicals.

Usage Areas

It is used as a primer on concrete, metal, wood, asphalt, etc. before the application of polyurethane and epoxy-based top coats.

Advantages

- It is water based.
- Fills the holes found on the concrete and other surfaces treated.
- It is easy-to-use and it becomes a hard and durable primer after having been cured.
- It is resistant to water and chemicals.
- With perfect adherence, it prepares the surface perfectly for the application of polyurethane and epoxy materials.

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- The surface to be treated must be clean, dry and free from any other substance such as dirt, grease, old coatings and curing materials.
- Gaps and holes must be completely cleared first and then filled with Em-Poxy WB which is prepared in paste form by adding sand.

- To ensure a smooth surface any swelling must be levelled.
- All dust and loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Em-Poxy WB containers must be kept under +20°C the previous night.

Application

First, Component A is mixed to a homogenous consistency in its original packaging using a low speed mixer for approximately 1 minute and then Component B is added into it to continue mixing for approximately 3 minutes again with the low speed mixer. The application should be performed with a roller or brush. The mixture can be applied within approximately 40 minutes depending on the air temperature. The surface treated must be protected from water for 4-5 hours. For perfect adhesion the concrete surface should be a little humid and it will be sufficient to wipe the surface with a damp cloth. As the primer completes its cure, the application of the top coat must be performed within minimum 12 and maximum 18 hours.

Consumption

0,150 kg/m² for a single coat. Depending on the absorbance of the surface to be treated the application of a second coat may be required.

Packaging

Component A + Component B = Net 10 kg Set





Description

Aliphatic, UV-resistant, double component, polyurethane based, matte and glossy top coat paints which can be applied onto epoxy coatings, concrete and metal indoor and outdoor surfaces.

Usage Areas

- As a top coat floor or wall paint; on concrete and metal surfaces,
- On surfaces with Pu and epoxy coating,
- In industrial steel buildings,
- In production and storage areas, garages, hangars and loading ramps,
- In parking areas,
- In outdoor sporting fields,
- In tennis courts,
- In data processing and control centers.

Advantages

- It is resistant to water, sea water, salt, numerous chemicals, outdoor weather conditions, weak acids and bases.
- It is resistant to scratch and abrasion.
- It has high ultraviolet stability. It does not lead to chalking and colour change.
- It is suitable to sterile conditions. It is hygienic and easy to clean.
- The surface treated becomes waterproof.

Surface Preparation

- Pressure strength of the concrete to be treated must be 25 N/mm² minimum and tensile strength 1,5 N/mm² minimum.
- The humidity ratio in the concrete must be lower than 5%.

- The surface to be treated must be clean, dry and free from any other substance such as dirt, grease, old coatings and curing materials.
- Gaps and holes must be completely cleared first and then filled to smooth the surface.
- Any swelling must be sandpapered and levelled.
- All dust and loose and displaced particles must be removed by using a brush and/or vacuum cleaner.
- During application relative humidity must not exceed 50% when the ambient temperature is +10°C, and 80% when the ambient temperature is +30°C.
- The temperature of the surface to be treated must be between +10°C and +30°C.
- The temperature of the surface to be treated must be 3°C higher than the dew point.
- Ambient temperature and surface temperature must be increased by using heaters for the applications performed in cold weather conditions and Pu-Coat II SKM/SKP containers must be kept under +20°C the previous night.
- Direct Pu-Coat II SKM/SKP applications on concrete does not require undercoating.
- If former Pu-Coat II SKM/SKP coating has been applied more than 12 hours ago, the surface must be sandpapered thoroughly before the application of Pu-Coat II SKM/SKP.

Application

First stir Component A and Component B separately, and then add Component B to Component A and stir the mixture continuously to a homogenous consistency with a low speed mixer for 3 minutes. To minimize air drag avoid stirring too much. The mixture should be applied to the prepared surface with a merino roller. The first coat can be thinned with 10% cellulosic thinner. The thickness of each coat must not exceed 100 microns. 2 coats will be sufficient. It is critical to apply the second coat on time. Otherwise decreased adherence may lead to cleavage. If the edges match 'wet' during application, a seamless effect can be created.

Consumption

Approximately 0,300 kg/m² in two coats.

Packaging

Pu-Coat II SKM (Matte)

7 kg Component A + 0,5 kg Component B = Net 7,5 kg as a set

Pu-Coat II SKP (Gloss)

6,5 kg Component A + 1 kg Component B = Net 7,5 kg as a set









Complementary Products

Insulation Strainers

Styro-Bitüm (Thermal Insulation Plate Adhesive)

Em-Poxy 310 Epoxy Fixing and Adhesive Mortar

(A Two Component Epoxy Based Fixing Paste)

Dilatation Tapes

Corner Tape

Joint Insulation Tape 120/70 (Elastic Waterproofing Tape)

Inner Corner Waterproofing Tape (Elastic Waterproofing Tape)

Outer Corner Waterproofing Tape

(Elastic Outer Corner Waterproofing Tape)

Geotextile Felt (Non-Woven Polyester and Polypropylene Felt)

Puntodrain (Protective Plate for Drainage and Insulation)

Puntodrain PK (Protective Plate for Drainage and Insulation
with Geotextile)

Puntodrain RG (Protective Plate for Drainage and Insulation
for Green Roofs)

Puntodrain Fixing Pin

PP Fiber (6-12-18 mm)

Nassio (Breathable Waterproofing Membrane)

Butyl Tape

Insulation Brush

Fiber Mesh

Bituminous Foam

Trowel

Concrete Primer (Acrylic Copolymer Based, Single Component,
Primer For Exposed Concrete Surfaces)



Leaf Holders / Insulation Compatible Strainers / Ventilation Shafts / EPDM Parapets and Vertical Falls



Leaf Holders

Leaf Holders are used on Roof gutters, concealed gutter, influx of rainwater drainage systems open-closed balconies and terraces. In the long run Bird feathers, leaves, various garbage particles, soil, sand and dust particles etc carried by the wind, blocks the entrance of the drain systems and decreases the volume of water flow. Under these conditions leaf holders prevents these blockages and provide practical, efficient and economic solution to expenditures which might occur because of flooding.

Insulation Compatible Strainers

While waterproofing the wet areas of the buildings, waste water should be drained properly with strainers. On the long term if suitable strainers did not used in such areas; water leaks will effect the structure of buildings and its bearings negatively. These will form a decrease on the load - carrying capacity and durability.

- 100% compliant with all liquid water insulation materials thanks to its integrated meshed skirt on bottom body and laminated textile layer.
- Height of upper body is adjustable from 1 cm to 9 cm height extension apparatus enables unlimited extension.

- 304 quality stainless and plastic frames.
- Bottom body can be directed towards plumbing providing easy installation. Meshed insulation skirt integrated to the top body is located between the liquid insulation layers applied over the leveling screeds.
- This provides integration of the drain to the insulation material.
- Height adjusted top body can be clipped from the guides to set desired height of grate between 1 and 9 cm. Further extension possible through additional apparatus.
- It can be used in any location where liquid water insulation is applied; where thick floor cover such as marble is to be applied or all wet surfaces where heat insulation will be applied.

Ventilation Shafts

- Used in terrace, roof exits of ventilation shafts used for discharging steam from the building or vents with Ø10 cm or less diameter
- Thermoplastic structure ensures impermeability
- It is recommended to use ventilation shafts for the areas bigger than 100 m².
- UV Resistant.
- Installed to the highest point of the slope of the each roof.

EPDM Parapets and Vertical Falls

- EPDM steep descents and parapets; It provides absolute impermeability between membrane covers and rain downspouts.
- Made of thermoplastic rubber resistant to ultraviolet rays, all atmospheric and chemical effects.





Description

It is a bitumen-based adhesive used for adhering EPS or XPS thermal insulation plates in undersoil insulation applications.

Usage Areas

It is used for adhering thermal insulation plates after bitumen or cement-based undersoil insulation applications.

Advantages

- It can be easily applied by anyone.
- Because it does not contain any flammable and toxic materials, it can be safely used in closed spaces.
- It is elastic.
- It is ready to use; it does not require heating or thinning.
- It is a cold applied material.
- It is thixotropic, so it does not creep.
- It adheres perfectly even to damp surfaces thanks to its water-based characteristic.
- Dries very fast.

Application

- Sytrobittum is applied in points onto the sides and middle parts of thermal insulation plates and then adhered to the surface by pressing firmly.
- If it will be applied onto bituminous membrane, the PE film on the surface of the membrane must be burnt.

Consumption

0,150 - 0,200 kg/m²

Packaging

13 kg Pail - 33 Pails / Pallet



Em-Poxy 310 Epoxy Fixing and Adhesive Mortar 2072

A Two Component Epoxy Based Fixing Paste



Description

It is a double-component, epoxy resin-based, non-solvent, thixotropic repair and mounting mortar.

Usage Areas

- It is used; for mounting expansion tapes,
- For filling tie rod holes,
- For repairing columns, curtains and girders,
- As a mounting, filling and bevelling mortar for waterproofing joints,
- For repairing and waterproofing concrete cracks,
- For repairing all types of structural concrete,
- For mounting and adhering all types of metal elements onto concrete or steel elements.

Technical Properties

Colour	: Grey
Density	: 1,6 kg/dm ³
Pressure strength	: 75 MPa
Adhesion to concrete	: >4 MPa (Breaking from concrete)
Pot life	: 30 minutes (+30°C)
Initial setting	: 8 hours (+30°C)
Loading	: 24 hours (+30°C)
Actual strength	: 7 days

Advantages

- Highly resistant to corrosion, abrasion and chemicals.
- Resistant to vibration.
- Does not shrink.

- Waterproof and gas-proof.
- Due to fast curing, allows loading in a very short period of time.
- Has high adherence.
- Non-solvent.
- Easy-to-mix and easy-to-apply.
- Has perfect adhesion to concrete, steel and many other building materials.
- Thixotropic; does not creep in horizontal and overhead applications.

Surface Preparation

The concrete should be firm and strong. Holes must be cleared with pressured air, leaving behind no grease, dust, plastic particles or water. Cement based surfaces must be cleared from all dirt and dust prior to application. Metal surfaces must also be cleared from rust and dirt. The material must be mixed to a homogenous consistency with a low speed mixer for at least 2-3 minutes; it should not at all be mixed manually or with a trowel. It must be applied with a trowel or spatula. During application surface, ambient and material temperatures must be between +5°C and +30°C.

Application

- The dosage of the components are designed according to application requirements.
- The hardener is poured into the epoxy and mixed to a homogenous consistency and gray colour; to prevent air bubbles a low speed mixer must be used.
- Pot life must be considered in the preparation of the material and only required amount of it must be mixed. Because it is non-solvent, it cannot be thinned with a thinner.
- During application the air temperature must be +5°C minimum.

Cleaning the Equipment

The equipment used should be cleaned with a detergent and warm water if possible, otherwise with a cellulosic thinner.

Consumption

1,6 kg/dm³

Approximately 2 kg for 1 meter of expansion tape.

Packaging

Epoxy resin + Hardener = Net 5 kg as a set
60 Sets / Pallet





Description

It is an elastomer reinforced dilatation tape that is used in the insulation of building dilatations, seams of different construction materials, and large cracks. It is resistant to UV light and external weather conditions, tearing and piercing. The product's elasticity is durable, and it is suitable for use on potable water tanks due to its constant water resistance. Moreover it is resistant to the penetration of plant roots and easy to repair in case of damage.

Usage Areas

- Vertical and horizontal expansion joints
- Joints of construction materials with different elasticity coefficients.
- Insulation of large cracks

Technical Specifications

Specification	Result	Test Standard
Chemical composition	: TPE	
Colour	: Grey with red strip	
Thickness	: 1 mm	
Elongation at Break	: >400%	EN 12311-2
Tensile strength	: >20 N/mm	EN 12311-2
Dimension stability	: < 1%	EN 1107-2
Bending at cold	: at -30°C /	EN 495-5
	No fracture or cracking	
Class of Reaction to Fire:	Class E	EN 13501-1

Resistance to Water Pressure	: >8 Bar EN 1928
Tear Strength	: >160 N/mm EN 12310-2
UV Resistance	: >5000 Hours EN 1297
Hardness	: 70 Shore A
Resistance to Epoxy Delamination	: >20 N/mm ² DIN 16860

Advantages

It is soft and easily applied.

Surface Preparation

- The application surface must be cleaned of substances that would prevent adherence such as dust, oil, paint, curing material, detergent, mold oil, cement foam and silicon.
- After sweeping the surface with a hard broom or wire brush, the dust must be cleaned from the surface by using a soft broom or a vacuum cleaner.

Application

- The width of the band must be larger than the width of the dilatation. After the dilatation tape is secured on both surfaces, an excess that would allow giving an omega shape is left.
- Emülzer® Em-Poxy 310 Repair and Adhesion Mortar is applied on both sides of the dilatation. The holes on the dilatation tape are compressed on the surface in a manner to lie on top of the assembly mastic and it is ensured that some mastic is released from these holes.
- There must be no air bubbles left in between. Finally, mastic is applied on top of the tape as well as the sides to cover all of its holes.
- It is joined lengthwise with an overlay of 20 cm by using a heat source or a special adhesive. Open flame or epoxy assembly mixture is not used for this process.
- The tape must not be moved until the epoxy adhesive has hardened.

Packaging

25 meter Roll
Width: 25 cm x 25 m / Roll





Description

Emülzer® Corner Tape is a composite insulation tape that is used to insulate chamfers, cracks and building joints. Between two layers of geo-textile coating that is used as an adherence enhancer there is waterproof layer of PVC.

Usage Areas

- In the insulation of floor and wall corners.
- In the insulation of corners and chamfers.

Advantages

- It is thin and soft. Especially in application on ceramic it does not form any crease on edges.
- It has high tearing resistance.

- It is waterproof.
- Thanks to its textile surface achieves excellent adherence on insulation materials.

Surface Preparation

- The roughness of the surface must be levelled.
- The surface to be treated must be clean and dry and free from any substances which may prevent adherence such as dust, grease, paint, curing materials, detergent, mould grease and silicon.
- The floor must be swept thoroughly with a hard broom or wire brush and then the surface must be cleared from dust with a soft broom or vacuum cleaner.

Application

- The product to be used for insulation is applied on the surface (Permo Chim Duo, Beyazcoat, Purready, etc.). Before the product dries Emülzer® Corner Tape is pressed on it and awaited until dry.
- After drying, the tape is completely covered with insulation material.
- At the end of the roll the ends are overlapped by 20 cm.

Packaging

Width: 23.5 cm
Length: 50 m /roll



Corner Tape
Application Film

Technical Properties

Weight
The Highest Tensile Strength (Longitudinal)
The Highest Tensile Strength (Transverse)
Elongation at Break (Longitudinal)
Elongation at Break (Transverse)
Water Permeability
Tensile of Adhesion
Resistance to Fire

Test Method

EDANA 20.2.89
EDANA 20.2.89
EDANA 20.2.89
EDANA 20.2.89
EDANA 20.2.89
DIN EN 20811 >0,5 BAR
(N/25mm)
DIN EN 4102

Result

189 g/m²
135 N/50 mm
93 N/50 mm
210
230
7000
7
B2

Elastic Inner and Outer Corner Waterproofing Tapes



Description

It is a thermoplastic elastomer (TPE) based, elastic, inner and outer corner joint waterproofing tape with polyester mesh bearing used for waterproofing building and dilatation joints.

Usage Areas

- It is used for waterproofing; floor and wall intersections in damp environments that will be coated with ceramic such as bathrooms, kitchens, toilets, terraces and balconies.
- Moving joints,
- Corner intersections and joints in reinforced concrete or precast roof gutters,
- Pipe intersections,
- For repairing cracks in the pools. At corner intersections and dilatations,
- For repairing cracks on plaster and alum.

Advantages

- Can be applied to bituminous surfaces.
- Highly resistant to tearing.
- Easy to apply.
- Protects its elasticity during temperature changes.
- Resistant to weak chemicals.

Surface Preparation

The surface to be treated must be free from grease, dirt, dust, residues and free particles which may impede adherence. To protect the tape against strokes Emulseal PU Mastic must be applied onto corner intersections. The surface must be prepared according to the type of the waterproofing material that will be used.

Application

First of all, waterproofing material must be applied onto the surface in two coats and then the side wings of Emülzer® Joint Insulation Tape must be placed on the surface when the material is still wet. The tape must be pressed smoothly with a trowel or brush and embedded into the waterproofing material. Emülzer® Joint Insulation Tape is covered completely with a second coat of waterproofing material. The tape should not contact with the rubber part found in the middle of the waterproofing material.

Packaging

50 m/roll

Technical Specifications

Components Bearing	: Polyester mesh coating Elastic thermoplastic elastomer (TPE) resistant to wearing
Colour	: Red
Total Width / TPE Part	: 120 mm / 70 mm
Thickness (approximately)	: 0,56 mm
Product Weight (approximately)	: 35 g/m
Resistance to Temperature Min./Max.:	: -30°C / + 90°C

Chemical Resistance

Resistance to chemicals for 7 days storage at room temperature

+ = resistant **0** = weak **-** = not resistant

Salt Acid 3%	: +
Sulphuric Acid 35%	: +
Lemon Acid 100 g/l	: +
Lactic Acid 5%	: +
Potassium Hydroxide 3% / 20%	: +
Sodium Hypochloride 0,3 g/l	: +
Salty Water (20 g/l Sea Water Salt)	: +

Geotextile Felt

Non-Woven Polyester and Polypropylene Felt



Description

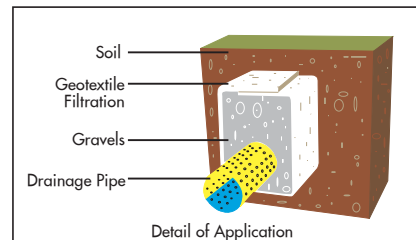
Geotextile is a non-woven product manufactured by combining synthetic short yarns mechanically by using needling method. Non-woven geotextile has no woof and warp. Strength is achieved by combining yarns and applying thermal process. Geotextile felt is a permeable textile product which can be used with basic elements or with any material related with soil, running ground or geotechnic engineering.

Usage Areas

Used in motorways, sport facilities, tunnels and underground facilities, art buildings, underground, agricultural areas, garden terraces, airports, mining fields, railways, solid waste storage areas, irrigation channels and reservoirs, shore protection and isolation areas; as a reinforcement against cracks between insulation layers; as a separator between waterproofing and thermal insulation layers; to protect insulation; to drain excess water; to prevent drainage pipes from plugging by wrapping them around; to avoid sinking and in many other applications.

Advantages

- Thanks to thermal process, more strength and less elongation is achieved with the same weight.
- Requires smaller storage area.
- Can be manufactured up to a width of 6 meters, leading to less loss of material.
- Both white and tinted varieties of geotextile are manufactured from 100% pure fiber. No recycled material is used.



- Products can be manufactured with surface weight ranging from 50 g/m² to 1000 g/m².

Application

Various applications

- In liquid bituminous insulation applications, it is used as a reinforcement between layers and avoids cracks.
- It prevents cracks found on the surface from moving onto insulation surface.
- It protects bituminous membrane or geomembrane applications in foundations.
- It is used as a separator between waterproofing and thermal insulation layers.
- It is used as a separator between thermal insulation and protection layers.
- It is wrapped around drainage pipes in foundations and it is used as a filter layer in terrace gardens.
- It is used in applications designed up withdraw pressure, under road.

Coverage Rate

Calculation of coverage rate:

Coverage rate = $\text{area} \times (\text{roll width} + \text{overlap}) / \text{roll width}$

Example

1500 m² area, 3 meters width, 20 cm overlap
 $1500 \text{ m}^2 \times (3,00 \text{ m} + 0,20 \text{ m}) / 3,00 \text{ m} = 1600 \text{ m}^2$ geotextile required coatings.

Packaging

Depending on the weight, geotextile felt is packed with various length options.

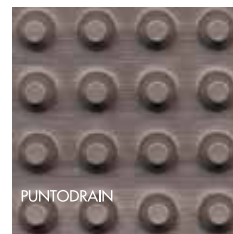
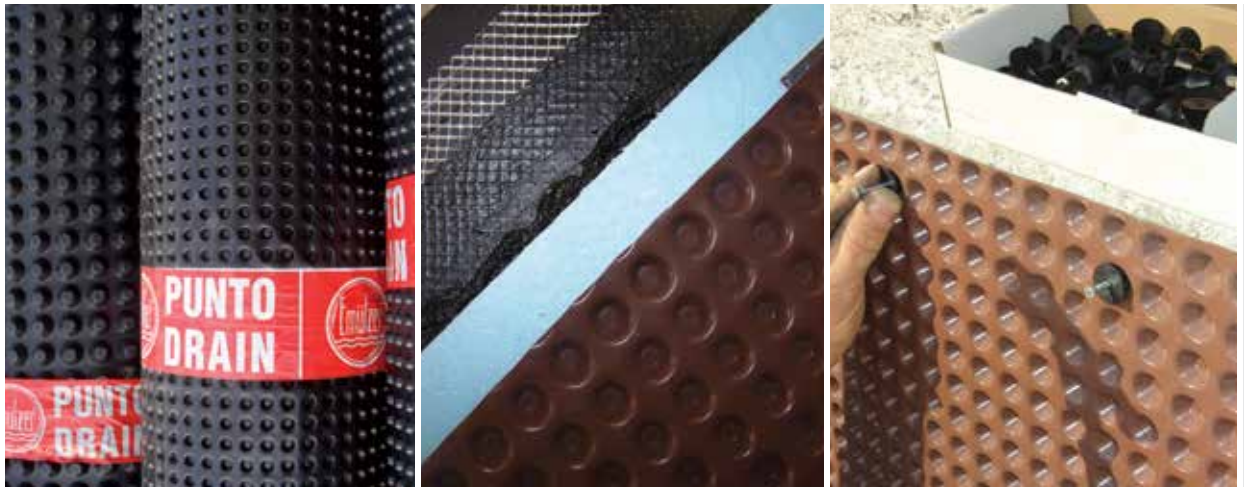


Geotextile
Application Film



Puntodrain / PK / RG / Puntodrain Fixing Pin

Protective Plate for Drainage and Insulation



Description

It is a high-density polyethylene (HDPE) plate used for protecting drainage and insulation.

Usage Areas

- Protecting insulation against mechanical damage which may occur during backfilling, and then against chemicals found in the soil,
- Ensuring air circulation,
- Removing accumulated excessive water fastly,
- Preventing humidity raise from under the foundation by capillary action,
- Foundation curtains, foundations, floors, garden terrace applications, tunnels, water channels, railways and highways.
- For repairing all types of structural concrete,
- For mounting and adhering all types of metal elements onto concrete or steel elements.

Advantages

- Very economical compared to other insulation protection methods such as briquet wall or polystyrene foam.
- Because it is manufactured up to 3 meters in width and up to 30 meters in length, there is no loss of material resulting from overlap.
- Easy to apply.
- Resistant to plant roots and decay.

- Thanks to more than 1200 blisters/m² ensures a homogeneous distribution of the soil load.
- Blistered structure contributes to thermal insulation.
- Contributes to sound insulation in interior applications.
- Ensures rapid drainage of ground water thanks to 5,8 litres /m² of air gap created between the plate and the surface.
- Ensures air circulation for damp surfaces to dry.

Application

Curtain: Depending on the height of the surface to be applied Puntodrain can be used widthwise or lengthwise. The application starts from 15 cm higher than the end point of the insulation and from the corners. The insulation must not be damaged during mounting. Mounting pins, nails or another type of compatible profiles can be used for mounting.

Packaging

Width: 2 m - 2,40 m - 3 m
Length: 20 m - 25 m - 30 m

Puntodrain PK

Drainage and insulation protection plate with felt

Puntodrain RG

Drainage and insulation protection plate for green roofs

Puntodrain Fixing Pin

Fixing pin used for fixing laths in Puntodrain application



Puntodrain
Application Film



PP Fiber

6-12-18 mm



Description

PP fiber is polymer based 100% synthetic fibers for reinforcement of hydraulic binder mixture against shrinkage and settlement cracks. It improves freeze-thawing, fire, impact and abrasion resistance. It blends with concrete homogenously without balling effect. It has resistance alkaline and non-chlorinated chemicals in low temperatures.

Usage Areas

PP FIBER specially designed for drymix mortar, screeds, overlays as well as plasters, at cement based mortar for repair, precast elements, parking lots, sport fields and light industrial floors.

Advantages

- Basic properties and advantage is inhibiting plastic and settlement shrinkage cracks in early age of concrete.
- Improves the adherence at the mortars.
- It is a passive fire protection element at indoor spaces such as tunnels, at the refractor industry and at high temperatures at reinforced concrete structures.
- It improves fracture and spalling resistance of joint edges and corners.
- It improves freezing-thawing resistance of the concrete.
- Those individual fibers stop the thermal cracking without destroying the surface quality and performance.
- Its surface is treated chemically for perfect distribution on concrete mixture paste.
- It is compatible with all types of Portland Cement Types and Grades.
- It delays the corrosion of the reinforcement

Application

PP Fiber should be ideally added to the batching plant. In case of site mixing, additional mixing time of 3 to 5 minutes (70 cycles) is necessary to ensure that the product is fully degraded and to ensure uniform fiber dispersion throughout the mix.

If mixing is at the batching plant, fiber should be added first along with half of mixing water. After all the other ingredients have been added, including the remaining mixing water the concrete or mortar should be mixed for a further few minutes at full speed to ensure uniform fiber dispersion.

Consumption

6 mm PP fiber 100 - 150 gram per 50 kg cement in mortar and drymix.
12 mm PP fiber 1 bag (600 g) pre-dosed for 1 m³ of concrete or screed
18 mm PP fiber 1 bag (900 g) pre-dosed for 1 m³ of concrete

Packaging

6 mm: 0,600 kg/paper bags-bulk
12 mm: 0,600 kg/paper bags-bulk
18 mm: 0,900 kg/paper bags-bulk



PP Fiber
Application Film



Description

It is a light three layered waterproofing membrane which allows water vapor permeability while blocking water and wind. The "breatech" film, the mid-layer, serves as the main stratum of the membrane. Its microscobic pores provide moisture permeability, while blocking water molecules which are larger in size. Upper and lower polypropylene layers do not only protect the main stratum, but provide resistance against various construction conditions as well.

Usage Areas

- It is used in hot or cold hipped roofs with any type of pitch.
- It is used between the facing and the thermal insulation layer in siding and other types of curtain walls.

Advantages

- NASSIO is produced in two colors to make it distinguishable from single layered products. Alternative products offered as breathable waterproofing sheets must be checked for colors (the two faces of the sheet must be in different colors) as well as for the technical specifications.
- NASSIO removes moisture from the building: It allows water vapor permeability as if there is no membrane and prevents the formation of mildew and bacteria.
- It keeps the thermal insulation materials dry, and thus improves the durability of the structure.
- NASSIO waterproofs: It is impermeable against rain and snow.

- It blocks air currents. With NASSIO it is possible to create a breathable atmosphere even in closed roofs so the roof does not have to be open. This provides energy saving by improving thermal insulation productivity because there is no need for aeration in the roof.
- Compared to bituminous membranes used under tiles, it is very light in weight.
- With higher strength and lower elongation, it is resistant to tearing.
- It is easy to apply.
- It is durable.
- It requires less stock.
- Because it is manufactured 1,6 meter wide, there is no loss of material.
- Production is available in a range of 80/90/100/110/130 g/m² in terms of surface weight.

Application

Hipped roof (hot roof, cold roof): After having applied NASSIO onto the insulation material, you can easily tile your roof. With NASSIO you do not only waterproof your roof, but thanks to its breathability which removes the air humidity from the roof, you are also able create a dry, healthy atmosphere, and thus NASSIO helps protect the wooden parts of the roof, and improve the durability and performance of thermal insulation boards.

Siding and Curtain Wall Systems: Applying NASSIO onto the thermal insulation materials provides a comfortable atmosphere. Thermal insulation performance improves, and the system becomes much more durable. NASSIO can be safely used in curtain walls thanks to its superior mechanical and vapor permeability characteristics.

Consumption

Consumption Calculation:

Geotextile required can be calculated by the following equation:

$$\text{Consumption} = \text{Area} \times (\text{Roll width} + \text{Overlap}) / \text{Roll width}$$

For example: Geotextile required for a 2000 m² area (with 1,60 meter roll width and 10 cm overlap) is:

$$2000 \text{ m}^2 \times (1,60 \text{ m} + 0,10 \text{ m}) / 1,60 \text{ m} = 2125 \text{ m}^2$$

Packaging

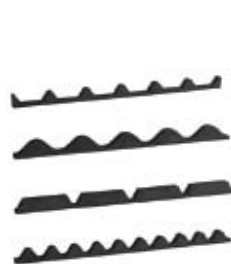
$$1,6 \text{ m} \times 100 \text{ m roll} = 160 \text{ m}^2/\text{roll}$$



Nassio
Application Film



Butyl Tape 4400 - Insulation Brush Fiber Mesh - Bituminous Foam - Trowel



Butyl Tape

Description

Butyl rubber-based insulating and filling tape that is single or double-sided adhesive, capable of adhering perfectly to various surfaces.

Dimensions

Thickness : 1-5 mm
Width : 5-100 mm
Length : 10 m

Insulation Brush

Description

It is suitable to use in liquid membrane applications. Water, solvent and heat effects the brush at minimum level.

Fiber Mesh

Description

Used as a reinforcement in liquid waterproofing applications. It is alkali resistant.

Bituminous Foam

Description

Suitable for all roofing products which produced in Turkey. Various type of bitumen impregnated sponge profile and strips.

Usage

- Bituminous foam and strips are used in building roofs and facades.
- They avoid dust, heat, snow and insects to enter inside of the panel endings.
- Bituminous foams can be produced in any requested form to fit roof ridge and eaves to fulfill customer needs.

Trowel

Description

Due to trapezoidal notches, it is used for coating large spaces and facades, and other kinds of insulation coatings with products like Elastokote, Elastokote 2K, Styro-Bitüm.





Description

Acrylic copolymer based, single component primer for exposed concrete surfaces with an effective bonding and holding feature.

Usage Areas

- Indoors and outdoors
- Prior to cement or plaster based mortar applications on exposed concrete surfaces.
- Protection of water absorbent surfaces such as cement & plaster, plywood, aerated concrete, briquette chipboard briquette from humidity.
- As a primer in heat insulation applications if necessary.
- As a primer to increase the adhesion before ceiling plaster application.
- Used to increase adherence before applications on the previous coats.

Advantages

- Increasing the adherence of the concrete surface.
- Preventing rapid water absorption.

Surface Preparation

The surface to be treated must be without dust, rust, dirt, grease and should be a solid.

Application

- The primer should be mixed with 7-10 kg of water before using it and it is applied to the surface with a brush or roller.
- CONCRETE PRIMER should be kept in homogeneous condition by mixing it at certain intervals and it should not be sediment.

Cleaning of Tools

The tools can be cleaned with soapy water immediately after using, and with industrial solvents after drying.

Consumption

150-250 g/m² for single layer.

Packaging

Net: 15 kg Plastic Drum
27 Pieces / Pallet





Solutions for every waterproofing problem.

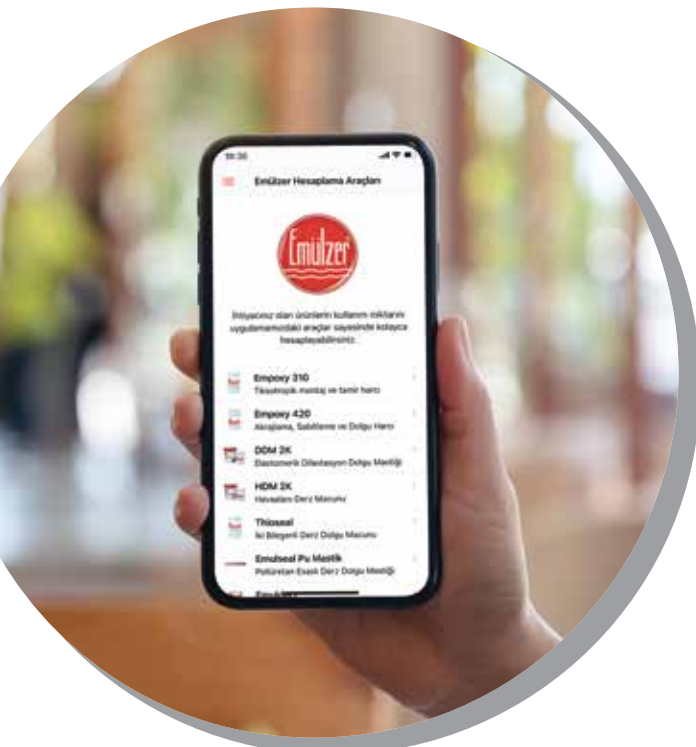


Likit Yalıtım Teknolojisi

CONSUMPTIONS

SHINGLE MASTIC KZ - BITUMEN MASTIC SA - EMULSEAL PU MASTIC - PUR-WET HYBRID MASTIC

Joint Width	Consumption per meter	Performance of 310 ml Cartridge
5 x 5 mm	25 cm ³	12,8 mtül
6 x 6 mm	36 cm ³	8,9 mtül
7 x 7 mm	49 cm ³	6,5 mtül
8 x 8 mm	64 cm ³	6,0 mtül
9 x 9 mm	81 cm ³	3,9 mtül
10 x 10 mm	100 cm ³	3,2 mtül
12 x 10 mm	120 cm ³	2,1 mtül
15 x 10 mm	150 cm ³	1,8 mtül
18 x 10 mm	180 cm ³	1,7 mtül
20 x 10 mm	200 cm ³	1,6 mtül
22 x 12 mm	264 cm ³	1,2 mtül
25 x 12 mm	300 cm ³	1,1 mtül



**We are on
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You can access application information of our products and you can calculate material consumption for your applications.

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