

PolyPasta-Flex

Elastic waterproofing emulsion

→ Description:

PolyPasta-Flex is a one component homogenous paste based on polymer modified bitumen emulsion. This product can be used with or without reinforcing fiberglass mesh or polypropylene mesh. It is ideal for waterproofing and protection of concrete surfaces and masonry structures, foundations, retaining walls, roofs, concrete pipes, tunnels and etc. After application and curing it makes a flexible waterproof layer and it's resistant to structure movement and stresses.

→ Main uses:

- Plastic protective coating and waterproofing in all structures
- Seamless waterproofing and coating for roofs, wet-rooms; rest-rooms, kitchens, bathrooms, retaining walls; foundation
- Repairing and waterproofing old bituminous roofing felts.
- Periodical coating for roof membranes to increase their lifetime

Advantages:

- Polymer modified bitumen emulsion
- Seamless waterproofing system
- Elastic with crack bridging properties
- Water impermeable
- One component, ready to use
- Easy to apply
- Resistant against water, salts and alkalis
- Resistant against corrosive agents in wastewater and soil
- Can be used with or without reinforcing mesh
- Resistant against U.V
- Good adhesion to concrete and steel surfaces
- Good adhesion to wet and dry surfaces, no need to primer
- Insoluble in water after curing

- Breathable
- Suitable for waterproofing and protection of most surfaces

Physical Properties:

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Basis	Bitumen rubber
	emulsion
Color	Brick Red, Black
Density	$1.3 \pm \text{ g/cm}3$
Solid content	70±5%
Application	Spatula, roller,
equipment	spray or brush
Application	>5°c
temperature	
Dust free time	1 – 1.5 hrs
@ 20 ∘c	
Full curing time	7 days
@ 25 ∘c	
Elongation	>80%
Tensile strength	>1 MPa
Cold bending	-10°c
Packaging	25 Kg
Shelf life	12 months

→ Application Guide:

→ Surface Preparation:

The surface must be clean, sound and free from grease and oil containment and all loose particles have to be removed completely from the substrate before application.

Before PolyPasta-Flex is applied, the absorbent substrate should be matt-moist. It is recommended to apply one layer of diluted Pasta-flex as primer on absorbent and dusty substrates.

Coarsely pored surfaces like gutter blocks or precast concrete blocks have to be repaired with appropriate cementitious mortar or 2-component bitumen emulsion Plastikol



→ Mixing Procedure:

Before applying, stir well the material pail. After surface preparation, apply the material with required thickness in one to two layers with spatula, roller, spray or brush.

For large surfaces that have risk of cracks, it's recommended to use reinforcing woven fiberglass/PP mesh.

For protecting the waterproofing layer against mechanical damages, protective/reinforcing mesh can be used or stone powder or silica sand can be broadcasted.

Note that for increasing the durability of the coating system, the slope of roof should be minimum 5%.

Note that dissolution of the coating and good adhesion is achieved when coating becomes completely dry, so application of coating in a suitable weather condition is necessary. The coating should be protected against rain and water for at least 6 hours. In case of risk of raining, protect the applied surface with stone powder or silica sand with consumption of 10 gr per square meter. This powder accelerates forming the rain-proof layer. After the rain and before the new application of materials on surface, the excess powders/sands should be removed to achieve enough adhesion in next layers.

→ Application method:

1-As protective coating: This coating can be applied on dry and wet surfaces. For absorbent surface it's necessary to apply one layer of diluted Pasta-flex or Polypasta as a primer. For preparing the primer dilute the product with clean water in 1:1 ratio. In case of non-absorbent surface such as old bituminous membrane, apply the product without diluting.

2-As roof waterproofing system: Pasta-flex can be applied in all horizontal and vertical

surfaces. It can make a seamless layer on floors, parapets, chimneys, waterways, etc. Clean the roof surface before coating application. Dilute the product with clean water with mixing ratio of 1:1 to prepare the primer and apply it on the surface to saturate the surface.

Fiberglass sheets or nonwoven polyester can be used as reinforcing layer as below:

One layer:

After drying the primer layer, one layer of pasta-flex with thickness of minimum 1 mm is applied on the primed surface and immediately the reinforcing layer is spread on it and it is rubbed with brush or roller to reach a smooth and uniform surface.

Two layers:

In case of using the second layer of reinforcing mesh, one coat of Pasta-flex is applied on the first layer and just immediately the second layer of mesh will be put on it and just like the first layer it is rubbed by brush and roller on the surface. Then the final layer of Pasta-flex is applied to fill completely all pores and eyes of the mesh.

3-For repairing coating of old bituminous membranes: First observe the surface and remove all blisters, then repair all damages with Pasta-flex. Let the repaired parts get dried. Dilute the product with clean water with mixing ratio of 1:1 to prepare the primer. Apply one coat of primer on all surfaces, then apply Pasta-Flex with thickness of minimum 1 or 2 mm on whole primed surface in one or two layers.

→ Consumption:

Protective coating and waterproofing: 2-3kg/m²

Coat with one layer reinforcement: 3-4kg/m²

Coat with two layers including primer and two reinforcing mesh layers: 4-5kg/m²



→ Important advices:

Containers shouldn't be exposed to sunlight or high temperature, as heat accelerates hardening of the product.

Apply on frozen surfaces isn't possible.

Before the product get hardened, the tools should be cleaned with water and if product is hardened, the tools can be cleaned with special thinner/solvents or mechanical tools. Do not store the product at temperature less than 5°C.

The Waterproof layer shouldn't be exposed to sharp edges directly.

This product isn't resistant against negative water pressure. In case of existence of negative water pressure, use Aquafin-1K as the first layer on the substrate.