



POLYGON Establishment

Constriction – Industry – Trading

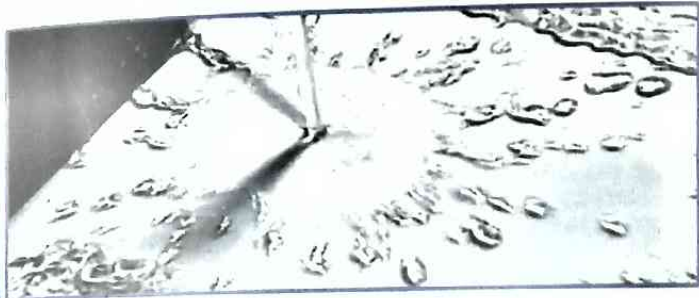


 **Polygon**

Polygon Speciality Construction Chemicals

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POLYROOF WR



DESCRIPTION:

POLYROOF WR is one pack roof coating. It provides a flexible waterproof coating with good weather resistance.

POLYROOF WR has good flexibility and is ideally suited for use over PU sprayed foam, concrete, light weight concrete, roof tiles, wood and galvanized steel surfaces and it is applied by brush, spray or rubber squeegee.

POLYROOF WR is blend of weather and water resistant pigments, fillers and styrene acrylic ester resins.

ADVANTAGES:

POLYROOF WR offers the following benefits:

- Waterproof coating.
- Allows surface to breath while remaining strongly adhered to the substrate.
- Good solar reflectivity
- Economical
- Reflect UV rays.

POLYCOAT WB



DESCRIPTION:

POLYCOAT WB is one pack wet & damp areas coating. It provides a flexible waterproof coating with good weather resistance.

POLYCOAT WB has good flexibility and is ideally suited for use over concrete, light weight concrete surfaces prior to finishing and it is applied by brush, spray or rubber squeegee.

POLYCOAT WB is blend of weather and water resistant pigments, fillers and styrene acrylic ester resins.

POLYCOAT WB BENEFITS:

- Waterproof coating.
- Allows surface to breath while remaining strongly adhered to the substrate.



PolyCoat BS



Elastomeric / Rubberized Waterproofing Coat

Ver. A1218

DESCRIPTION:

POLYCOAT BS is one pack rubberized elastomeric coating. It provides high flexible waterproof coating with good weather resistance. **POLYCOAT BS** has good flexibility and is ideally suited for use over concrete, light weight concrete surfaces prior to finishing and it is applied by brush, spray or rubber squeegee.

POLYCOAT BS is blend of weather and water resistant pigments, fillers and styrene acrylic ester and rubber resins.

ADVANTAGES:

POLYCOAT BS offers the following benefits:

- Waterproof coating.
- Allows surface to breath while remaining strongly adhered to the substrate.
- Economical
- High elongation and flexibility

All joints and cracks must be treated and reinforced by fiberglass mesh or suitable filling materials.

Let 24 hour at least to apply a coat over dried coat.

It is not recommended to use over humid and wet floors, wait and assure the surface is totally dry to apply.

APPLICATION METHOD:

Surfaces must be solid and cleaned from any loose particles, grease and oil.

Priming: **POLYCOAT BS** not need priming, in case of severe porous and old concrete surfaces, dilute

POLYCOAT BS with suitable water quantity as required (≈ 2.5 to 3.5 kg/20kg pail).

Coating: Apply the required coats when the primer coat is getting dry. Multiple coats have to be applied perpendicularly.

COVERAGE:

Apply **POLYCOAT BS** by spray, brush or rubber squeegee in two coats, at least, and approx. 0.8 mm per coat to give an approx. consumption of 0.7 – 1.0 m²/kg per coat.

HEALTH & SAFETY:

Skin & Eye contact: Avoid prolong contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

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PolyCoat BS



Elastomeric / Rubberized Waterproofing Coat

Ver. A1218

Flammability: Nonflammable materials, nonhazardous when dried materials burn.

Cleaning:

POLYCOAT BS is water-based material; tools can be cleaned by water immediately after use. Dried material can be scraped out mechanically.

SHELF LIFE:

12 month for unopened containers, use old first.

SUPPLY:

20 kg / metal Pail / 48 pail / pallet

TECHNICAL SPECIFICATION:

specification	ASTM(Met hod of test code)	POLYCOAT-WB Result
Appearance		Thick liquid
Color		Dark bluish liq. , Black dry film
Water permeability	ASTM A3245	≈ ZERO
Solid Cont.%	ASTM-D 1475	50- 55%
Specific gravity		1.1+/-0.1 Kg/L
Curing time	ASTM-C 4125	48 hours
Viscosity, Brookfield sp:6, speed 20		40000 –50000 Cps
Elongation break	ASTM-D 2370-98	> 250%
Hardness shore A	ASTM-D 2240-05	67



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PolyRoof RW



Elastomeric Waterproofing Coat

DESCRIPTION:

POLYROOF WR is one pack roof coating. It provides a flexible waterproof coating with good weather resistance. **POLYROOF WR** has good flexibility and is ideally suited for use over PU sprayed foam, concrete, light weight concrete, roof tiles, wood and galvanized steel surfaces and it is applied by brush, spray or rubber squeegee.

POLYROOF WR is blend of weather and water resistant pigments, fillers and styrene acrylic ester resins.

ADVANTAGES:

POLYROOF WR offers the following benefits:

- Waterproof coating.
- Allows surface to breath while remaining strongly adhered to the substrate.
- Good solar reflectivity
- Economical
- Reflect UV rays.

APPLICATION:

- Waterproof and protective coat over sprayed PU foam.
- Waterproof coating for sloped and horizontal concrete and light weight concrete roofs.

- Waterproof coating over existing terrazzo tiles.
- Waterproof coating over corrugated iron sheets.

APPLICATION METHOD:

Surfaces must be solid and cleaned from any loose particles, grease and oil.

Priming: Primer must be applied over porous and concrete surfaces, dilute **POLYROOF WR** with suitable water quantity as required (≈ 3 to 4 kg/20kg pail).

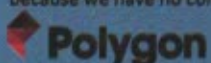
Coating: Apply the required coats when the primer coat is getting dry. Multiple coats have to be applied perpendicularly.

All joints and cracks must be treated and reinforced by fiberglass mesh and suitable filling materials.

Let 24 hour at least to apply a coat over dried coat.

It is not recommended to use after direct rain, wait for 48 hours or assure the surface is totally dry to apply.

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PolyRoof RW

Elastomeric Waterproofing Coat



COVERAGE:

Apply POLYROOF WR by spray, brush or rubber squeegee in two coats, at least, and approx. 200 micron per coat to give an approx. consumption of 1.5 – 1.8 m²/kg per coat.

HEALTH & SAFETY:

Skin & Eye contact: Avoid prolong contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

Flammability: Nonflammable materials, nonhazardous when dried materials burn.

Cleaning: POLYROOF WR is water-borne material; tools can be cleaned by water immediately after use. Dried material can be scraped out mechanically.

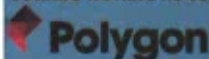
SHELF LIFE:

12 month for unopened containers, use old first.

TECHNICAL SPECIFICATION:

specification	ASTM(Met hod of test code)	POLYROOF WR Result
Appearance		Thick liquid
Color		White
Water permeability	ASTM – A3245	≈ ZERO
Solid Cont.%	ASTM-D 1475	55- 60%
Specific gravity		1.25 Kg/L
Curing time	ASTM-C 4125	48 hours
Viscosity, Brookfield sp:6, speed 20		28000 – 35000 Cps
Elongation break	ASTM-D 2370-98	> 250%
Hardness shore A	ASTM-D 2240-05	67

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PolyRoof F100



Elastomeric Waterproofing Coat

Ver. A1218

DESCRIPTION:

POLYROOF F100 is one pack roof coating. It provides a flexible waterproof coating with good weather resistance. **POLYROOF F100** has good flexibility and is ideally suited for use over concrete, light weight concrete, roof tiles, wood and galvanized steel surfaces and it is applied by brush, spray or rubber squeegee.

POLYROOF F100 is blend of weather and water resistant pigments, fillers and styrene acrylic ester resins.

ADVANTAGES:

POLYROOF F100 offers the following benefits:

- Waterproof coating.
- Allows surface to breath while remaining strongly adhered to the substrate.
- Good solar reflectivity
- Economical

APPLICATION AREAS:

- Waterproof and protective coat over sprayed PU foam.
- Waterproof coating for sloped and horizontal concrete and light weight concrete roofs.
- Waterproof coating over existing terrazzo tiles.
- Waterproof coating over corrugated iron sheets.

APPLICATION PROCEDURE:

Surfaces must be solid and cleaned from any loose particles, grease and oil.

Priming: Primer must be applied over porous and concrete surfaces, dilute

POLYROOF F100 with suitable water

quantity as required (≈ 3 to 4 kg/20kg pail).

Coating: Apply the required coats when the primer coat is getting dry. Multiple coats have to be applied perpendicularly.

All joints and cracks must be treated and reinforced by fiberglass mesh and suitable filling materials.

Let 24 hour at least to apply a coat over dried coat.

It is not recommended to use after direct rain, wait for 48 hours or assure the surface is totally dry to apply.

COVERAGE:

Apply **POLYROOF F100** by spray, brush or rubber squeegee in two coats, at least, and approx. 400 micron per coat to give an approx. consumption of 1.0 – 1.3 m²/kg per coat and may vary according to the surface condition.

HEALTH & SAFETY:

Skin & Eye contact: Avoid prolong contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

Flammability: Nonflammable materials, nonhazardous when dried materials burn.

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PolyRoof F100



Elastomeric Waterproofing Coat

Ver. A1218

Cleaning: POLYROOF F100 is water-borne material; tools can be cleaned by water immediately after use. Dried material can be scraped out mechanically.

SHELF LIFE:

12 month for unopened containers, use old first.

SUPPLY:

20 kg / metal pail / 48 pail / pallet

15 kg / plastic pail / 48 pail / pallet

TECHNICAL SPECIFICATION:

specification	ASTM(Met hod of test code)	POLYROOF Result	WR
Appearance		Thick liquid	
Color		White	
Water permeability	ASTM A3245	– ≈ ZERO	
Solid Cont.%	ASTM-D 1475	60- 65%	
Specific gravity		1.3 +/-0.05 Kg/L	
Curing time	ASTM-C 4125	48 hours	
Viscosity, Brookfield sp:6, speed 20		30000 – 45000 Cps	
Elongation break	ASTM-D 2370-98	> 200%	
Hardness shore A	ASTM-D 2240-05	69	



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PolyCoat WB



Black Elastomeric Waterproofing Coat

Ver. A1218

DESCRIPTION:

POLYCOAT WB is one pack roof coating. It provides a flexible waterproof coating with good weather resistance. **POLYCOAT WB** has good flexibility and is ideally suited for use over concrete surfaces in kitchens, bathrooms, balconies and shaded roofs. It is applied by brush, spray or rubber squeegee.

POLYCOAT WB is blend of weather and water resistant pigments, fillers and styrene acrylic ester and bituminous resins.

ADVANTAGES:

POLYCOAT WB offers the following benefits:

- Waterproof coating.
- Allows surface to breath while remaining strongly adhered to the substrate.
- Good flexibility, crack bridge over concrete surfaces
- Economical
- Reflect UV rays.

APPLICATION AREAS:

- Waterproof and protective coat over concrete surfaces in the wet areas.
- Waterproof coating for sloped and horizontal concrete and light weight unexposed concrete roofs.
- Waterproof coating over existing terrazzo tiles.
- Waterproof coating over wet areas prior to finishing.

APPLICATION METHOD:

Surfaces must be solid and cleaned from any loose particles, grease and oil.

Priming: Primer must be applied over porous and concrete surfaces, dilute **POLYCOAT WB** with suitable water

quantity as required (≈ 3 to 4 kg/20kg pail).

Coating: Apply the required coats when the primer coat is getting dry. Multiple coats have to be applied perpendicularly.

All joints and cracks must be treated and reinforced by fiberglass mesh and suitable filling materials.

Let 24 hour at least to apply a coat over dried coat.

It is not recommended to use after direct rain, wait for 48 hours or assure the surface is totally dry to apply.

COVERAGE:

Apply **POLYCOAT WB** by spray, brush or rubber squeegee in two coats, at least, and approx. 400 micron per coat to give an approx. consumption of 1.5 – 1.8 m²/kg per coat and may vary according to the surface condition.

HEALTH & SAFETY:

Skin & Eye contact: Avoid prolong contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

Flammability: Nonflammable materials, nonhazardous when dried materials burn.

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PolyCoat WB



Black Elastomeric Waterproofing Coat

Ver. A1218

Cleaning: POLYCOAT WB is water-borne material; tools can be cleaned by water immediately after use. Dried material can be scraped out mechanically.

SHELF LIFE:

12 month for unopened containers, use old first.

SUPPLY:

20 kg / metal pail / 48 pail / pallet

15 kg / plastic pail / 48 pail / pallet

20 Ltr / metal pail / 36 pail / pallet.

TECHNICAL SPECIFICATION:

specification	ASTM(Met hod of test code)	POLYCOAT Result	WB
Appearance		Thick liquid	
Color		Dark bluish liq. , Black dry film	
Water permeability	ASTM A3245	-	≈ ZERO
Solid Cont. %	ASTM-D 1475	55- 60%	
Specific gravity		1.25 / +- 0.05 Kg/L	
Curing time	ASTM-C 4125	48 hours	
Viscosity, Brookfield sp:6, speed 20		30000 –40000 Cps	
Elongation break	ASTM-D 2370-98	> 200%	
Hardness shore A	ASTM-D 2240-05	67	



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PolyProof HF



2K Cementitious / acrylic modified Waterproofing membrane

Ver. A1218

DESCRIPTION:

POLYPROOF HF is a two components high flexible acrylic modified cementitious coating for protecting concrete structures against water, vapor, ingress of chloride ions, attacks of acidic gases and alkalis. It cures to form a tough flexible coating having excellent waterproofing properties. **POLYPROOF HF** is a blend of cement, selected fillers, polymers and special graded additives. The liquid contains modified acrylic binders and additives.

CHARACTERISTICS:

Good flexibility. Thermal co-efficient of expansion similar to that of concrete.

- Good adhesion to both, porous and non-porous surfaces.
- Good mechanical properties.
- Excellent durability to long term weathering effect and UV
- Non-toxic, therefore suitable for use in potable water applications.
- Resistant to carbon dioxide and chloride ion diffusion.

FIELD OF APPLICATION:

Used as a waterproofing and protective coating for the following structures:

- Pile heads.
- Internal lining for potable water reservoirs and other water retaining structures.
- Protection of exposed concrete structures like bridge decks against carbonation and chloride attack.
- Inverted roofs, lift and inspection pits, swimming pools, spillways.
- Backing on marbles and granites to prevent the ingress of moisture.
- General construction waterproofing.

APPLICATION INSTRUCTIONS:

The application temperature should be between 5°C to 45 °C. Application procedures may vary slightly depending upon site conditions. The Product Guide V7-Structural Waterproofing general recommended guidelines for the application of the coating system is as follows:

Surface Preparation

The surface must be structurally sound and free of oil, grease, dust and other contaminants which will affect the bonding. Any structural cracks and potholes shall be repaired with a suitable repair mortar from the POLYREP* range of repair mortars. The surface to be treated should be pre-saturated with water prior to application. However, any standing water shall be removed prior to application.

Mixing

POLYPROOF HF is supplied in two pre-measured parts which just requires on site mixing. Do not mix more material than that can be used within the pot life. Part mixing can be carried out by mixing 4 parts of powder with 1 part of liquid (by weight). Pour the liquid into a suitable container and slowly add the powder to the liquid. Mix the contents using a slow speed drill till a homogenous, lump free and creamy consistency is achieved. **DO NOT ADD WATER TO DILUTE THE MATERIAL.**

Application

It is recommended to apply POLYPROOF HF in two coats to provide a minimum thickness of 2mm for heavily trafficked areas and water retaining structures. Each coat shall be applied @1.8 kg/m² which will give a dry film thickness of 1mm .The coating can be applied with a stiff brush or by an airless spray of nozzle size of 3-4mm and a pressure of 6-7 bar. After the application of the first coat and whilst the coating is still wet, embed a glass fibred mesh at all corners and other joints for added reinforcement. The second coat shall be applied after the first coat dries off completely (6-8 hours@25C,50% RH). For general waterproofing and protection against carbonation and alkali attacks, the coating can be applied in 1mm thickness.

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PolyProof HF



2K Cementitious / acrylic modified Waterproofing membrane

Ver. A1218

PROTECTIONS:

Adequate protection needs to be provided for the coating in the following conditions:

- Areas subjected to mechanical abrasion.
- Flowing water areas

Curing

The coating shall be cured immediately after it dries by wet hessian cloth or mist spraying for a minimum period of 72 hours. The coating will achieve its full mechanical properties within 7 days at 25C and 50%RH.

CLEANING:

Clean all tools immediately with water after use. Hardened materials can be removed mechanically only.

COVERAGE:

1.8kg per m2 per coat for 1mm Dry Film Thickness.

STORAGE & SHELF LIFE:

Store under cover, out of direct sunlight and protect from extreme temperatures. It is recommended to keep the powder bags on pallets and not stacked on the floor. The shelf life is up to 12 months when stored as per recommendations and in unopened conditions. Failure to comply with the recommendations will result in premature deterioration of the product and reduce its shelf life

HEALTH & SAFETY:

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

TECHNICAL SPECIFICATIONS:

specification	VALUES	TEST STANDARDS
Color	Dark Grey/ Light Grey	
Mixed density [g/cc]	18±0.02	ASTM – D 1475
Pot life [min]	45	ASTM – D 1475
Tensile strength, [#] [N/mm ²]	> 8	ASTM – D 412
Elongation, [#] [%]	> 5	ASTM – D 412
Adhesion strength, [N/mm ²]	> 0.5	ASTM – D 4541
Crack bridging [mm]	> 0.5	ASTM – C 836
Hydrostatic Pressure @ 3 Bar (50min)	No leakage	BS EN 12390 (Part 8)
Hydrostatic negative Pressure @ 3 Bar (30min)	No leakage	BS EN 12390 (Part 8)
Toxicity	Non Toxic	BS 6920
Abrasion resistance, [#] [mg]	< 75	ASTM – D 4060
VOC,[g/l]	< 50	ASTM – D 3960/ D 2369
Drying Time [hrs]	6-8	-
Full cure [days]	7	-
Application temp[°C]	5 to 45	-
Service temp [°C]	-5 to 70	-

SUPPLY:

POLYPROOF HF

- 20 kg Kit
(Part A – 15 kg Bag)
(Part B – 5 kg Jerkin)



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ABOUT US



Polygon's Construction Division was started on 2012. In these short span, we have designed and constructed various villas, apartments and home throughout the Kingdom. We strive our best to provide our customer with highest satisfaction, professional delivery of projects on time with highest quality.

Our services includes the following

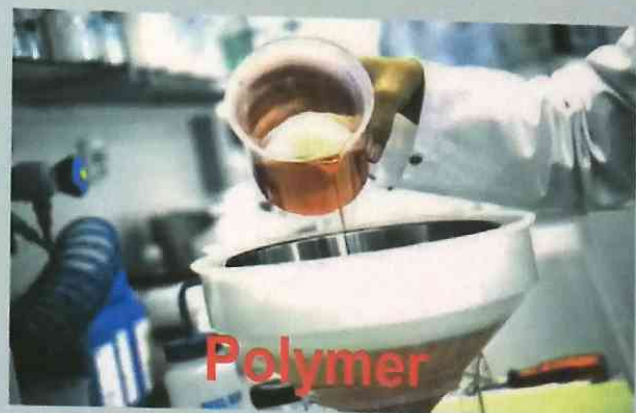


We provide specialized consultancy solutions and services to our clients in various fields and ensure the delivery of profitable propositions for their human capital needs. We specialize in recruitment services for lower to senior level executive appointments in multiple domain across all industries. Our value-added expertise is programmed to provide unparalleled performance in integrated HR consultancy solutions and services.




Polygon's Outside Plant Division provides an array of infrastructure functions. Polygon performs the estimating functions as well as assists customers with design requirements associated with all facets of OSP construction, including permitting. All communications infrastructure between the main distribution frame (MDF) and the end user level/desk top can be handled by our qualified technical staff.

We are specialized in installation of



Polygon Specialty Construction Chemicals Factory, existing manufacturing plant based in Saudi Arabia. Start production early 2017 in small scale to cover the local market demand for specialty construction materials typically formulated with chemical additives to enhance its performance and quality. In Polygon's Construction Chemical Division (Polymer), we produce various chemical required for construction and tiles laying process. We are specialized in the below mentioned products of highest grade and quality

 **Polygon**



 **Polygon**

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مصنع المضلع لكيماويات البناء المتخصصة



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