AMITEK

Technical Data Sheet

AMITEK EPOXY FLOOR PRIMER

This is a two component amine cured solvent free epoxy primer. It ensures very good adhesion on most concrete floors in atmospheric environments only. It is recommended for application on concrete and related surfaces like asbestos , tiles, stones etc to provide excellent bond strength, adhesion, good penetration & high degree of protection between surface and coatings. It comes in two components.

Field of application:

- It is recommended to be used before any type of screed and topcoat.
- For heavy duty ramps, flooring and vehicle parking.
- Traffic deck system for heavy duty traffic, areas such as ramps, car parks, parking bays, pedestrian walkways, roof decks and industrial floors.
- Loading-unloading bays for heavy duty vehicles, high abrasion floors for engineering plants, workshops, dairies, breweries, food processing , automotive and chemical plants.
- Recommended for cold stores, laboratories, hospitals, food and beverage plants, kitchens, high tech manufacturing facilities, dairies, warehouses, factories and hangars.

Application Area :

Solids by volume	98 ± 2 %
Color	Transparent | Yellowish
Gloss level (GU 60 °)	Gloss (70-85)
Flashpoint	100 °C
VOC-EU	22 g/l
Dry film thickness	50-200 µm
Wet film thickness	50-200 µm
Theoretical coverage	5-7 m²/l

The provided data is typical for factory-produced products, subject to slight variation depending on color.

Field of application:

- To secure lasting adhesion and bonding between substrate and coating system all surfaces shall be clean, dry and free from any contamination. New concrete surface must be a minimum of 28 days old, free from curing compounds and sealers and have a moisture content less than 5% prior to application of the primer.
- The surface can be prepared mechanically using sand blasting, shot blasting or scarifier. Surface preparation by acid etching with hydrochloric acid followed by thorough water wash and wire brushing should be the last option where methods mentioned earlier cannot be applied. Acid etching should be carried out in compliance to the local health and hazard regulations and should be necessarily supervised by a skilled person. The choice of surface preparation should be determined by the extent and nature of contamination present on the concrete surface. All dust present must be removed by vacuum pump.

Mixing:

A suitable power driven mixer such as a bucket mixer is recommended for uniform mixing of the Primer material. Stir the base and hardener separately. Mix hardener gradually into the base under continuous stirring as per the stated mixing ratio. Mix well for 3 – 4 minutes till the components become homogeneous. Apply before expiration of pot life.

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Product Use Restrictions:

- Generally recommended for interior use.
- Application method and higher drying temperature may affect the colour of the coating.
- As common with all epoxy products, this product also will tend to discolour and chalk on exposure to direct sunlight.

Application Method:

The product can be applied by-

Air Spray: Recommended
Airless Spray: Recommended
Brush: Recommended
Roller: Recommended

Conditions during application:

The temperature of the substrate should be minimum 10 °C and at least 3 °C above the dew point of the air, measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying. The moisture content in the substrate should not exceed 4 % (by weight). The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

Product mixing ratio (by volume):

BASE: HARDNER 1:1

Additional Information:

Thinner/Cleaning solvent	A.p.p. Paint & Chemical thinner
Storage Instruction	Store in a cool shaded dry area
Flash Point	Mixed less than 28°C
Packaging	10 kg & 20kg
Shelf Life	24 months

Safety and Precautions:

- Avoid contact with the skin and eyes. Wear suitable protective clothing such as overalls, goggles, dust masks and gloves. Use a barrier cream.
- Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe vapour or spray.
- This product is flammable. Keep away from sources of ignition. Do not smoke. Take precautionary measures against static discharge. In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.
- Refer to MSDS for further information.

MANUFACTURED BY -

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AMITEK EPOXY FLOOR SCREED

PRODUCT DESCRIPTION :

It is a three component Epoxy resin based floor Screed. It provides self levelling with high abrasion, mechanical, chemical resistant, compressive and flexible strength to the floor. It makes the flooring eligible to handle very high traffic.

APPLICATION AREA:

- It is recommended to be used before any type of topcoat.
- For heavy duty ramps, flooring and vehicle parking.
- Traffic deck system for heavy duty traffic, areas such as ramps, car parks, parking bays, pedestrian walkways, roof decks and industrial floors
- Loading-unloading bays for heavy duty vehicles, high abrasion floors for engineering plants, workshops, dairies, breweries, food processing, automotive and chemical plants.
- Recommended for cold stores, laboratories, hospitals, food and beverage plants, kitchens, high tech manufacturing facilities, dairies, warehouses, factories and hangars.

PHYSICAL DATA :

Volume Solids : **100 %**
(Based on ASTM D2697)
Typical Dry Film Thickness : **2 – 5 mm**
Theoretical Coverage : **0.15 m²/kg @ 3 mm dft**
: **0.25 m²/kg @ 2 mm dft**
Finish : **Matt**

APPLICATION AREA:

- Pour the entire screed material and spread uniformly onto the primed surface using a suitable trowel to get the required screed thickness.
- Finish the surface with a suitable steel trowel. The coverage would vary significantly based on the nature of the concrete surface.

	Ambient Temperature	Touch Dry	Hard Dry	Full Cure	Pot Life
Drying time	25°C	8 Hrs	24 Hrs	10 Days	45 Minutes
	35°C	4 Hrs	16 Hrs	7 Days	30 Minutes
	45°C	2 Hrs	14 Hrs	5 Days	20 Minutes

No. of Components	Three
Mixing Ratio (Base: Hardner: filler)	As per packaging.
Induction Time	10 Minutes
Overlay Time on Primed Surface	1 – 2 Hrs.
Application Conditions	Do not apply this product if the relative humidity exceeds 95%

PHYSICAL DATA :

Thinner/Cleaning solvent	**: A.P.P. Paint & Chemicals thinner**
Storage Instruction	**: Store in a cool shaded dry area**
Packaging	**: 15 kg & 30 kg**
Shelf Life	**: 24 months**

APPLICATION AREA:

- To secure lasting adhesion and bonding between substrate and coating system all surfaces shall be clean, dry and free from any contamination. New concrete surface must be a minimum of 28 days old, free from curing compounds and sealers and have a moisture content less than 5% prior to application of the primer. Screed will be applied over properly primed surfaces.
- The surface can be prepared mechanically using sand blasting, shot blasting or scarifier. Surface preparation by acid etching with hydrochloric acid followed by thorough water wash and wire brushing should be the last option where methods mentioned earlier cannot be applied. Acid etching should be carried out in compliance to the local health and hazard regulations and should be necessarily supervised by a skilled person. The choice of surface preparation should be determined by the extent and nature of contamination present on the concrete surface. All dust present must be removed by vacuum pump. Apply A.P.P. EPOXY FLOOR PRIMER before screed. On porous flooring, an extra coat of sealer is recommended so to avoid dry patches and ensure inter-coat adhesion. Expansion joints should be brought up through the coating.

Mixing

- A suitable power driven mixer such as a bucket mixer is recommended for uniform mixing of the screed material. Stir the base and hardener separately. Blend the aggregates in the base. Mix hardener gradually into the base under continuous stirring as per the stated mixing ratio. After induction time, mix the aggregates into the mixed resin portion uniformly under continuous mechanical agitation. Mix well for 3 – 4 minutes till the components become homogeneous. Apply before expiration of pot life.

Product Use Restrictions

- Generally recommended for interior use.
- Application method and higher drying temperature may affect the colour of the coating.
- As common with all epoxy products, this product also will tend to discolour and chalk on exposure to direct sunlight.

Safety Precautions :

- Avoid contact with the skin and eyes. Wear suitable protective clothing such as overalls, goggles, dust masks and gloves. Use a barrier cream.
- Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe vapour or spray.
- This product is flammable. Keep away from sources of ignition. Do not smoke. Take precautionary measures against static discharge. In case of fire blanket flames with foam, carbon dioxide or dry chemicals.
- Refer to MSDS for further information.

First-Aid

- Eyes : In the event of accidental splashes, flush eyes with water immediately and obtain medical advice.
- Skin : Wash skin thoroughly with soap and water or approved industrial cleaner. Do not use solvent or thinners.
- Inhalation : Move patient to fresh air, loosen collar and keep patient rested.
- Ingestion : In case of accidental ingestion, do not induce vomiting. Obtain immediate medical attention.

DISCLAMER:

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AMITEK EPOXY FLOOR TOPCOAT

PRODUCT DESCRIPTION

A.P.P. Epoxy Floor top coat is self levelling epoxy resin base coating which is designed to provide a heavy duty, chemical resistant floor finish. It provides floors with aesthetic appeal and is resistant to mechanical & chemical loading with high compressive and flexible strength. Top coats can be done using a variety of colors. Comes in matt & gloss finish both. It comes in three component. Pigment is provide according to the clients requirement.

FEATURES :

- Self levelling coatings with excellent flow & levelling characteristics
- Provides a hygienic and dust free environment
- Hard wearing and chemically resistant
- Attractive, easy to clean and maintain
- Finds application in automobile, pharmaceutical units, food processing plants and chemical plants

TECHNICAL CHARACTERISTICS :

Colour	RAL Range
Finish	Glossy
Recommended dry film thickness	1 mm
Theoretical Covering Capacity	0.55 sq.mtr/ kg @ 1 mm DFt
Drying time	Surface Dry : 4 hours Hard Dry :24 hours Full Cure : 7 days
Mixing ratio (By weight)	As per packing
Pot life	30 minutes

MECHANICAL PROPERTIES :

Compressive strength (astM C 579)	41 Mpa
Flexural strength (astM C 580)	9.5 MPa
tensile strength (astM C 307)	7.5 MPa

The data given is for guideline only. The physical values are subject to normal manufacturing tolerances, colour and testing variances. The coverage & consumption figures are theoretical and do not allow for any additional material required due to surface porosity, surface profile, variations in level or wastage etc. The actual drying time/ overcoat interval may be shorter or longer, depending on film thickness, ventilation, humidity, temperature etc. the information provided above is at 30°C and 65% relative humidity.

SURFACE PREPARATION :

SUBSTRATE QUALITY

- Concrete substrates must be sound and of sufficient compressive strength (minimum 2 0 Mpa) with a minimum tensile strength of 1.5 Mpa.
- A sound, clean and dry substrate is absolutely essential for successful coating application and ensuring maximum bonding between the substrate and coating system.
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc, and have a moisture content less than 5% prior to application of the primer. Ensure that the substrate does not suffer from rising moisture and potential osmosis problems.

New concrete floors:

Should be at least 28 days old or have a moisture content of less than 5% before proceeding with epoxy primer application. Any deposits on new concrete floors are preferably removed by light grit/ shot blasting, mechanical scarifying or grinding to achieve an open textured surface.

Old concrete floors:

- Determine the general condition, soundness, presence of contaminants, presence of moisture vapour emissions and the best methods to prepare the surface to receive a floor coating system. Mechanical surface profiling by grit or shot blasting, grinding or scarifying are the preferred floor preparation methods on old concrete floors.
- Hydrophobic contaminants can be identified by a simple water drop test. Other contaminants can be identified by pH.
- Remove localized weak or deteriorated materials from the surface. remove bond-inhibiting materials such as oils, grease, wax, fatty acids, and other contaminants. this can be accomplished by the use of detergent scrubbing, low pressure water cleaning (less than 5000 psi), steam cleaning, or chemical cleaning. Acids and alkalis can be removed by neutralizing to form a water soluble salt and then high pressure water cleaning and mopping it off to dry state.
- In the areas where the contaminants cannot be removed, complete removal and replacement of the contaminated surface is typically considered.
- Surface defects such as voids, bug holes, excess porosity, and physical and chemical damage are usually filled or repaired prior to the installation of the floor coating system. Materials such as slurries, mortars, and polymer concrete are used to level, smooth and patch concrete surfaces. High spots must be removed by grinding.

Note: Acid etching of the surface is not recommended as a preparation technique partly because of the implications for Health & safety but also because the surface is left saturated with water and calcareous salts which may ultimately lead to debonding or osmotic blistering.

FLOOR JOINTS

- All cracks and construction joints present, based on the depth of the crack, should be filled either with epoxy putty or mortar after primer application.
- The expansion joints should not be overcoated with the coating and to be addressed with suitable material.

MIXING

- A suitable power driven mixer such as a bucket mixer is recommended for uniform mixing of the screed material. Stir the base and hardener separately. Blend the aggregates in the bag. Mix hardener gradually into the base under continuous stirring. Mix the aggregates into the mixed resin portion uniformly under continuous mechanical agitation. Mix well for 3-4 minutes till the components become homogenous. apply after induction time and before expiry of pot life.

PRIMING

- All surfaces to be primed with A.P.P. Epoxy floor primer designed for maximum absorption and adhesion to concrete substrates. The primer should be applied immediately to the prepared substrate using stiff brushes,rollers or spray. The primer should be well ‘scrubbed’ into the substrate to ensure full coverage.
- Allow the primer to dry before proceeding to the next stage; do not proceed whilst the primer is ‘tacky’ as this will lead to unsightly marks in the finished surface.
- Porous substrates may require a second primer coat - when the first coat is directly absorbed into the substrate, but minimum over-coating times must still be observed.
- Freshly applied primer should be protected from damp, condensation and water for atleast 24 hours.

SCREED APPPLICATION :

- A.P.P. Epoxy Floor screed should be applied by a serrated/ notch trowel to the required thickness. The entire mixed material should be poured onto the prepared and primed surface and spread slowly and evenly. to ensure proper levelling and appearance avoid overspreading. The laid material should be rolled firmly with a spike roller to ensure compactness and de-aeration of the film. Always wear spike shoes when rolling with spike roller. The rolling should be carried out using a ‘back and forth’ technique along the same path. an overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air. This should be done prior to the setting of the product. to avoid roller marks prevent over rolling of the coating.
- The coverage & levelling would vary significantly based on the nature & levelling of the concrete surface.
- Freshly applied A.P.P. Epoxy Floor screed should be protected from damp, condensation and water for atleast 24 hours.
- At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time & curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly.

Topcoat APPPLICATION :

- A.P.P. Epoxy Floor Topcoat should be applied by a serrated/ notch trowel over the screed. The entire mixed material should be poured onto the prepared surface and spread slowly and evenly. To ensure proper levelling and appearance avoid overspreading. the laid material should be rolled firmly with a roller to ensure , the rolling should be carried out using a ‘back and forth’ technique along the same path. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air. this should be done prior to the setting of the product. To avoid roller marks prevent over rolling of the coating.
- The coverage & levelling would vary significantly based on the nature & levelling of the concrete surface.
- Freshly applied Amflor epoxy floor Topcoat should be protected from damp, condensation and water for atleast 24 hours.
- At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time & curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly.

APPLICATION CONDITIONS

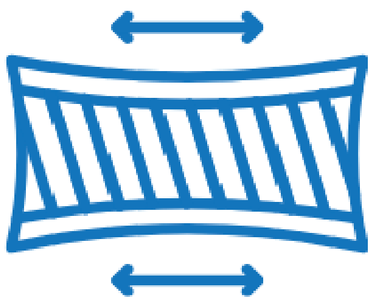
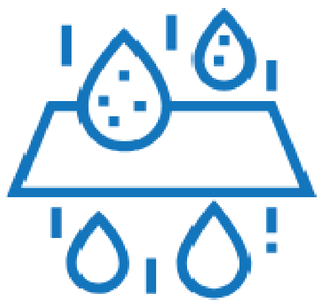
- Residual moisture content of the concrete substrate should not exceed 5%.
- No rising moisture & potential osmosis problems.
- Substrate temperature should be at least 3°C above dew point but not above 50°C.
- Recommended ambient temperature for application is between 10°C - 40°C.
- Relative air Humidity (rH) to not exceed beyond 80%.
- Only epoxy based colorant recommended for clear composition of Amfloor epoxy flooring topcoat.

CLEANING

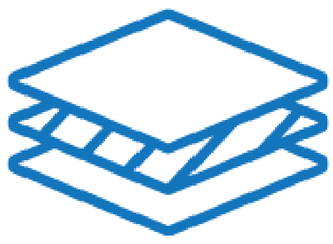
All tools and equipment can be cleaned with A.P.P. Paint & Chemical Thinner immediately after use.

Note: A.P.P. Epoxy Floor Topcoat should not be applied to asphalt, weak or friable concrete, unmodified sand/cement screeds, PVC tiles or sheet or substrates known to move substantially e.g. steel walkways. In common with all epoxy materials some light shade changes may be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being detrimental to performance.

APPLICATION INSTRUCTION :

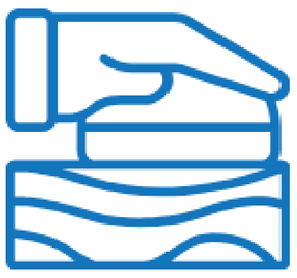
1		**Compressive Strength** of concrete minimum 25MPa. **Surface tensile strength** should be minimum 1.5MPa All joints should be treated by PU sealant. **Concrete surface** profile needed CSP 3 to 5 **Moisture level** should be ⩽ 5% Rh < 75%
2		**First apply 2 component primer** **(Binder + Curing Agent)** Mixing ratio 1:1 Drying time 12 hours

3



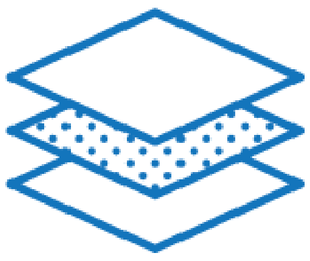
Then apply 2mm 3 component screed
(Binder + Curing agent + Fillers)
Mixing ratio 2:1:7
Drying time 12 to 24 hours

4

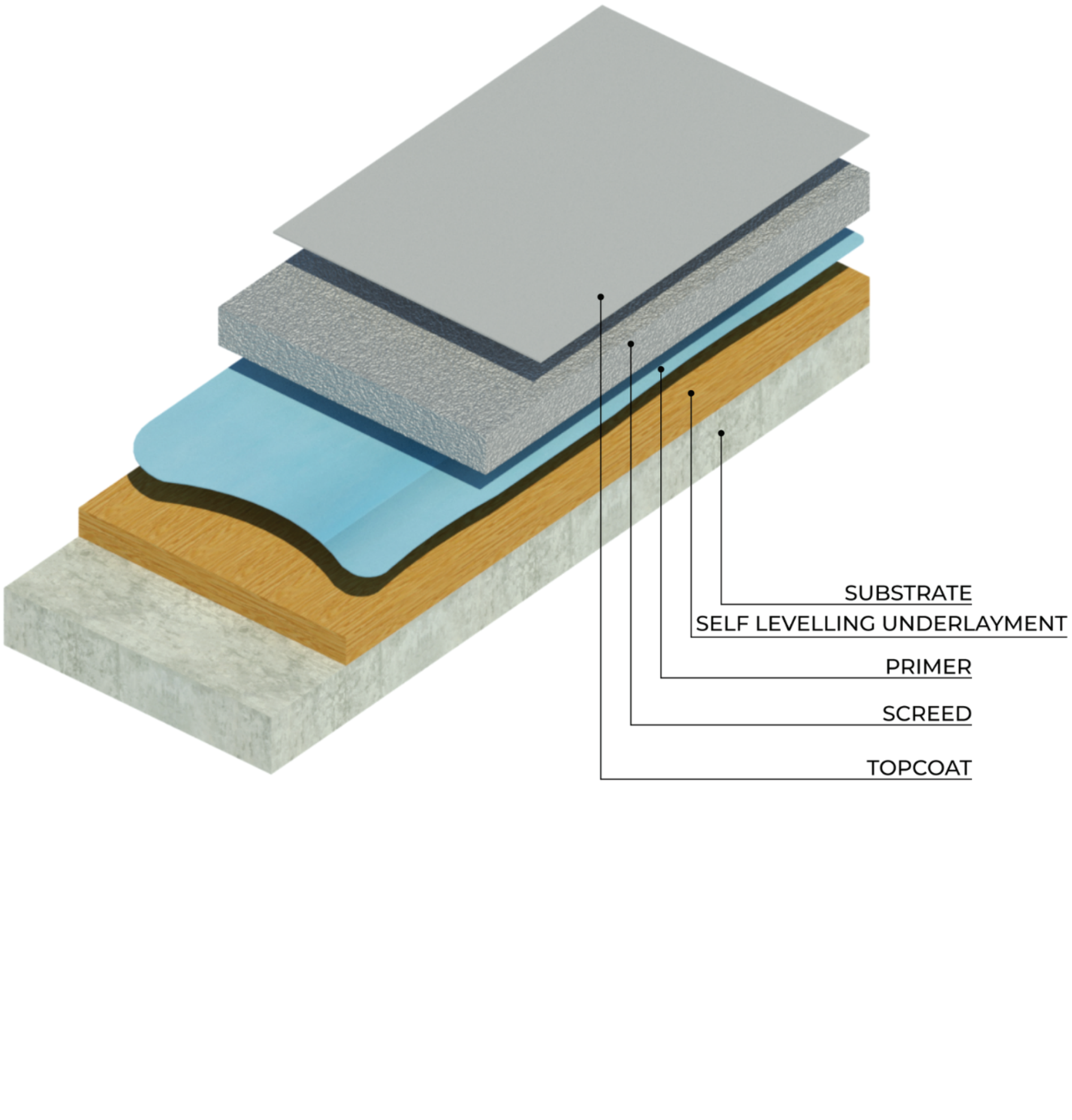


After the drying of screed do sanding

5



After sanding apply 4 component
(Binder + Curing Agent + Filler + Pigment)
Mixing ratio 4:1:7:1
Drying time 12 to 18 hours



PACK SIZE	15 kgs 30 Kgs
STORAGE REGULATORY	**Shelf Life:** at least 12 months if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between 5°C to 35°C, subject to inspection thereafter. store in a cool, dry place and in accordance with local regulations
INFORMATION	**Flash Point:** Base - Not less than 24°C; Hardener - Not less than 24°C **VOC: 51** gm/ ltr as per usa-ePa Method 24

- As a general safety measure, inhalation of solvent vapours or paint mist and contact of liquid paint with skin & eyes should be avoided. Forced ventilation should be provided when applying paint in confined spaces or stagnant air, even when ventilation is provided, respiratory, skin and eye protection is always recommended while spraying paint.
- Please refer our Material safety Data sheet prior to using the product.

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