

ACS POLYSEAL 600®

Bitumen-Polyurethane, Two Component Liquid Waterproofing Membrane



■ Description

ACS POLYSEAL 600® is a fast-curing, two component, bitumen-extended polyurethane fluid. It produces a highly elastic membrane with strong adhesion to many types of surfaces.

■ Place of usage

- Foundations and basements.
- Waterproofing of roofs, balconies, terraces and concrete curtains.
- Insulation of car parks.
- Bridge platforms.
- Cut-and-cover tunnels.
- Bathroom, terraces and roofs (under tiles waterproofing).
- Retaining walls.
- Gypsum and cement boards.
- Asphalt EPDM membranes.
- Indoors and outdoors.

■ Advantages

- Simple application.
- When applied forms seamless membrane without joints.
- It has excellent elongation properties.
- Fast curing.
- Resistant to slack water and resistant to frost.
- Good water vapor blocking properties.
- Its low modulus gives it excellent substrate crack-bridging properties.
- Excellent adhesion on almost any surface, with or without the use of special primers.
- Resistant to chemicals.
- It provides permanent elasticity up to the -30°C to 90°C.
- Full surface adherence.
- Even if the membrane gets damaged, it can be easily repaired locally within minutes. (ACS POLYSEAL 600® creates a 100% adherent insulation with the bottom surface.)

TECHNICAL CHARACTERISTICS

ACS POLYSEAL 600® Component A	Bituminous-Polyurethane resin
ACS POLYSEAL 600® Component B	Polyurethane Hardener
Color	Black-half bright
Density	1,00 ± 0,05 kg/lit (A+B / 20 °C)
Solid by Volume	%82 (A+B)
Elongation at Break-Elongation Percentage (ASTM D 412)	≥ %2400
Adherence On Concrete (+23°C-ASTM D 903)	≥ 2 N/mm ²
Tensile Force at Break (ASTM D 412)	≥ 2 N/mm ²
Temperature Resistance	80°C 200 Days & 150 °C Dry sudden heat
Shore A (hardness) (DIN 53505 - ASTM D2240)	35
Implementation Time (+30°C)	35 Minutes
Service Temperature	-30°C -+ 90°C
Recoating	12-24 Hour -20°C
Drying Time	1/ 2-1 Day / 20°C
Fully Cured	7 Days / 20°C
Ambient Temperature	+10°C -+ 35°C
Surface Temperature	+10°C -+ 35°C

NOTE: The above values are given at + 23 °C and 50% relative humidity environment. High temperatures shorten the time, low temperatures prolong the time.

APPLICATION

ACS POLYSEAL 600® New concrete structures need to dry for at least 28 days, Moisture content should be between 4% and

6%. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Old, loose coatings, dirt, fats, oils, organic sub-

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stances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed. Do not wash the surface with water.

PRIMING

Prime absorbent surfaces like concrete, cement screed or wood with **ACS PU PRIMER**® or with **ACS AQUA EPOXY PRIMER**® or with **ACS EPOXY PRIMER MAX**®. Prime non-absorbent surfaces like metal, ceramic tiles and old coatings with **ACS AQUA EPOXY PRIMER**®.

MIXING

ACS POLYSEAL 600® is supplied as ready to use kits in the exact ratio. Before mixing, precondition both A and B parts to the temperature of +15 - +25°C. **ACS POLYSEAL 600**® A Componenti contains pigment. Mix with epoxy / polyurethane resin mixer with 300 - 400 rpm mechanical stirrer for 4 - 5 minutes until it is homogenous. After Pour the entire contents of part B into the container of part A; make sure that there is no product left in the part B package. Components A and B must be used after homogenous mixing (at least 4-5 minutes).

MIXING RATIOS

ACS POLYSEAL 600®	Component A	Component B
Mixture Amount	20 kg	20 kg
Mixture Density	1,00 kg/liter	

APPLICATION METHOD

Once the **ACS POLYSEAL 600**® has been mixed as recommended above, pour the **ACS POLYSEAL 600**® A+B mixture onto the primed surface until fully covered and spread by roller, brush or teeth trowel. After 12-24 hours (not later than 48-78 hours) apply another layer of the **ACS POLYSEAL 600**®. For demanding applications, apply a third layer of the **ACS POLYSEAL 600**®. If the **ACS POLYSEAL 600**® is to be covered with ceramic tiles, fully saturate with oven-dry silica sand (corn-size 0,4-0,8mm) the last layer while still wet. This saturation will create an adhesion bridge to the tile adhesive that will follow. For best results, the temperature during application and cure should be between 8°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

CONSUMPTION

1,8 - 2,0 kg/m² consumption should be applied in two or three layers. (In mesh application, you may need extra 600-800 gr consumption.)

TIPS TO NOTICE

- The relative humidity of air is highest % 80, Avoid application under excessive heat or wind and/or when the ambient and/or substrate temperature is below +10°C or above +30°C
- The pot life is 30-35 minutes at 20°C.

- Surface temperature should be 3°C above the then dew point. (Please call our firm for the Ambient temperature-Ambient Moisture-Dew Point table.)
- The materials to be used at the appropriate temperatures should be brought and stored in the application area 1-2 days prior to the application and enabled to adjust the ambient conditions
- In extremely cold conditions, heaters should be used to increase the ambient and the workability of the product, the packages should be preconditioned to +20°C - +25°C to become ready to use.
- Epoxy and polyurethane based floor coatings should be applied by specialists.
- The reaction and workability times of resin based systems depend on the ambient and substrate temperatures as well as the relative humidity under lower temperatures, the chemical reaction times are prolonged and this increases the pot life, coating interval and the working time. In addition to this, the consumption is increased as the viscosity increases. High temperatures ignite stronger chemical reactions and the abovementioned times decrease accordingly. After the application the temperature should not fall below +8 °C for at least 36-48 hours, the newly applied material should be protected from direct contact with water and snow.

CLEANING OF TOOLS

Used tools and equipment must be cleaned carefully with an appropriate solvent.

PACKAGING

ACS POLYSEAL 600® Component A: 20 kg pail Component B: 20 kg pail

STORAGE

The product should be stored in unopened original package at temperatures between +10- +25 in a cool and dry place protected from freezing. For short term storage, maximum 3 palettes should be placed on top of each other and the shipment should be made on a 'first in - first out' basis. Palettes should not be placed on top of each other during long term storage.

SHELF LIFE

The shelf life is 9 months from the date of production under suitable storage conditions

SAFETY

During the application, work clothes, protective gloves, goggles and masks should be used in accordance with the Occupational Health and Safety Rules. Due to the irritating effects of uncured materials, the components should not be allowed to come into contact with the skin and the eye. In case of contact, immediately wash with plenty of water and soap. If swallowed, seek medical advice immediately. Food and beverages should not be left at the application areas. Keep out of reach of children.

Responsibility

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is only responsible for the quality of the product. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones (06/2019)