



SmartCare Flexi Seal PU

PRODUCT DESCRIPTION

Asian Paints SmartCare Flexi Seal PU is a single component liquid, cold applied elastomeric waterproofing membrane system. SmartCare Flexi Seal PU is a Pitch modified PU coating which cures by reaction with atmospheric moisture and forms a seamless highly elastic membrane for all below and above the grade waterproofing specifications. SmartCare Flexi Seal PU is designed with a high solid content which gives a high film build up and has a good adhesion to wide range of cementitious and masonry substrates. Due its liquid application nature it can be applied to all substrates which exhibit high detailing.

PRODUCT FEATURES

Durability: Superior durability and thermal stability
Waterproof: Forms a seamless and tough waterproof barrier on curing
Flexibility: Superior flexibility and elongation of up to 600%
Crack Bridging: Superior crack bridging ability (CBA) up to 2mm
Adhesion: Excellent adhesion to wide level of masonry and cementitious substrates
Resistance: Superior resistance to chemicals, mild acids and alkali, corrosive soil conditions, resistance against saline water and high sulphate resistance.
Application: Easy to apply coating by brush or spray.

RECOMMENDED USAGE

Asian Paints SmartCare Flexi Seal PU can be used for waterproofing and damp proofing of below and above the grade structural members. This may include;

- Positive side waterproofing of below the raft foundation,
- Positive side waterproofing of retaining walls,
- Positive side waterproofing of podium slabs
- Positive side waterproofing of roof slabs, balconies,
- Damp proofing of basements
- Waterproofing of sunken portions

PRODUCT INFORMATION

PACK SIZE

20 litre epoxy lacquered metal drums

SHELF-LIFE

Shelf life is 12 months from the date of import.

TECHNICAL DETAILS

Asian Paints SmartCare Flexi Seal meets the requirements of ASTM C836-84, & ASTM C898.

Typical Properties	
Appearance	Black viscous Liquid
Abel closed cup flashpoint ° C (ISO 1523, 1983)	69
Density, g/cm ³	1.24
Solid by Mass, %	85% Max
Viscosity on Brookfield, CPS, Spindle 7, at 20 rpm @ 25°C	33800
Application limits ° C	5 – 60
Approximate Dry Time (20° C, 50% RH)	12 – 24 hours touch dry, 7 days full cure
Elongation % (ASTM D412)	600%
Tensile Strength MN/m ² (ASTM D412) minimum	2
Accelerated Weathering 12000 hrs (ASTM G154)	No appreciable deterioration
Hydrolysis Resistance	Excellent
Resistance to Industrial Environments	Good
Storage Stability in unopened container	6 months
Crack Bridging Ability (ASTM 836-84m)	Result: 2.6 mm (20° C, 0.4 mm thick EMB)
Hardness (Shore 00 / A) (ASTM C836-05)	90 / 50
Low temperature Flexibility Crack Bridging	No cracking
Adhesion-in-Peel (mortar)	6.5 lb./in
Extensibility after Heat Aging	No Cracking
Water Vapor Permeability (Free films were prepared and allowed to cure for 28 days prior to test. The water vapor permeability was measured using the dry cup method under tropical conditions of 38° C and 90% rh as described in ASTM E96-05)	 Result: 22.2 g/(m ² /24h)/1 mm Hg

Waterproofing

APPLICATION PROCESS

SURFACE PREPARATION

- › Inspect the surface conditions
- › The concrete surface should be levelled, tough and should not have hollow areas or pot holes.
- › Check hollowness by hammering and repair such areas as well as pot holes using polymer modified cement sand mortar.
- › Allow to cure for at least 72 hours before application AP SmartCare Flexi Seal PU
- › Clean surface so that it is free from loose dust, particles, oil etc. by brooming or vacuum cleaner.
- › Check moisture of the surface, it should be less than 5%.

PRIMING

Priming is not recommended in case of sound masonry/cementitious substrate conditions. In case of high absorption or porosity, prime the surface with self-priming coat of Asian Paints SmartCare Flexi Seal PU, by 40 % diluting with Xylene by brush or roller (Coverage of 12 sq. m./ltr), alternatively prime the surface using Asian Paints SmartCare Bitumen Primer with brush or roller. Allow it to dry for 4 - 6 hours till it becomes tacky. For extra smooth surfaces lightly grind the surface to make it rough and abrasive.

CRACK AND JOINT FILLING

All structural cracks and expansion joints should be filled and sealed with Asian Paints SmartCare PU Sealant as per recommended application procedure and site specifications.

APPLICATION

Asian Paints SmartCare Flexi Seal PU can be applied with the help of a brush, roller, airless spray and trowel or rubber squeegee. For horizontal surface, it is recommended to apply Asian Paints SmartCare Flexi Seal PU in the thickness of 1 mm to 2 mm DFT (Dry Film Thickness), lower thickness is not recommended. SmartCare Flexi Coat can be applied in one 1 mm or two 0.5 mm coats. Two coats are recommended on uneven and jointed surfaces to minimize the possibility of thin patches, missed areas and pin holing. Also sloping or vertical surfaces, will only accept 0.5 mm per coat.

In the case of two-coat application, it is important to re-coat within 24 hours of the first coat becoming sufficiently cured to allow operator access. Application of 1 liter / m² on a smooth flat surface will provide an adequate DFT of approx. 1 mm. Any surface texture will increase the surface area which must be allowed for when calculating usage e.g. on a chipping embedded surface the actual area will be approximately doubled.

FLOOD TEST

Prior to placement of protection, flood to a minimum depth of 50 mm of water for 24 hours. Drains shall be plugged and barriers placed to contain the water. Flood test needs to be done after 7 days of application of Flexi Seal PU.

CLEANING

Aromatic hydrocarbon solvent should be used to clean equipment etc.

POST APPLICATION PROTECTION

After the application of AP SmartCare Flexi Seal PU the film should be allowed to cure for at least 72 hours. For horizontal application protection place a loosely laid geotextile film of 250 GSM over the SmartCare Flexi Seal PU film. Screed to slope (M20 grade). For vertical application protection before backfills etc. plaster screed or protection board should be used. The SmartCare Flexi Seal PU film should never be left open to sky.

SPRAY APPLICATION

Only airless spray should be used Graco King 60: 1 ratio or similar, Compressor: - 100psi, 60cfm min, Tip Size: - 28-30 thou 50° Angle

REPAIRS

Minor damage to the film can be repaired by removing loose membrane; cleaning the surrounding area with aromatic hydrocarbon solvent; overlapping by 150mm; priming the area with AP SmartCare Bitumen Primer, and finishing with two coats of AP SmartCare Flexi Seal PU

PRECAUTIONS

- › Do not apply during rains or extreme temperatures.
- › Should not be applied at substrates with moisture level greater than 5% as measured by a recommended moisture measuring instrument.
- › After opening the container minimum application life is up to 48 hours if stored in tightly closed container.

Kindly refer to the MSDS which gives detailed information on safety measures while handling the paint, which is available on request. Store in a cool, dry place. Keep out of reach of children and away from eatables. May be harmful if swallowed. In case of ingestion seek immediate medical attention. Eye protection during application is recommended. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of skin contact skin with soap and plenty of water. Get medical attention if irritation develops or persists. It is recommended to wear suitable nose pad during torching application and surface preparation. Dispose as per recommendation mentioned above. No added Lead, Mercury or Chromium compounds. For Feedback/complaints, write to Marketing Manager Services, Asian Paints Limited, 6A, Shantinagar, Santacruz (E), Mumbai 400 055, India.