ARDEX Sheltercoat

High Build Acrylic Waterproof Membrane

Advantages

- **Specially designed for exposed situations**
- **Flexible – accommodates normal building movement**
- **UV resistant – providing long term protection**
- **Decorative – choice of colours available**
- **Water Based – safe to use, low in odour**

Description
Sheltercoat is a tough, UV stable, mildew resistant and flexible premixed liquid applied waterproofing membrane. It has been specifically formulated for exposed situations, and is available in a range of colors. In areas exposed to periodic foot traffic a layer of polyester mat should be incorporated into the system between coats.

Areas of Application
Concrete, renders and screeds
Masonry, concrete and AAC blocks
Fiber cement sheets (external grade only)
Preprimed metal & corrugated roofs (excluding plastic and aluminium roof sheeting)
Structural plywood (PAA branded) or marine plywood
For use over existing paints, membranes, covering materials, and any other substrates contact Ardex Hong Kong for advice.

Typical Applications
External decks & floors, rooftops (new & existing), podiums, parapets. Sheltercoat is also ideal for areas that will be subjected to maintenance foot traffic.

Limitations
Do not use the product in the following situations:
Areas subject to vehicular traffic
When rain appears imminent
Where solvent or petroleum based products could be spilled
Where the surface temperature is below 5' or greater than 35'C
Do not attempt to thin down the mix with water, cement etc.
Decks or balconies must have adequate falls.
For substrates or situations other than those listed contact ARDEX

Basic Application Instructions
Surface preparation
Ensure all surfaces are structurally sound and totally dry. All sheet substrates must be securely fixed in accordance with the manufacturer's instructions. All areas to be waterproofed must have sufficient provision for drainage and falls of at least 1 :80 or 25mm in 2m. The surface to be coated should be free from dust, oil, paint, curing compounds and any other contaminating materials. Damaged concrete should be repaired (levelled) and surface defects including all cracks and sharp protrusions should be treated prior to the application of the membrane. Remove laitance on concrete or screeds by mechanical means. Dense concrete
(refer priming) should be roughened by mechanical means.

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Priming

To achieve proper adhesion it is critical to select the appropriate primer. Dense or steel trowelled concrete, or concrete that has been treated with an additive will normally require the use of Sheltercoat solvent based primer to achieve proper adhesion.
Check the density of the substrate by pouring a small amount of water onto the substrate. If the substrate absorbs the water then Sheltercoat water based primer can be used. If however, the water beads on the surface of the substrate the solvent based primer is recommended.
Dense concrete must be mechanically roughened before priming. Apply one coat of Sheltercoat Primer (water or solvent based) by brush or roller to all areas to be waterproofed.
Two coats are required when priming AAC or other highly porous substrates.
Allow the primer to be completely dry prior to the application of the Sheltercoat HK. This will take around 20-30 minutes depending upon weather conditions and porosity of the substrate. Prime metal surfaces with a suitable metal primer.
Plastic (e.g. PVC) pipes should be primed with a solvent based PVC primer.
For wet surfaces or freshly laid concrete ARDEX WPM300 shall be used as a primer at a rate of 3m^2 per liter to achieve required thickness.

Application

ARDEX recommends using a short pile roller (5mm) for applying Sheltercoat to achieve the best results. Ensure the roller is fully saturated and do not overwork the roller when applying.
Crack Preparation
Cracks less than 2mm: clean and remove any loose particles in the crack. Prime the area carefully before patching the crack with neutral cure silicone sealant. Extend the silicone 5mm either side of the crack along its entire length. Apply two coats of Sheltercoat over the crack to achieve a minimum dry film thickness of 1.2mm.
Cracks 2-6mm: prepare the crack and apply the silicone as described above. Apply a 300mm wide band of mixed Sheltercoat along the entire length of the crack. Place a 200mm wide band of polyester reinforcement mat into the wet membrane. Remove any creases or air pockets in the mat. Immediately apply a second coat to completely fill the mat.
Cracks greater than 6mm: contact your local ARDEX representative.
Movement/Construction Joints
Clean and prime the joint and apply one coat of the membrane to the edge of the joint. Whilst the membrane is wet insert the Joint Bridging Band along the length of the joint. Immediately apply a second coat over the entire bandage.
Corners & coving areas
After priming apply a generous bead (10mm) of neutral cured silicone sealant in caving areas and corners. Smooth over the silicone so that it extends 5mm up the wall and 5mm over the floor. Apply a first coat of Sheltercoat to the area and whilst the membrane is still wet insert a layer of reinforcement material. Immediately apply the second coat ensuring that any wrinkles in the material are removed.
Vertical surfaces
After priming apply two coats of Sheltercoat HK in two opposite directions on vertical surfaces. Take the membrane up underneath any existing cover flashing or install appropriate flashing. Allow the first coat to dry before applying the second coat. The top of the parapet should be waterproofed with Sheltercoat or covered with suitable metal capping or protective coating.
Horizontal surfaces
Apply two coats of Sheltercoat in two opposite directions over the primed surface. Allow the membrane to fully cure before being subjected to full service foot traffic. This will take approximately 7 days at 23°C and 50% RH. When using reinforcing at critical areas place the
polyester or fibreglass reinforcing mat over the first coat whilst the membrane is still wet.
Ensure that the mat is fully bedded into the membrane, with no air pockets and creases. Apply a second coat of Sheltercoat over the mat as soon as it is fully bedded into the base coat.
Roof & balcony penetrations
Place a suitable flanged metal upstand around the penetration. Prime the metal with an appropriate metal primer and allow to dry. Apply a 10mm bead of silicone around the perimeter of the penetration. Apply the first coat of Sheltercoat on the substrate and the flanged metal.
Allow first coat to dry before applying a second coat ensuring a finished dry film thickness of no less than 1.2mm is achieved. Place a suitable flashing collar around the penetration sealing it with an elastomeric sealant.

Coverage

Approximately 12-15 m² per 20L unit at a dry film thickness of 1.0 - 1.2mm for horizontal surfaces. Approximately 30m² per 20 L unit of a dry film thickness of 350 micrometers for vertical surfaces. Coverage will vary depending on the condition of the surface and film thickness.

Drying time

Allow 4 hours between coats (at 23°C and 50% RH) if a reinforcing material is not used. When using a reinforcing material, it should be embedded in the wet membrane and immediately overcoated. The membrane is fully dry within 24 hours (at 23ºC and 50% RH), after which it can be subjected to light foot traffic. Avoid full service foot traffic until the membrane is fully cured (7 days at 23°C, 50% RH). Pot life is approximately 3 hrs at 23°C and 50% RH. Drying time will vary depending on humidity, temperature and surface porosity. Do not apply on substrates where the surface temperature is below 5°C or above 35°C.

Safety Data

Sheltercoat HK is non-toxic. The contents should not be swallowed or inhaled. In case of eye contamination, rinse thoroughly with clean water. If irritation continues seek medical advice.

Packaging & Storage

One component: 25 kg PVC bucket.

Clean up & Disposal

Wash hands, brushes, rollers, etc., with water while the membrane is still fresh. Remove cured material with mineral turpentine. Remove any food or drink stains immediately with warm water and a mild household detergent. Dispose of containers in compliance with all relevant local, state, and federal regulations.

Technical Performance Data

Characteristics of liquid
Form & color: Medium viscosity liquid in standard colors white, grey, green or black Specific gravity: Approx. 1.206g/cm²
Characteristics of cured membrane
Water absorption: ASA121 App K 6.5%
Tensile strength: AS1145 4.0 MPa 5.5 MPa (28 days dry after UV exposure)
Elongation at break: AS114S 300% 325% (28 days dry after UV exposure)

Application Details

Application method: short nap (5mm pile) roller, brush, or airless spray
Overcoat time 4 hrs @ 23°C 50% RH (without mat):
Dry through (2nd coat): 24hrs @ 23°C 50% RH
Application temperature: 5°C - 30°C (surface temp)
Service temperature: 0-60°C
Coverage: Approx. 15m² per 20 L unit at 1 mm OFT