



Arrocrete 2K Flex

2-PARTS FLEXIBLE CEMENTITIOUS
WATERPROOFING MEMBRANE



Product Description

Arrocrete 2K Flex is a high elastic, waterproofing cement based material. With special waterproofing properties, easy to use by plastering, applying by using a brush and roller or trowel. Can be painted or overlaid. Use with waterproofing for non-toxic water tanks, can be used with drinking water. (Passed the water quality test on toxic substances (heavy metals) of the Water Quality Control Department) Provincial Water works Authority. After mixing the two parts together, the liquid material can be applied on the desired surface. After drying, it looks like a rubber sheet. It has the property to prevent water seeping through, seamless and flexible, not cracking. Japanese standard.

Arrocrete 2K Flex is a 2-component cement-based waterproofing material, which is powdered (fine sand, sizing), liquid (modified acrylic polymer) and nontoxic substances, environmentally friendly - free Volatile Organic Compound (VOC), excellent waterproofing property - no leakage up to 10 m. hydrostatic pressure.

Area of Application

Concrete foundations, basements wall and lift pits.

- Swimming pools, water tanks and reservoirs.
- Concealed roofs, parking decks, bathroom, toilet, kitchen, balconies and planters.
- Any other concrete, cement or masonry surface subject to damage from moisture.

Coverage

Rate of uses		
	Kg/m ²	m ² /set (13 kg)
	Standard	
1 coats	1.10	11.8
2 coats	1.10	11.8
Total 2 coats	2.20	5.90

*Depending on surface conditions

Thickness

Thickness (micron)			
	Standard	At Least	At Most
1 coats	425	350	500
2 coats	425	350	500
Total 2 coats	850	700	1,000

Method of Application

1. Surface Preparation

- Allow new concrete and masonry substrate to fully cure prior application.
- All surfaces must be free from oil, grease, wax, dirt or any other form of foreign matter which might effect adhesion.
- Spalled Concrete must be sound before applied.
- Substrate should be reach a "Saturated Surface Dry" (SSD) condition (damp, without standing water)

2. Mixing

- Use Portland cement mechanical mixer at slow speed; add product powder part to liquid part in a clean container until a smooth and homogenous slurry mixture is achieved.
- Allow the mixed slurry to stand for 5-10 minutes for releasing air-trapped during the mixing prior
- Mixing material must be use within recommend pot life.

3. Applications

- Arrocrete 2K Flex slurry can be applied by brush or roller. DO NOT dilute with water
- Recommend Coverage rate is approximately 1.1 kg./m²/coat for 1 mm. (Minimum 2 coat.).
- Allow the slurry to cure for at least 15-30 min. before applying second coat. Do not leave the first coat to dry longer than 8 hours.
- For tile adhesive application on surface allow surface to cure for 3 days prior.
- If first coat was cure over 8 hours, fix surface by applying 2 to 3 coats of Arrocrete 2K Flex for desire waterproof surface thickness or fix by applying Arrocrete 2K Flex tile adhesive to act as top coat protection for Arrocrete 2K Flex

4. Curing

- For maximum protection, allow 12 to 24 hours curing time after second coat
- Leave Arrocrete 2K Flex at least 7 days to cure before filling or sealing water to test leaks.

Technical Data

Properties	Specification / Standard	Results
Mix Component (powder : liquid)		Mix Ratio 1.6 : 1 by weight
Polymer Content by TGA Polymeric substance, % Organic substance, % Ash, %	ASTM D 6370	25.0 8.3 66.7
Proprietary Polymer by FTIR	ASTM D3677	High quality modified acrylic polymer
Polymer/Cement Ratio		50-65% based on wet weight
Time of setting, hrs.	ASTM C 191	41.5
Tensile Strength -as cast -after 2 week aging at 50 °C -72 hrs at 23°C immerse in 0.5% NaOCl -72 hrs at 23°C immerse in 1.25% NH4OH -72 hrs at 23°C immerse in 3.7% HCl	ASTM D 412 (Dumbbell die C)	2.63 N/mm.2 3.70 N/mm.2 3.00 N/mm.2 3.00 N/mm.2 3.50 N/mm.2
Elongation at Break -as cast -after 2 week aging at 50 °C -72 hrs immerse in 0.5% NaOCl -72 hrs immerse in 1.25% NH4OH -72 hrs immerse in 3.7% HCl	ASTM D 412	120% 52 % 41 % 44 % 37 %
Adhesion in peel on mortar, N/width (25mm)	ASTM C 794	72.9
Crack Bridging 2 mm. width 1 mm. width after 10 cycles	ASTM C 836	Passed Passed
Resistance to water penetration	DIN 1048: Pt5:1991	No Water Penetration
Durometer Hardness, shore A	ASTM D2240	93
Chloride Content Not detected - Chloride free (D.L < 0.01%) No Corrosion effect	BS EN 480	0.007
Water Absorption	-	< 3%
Dry Film Thickness	-	1000 Microns
Vibration durability test against earthquake	JIS C 60068-2-59	No water leak after all test.
Intensity level of earthquake	JIS C 60068-2-59	Upper 6
Adhesion to Substrate, N/mm ²	ASTM D4541	1.6 N/mm ²
Adhesion to Concrete 7 day N/mm ²	ASTM D4541	1.25 N/mm ²
Immersion in Water Adhesion to Concrete 7 day	ASTM D4541	1.90 N/mm ²

Drying and Curing time

Substrate temperature	10 °C	25 °C	30 °C	40 °C
Surface (touch) dry, hrs.	3	1,30	1	0,45
Dry to over coat, minimum, hrs.	12	6	3	2
Dried/cured for service, day	7	5	4	3
Thickness Recommend, mm At least At most	0.7 mm 1 mm			

Drying and curing times are determined under controlled temperatures and relative humidity below 65%, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Dry to over coat, minimum: The recommended shortest time before the next coat can be applied.

Dried/cured for service: Minimum time before the coating can be permanently exposed to the intended environment/medium

Packaging

13 kg/set

Powder 8 kg.

Liquid 5 kg.

Precautions & Limitations

- Arrocrete 2K Flex is not suitable for traffic area application.
- Arrocrete 2K Flex is a premeasure package, do not dilute with water or add more sand or cement.
- Arrocrete 2K Flex material should have topcoat coating over it. Do not leave it bare to the sun at all times.
- Do not leave first coat dry longer than 8 hours.

Storage

- 12 month storage in sealed container and room temperature.

Health & Safety Precautions

- Non Flammable.
- Avoid contact with skin and eyes. Any splashes to the skin or eyes should be washed off with clean water
- Wear mask when mixing
- Wear protective gloves and eye protection when applied.

For Feedback / Suggestion & Complaints :

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