

Setcrete RMW

Liquid waterproofing admixture for concrete and mortar



Description

Setcrete RMW is Liquid waterproofing admixture for concrete and mortar formulated from selected polymers specially designed to reduce water permeability by reducing capillary voids, which will last for the life of the concrete and mortar.

The presence of water in hardened concrete can cause corrosion of reinforcement which is made severe by freezing and thawing of concrete containing absorbed moisture.

Further deterioration can occur if the water penetrating the concrete contains dissolved aggressive salts.

Applications

Setcrete RMW is a waterproofing admixture for use in all cement based mortars, screeds and concrete.

Advantages

- ▲ Improves durability by minimizing penetration of moisture and water based chemicals.
- ▲ No additional water into dry or semi-dry mixes.
- ▲ Reduces efflorescence and pigment leaching from cement mortars.
- ▲ Chloride free.
- ▲ Improves plasticity cohesion.
- ▲ Better compaction and finishing.

Compatibility

Setcrete RMW can be used with all types of Portland cement and cement replacement materials. Setcrete RMW is compatible with other DCP admixtures used in the same concrete mix.

If more than one type of admixture is to be used in concrete mix, they must be dispensed to the concrete separately.

Standards

Setcrete RMW complies with ASTM C494, Type A and IS 2645.

Technical Properties @ 25°C:

Colour:	Brown liquid
Freezing point:	≈ -2°C
Specific gravity:	1.18 ± 0.01
Chloride content: BS 5075	Nil
Air entrainment:	Typically less than 2% additional air is entrained above control mix at normal dosages

Test Results:

Mix proportions:	1:2:4
Dosage:	0.25 ltr/50 kg cement
	Control RMW
Water/cement ratio:	0.54 0.49
Slump:	65 mm 65 mm
Compressive strength: @ 28 days	42.40 MPa 43.60 MPa

Permeability:

The permeability measurements as per BS 1881, Part 5:1970 has been carried out on samples of mortar using Setcrete RMW to determine the waterproofing efficiency of Setcrete RMW.

	Permeability (mt/m ² /s)		
	10 min	30 min	60 min
Control:	11.6	6.8	3.4
Setcrete RMW:	4.8	2.9	1.6

Method of Use

Setcrete RMW should be added to the concrete or mortar with the mixing water to achieve optimum performance.

An automatic dispenser should be used to dispense the correct quantity of Setcrete RMW to the concrete mix.

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Dosage

The guidance dosage of Setcrete RMW is 0.15 - 0.25 litre per 50 kg of cementitious materials in the mix, including GGBFS, PFA or microsilica within this dose, water content can be reduced by 10 - 15% due to the plasticising action of Setcrete RMW.

Representative trials should be conducted to determine the optimum dosage of Setcrete RMW to meet the performance requirements by using the materials and conditions in actual use.

Effects of Over Dosage

Over dosing of Setcrete RMW will cause the following:

- ▲ Significant increase in retardation.
- ▲ Increase in workability.

Ultimate concrete strength will not be adversely affected and will generally be increased provided that proper concrete curing is maintained.

Points to be considered in waterproof concrete

- Lower water to cement ratio gives lower permeability concrete.
- Good concrete placing and compaction are very important to produce waterproof concrete.
- Fresh concrete should be protected against rapid drying and cured properly.
- Cold joints must be avoided.

Cleaning

Setcrete RMW can be washed with fresh cold water.

Packaging

Setcrete RMW is available in 150 ml, 1, 5, 20 litre pails, 250 kg drums and 1000 litre bulks supply.

Storage

Setcrete RMW has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

Cautions

Health and Safety

Setcrete RMW is not classified as hazardous material. Setcrete RMW should not come into contact with skin and eyes.

In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

For further information refer to the Material Safety Data Sheet.

Fire

Setcrete RMW is nonflammable.

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A wide range of construction chemical products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.