



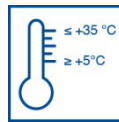
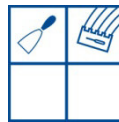
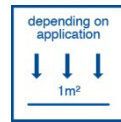
Technical Data Sheet Art. No. 0872

ECO 1K

Single component, thick coating in paste form filled with polystyrene based on a polymer modified bitumen emulsion



Water based

For use outdoors
and floor surfaces
indoorsWorking
temperatureFilling knife /
Applied with a
trowelApplication rate
per coatStore frost-free
and cool
protected from/
moisture in closed
containers

Shelf-life

Range of use

Remmers ECO 1K is used to waterproof areas with ground contact against ground damp and non-standing seepage water in accordance with DIN 18195, part 4; against moisture on ceilings and in wet rooms in accordance with DIN 18195, part 5 and against standing seepage water in accordance with DIN 18195, part 6.

- Basement walls, foundations, floor slabs
- Pipes passing through walls with ground damp and non-standing seepage water

Property profile

ECO 1K is an eco-friendly waterproofing that is very easy to apply with outstanding properties corresponding to DIN 18195.

- Environment-friendly because solvent-free
- Flexible, expansion capable and crack-bridging
- Easy to apply

Characteristic data of the product

Base	Polymer-bitumen emulsion
Density:	approx. 0.70 g/dm ³
Consistence:	paste, thixotropic
Resistance to heat AIB:	+ 120° C
Cross-slit pressure test according to DIN 15820:	passed
Drying time* 20 °C/70 % relative humidity:	3 days
Layer thickness:	1 mm fresh layer = 0.8 mm dry layer thickness

* Depending on weather conditions and the thickness of the fresh layer, the time given may be shorter or longer.

- Resistant to water that attacks concrete up to a degree of 'strong attack' according to DIN 4030
- Resistant to algae, rot and de-icing salts
- Adheres to all cementitious substrates, even matt damp
- Can be applied directly to masonry without a layer of render

Substrate

All mineral substrates such as sand-lime brick, brick, pre-cast concrete stone, concrete, aerated concrete and cement screed are suitable. The substrate must be clean and sound as well as free of oil, grease and release agents. Matt damp surfaces are permitted. The substrate must be solidly filled and plane. Remove projecting seams and the remains of mortar. Break or slope off corners and

edges, especially on floor slabs and cantilevered slabs. Close indentations > 5 mm such as mortar pockets, open vertical and horizontal joints and broken out areas with a suitable mortar, e.g. Repellent Mortar.

Waterproofing new buildings

Sealing cove:

Produce a sealing cove in the clean wall position area with a radius of 5 cm. To improve adhesion and to protect from moisture penetration from behind, basic silicification treatment consisting of Kiesol (diluted 1:1 in water) and Remmers Waterproofing Grout is applied from 10 cm below the upper edge of the slab up over the 2nd horizontal joint (however, at least 20 cm high). Wet-on-wet, place a sealing cove with Waterproofing Filler. On wet substrates, silicification treatment should be executed over the entire surface. If it has been ensured through constructional measures that moisture cannot penetrate from behind, only the sealing cove area is prepared by grouting. Surfaces without protection against moisture penetration from behind are primed with Kiesol (diluted 1:1 with water). On dry surfaces, the substrate can alternatively be primed with Protective Coating (diluted 1:10 in water). For standing seepage water, basic silicification treatment consisting of Kiesol (diluted 1:1 in water) and Waterproofing Grout are recommended. A scratch coat should be applied to concrete as well as masonry stone with profiled surfaces after priming to level the substrate and prevent blisters. In the case of substrates with inherent porosity (e.g. concrete blocks or light-weight concrete blocks), apply a scratch coat to produce a closed surface.

Vertical surface waterproofing:

Two layers of ECO 1K are applied to the substrate after Kiesol is air-dry or Protective Coating or the scratch coat has thoroughly dried. The second layer is applied as soon as the first has hardened sufficiently and will not be damaged when worked over. The

minimum application rates for each load case should be observed, checked in the fresh state and, in the case of standing seepage water and external water pressure, also documented. Make sure that only the prescribed layer thickness is applied in sealing cove areas to ensure that the coating can dry thoroughly. If a layer of reinforcement fabric is required according to DIN 18195, part 6., Reinforcement Fabric 2.5/100, Art. No. 4176, should be worked into the first layer. Reinforcement fabric should always be placed over joints in the element.

Horizontal surface waterproofing:

When waterproofing against ground damp and non-standing seepage water, prime the floor slab as described for vertical surfaces with Kiesol (no pools). Apply ECO 1K in two uniform layers, pore-free. After the waterproofing has thoroughly dried, two layers of PE sheet are placed over the waterproofing as a parting plane and for protection before the screed is placed. Waterproofing against standing seepage water is carried out on the reinforced sub-layer of concrete beneath the floor slab. Carry out silicification treatment first. When waterproofing balconies, terraces and in wet cell areas, ECO 1K is applied up to the upper edge of the finished floor or the horizontal barrier in the walls. This product is not suitable for waterproofing under elevated piles.

Pipes passing through walls

In cases of ground damp and non-standing seepage water, waterproof around pipes passing through walls flexibly with ECO 1K in cove form by applying a layer max. 10 mm thick. Roughen plastic pipes with sandpaper. Clean metal pipes and sand if necessary. Then prime with Ilack ST and blind with sand. After the solvents have evaporated, waterproof as described above. For moisture loads, pipes passing through walls are integrated in the waterproofing with adhesive flange or loose/fixed flange. Loose/fixed flanges must be used for standing seepage wa-

ter. Remmers Pipe Flange can be used for all of the loads stated above.

Subsequent external waterproofing

Substrate preparation:

Clean the exposed substrate thoroughly. Remove all loose parts, friable joints and hollow render and renew with Undercoat Render. After the substrate has been properly prepared it can be waterproofed in the same manner as for new buildings.

Any existing, tightly adhering bituminous waterproofing is primed after drying with 1 K Elastogrout or Ilack ST. Ilack ST is blinded with fire-dried quartz sand, grain size up to 1.0 mm, while fresh. After the solvents have completely evaporated (at the earliest after 48 hours), apply two layers of ECO 1K.

Protection/drainage layer

As soon as the waterproofing has thoroughly dried, it must be protected from mechanical damage and UV-radiation. To protect the waterproofing system, we recommend our DS System Protection, Art. No. 0823, which fulfils the requirements for filling protection in DIN 18195, part 10, and the Thick Coating Guideline and is also the vertical part of a drainage facility according to DIN 0823. Materials that exert a point or line load on the waterproofing should not be used.

Directions

ECO 1K is a ready to use product and can be worked directly out of the can without stirring.

Notes

The ambient and substrate temperature should range between **+5 and +35 °C**. Do not apply in direct sunlight; work should be carried out observing the rules for applying render according to the position of the sun or in the morning or evening hours. In the fresh state the waterproofing is sensitive to rain and frost. Observe DIN 18195, the currently valid Thick Coating

Guideline and the valid Technical Information Sheets for the products that are components of the system.

Tools, cleaning

Smoothing trowel, float, tongue trowel. As long as the coating material is still fresh, it can be removed with water, otherwise use V 101 Thinner for cleaning.

Packaging, application rate, shelf-life

Packaging:

30 l tin cans

Application rate:

- Per silicification treatment:
0.1 kg/m² Kiesol and
1.6 kg/m² Waterproofing Grout
- Sealing cove:
1.7 kg/m Waterproofing Filler
- Priming:
0.1 kg/m² Kiesol or Kiesol red

Coating:

- Ground damp and non-standing seepage water:
At least 40 l/m² ECO 1K
- Moisture:
At least 4.0 l/m² ECO 1K
- Standing seepage water:
At least 5.0 l/m² ECO 1K
- Scratch coat:
Approx. 1.5 l/m² ECO 1K
- Adhesive for cementing perimeter insulation:
Approx. 1.5 l/m² ECO 1K

Depending on how the material is applied, application rates may be higher.


Shelf-life:

At least 6 months in closed, original containers stored frost-free, dry and protected from stronger heat.

Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.



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Remmers GmbH Bernhard-Remmers-Str. 13 D – 49624 Lönigen 14 GBI F 028-1	
EN 15814:2012 EN 15814; PMB-CB2-W2B-C2A Polymer modified, bitumen thick coating (PMBC) for waterproofing in below ground structures	
Water tightness	Class W2B
Crack-bridging ability	Class CB2
Water resistance	No colouration of the water No debonding from inlay
Flexibility at low temperature	No cracks
Dimensional stability at high temperatures	No sliding or draining down
Reaction to fire	Class E
Resistance to compression	Class C2A
Durability of water tightness and reaction to fire	passed

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid. With the publication of this Technical Information Sheet all previous editions are no longer valid.



Remmers (UK) Limited Crawley
 United Kingdom
 Tel: +44 (0) 1293 594 010
 Fax: +44 (0) 1293 594 037
www.remmers.co.uk