

## Specification

Ref: KR50-05

Summary: Silicone TC 15 onto lightweight block

### JOB DESCRIPTION

- **Substrate:** Lightweight/aerated blockwork.
- **Manufacturer:** Kilwaughter Chemical Co. Ltd.  
9 Starbog Rd, Larne, Co. Antrim, N. Ireland, BT40 2TJ  
Tel: 028 2826 0766 Fax: 028 2826 0136  
www.K-Rend.co.uk
- **Undercoat:** K Rend HPX Base  
**Thickness:** 6 mm. Whilst the HPX Base is still wet K Rend alkali resistant reinforcing mesh is embedded into the top third of the basecoat. Rule to line and level. Lightly scratch and allow to set.
- **Undercoat:** K Rend Standard UF Base  
**Thickness:** 10 mm. Rule to line and level. Leave with a float finish. Allow to cure for a minimum of 14 days.
- **Primer:** K Rend Primer TC, applied by brush or roller. Allow to cure for a minimum of 24 hours prior to application of final finish coat.  
**Colour:** Selected by Specifier (colour co-ordinated with finish coat).
- **Final finish coat:** K Rend Silicone TC 15 applied by hand.  
**Colour:** Selected by Specifier.  
**Finish:** Fine textured.
- **Total thickness:** 16 mm (finished).

K Rend HPX Base, K Rend Standard UF Base and K Rend Silicone TC 15 should be applied strictly in accordance with the manufacturer's instructions and specifications and the relevant sections of BS 5262:1991 and BS EN 13914-1:2005. Further guidance is available in the British Board of Agrément Certificate No. 97/3428 and the National Standards Authority of Ireland (NSAI) Agrément Certificate No. 06/0248.

**IF THESE INSTRUCTIONS ARE NOT FOLLOWED CLOSELY, A SATISFACTORY FINISH MAY NOT BE ACHIEVED AND KILWAUGHTER CHEMICAL CO LTD WILL ACCEPT NO RESPONSIBILITY.**

**This specification is valid for 6 months from date of issue. Thereafter details should be re-checked with Kilwaughter Chemical Co. Ltd.**

## DESIGN CONSIDERATIONS

New construction to be rendered should be designed and constructed in accordance with the relevant recommendations of BS 5628:2003, BS5262:1991 and BS EN 13914-1:2005.

Render should only be applied to mature, stable surfaces. New walls to be rendered should be left as long as possible to minimise substrate movement.

In order to achieve the best finish K Bead PVC Angle, Stop, Bellcast, Drip and Expansion beads should be used. The K Bead range is available with all K Rend products from Kilwaughter Chemical Co. Ltd.

Render must not be applied to horizontal or sloping surfaces. Rendering should not be continued over movement joints, damp-proof courses, weep holes or air vents.

An adequate flashing must always be provided to prevent water penetrating behind the render.

Suitably designed overhangs and flashings should be provided to prevent water washing onto the façade. A generous overhang or eave should be designed and all sills and copings should have sufficient drips, including mortar joints at coping. Gutters and down-pipes must also be designed to keep water off the façade.

In order to minimise damage to the rendering, consideration should be given to installing fixings for rainwater, soil and vent pipes before rendering commences. The pipes themselves should be fitted after rendering is completed. Fixings should be made of stainless steel to minimise the risk of corrosion.

Independent scaffolding should be used to avoid the need to repair plug holes. Sufficient height and clearance should be allowed to enable satisfactory completion of the rendered finish.

Some construction materials may be susceptible to alkali attack. Fittings and adjacent surfaces that are likely to be damaged during rendering should be protected.

## BACKGROUND AND PREPARATION

Lightweight/aerated blockwork.

The background should be assessed to ensure that it is suitable to receive the K Rend render system. It should also be checked for line and level to decide if the render can be applied in a uniform thickness or if dubbing out is required. Following suitable preparation of the background K Rend Standard UF Base should be used for any dubbing out requirement.

All necessary repairs must be carried out before application. All damage to substrate from salt attack, corrosion or salts must be carefully prepared. Damaged blocks must be replaced and any holes or insufficiently filled joints repaired.

It is recommended that K Rend alkali resistant reinforcing mesh is used in areas likely to suffer from stress cracking. This can be done by applying K Rend HPX Base, bedding mesh into it whilst it is still wet and leaving the HPX Base with a light scratch prior to setting. K Rend alkali resistant reinforcing mesh is available with all K Rend products from Kilwaughter Chemical Co. Ltd.

The surface must be clean and free from any loose or friable material including paint, oil, soot, lichens and dust. If there is any algae present it should be treated with a proprietary fungicidal wash or surface biocide (i.e. Algae Clean) and then pressure washed to remove any residue.

The product should not be applied to frost bound walls.

Apply suction control as necessary; it may be necessary to damp down walls prior to applying the product to control suction. Rendering should not be applied to walls which have been subject to rain over several hours.

## **PRODUCT**

K Rend HPX Base (an ultra high performance render incorporating high polymer technology and fibres).

K Rend Standard UF Base (a high quality all purpose sprayable basecoat with excellent workability qualities, designed to be used over blockwork as a primary coat for K Rend finishes).

K Rend Primer TC (synthetic resin primer for K Rend thin coat finishes).

Colour as selected by the Specifier (colour co-ordinated with finish coat).

K Rend Silicone TC 15 (thin coat synthetic resin plaster).

Colour as selected by the Specifier.

Samples are provided on request for colour indication only.

It is recommended that a test panel (ideally 2 m<sup>2</sup>) be produced for inspection by the customer (client, architect etc). Work should not commence until the customer is satisfied with the appearance of the product. Applicators should be familiar with product water requirement, handling characteristics, setting and hardening times. These may vary according to background temperature and humidity. The test panel should be prepared well in advance of work commencing.

K Rend products are manufactured from natural products and slight shade variations may occur.

K Rend bagged products are delivered in sealed 25 kg bags on pallets. Each complete pallet contains 70 bags and weighs 1.75 tonne.

K Rend paste products are delivered in 25 kg tubs on pallets. Each complete pallet contains 30 tubs and weighs 0.75 tonne.

### **Storage**

Product sacks, even when protected by hoods, are only shower proof, and should be further protected to prevent damp causing caking of the product. The shelf life is 1 year from date of manufacture if stored off the ground in dry conditions, protected from frost and sunlight, in original unopened packaging.

**It is important to note that all K Rend products are non-returnable.**

### **Health and Safety**

Material Safety Data Sheets are available from the manufacturer and should be read prior to commencement of any rendering.

### **SUPPLIER :**

**Kilwaughter Chemical Co. Ltd**

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## APPLICATION METHOD

K Rend HPX Base, K Rend Standard UF Base and K Rend Silicone TC 15 should be applied strictly in accordance with the manufacturer's instructions and specifications and the relevant sections of BS 5262:1991 and BS EN 13914-1:2005. Further guidance is available in the British Board of Agrément Certificate No. 97/3428 and the National Standards Authority of Ireland (NSAI) Agrément Certificate No. 06/0248.

### Mixing

K Rend HPX Base and K Rend Standard UF Base require approximately 5-6 Litres of clean water per 25 kg sack. Consistency in proportions is essential to ensure an even finish. Mix thoroughly; it takes at least 10 minutes to dissolve the powder additives. Once the products have been mixed to the desired consistency additional water should not be added. The products should not be remixed once the material has started to set.

K Rend Primer TC and K Rend Silicone TC 15; stir the contents of the tub thoroughly before use. (At this stage a small amount of water can be added to Silicone TC 15 to achieve the best working consistency).

### Application

K Rend HPX Base, apply either by machine or by hawk and trowel. Whilst the HPX Base is still wet K Rend alkali resistant reinforcing mesh is embedded into the basecoat. Rule to line and level. Lightly scratch and allow to set.

Thickness: 6 mm.

K Rend Standard UF Base, apply either by machine or by hawk and trowel, ruled to line and level. Leave with a float finish. Allow to cure for a minimum 14 days. It is important to ensure that the background is fully dry and protected from rain prior to priming.

Thickness: 10 mm.

K Rend Primer TC, apply by brush or roller. Allow to cure for a minimum 24 hours prior to application of thin coat finish.

K Rend Silicone TC 15, apply by hand in a continuous application, always working to a wet edge. Apply to the thickness of the largest aggregate. If possible, entire sections or elevations should be coated in a single operation using the same batch to avoid joint marks in the finish.

### Finishing

Allow Silicone TC15 to take up slightly prior to rubbing up in a circular motion (using a plastic float or steel trowel) to create the final texture.

**Finish:** Fine textured.

**Total finished thickness:** 16 mm.

## **OTHER CONSIDERATIONS**

### **Site conditions**

K Rend products have a working temperature range of 5°C to 35°C. The product should not be applied in the rain or mist, at temperatures above 35°C or below 5°C or if exposure to frost is likely to occur during curing.

In sunny weather work should commence on the shady side of the building and be continued round following the sun to prevent the render drying out too quickly. In cold weather, if frost is forecast, work should stop in time to allow the material to set sufficiently to prevent frost damage. Curing times may be prolonged by lower temperatures and/or high humidity.

### **Cleaning of tools**

Clean tools and equipment with water immediately after use. Residue from cementitious products must not enter the drainage system.

### **Curing**

All areas should be protected from rain, mist and cold for at least 48 hours after the application and until the render has fully cured. Care should be taken to protect the fresh render from rain and from drying out too rapidly due to direct sun or drying wind.

### **Repairs**

Damage to the products should be repaired immediately and carried out in accordance with the relevant section of BS 5262:1991 and BS EN 13914:2005. Advice from the manufacturer should be sought. K Rend Silicone TC 15, in common with all finishes, should be protected from all potential site damage.

## Algae

The product contains an algae resistant additive which gives enhanced resistance to algae growth. However, local conditions may still allow algae growth on the render surface. An annual coat of fungicidal wash can prevent algae from growing on facades which can be prone to algae by remaining wet over prolonged periods.

## Maintenance

Regular maintenance checks should be carried out. Where general staining occurs, a warm power wash with suitable detergent can be used to clean up the finish. Care must be taken to adjust the pressure of the power washer to ensure that the render surface is not damaged during the procedure.

**This specification is valid for 6 months from date of issue. Thereafter details should be verified with Kilwaughter Chemical Co. Ltd. (Version 10/15)**

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## Kilwaughter Chemical Co Ltd

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