

PAREX Render Systems and Façade Solutions

PAREXTHERM & PAREXDIRECT MINERAL RENDER SYSTEMS MAINTENANCE & REPAIR GUIDE



Choosing a Parex exterior finish means you have made an enduring, environmentally responsible choice.

Every finish requires some maintenance to keep it looking fresh and clean.

This information will inform you how to care and maintain the finish on your building. It will also answer some questions you might have as you enjoy the benefits of ownership of a Parex render finish. Please keep this information with your other property documents so you can refer back to it should you ever need to. Please note that Parex Ltd will provide Technical Assistance if deemed necessary after completion of the finish. Website or telephone assistance is also available.

What every new owner with a Parex render finish needs to know:

Parex render finishes are one of the most durable finishes you will find. Over time, all finishes benefit from an occasional cleaning with low pressure washing and an approved detergent to remove airborne dust or other atmospheric matter.

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This information will help take care of the finish on your property. It includes warranty information, maintenance instruction and answers to frequently asked questions about the finish.

The following are some recommendations for maintenance for the PAREX THERM Mineral Exterior Insulation and Facade System (EIFS) and the PAREX DIRECT Mineral Render System.

NOTICE

Parex Ltd, reserves the right to replace or change this information at any time.

Parex Ltd shall not be liable for any consequential or other damages resulting from or in connection with the application of these repair procedures, cleaning procedures, or cleaning materials. No warranty, express or implied, is made of the effectiveness of the methods or cleaning materials herein described, and no waiver is made by Parex Ltd, of the limitations set forth in its warranty.

These suggested procedures are supplied solely for the convenience of the purchaser of Parex materials.

FIXING BRACKETS, LIGHT FITTINGS etc.

When an insulated render / brick slip system has been installed onto your property, the fixing of light fittings, hanging basket brackets and etc. requires some care and thought as the insulation applied is often very thick, frequently ranging from 60mm to over 200mm thick, with the insulation having no fixing capability and normal fixings are not designed to deal with this type of application, therefore certain requirements and procedures need to be followed.

When fixing anything onto the insulation system it is advisable to use a form of stand-off type fixing or use a form of back plate to spread the load. There are proprietary fixings that are available from certain fixing manufacturers which are detailed below and the product data sheets are attached to the back of this manual but if these are not available you can for small items that need fixing, such as hanging basket brackets or light fitting as examples, use elongated frame anchors which are fitted through a non corrosive sleeve such as 10, 12, 15mm rigid plastic, stainless steel or copper pipe. The installation procedure is detailed below.

1. Drill a hole in the desired location to suit the diameter of the sleeve being used, until the drill reaches the original substrate. Ensure you **do not** use the hammer mode of the drill as this could shatter the render / brick finish.
2. Cut the sleeve at least the same length as the insulation and render system and install into the hole.

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3. Drill the hole to receive the desired frame type fixing, generally an 8mm or 10mm diameter fixing approximately 50 – 70mm into the original substrate. The depth of hole and the fixing type may vary subject to the type of building substrate.
4. Install the fixing plug of the frame fixing into the substrate and carefully seal around the edge of the fixing with a proprietary silicone sealant and then apply a further layer of sealant behind the item being fixed around the fixing location ensuring the hole is fully protected from water ingress.

For additional guidance, please refer to the details attached to the back of this manual.

- ACC2.1 Principle for fixing single downpipe brackets
- ACC3.1 Principle for fixing light objects
- ACC4 - Principle for sealing fixings & brackets
- ACC7 - Principle for sealing cable ducts and projections
- ACC8.2 -Typical fixing of light fitting
- ACC9 - Principle for fixing a ventilation grille
- Fischer FID screw thread fixing into insulation – Ideal for fixing lightweight fixtures and fittings
- Fischer Thermax 8 & 10 stand-off insulation fixing – Ideal for fixing heavy items e.g. satellite dishes, hanging basket brackets.

If in doubt, contact a professional or competent person to carry out the work for you or if required contact Parex for further assistance.

CLEANING

Parex finishes are durable strong materials manufactured to give attractive appearance and long service. The desired colour of the finish is manufactured into the product and does not require painting for many years. The following procedures are suggested to treat Parex finishes in case of accidental or environmental soiling or minor damage. At the end of this guidance are some recommendations of a few cleaning products that are available in the market for PAREX THERM Mineral Exterior Insulation and Finish Systems (EIFS) and PAREX DIRECT Mineral Systems.

General Information:

- PAREX THERM Mineral renders are mineral based materials. They are compatible with **non – abrasive** cleaning agents that can be used on exterior surfaces.
- Always minimize contact of cleaning agents with the skin, avoid breathing their fumes or vapours, wear goggles, and carefully follow instructions by the cleaning agent manufacturer.
- Cleaning agents should be non-toxic, non-abrasive, non petro-chemical based substances (these

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products could affect the insulation behind the render system on PAREX THERM systems). A simple rule of thumb is if it does not dissolve in water **do not** use it. The cleaning agents should be applied using a soft brush. The surface should **NOT** be scrubbed as this will mark the render finish.

- Test cleaning should be done on a small inconspicuous area of the finish to ensure that no detrimental effect will occur.
- Cleaning of soiling should begin with dry finishes. If the finishes have been well soaked by rain, lawn sprinklers, etc., cleaning action may drive soiling deeper into the finish.
- Exception: If a liquid staining substance has not yet dried, efforts to remove it should commence immediately, before it can dry. Begin all cleaning by liberally flooding surfaces to be cleaned with clear, running water, and end all cleaning by thoroughly rinsing with clear running water.
- For especially stubborn stains, two applications of cleaning procedure will usually be more effective than one heavier, lengthy application of the cleaning agent.

General Soiling

Option 1 – Gently brush the affected area with a solution of strong commercial detergent and warm water.

Option 2 – Pressure wash at a maximum pressure setting of 1000 psi. Warm water up to 100° F may be used. The nozzle of the pressure washer wand should be held no closer than 300mm from the surface of the Parex finish. Do not concentrate the nozzle in one area as this may result in damage to the surface. We recommend you carry out a trial area first to a non-conspicuous area.

Option 3 – Mix 1/4 cup of Trisodium Phosphate (TSP) to 5 litre of warm water. Gently brush the affected area. Rinse thoroughly. Caution: TSP can become a nutrient source for algae growth. If required treat the area with Parex 251 Lankomousse.

Rust Stains

Rust stains on Parex finishes can come from iron or steel construction components adjacent to the installation. To effectively address the staining, its source should be removed or treated to prevent its re-occurrence.

To clean the Parex finish affected by rust stains, use a commercially-available metal oxide remover. This type of staining may not be easily removed.

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Stains from Wood

Tannin or other staining fluids from redwood, cedar, or treated timber can be very difficult to remove once they have set on Parex mineral finishes for an extended period of time. If possible, these stains should be removed immediately by one of the cleaning methods listed above. If the stain does not respond to cleaning, the affected area may have to be sealed and re-coated. Please contact Parex Technical Services for options in this regard.

Tar and Asphalt Materials

Similar to stains produced from woods, tar-like materials can be very difficult to remove.

If the Parex mineral finish is fully dry and the affected area small, quick action must be taken. Remove any excess residue, taking care not to enlarge the stain. Cold water and/or ice may be helpful in containing the affected area.

Commercial cleaners are available that may be effective in removing the remaining stain. Please contact Parex Technical Services for more information. In the event that the stain cannot be removed, it may be necessary to seal and re-coat the surface with Parex 311 DPR Coating.

Mildew, Fungus, and Algae

For installation of Parex mineral systems in geographic areas prone to microbiological fungus and algae growth, a regular schedule of cleaning is advisable. At the first signs of organism growth, the affected area should be cleaned. At a very early stage this can be achieved with a light power wash. For more infected areas, an application of domestic bleach in diluted form (take necessary precaution against splashes and read and observe the instruction on the container) may be suitable. Take care on dark colours and carry out a trial sample area first. For large scale areas treat with Parex 251 Lankomousse.

In the event that the stain cannot be removed, it may be necessary to seal and re-coat the surface with Parex 311 DPR Coating or 310 Primer.

PAINTING

Parex mineral finishes generally remain attractive for many years of service. However, if desired, Parex mineral finishes can be recoated with Parex 311 DPR Coating or 310 Primer. It should be realized that Parex 311 Coating applied in its neat form will alter the texture and sheen of the original finish. 310 Primer is designed not to alter the texture but to soak into the surface of the finish however in all cases complete

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a trail area first. This is an especially important point to consider if the paint is covering a scraped textured finish. Due to the nature of these finishes, some of the texture may be lost when painting.

In matching the colour of an existing Parex mineral finish, it is recommended that a physical sample be used because there is no cross correlation of colour systems between paint colour pigments and mineral render colour pigments.

The existing finish should be clean and dry prior to painting. Parex 311 Coating or 310 Primer can be applied with a brush, roller, or suitable spray equipment. Generally both coatings exhibit good surface coverage in single applications. However, depending on the texture and/or colour of the existing finish, it may be necessary to apply two coats. Alternatively a diluted coat can be applied for lightly soiled areas.

For single applications using a roller, apply the coating in vertical strokes, overlapping each stroke by half a roller width. For two coats, apply the first coat in horizontal passes and allow to dry. The second coat should be applied at a right angle to the first coat in a similar fashion to a single application.

PATCHING & REPAIRING

Any occurrence of damage, such as dents, punctures, holes, etc., is best repaired by an applicator with experience in the use of Parex materials. In some cases, finish, base coat, reinforcing mesh, and even insulation board may have to be removed and replaced.

For additional information please refer to the REPAIR PROCEDURE on page 6 below.

Given the varying circumstances and the variety of damage that can be encountered, you may wish to contact the Parex Technical Services Department for specific information on repairs of this nature.

REFINISHING

Mineral render finishes are very difficult to patch in and any form of repair is likely to be seen. If repairs need to be completed it may be desirable to re-render the affected wall in full.

If the finish material must be closely colour matched to the existing work, it is recommended that a physical sample be provided to the Parex Colour Department for analysis and matching. Even then, the new finish can appear somewhat different than the original finish due to age or a difference in the

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texturing technique of the applicators. If a wall surface must be refinished, it may produce a more acceptable appearance to resurface a panel or larger area to an existing break or termination, rather than a smaller patch area.

As per the Patching and Repairing sections, refinishing should be left to an applicator with prior experience in the use of Parex materials. The area must first be cleaned by one of the methods listed above. Secondly, on the clean and dry existing finish, a preparatory coat of Parex Micro Gobetis 3000 sealer should be applied onto the surface. In applying the new finish, follow the instructions given in the Parex Product Data Sheet for the specific finish and texture desired.

FLASHINGS AND SEALANTS

The first notice of water entry into the building should indicate a problem and should be repaired as soon as possible. EIFS systems, like other wall claddings, rely on flashing and sealants to prevent moisture entry behind the face of the cladding. For this reason it is good practice to periodically check the installation at these key locations:

- Window and door perimeters.
- Expansion joints
- Abutments to dissimilar materials.
- Penetrations, such as around fixtures, hose bibs, outlets, scuppers, etc.
- Terminations at top and bottom of wall
- Sidewall and roof line intersections

Repairs to sealant joints may require their removal and replacement. If this results in the damage of the system base coat, new base coat materials must be used in repair of the damaged area. It should be kept in mind that base coats requires a minimum drying time of three days, or longer if necessary depending on conditions, before sealant is applied to them.

The sealant manufacturer should also be consulted to ensure the compatibility of the sealants to the surfaces to which they will be applied. Special surface preparation or primers may be necessary. If the procedures involved are beyond the scope of simply removing and replacing existing sealants it is the best option to contact Parex Technical Services Department.

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REPAIR PROCEDURE

The following are the recommended instructions and illustrations for a repair procedure for a PAREX THERM Mineral render system (The same repair procedure would be followed after fig 7 for the PARE DIRECT Mineral render system).

If you have any questions, please contact the Parex Technical Department on 01827 711755.

Preparation of External Insulated Façade System – PAREX THERM Mineral

Cut a piece of insulation to be used to replace the damaged EPS (Fig. 1) and trace out the proper size on the surface (Fig. 2).



Fig. 1



Fig. 2

Using a mechanical disc cutting tool (observe the Health and Safety requirements) cut through and remove the top coat mineral finish and base coat, exposing a neat uniform area of insulation larger than the damaged area (Fig. 3).

A disk grinder or belt sander (36 grit aluminium oxide disk or belt) is used to expose the Parex Base Coat, approximately 100mm around the damaged area (Fig. 4). Mask the surrounding finish coat before grinding.

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Fig. 3



Fig. 4

Installing Insulation Board with Parex Adhesive

Cut out all remaining insulation board carefully. Clean the substrate of any old Parex adhesive. If working over gypsum render board, take particular care not to damage the board (Fig. 5).

Using the piece of Parex-approved insulation board used to trace into the damaged area in Fig. 2 on page 10, prepare the edges of the insulation board for a precise fit and apply Parex adhesive mixture over the entire back of the insulation board to a thickness of 10mm. The adhesive should be the same as that originally used in the initial installation. Do not apply Parex adhesive on the edge of the insulation board (Fig. 6).

Make sure the new insulation board is flush with the surrounding insulation board (Fig. 7).

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Fig. 5



Fig. 6



Fig. 7

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Masking the Repair Patch and Applying Base Coat/Adhesive with Reinforcing Mesh

Precisely mask the surrounding area with masking tape again (Fig. 8). Cut the reinforcing mesh so that it will cover the patch area, lapping onto the original reinforced base coat a minimum of 100mm) (Fig. 9).



Fig. 8

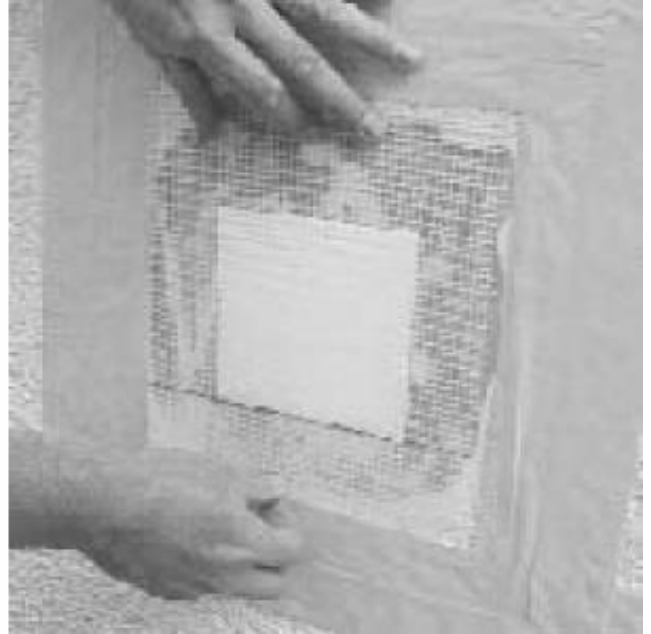


Fig. 9

Install Parex adhesive/base coat mixture on the face of the insulation board, taking particular care to keep the Parex adhesive/base coat off the surrounding original finish edge. Embed the reinforcing mesh. The base coat should be the same as that used in the initial installation (Fig. 10).



Fig. 10

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Applying the Finish and Feathering the Edges of the Patch

Using a small damp brush, smooth irregularities and feather the edge of the Parex adhesive / base coat mixture up to the edges of the existing mineral render finish. The reinforcing mesh must be fully embedded with no mesh pattern showing. Allow to dry completely before applying finish (Fig. 11).

If necessary, precisely mask the surrounding finish with masking tape. Install the new finish over the patch area and texture to match the surrounding finish.

Using a small damp brush, feather the new finish into the existing finish. Please note that this type of repair is unlikely to totally blend into the surrounding area (Fig. 12).



Fig. 11



Fig. 12

Cleaners:

The following information is published as a guide and are our recommendations of a few cleaning products that are available in the market place for the mineral render finishes. It is solely up to the customer to contact the company listed and procure the necessary information regarding pricing, directions, material safety data sheets and other special considerations. We recommend that a small inconspicuous area be used to test the chemicals first. This will help determine a satisfactory cleaning process before applying to the entire wall.

Geocel Ltd

01752 334350

General Purpose Cleaner

Efflorescence Remover

Moss and Algae Remover

www.geocel.co.uk

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Frequently asked questions;

1 Should I expect the Parex Mineral Finish to crack? When should I be concerned with cracking?

As houses settle over time, certain building products have more or less flexibility. The final coat of mineral finish is not a flexible finish and sometimes the substrates are brittle and will produce cracks that may "telegraph" to the surface. These are normally small hairline cracks that do not affect the performance of your wall. However, if the house begins to develop cracks wider than 0.5mm then the render cracks will need to be filled using the Parex crack repair system. If the wall is significantly moving, you may need to contact a building surveyor or engineer.

2 My house has changed colour from when it was new: Is this normal?

Most products when left outdoors will change colour over time given changes in temperature and exposure to ultra violet (UV) light. While traditional render will darken with age, pre – coloured finishes will lighten as composition polymer resins changes with time. This is more apparent on darker colours. This change in colour no way affects the performance of the render, but periodic recoating of acrylic finish will keep your properties exterior beautiful. Applying a coat of Parex 600 sealer will assist in prolonging the colour of your render finish.

3 What is that white powdery substance I have near the base of my render wall? How can I remove it?

This is probably "efflorescence", also known as "alkali". Efflorescence consists of calcium carbonate salts leached from cement based materials when exposed to excessive, saturating moisture. It can be removed by following the directions outlined previously in the render maintenance section. Taking care to direct lawn sprinklers or other sources of water away from render walls will help prevent it.

4 What is the darker, fuzzy growth appearing along the bottoms of the render walls near my flower beds? What can I do about it?

Shrubs and other organic materials create ideal growing conditions for these organisms. It can be prevented, or minimized, by eliminating excess moisture. Ensure irrigation systems are not directed against walls and keep plants trimmed back to allow ample light and air circulation. Remove the discolouration by following the directions outlined previously in the render maintenance section.

5 How can I change the colour of my finish?

Parex finishes generally remain attractive for many years of service. However, if desired, mineral finishes can be recoated with an acrylic based finish to either refresh or change the colour. It should be realized that paint and another acrylic coatings will alter the appearance and sheen of the original finish. This is an especially important point to consider if the paint will cover existing textured finishes. Due to the aggregate size in these finishes, some of the texture will be lost when recoating. Parex have a specific product designed to reduce this issue called 310 Primer.

The existing finish should be clean and dry prior to painting. The new coatings can be applied with a brush, roller or suitable spray equipment. Generally both coatings exhibit good surface coverage in single applications. However, on the texture and/or colour of the existing finish, it may be necessary to apply two coats.

For single applications using a roller, apply the coating in vertical strokes, overlapping each stroke by half a roller width. For two coats, apply the first coat in horizontal passes and allow to dry. The second coat should be applied at a right angle to the first coat in a similar fashion to a single application.

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6 Do I have to seal the joints?

Mineral render installations should be checked at the following areas for cracks that can allow water behind the system:

- Window and door perimeters
- Expansion joints
- Abutments to dissimilar materials
- Penetrations such as around light fixtures, hose bibs, electrical outlets, scuppers, wall vents, scuppers, etc.
- Terminations at the top and bottom of wall
- Sidewall and roofline intersections

Repairs to sealant joints may require their removal and replacement. If this results in damage to the system base coat, new base coat materials must be used in the repair of the damaged area. The sealant manufacturer should be consulted to ensure the compatibility of the sealants to the surfaces to which they are applied. Special surface preparation or primers may be necessary.

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