

Polimar CRS (Cladding Refurbishment System)

Introduction

This is a brief introduction and summary of the new Polimar Cladding Refurbishment System (CRS) designed to coat plastisol coated steel sheets on roofs or in vertical cladding situations. The system is similar to the previous version, although there are different materials included in the system to treat laps and bolt heads on pitched profiled metal roofs.

Before:



After:



This summary includes system components, application summary and some survey guidance on what to look for when carrying out surveys for these types of projects.

Polimar Cladding Refurbishment System (CRS) system guarantee for up to 10 years covering materials and workmanship (MW) of an IKO Polimar Approved Contractor.

Cladding Refurbishment System System Components

Polimar CRS Primer

Anti-corrosive bare metal primer Size: 5 litres Coverage: 8-10m² per litre Product code: MW760004

Polimar CRS Tape

Reinforced butyl rubber tape for panel joints on roofs Size: 10m x 75mm Product code: MW760075

Polimar CRS Seal

Single pack, fibre reinforced coating for panel joints and bolt heads on roofs Size: 5 litres Coverage: 1.0 m² per litre Product code: MW760003

Polimar CRS Finish

Single pack coloured liquid for roofs and vertical cladding. Size: 10 Litres Coverage: 6.7m² per litre per coat (2 coat application) * Product code: MW760002

* Some applications with no colour change may require only 1 coat

Other Products

Polimar CRS Glaze

Single pack, clear coating for plastic rooflights Size: 5 litres Coverage: 4 m²/litre per coat (2 coat application) Product code: MW760001

Before



After:



Application Summary

Plastisol Coated Vertical Cladding

- Inspect and replace badly corroded or damaged sheets
- Mechanically prepare local corrosion to remove rust around bolt heads, fixings, edges and ends
- All surfaces must be clean, dry and free from loose material
- Carry out adhesions tests to ensure satisfactory adhesion can be achieved
- Existing coatings must be sound and fully adhered to the metal substrate. Application adhesion tests must be carried out to ensure system will apply and bond to existing coatings.
- Prime bare metal with Polimar CRS Primer
- Apply Polimar CRS Finish in 2 coats to the whole area

Plastisol Coated Profiled Pitched Metal Roofs

- Inspect and replace badly corroded or damaged sheets
- Mechanically prepare local corrosion to remove rust around bolt heads, fixings, edges and ends
- All surfaces must be clean, dry and free from loose material
- Carry out adhesions tests to ensure satisfactory adhesion can be achieved
- Existing coatings must be sound and fully adhered to the metal substrate. Application adhesion tests must be carried out to ensure system will apply and bond to existing coatings.
- Prime bare metal with Polimar CRS Primer
- To help minimize movement and flexing of the profiled sheet during the treatment process fix the upper and lower sheets at intervals of every other profile approximately 50-75mm from the prepared cut end
- Tape joints with Polimar CRS Tape and stripe coat with Polimar CRS Seal
- Treat bolt heads and fixings with Polimar CRS Seal
- Apply Polimar CRS Finish in 2 coats to the whole area



Survey Notes

Refer to LRWA (Liquid Roofing and Waterproofing Association) Guidance Note No. 10 – Waterproofing of Metal Profiled Sheet Roofing and Cladding for additional information survey guidance and points to consider when refurbishing profiled sheet roofs and cladding

The south-side of a building will have experienced the most weathering so any survey should include this area considering the following points.

Base metal and coating type

This system is designed for the coating of plastisol coated steel sheets. Base sheets made of aluminium and/or finished with other types of coating will require different preparation. A simple magnet test can be used to determine that the base metal is steel. Aluminium will require additional preparation works/primers not included in the standard Polimar CRS system. For roofing applications steel sheets must be a minimum of 0.7mm thick. Vertical cladding steel sheets are a minimum thickness of 0.5mm.

Plastisol finishes will have a 'leatherette' textured finish as in these examples.



Smooth finishes may indicate that the coating is not plastisol (and alternative preparation/primers are required) or previous recoating has taken place.

Adhesion of existing coatings

The adhesion of any existing coating must be verified to confirm that existing coatings are sound and fully adhered to the substrate and suitable for treatment. Application adhesion tests must be carried out using the Polimar CRS Finish (and primers as appropriate) to confirm satisfactory adhesion of the system can be achieved prior to the full works commencing. Adhesion tests must be carried out at locations across the area to be coated.

A simple cross-cut adhesion test can also be carried out on the existing coating. This should be carried out in the following locations Internal corner of a profiled sheet – the existing coating will be under most stress here as the manufacturing process involves coating flat sheets and then forming the profile

Crown of profile – the coating will be more weathered here



Previous repairs

If previous repairs have been carried out these are likely to be around the cut edges of the profiled sheet, bolt heads, fixings and details. Repairs are often indicated by smooth coatings. Previous cut edge corrosion repairs may cause reverse side corrosion of the metal sheets on roofs (see notes below). Any previous repair should be removed back to bare metal.

Reverse side corrosion on roofs

If there is any evidence of reverse side corrosion this must be noted as it is almost impossible to treat as the reverse side of the sheets cannot be accessed. Reverse side corrosion is often indicated by weeping rust stains (as in the image below), corrosion blisters in the sheet above the joint or in extreme cases the sheet will be visible corroded.



Reverse side corrosion is caused by previous repairs to the cut edge joints using systems that are not breathable allowing condensation to occur on the underside of the roof sheets, promoting corrosion from the reverse side.

If reverse side corrosion has occurred then all defective areas of the sheet must be removed and replaced with new to match existing or the whole roof re-sheeted.

Precautions

Effective precautions are required for all work on or near fragile surfaces, no matter how short the duration, whether the work concerns construction, maintenance, repair, cleaning or demolition.

<u>Health and safety in roof work HSG33 [paras 170-202]</u> provides full details of the dangers presented by fragile surfaces and the precautions available. This guidance should be consulted by all involved in such work.

Disclaimer

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