



Industrial Finishes
Wood Coatings Europe

Dear Sir/ Madam

MAINTENANCE OF PROFILE SHEET CLADDING

Thank you for your enquiry regarding the maintenance of pre-finished cladding products.

The Steelseal cladding paint system has been developed in accordance with the requirements for the maintenance of CORUS Colorcoat cladding range. The Corus Colorcoat range are high performance finishes giving many years of maintenance free durability. However, if Steelseal is applied at the optimum time, it can considerably lengthen the life expectancy to next maintenance resulting in considerable cost savings.

The Steelseal system is also suitable for the maintenance of many other coil coated surfaces such as PVF2, silicone Polyester, HP200, HPS200, Urethane, Polyester, Epoxy, and other types of architectural cladding.

Steelseal Topcoat is available on our colourmatch system providing colour flexibility. This allows you to re-colour in the Steelseal system to:

- ✍ Suit corporate colour style and marketing strategy
- ✍ To suit change of ownership
- ✍ To suit change in planning policy
- ✍ To ensure environmental colour compatibility
- ✍ To create a cheerful working environment
- ✍ To restore the existing colour scheme

With the growing need for cost effective programmed maintenance, we trust the enclosed information will be of interest to you. Our literature includes standard specifications for various types of finishes, and differing conditions.

If you have any questions or require more detail or technical assistance, please do not hesitate to contact us.

Yours faithfully

IAN M CRAWFORD
Steelseal Development Manager



Registered in England Number 264 8158

Akzo Nobel Industrial Coatings Ltd
PO Box 37, Crown House
Hollins Road, Darwen
Lancashire BB3 0BG
Telephone (01254) 760760
Facsimile (01254) 701092

Steelseal Specification for New Plastisol
Standard Specification No. 4

In certain instances it may be necessary to repaint New Plastisol cladding. The condition of this New Plastisol is considered to be similar to that of original manufacture, i.e. no loss of sheen, discolouration, adhesion or degradation of PVC. Traces of plasticiser may also be present on the surface of the PVC. Typically 'New' Plastisol is less than one year old.

PREPARATION

Thoroughly wash down using a suitable detergent/water solution so as to remove all dirt, grease and any deleterious matter. This process may be carried out using high pressure water jetting. Control water pressure and techniques so as to 1) avoid damage to sheets and 2) prevent excessive ingress of water under sheet overlaps. Where ingress occurs thoroughly dry before painting commences.

New Plastisol should be swabbed over using white spirits (ref. PC3CW000) on lint free cotton cloth, which should be turned and replaced regularly to prevent smearing and effectively remove any residual plasticiser. Allow to evaporate and ensure the surface is clean and dry before painting commences.

PAINTING

1st Coat: Steelseal Primer, PC4VC Series, (Brush & Airless Spray Qlty), DFT 50-60? ms.

2nd Coat: Steelseal Topcoat, PC5VF series, DFT 50-60 ? ms.

***3rd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms**

*** The second application of the topcoat will depend on the method of application, surface profile detail and the colour choice**

Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film, is applied. Pigment orientation of metallic shades can result in sueding effects if applied incorrectly.

The above suggestions are given in good faith, without prejudice or liability. All materials should be applied in strict accordance with the product data sheets and Steelseal repaint Systems - Notes for guidance.

This specification is valid for 6 months from the date of the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials are subject to Akzo Nobel Industrial Coatings Ltd Current Terms and Conditions of Sale.

Steelseal Repaint System for Firmly Adhering, Weathered Plastisol
Standard Specification No. 5

PREPARATION

Areas of mould or algae growth must be treated with a proprietary fungicidal solution (used in accordance with the manufacturer's instructions). This must be done prior to washing down of surfaces and may require repeat application to effectively sterilise the surface.

Thoroughly wash down with a suitable detergent solution so as to remove all dirt, chalk deposits, oil, grease, residues from sterilisation and any other deleterious matter. Fresh water rinse and allow to dry.

Most common areas of corrosion occur at sheet ends/sides, overlaps and as a result of mechanical damage. Remove corrosion by mechanical abrasive tools to achieve bright metal substrate feathering back adjacent sound Plastisol. Any white zinc salts must also be removed by dry abrading using nylon scouring pads or similar. Remove any 'lift & curl' Plastisol at the bottom of the sheets where necessary, by mechanical means, and feather the edges back to a sound basis

Ensure all surfaces are clean, dry and free from oil, grease or other deleterious matter before painting commences.

PAINTING

Patch Primer: To prepare bare steel areas apply: **Steelseal primer, PC4VC range, DFT 50-60? ms**

Apply Overall

1st Coat: Steelseal Primer, PC4VC Series, (Brush & Airless Spray Qlty), DFT 50-60? ms.

2nd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms

***3rd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms**

*** The second application of the topcoat will depend on the method of application, surface profile detail and the colour choice**

Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film is applied. Pigment orientation of metallic shades can result in sueding effects if applied incorrectly.

The above suggestions are given in good faith, without prejudice or liability, and all materials should be applied in strict accordance with the product data sheets and Steelseal Repaint Systems - Notes for Guidance.

This specification is valid for 6 months from the date of the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials are subject to Akzo Nobel Industrial Coatings Ltd Current Terms and Conditions of Sale.

Steelseal Repainting System for Peeling/Flaking (unsound) PVC Plastisol/HP200
Standard Specification No. 6

PREPARATION

Remove all existing coatings back to the galvanised substrate by the most suitable means. Trials may be carried out to ensure the most practical method is used. Typical methods include:

1. Proprietary Chemical Stripper

Use in accordance with the manufacturer's recommendations. After allowing the stripper to react, remove coating by scraping and/or pressure washing. Repeated application may be necessary for complete removal of Unsound Plastisol.

Thoroughly wash down using a suitable detergent solution to remove all stripper residues, dirt, grease and other deleterious matter. This should be supplemented with scrubbing brushes/nylon scouring pads etc. to remove stubborn residues. Rinse with clean water and allow to dry.

Remove corrosion by mechanical abrasive tools to achieve bright metal substrate. Most common areas of corrosion occur at sheet ends/sides, overlaps and as a result of mechanical damage. Any white zinc salts must also be removed by dry abrading using nylon scouring pads or similar.

2. Abrasive Blast Cleaning

Wet or dry blast clean in accordance with equipment manufacturer's recommendations. Remove all Unsound Plastisol and prepare corroded areas to bright metal (Sa 2.5 grade ISO 8501-1:88). Remove all blasting debris. Apply primer as soon as possible to avoid deterioration of blast standard.

3. High Pressure Water Equipment

Use in accordance with the manufacturer's instructions.

Remove corrosion by mechanical abrasive tools to achieve bright metal substrate. Most common areas of corrosion occur at sheet ends/sides, overlaps and as a result of mechanical damage. Any white zinc salts must also be removed by dry abrading using nylon scouring pads or similar.

Preparation of the substrate may also be carried out using a combination of the above methods.

Control water/blast pressures and techniques so as to avoid 1) damage to sheets, 2) minimise removal of any sound galvanise and 3) prevent excessive ingress of water/blast media under sheet overlaps. Where ingress occurs thoroughly dry and remove any blast media.

Ensure all surfaces are clean, dry and free from oil, grease or other deleterious matter before painting commences.

Spec. No. 6 (cont)

PAINTING

Patch Primer: To bare prepared steel areas apply: Steelseal Primer, PC4VC Series, (Brush & Airless Spray Qlty), DFT 50-60? ms. This patch coat should be applied as an overall coat in the case of abrasive blast cleaning as this method of preparation often depletes the protective galvanise layer.

Apply Overall

1st Coat: Steelseal Primer, PC4VC Series, (Brush & Airless Spray Qlty), DFT 50-60? ms.

2nd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60? ms

***3rd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms**

*** The second application of the topcoat will depend on the method of application, surface profile detail and the colour choice**

Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film is applied. Pigment orientation of metallic shades can result in sueding effects if applied incorrectly.

The above suggestions are given in good faith, without prejudice or liability, and all materials should be applied in strict accordance with the product data sheets and Steelseal repaint Systems - Notes for guidance.

This specification is valid for 6 months from the date of the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials are subject to Akzo Nobel Industrial Coatings Ltd Current Terms and Conditions of Sale.

Stealseal Repaint System for Silicone Polyester/PVF2 Coated Cladding
Standard Specification No. 7

PREPARATION

Areas of mould or algae growth must be treated with a proprietary fungicidal solution (used in accordance with the manufacturer's instructions). This must be done prior to washing down of surfaces and may require repeat application to effectively sterilise the surface.

Thoroughly wash down using a suitable detergent; so as to remove all dirt, oil, grease, sterilisation residues and chalking coatings. This process may be carried out using high-pressure water jetting methods. The washing down should be supplemented with scrubbing brushes or scouring pads in order to remove stubborn chalking residues or any surface contamination. Rinse with clean water and allow to dry.

Remove all loosely adhering coatings and any rust corrosion or zinc/aluminium oxidation, preferably by mechanical means, to clean bright metal, feathering back adjacent sound coil coating. Where chalking has not occurred, it is recommended to uniformly abrade to provide surface key for subsequent coatings.

Depending on the extent of corrosion/breakdown, wet or dry abrasive blast cleaning may be more economical as a method of surface preparation. Spot blast corroded areas to bright metal (Sa2.5 grade ISO8501-1: 1988) and sweep blast remaining areas. Dust off and remove all debris.

Control water pressure/blast technique so as to avoid 1) damage to sheets; 2) minimise removal of any sound galvanise and 3) prevent excessive ingress of water/blast media under sheet overlaps. Where ingress occurs, thoroughly dry and remove any blast media.

Ensure the surface is clean, dry and free from any oil, grease or deleterious matter before painting commences.

PAINTING

Patch prime all abraded clean bright metal using: **For galvanise/steel: Stealseal Primer, PC4VC Series, DFT 50-60? m. For aluminium alloy etc: Akzo Chromate Free Etch Primer, IN7NN300, DFT 15-20 ? m**

Apply Overall

1st Coat: Cladding Repaint Primer, DFT 30-35? m, PC4WO Series

2nd Coat: Stealseal Topcoat, DFT 50-60 ? m, PC5VF Series

***3rd Coat: Stealseal Topcoat, PC5VF Series, DFT 50-60 ? ms**

*** The second application of the topcoat will depend on the method of application, surface profile detail and the colour choice**

Pigment orientation of metallic shades can result in sueding effects if applied incorrectly.

Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film, is applied.

The above suggestions are given in good faith, without prejudice or liability, and all materials should be applied in strict accordance with the product data sheets. All above materials should be used in strict accordance with the product data and Stealseal Repaint Systems Notes for Guidance.

This specification is valid for 6 months from the date on the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials must be applied in accordance with our product data sheets and are supplied in accordance with Akzo Nobel Industrial Coatings Ltd current Terms and Conditions of Sale.

Suggested Specification for Previously Painted Plastisol cladding **PREPARATION**

Areas of mould or algae growth must be treated with a proprietary fungicidal solution (used in accordance with the manufacturer's instructions). This must be done prior to washing down of surfaces and may require repeat application to effectively sterilise the surface.

Thoroughly wash down with a suitable detergent solution so as to remove all dirt, chalk deposits, oil, grease, residues from sterilisation and any other deleterious matter. Fresh water rinse and allow to dry.

Most common areas of corrosion occur at sheet ends/sides, overlaps and as a result of mechanical damage. Remove corrosion by mechanical abrasive tools to achieve a bright metal substrate feathering back adjacent sound Plastisol. Any white zinc salts must also be removed by dry abrading using nylon scouring pads or similar. Remove any 'lift & curl' Plastisol at the bottom of the sheets where necessary, by mechanical means, and feather the edges back to a sound basis

Remove all loosely adhering coatings back to a firm sound basis and feather back all edges. (The success of the overpaint will be attributed to the diligence of this preparatory work.) Abrade the firmly adhering coatings to check its adhesion and provide a 'Key' for the subsequent coating

Ensure all surfaces are clean, dry and free from oil, grease or other deleterious matter before painting commences.

PAINTING

Patch Primer: To prepare bare steel and exposed bare Plastisol areas apply: **Steelseal primer, PC4VC series (Dual Quality Brush & Spray) DFT 50-60 ? ms**

Apply Overall

1st Coat: Akzo Urethane Alkyd Undercoat, PC5AS Series, DFT 40? ms

2nd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms

*** 3rd Coat:** Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms

*** The second topcoat requirement, will depend on the colour choice, method of application, profile detail and access, and will ensure obliteration and maximum opacity.**

Please note we are unable to give any assurances as to the adhesion of existing coatings.

Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film is applied. Pigment orientation of metallic shades can result in sueding effects if applied incorrectly. The above suggestions are given in good faith, without prejudice or liability, and all materials should be applied in strict accordance with the product data sheets and Steelseal Repaint Systems - Notes for Guidance.

This specification is valid for 6 months from the date of the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials are subject to Akzo Nobel Industrial Coatings Ltd Current Terms and Conditions of Sale.

Suggested Specification for Previously Painted Pvf₂ cladding **PREPARATION**

Areas of mould or algae growth must be treated with a proprietary fungicidal solution (used in accordance with the manufacturer's instructions). This must be done prior to washing down of surfaces and may require repeat application to effectively sterilise the surface.

Thoroughly wash down with a suitable detergent solution so as to remove all dirt, chalk deposits, oil, grease, residues from sterilisation and any other deleterious matter. Fresh water rinse and allow to dry.

Most common areas of corrosion occur at sheet ends/sides, overlaps and as a result of mechanical damage. Remove corrosion by mechanical abrasive tools to achieve a bright metal substrate feathering back adjacent sound Pvf₂. Any white zinc salts must also be removed by dry abrading using nylon scouring pads or similar. Remove any 'lift & curl' Pvf₂ at the bottom of the sheets where necessary, by mechanical means, and feather the edges back to a sound basis

Remove all loosely adhering coatings back to a firm sound basis and feather back all edges. (The success of the overpaint will be attributed to the diligence of this preparatory work.) Abrade the firmly adhering coatings to check its adhesion and provide a 'Key' for the subsequent coating

Ensure all surfaces are clean, dry and free from oil, grease or other deleterious matter before painting commences.

PAINTING

Patch prime all abraded clean bright metal using:

For galvanise/steel: Steelseal Primer, PC4VC Series, DFT 50-60 ? m.

For aluminium alloy etc: Akzo Chromate Free Etch Primer, IN7NN300, DFT 15-20 ? m

Bare Pvf₂ :Cladding Repaint Primer, PC4WO Series, DFT 30-35? m

Apply Overall

1st Coat: Akzo Urethane Alkyd Undercoat, PC5AS Series, DFT 40? ms

2nd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms

*** 3rd Coat: Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms**

*** The second topcoat requirement, will depend on the colour choice, method of application, profile detail and access, and will ensure obliteration and maximum opacity.**

Please note we are unable to give any assurances as to the adhesion of existing coatings.

Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film is applied. Pigment orientation of metallic shades can result in srueding effects if applied incorrectly. The above suggestions are given in good faith, without prejudice or liability, and all materials should be applied in strict accordance with the product data sheets and Steelseal Repaint Systems - Notes for Guidance. This specification is valid for 6 months from the date of the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials are subject to Akzo Nobel Industrial Coatings Ltd Current Terms and Conditions of Sale.

Steelseal Repaint System for Weathered Galbestos
Standard Specification No. 8

PREPARATION

Areas of mould or algae growth must be treated with a proprietary fungicidal solution (used in accordance with the manufacturer's instructions). This must be done prior to commencement of washing down of surfaces and may require more than one application to effect complete sterilisation. Thoroughly wash down using a suitable detergent solution so as to remove all dirt, grease, surface contaminants and sterilised mould/algae. This is normally carried out using pressure water jetting methods and may need repeating to effectively clean the surface. Rinse with clean water and allow to dry. Control water pressure and technique so as to avoid 1) damage to sheets and 2) prevent excessive ingress of water under sheet overlaps. Where ingress occurs, thoroughly dry. Remove all loosely adhering coatings by the most practical and efficient methods. Particular attention should be given to splitting, cracking of coatings at the internal corners of the profile where the topcoat has bridged and become hollow behind. Feather back all broken paint edges. Remove all corrosion/oxidation by mechanical power tools back to clean bright metal and feather back edges. Sheet ends, edges and mechanically damaged areas are particularly prone to this. Dust off well and remove all debris created during the preparatory work. Ensure the surfaces are clean, dry and free from any deleterious matter before painting commences.

PAINTING

Patch prime any prepared bright metal and exposed prepared **bitumen** using: **Steelseal Primer PC4VC Series, (Dual purpose Brush & Airless Spray Qlty), DFT 50-60 ? ms**. Apply liberally and evenly and trespass onto the sound coating by 50mm.

Apply Overall

1st Coat: **Cladding Repaint Primer, ref. 4WO Series, DFT 30-35 ? ms**

2nd Coat: **Steelseal Topcoat, PC5VF series, DFT 50-60 ? ms**

***3rd Coat:** **Steelseal Topcoat, PC5VF Series, DFT 50-60 ? ms**

*** The second application of the topcoat will depend on the method of application, surface profile detail and the colour choice**

Pigment orientation of metallic shades can result in sueding effects if applied incorrectly. Consideration should be given to surface profile, accessibility, location and equipment used. Work should be carried out using good painting practices and application techniques to ensure that a continuous, even wet film, is applied. We understand the Galbestos composition to be a zinc coated steel onto which an **asbestos** felt has been applied whilst the zinc was still molten. The felt is impregnated with a bituminous coating and finally colour topcoated. All advice regarding the current health & safety legislation must be implemented. Taking this into consideration, we cannot be held responsible for any future splitting, cracking etc. that may take place due to differential movement accommodation, typically experienced with layered coatings of differing thermoplasticity e.g. bitumen. All relevant health and safety issues must be taken into consideration when preparing any exposed asbestos felt and should be done under current legislation.

The above suggestions are for coloured Galbestos and not Bitumen Finish type and are given in good faith without prejudice or liability. All above materials should be used in strict accordance with the product data and Steelseal Repaint System Notes for Guidance.

This specification is valid for 6 months from the date on the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials must be applied in accordance with our product data sheets and are supplied in accordance with Akzo Nobel Industrial Coatings Ltd Current terms and Conditions of Sale.

STEELSEAL REPAINT SYSTEMS NOTES FOR GUIDANCE

- ? The mentioned materials must be used in strict accordance with the product and health & safety data sheets.
- ? The wet film thicknesses should be monitored at all stages to ensure the DFT requirements are met.
- ? Work should be carried out by competent personnel who have a sound knowledge of access, preparation and application techniques related to maintenance painting of architectural cladding. Akzo Nobel Industrial Coatings Ltd is always willing to answer user's enquiries regarding its products.
- ? The resultant paint finish should be of an accepted high aesthetic appearance, free of surface defects, runs, sags, curtains, misses, etc.
- ? Application should be carried out in weather conducive to painting, to alleviate problems associated with inclement weather damage, i.e. rain spotting, blisters, pinholing, blooming (matting off), etc.
- ? If the coatings are subject to any of the above, they should be re-coated accordingly, which may mean re-painting complete elevations to ensure that a uniform aesthetic standard is achieved.
- ? Work should be done methodically and with suitable access so as to allow application to progress with the profile rather than against it. This should help alleviate patchy finishes and banding. Always try to keep and maintain the wet edge, to avoid double coating, fat edges, etc. This will help ensure complete coverage with the coating system.
- ? When finishing shifts, or the working day, try to work to a natural break in the elevation. If no breaks are in the design of the building, use the troughs of the profile or seams or joints.
- ? Choose appropriate brush size depending on cladding profile.
- ? When spraying, ensure all site restrictions are considered and areas not to be treated should be protected or adequately masked up. Spray equipment must be capable of achieving tip pressure necessary to produce good spray atomisation.
- ? In order to achieve maximum system longevity, preparation should be carried out thoroughly and diligently, in accordance with the specifications.
- ? Any holes in the cladding caused by previous signage should be filled with a suitable filler, or stopped with a rubber grommet.
- ? When painting is complete, replace any fixing cappings as necessary.
- ? Where chemical strippers are used, they should be used in strict accordance with the manufacturer's product data sheets. Do not allow to dry on the surface. It is essential to ensure all stripper residues are removed prior to application of the coatings.

- ? Ensure all corrosion, white zinc salts (galv. oxidation) and loose PVC are totally removed and feathered back where necessary.
- ? Depending on the colour choice, method of application and profile detail, an additional topcoat of PC5VF Series may be necessary, in order to achieve maximum opacity and purity of colour. Metallic shades can result in sueding effects due to pigment orientation if incorrectly applied.
- ? In the case of sites which have been previously painted, whilst we can inspect and provide a compatible system to the existing, we can not be held responsible for any failure or adhesion problems associated with delamination of the existing coating and any subsequent failure of our overpaint system as a result of this.
- ? Where an extra topcoat is required, this should be applied within 48 / 72 hours, to reduce intercoat contamination.

These notes are given as a guide to achieving maximum performance and obtaining high decorative appearance; however, as every site tends to be unique in some way, please do not hesitate to contact Crown Protective Coatings if you should have any query.

This specification is valid for 6 months from the date on the document. Further deterioration in site conditions may occur after this time, which would require a new specification. All materials must be applied in accordance with our product data sheets and are supplied in accordance with Akzo Nobel Industrial Coatings Ltd current Terms and Conditions.