

Substrate Characteristics

Although non-ferrous metals do not rust as quickly as ferrous metals, they do corrode when exposed to the atmosphere, forming oxides and carbonate layers. In some instances these may be protective, but often impair adhesion of subsequent coatings. The corrosion and chemical resistance of each of these metals is unique and care should be taken when specifying them. Contact between dissimilar metals may result in extreme corrosion, such as copper pipes on zinc roofs.

Surface Preparation

New Work - see [Surface Preparation D89](#) for detailed preparation guidelines.
Repaints - see [Surface Preparation D87](#) for detailed preparation guidelines.

7e 1 Exterior Waterborne

Achieving good adhesion presents the greatest difficulty with coating non-ferrous metals, especially when the surfaces are very smooth or when oxides have formed. Surface preparation and primer are therefore critically important.

Generic Specification				Resene Spec No.	Resene One-Line Specification			
Substrate	Environment	Paint Type	Gloss Level		Surface Prep	1st Coat	2nd Coat	3rd Coat
Non-Ferrous Metals	Exterior	Waterborne	Gloss	7e 1.1	D89	NRS: Vinyl Etch RA31 WNW: Galvo-Prime D402 WUG: Galvo One D41	Hi-Glo * D31	Hi-Glo * D31
Non-Ferrous Metals	Exterior	Waterborne	Semi-Gloss	7e 1.2	D89	NRS: Vinyl Etch RA31 WNW: Galvo-Prime D402 WUG: Galvo One D41	Sonyx 101 * D30	Sonyx 101 * D30
Non-Ferrous Metals	Exterior	Waterborne	Satin	7e 1.3	D89	NRS: Vinyl Etch RA31 WNW: Galvo-Prime D402 WUG: Galvo One D41	Lumbersider D34	Lumbersider D34

* For doors, windows and joinery, use Resene Enamacryl (see [Data Sheet D309](#)) in place of Resene Hi-Glo (see [Data Sheet D31](#)) and use Resene Lustacryl (see [Data Sheet D310](#)) in place of Resene Sonyx 101 (see [Data Sheet D30](#)).

7e 2 Exterior Solventborne

Achieving good adhesion presents the greatest difficulty with coating non-ferrous metals, especially when the surfaces are very smooth or when oxides have formed. Surface preparation and primer are therefore critically important. Resene Galvo-Prime (see [Data Sheet D402](#)) is not recommended under solventborne topcoats. Semi-gloss and flat solventborne paints do not have the necessary weather resistance for exterior exposure. Drying times of solventborne paints may be extended when applied directly over Resene Vinyl Etch (see [Data Sheet RA31](#)). For better hiding, Resene Acrylic Undercoat (see [Data Sheet D404](#)) tinted to the correct colour may replace one of the topcoats.

Generic Specification				Resene Spec No.	Resene One-Line Specification			
Substrate	Environment	Paint Type	Gloss Level		Surface Prep	1st Coat	2nd Coat	3rd Coat
Non-Ferrous Metals	Exterior	Solventborne	Gloss	7e 2.1	D89	NRS: Vinyl Etch RA31 HDF: Vinyl Etch RA31 WUG: Galvo One D41	Acrylic Undercoat D404 Uracyl 403 RA56	Super Gloss D32 Uracyl 403 RA56
Non-Ferrous Metals	Exterior	Solventborne	Semi-Gloss	7e 2.2	D89	HDF: Vinyl Etch RA31 WUG: Galvo One D41	Uracyl 402 RA55	Uracyl 402 RA55
Non-Ferrous Metals	Exterior	Solventborne	Low Sheen	7e 2.4	D89	HDF: Vinyl Etch RA31 WUG: Galvo One D41	Uracyl 404 RA59	Uracyl 404 RA59

Key: HDF = Heavy Duty Finish NRS = Normal Recommended System WNW = Waterborne, New Work WUG = Weathered Unpainted Galvanising

Exterior Non-Ferrous Metals

Aluminium, Brass, Bronze, Copper, Lead, Stainless Steel and Zinc

General specification guidelines for painting non-ferrous metals in non-demanding environments

For demanding and aggressive exterior environments, see the Resene Engineered Coating Systems Manual or contact Resene

the paint the professionals use

access specification information online at www.resene.co.nz (NZ) or www.resene.com.au (AUST)
minimise the effect of your project on the environment – see www.resene.co.nz/paintwise.htm

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Surface Preparation

New Work - see [Surface Preparation D89](#) for detailed preparation guidelines.
Repaints - see [Surface Preparation D87](#) for detailed preparation guidelines.

7i 1 Interior Waterborne

Waterborne enamels Resene Enamacryl (see [Data Sheet D309](#)) and Resene Lustacryl (see [Data Sheet D310](#)) may be used in areas traditionally reserved for solventborne enamels with the added benefits of non-yellowing, fast drying and low odour.

Generic Specification				Resene Spec No.	Resene One-Line Specification			
Substrate	Environment	Paint Type	Gloss Level		Surface Prep	1st Coat	2nd Coat	3rd Coat
Non-Ferrous Metals	Interior	Waterborne	Gloss	7i 1.1	D89	NRS: Vinyl Etch RA31 WNW: Galvo-Prime D402	Enamacryl D309	Enamacryl D309
Non-Ferrous Metals	Interior	Waterborne	Semi-Gloss	7i 1.2	D89	NRS: Vinyl Etch RA31 WNW: Galvo-Prime D402	Lustacryl D310	Lustacryl D310

7i 2 Interior Solventborne

Achieving good adhesion presents the greatest difficulty with non-ferrous metals, especially when the surfaces are very smooth or when oxides have formed. Surface preparation and primer are therefore critically important. Resene Galvo-Prime (see [Data Sheet D402](#)) is not recommended under solventborne topcoats. Drying times of solventborne paints may be extended when applied directly over Resene Vinyl Etch (see [Data Sheet RA31](#)).

Generic Specification				Resene Spec No.	Resene One-Line Specification				
Substrate	Environment	Paint Type	Gloss Level		Surface Prep	1st Coat	2nd Coat	3rd Coat	4th Coat optional
Non-Ferrous Metals	Interior	Solventborne	Gloss	7i 2.1	D89	Vinyl Etch RA31	Acrylic Undercoat D404	Super Gloss D32	Super Gloss D32
Non-Ferrous Metals	Interior	Solventborne	Semi-Gloss	7i 2.2	D89	Vinyl Etch RA31	Acrylic Undercoat D404	Lusta-Glo D33	Lusta-Glo D33
Non-Ferrous Metals	Interior	Solventborne	Flat	7i 2.5	D89	Vinyl Etch RA31	Acrylic Undercoat D404	Flatcote D306	Flatcote D306

Key: NRS = Normal Recommended System WNW = Waterborne, New Work

Interior Non-Ferrous Metals

Aluminium, Brass, Bronze, Copper, Lead, Stainless Steel and Zinc

General specification guidelines for painting non-ferrous metals in non-demanding environments

For demanding and aggressive interior environments, see the Resene Engineered Coating Systems Manual or contact Resene