Technical Information

Zina Core™

Pre-painted steel with hot-dipped aluminium and zinc alloy for excellent durability.

colorcote.co.nz

ColorCote®
The right roof always lasts longer

ZinaCore™
Previously known as ZR8™

Raise your profile, not your costs

ColorCote® ZinaCore™ is highly durable and designed for excellent colour retention and formability. It's the 'formability' or innate ability to be easily re-formed that will offer you profile options to suit your overall design aesthetic, and all at an incredibly affordable price. Under normal conditions its baked on colour will give many years of vibrant life without any signs of fading, cracking or peeling.

Choose the right ColorCote roof and it will always last longer.

Leading New Zealand innovation in pre-painted steel and aluminium

40+

Manufactured and marketed in New Zealand for more than 40 years

ZinaCore™

Previously known as ZR8™, ZinaCore is highly durable and desirable. Designed for long-lasting colour retention and formability, it can be pliably rollformed to the profile of your choice, at a very cost-effective price.

Technical

ColorCote ZinaCore
Conforms to AS/NZS2728:2013
Suitable for ISO9223:2012
Atmospheric Classifications C1 – C3

Substrate

Hot-dipped aluminium/zinc alloy coated steel coil, 150gms/m^2 coating weight.
Manufactured to AS 1397:2001.

Pre-treatment

Corrosion resistant chromate conversion coating.

Primer

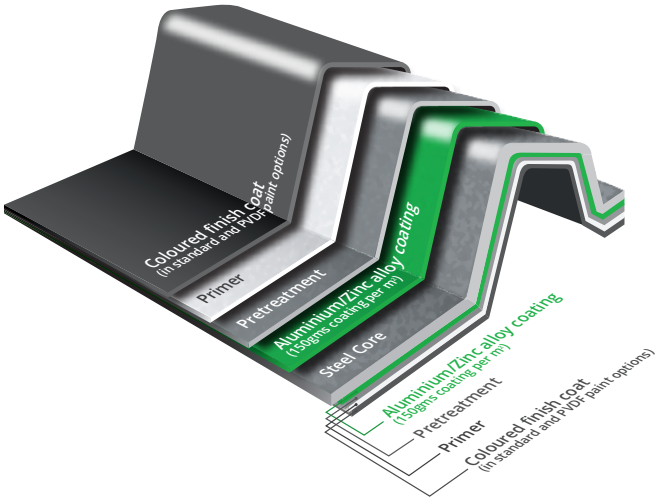
Flexible corrosion resistant chromated primer. Nominal film thickness 7µ ± 1µ on the top side and 5µ ± 1µ on the reverse.

Finish Coat

Flexible exterior acrylic, polyester or modified polyester coating. Nominal film thickness 18µ ± 2µ.

Backing Coat

Shadow Grey (standard colour) wash coat, 5µ ± 1µ nominal thickness.



Gloss

Typical gloss levels are 25 ± 5% measured in accordance with ASTM D523-14 (60 degrees). A range of our colours can also be supplied in a low gloss version if required.

Strippable Film

Products can be supplied with an optional strippable protective film at extra cost. This material has a relatively short life span when exposed to sunlight and weather. It should be removed either just before, or immediately after installation. If stored indoors strippable film should be removed within 12 months of delivery from ColorCote.

Need an extra durable finish?

ZinaCore X (previously known as ZRX) uses exactly the same steel substrate as ZinaCore but comes with a more protective paint system for use in chemical or industrial environments.

Technical

ColorCote ZinaCore X
Conforms to AS/NZS2728:2013
Suitable for ISO9223:2012
Atmospheric Classifications C1 – C4

Primer

Flexible corrosion resistant chromated primer on both sides. Nominal film thickness 7µ ± 1µ on the top side and 5µ ± 1µ on the reverse.

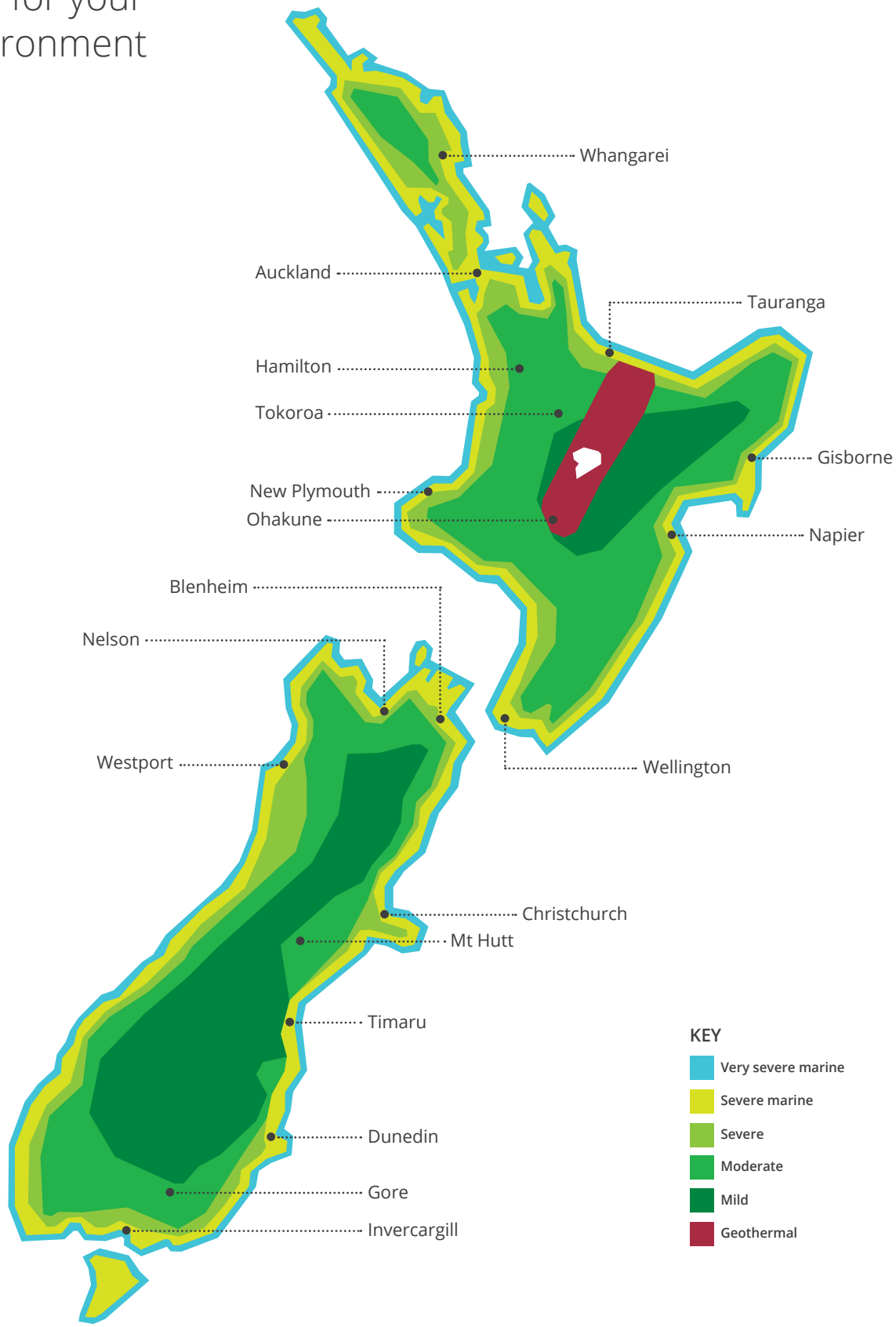
Finish Coat

70% PVDF system (Polyvinylidene Fluoride). Nominal film thickness 20µ ± 2µ. The exterior coat of ColorCote ZinaCore X is a PVDF paint system containing at least 70% PVDF resin in the dry paint film.

Backing Coat

Shadow Grey (standard colour) wash coat, 5µ ± 1µ nominal thickness.

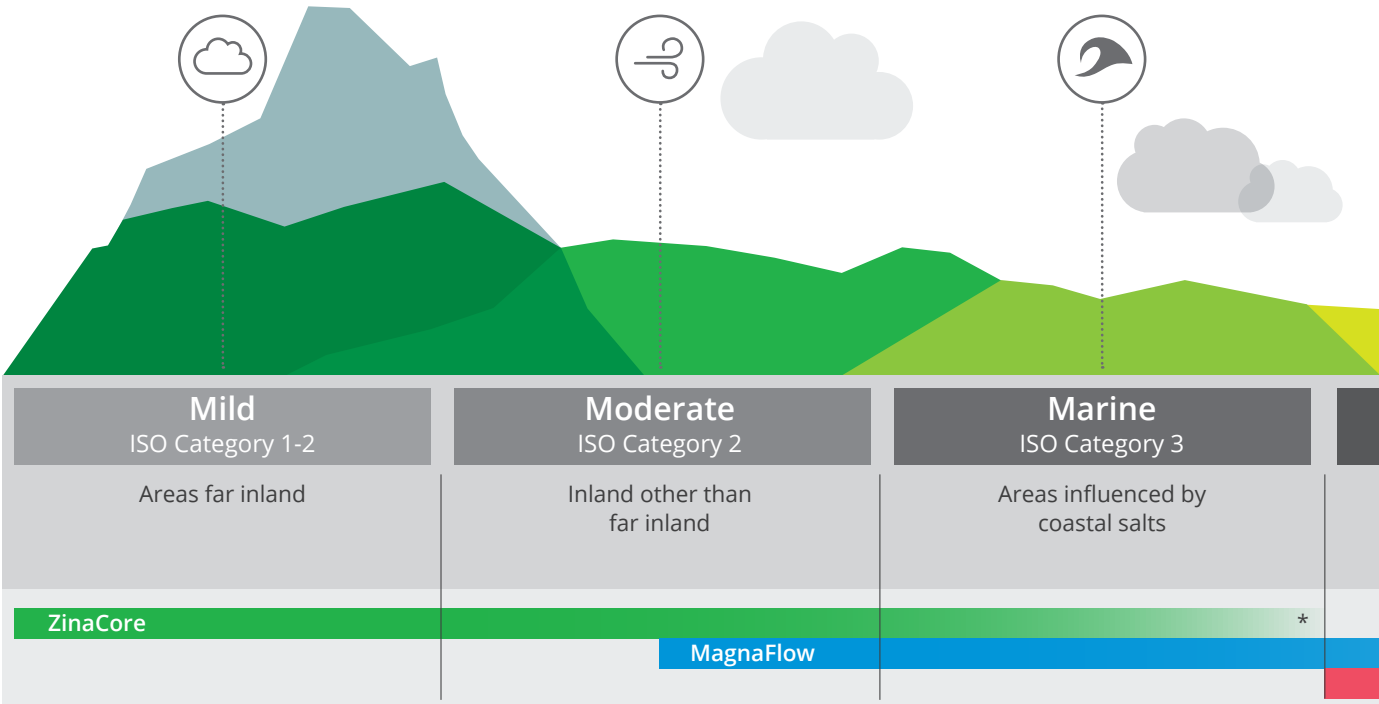
Choose the right roof for your environment



Representative of NZ environmental classification borders only. Contact ColorCote via the warranty enquiry form online or by using the free ColorCote app to determine the environmental classification, recommended product and warranty information for your specific roof or cladding project.

Atmospheric environments

Usage guide



Buildings with exposure to corrosive chemicals such as airports, gas stations, fertiliser or dairy factories may require the ColorCote 'X' paint system to ensure roof or cladding is protected from chemicals in the environment. Please contact ColorCote for a recommendation if you are unsure which paint system is required.

ZinaCore performance testing

Scratch resistance

Good scratch resistance. Testing includes needle scratch test – no marking of paint surface when a needle with a 2kg weight attached is drawn across. ASTM D5178-13.

Impact resistance

AS/NZS2728:2013 Table 2.2 and Appendix E. No loss of paint adhesion after a test piece is struck on the reverse side with a specified force, in line with the test methodology described in Appendix E.

Bend test

AS/NZS2728:2013 section 2.6.1 and Appendix F – No loss of adhesion or paint cracking when bent around a diameter equal to five times the thickness of the sheet.

Heat resistance

Suitable for continuous service up to 100ºC. Continuous service at higher temperatures may cause some colour change and damage to the paint film.

Tested under New Zealand's most demanding environmental conditions.

Results from lab tests are backed up with ongoing testing in New Zealand environmental conditions. Test sites are in Penrose, Auckland and Muriwai Beach, northwest of Auckland, providing real world testing in demanding industrial & marine environments.

Salt spray

Meets the requirements of AS/NZS2728:2013 Sections 2.8 and 2.10

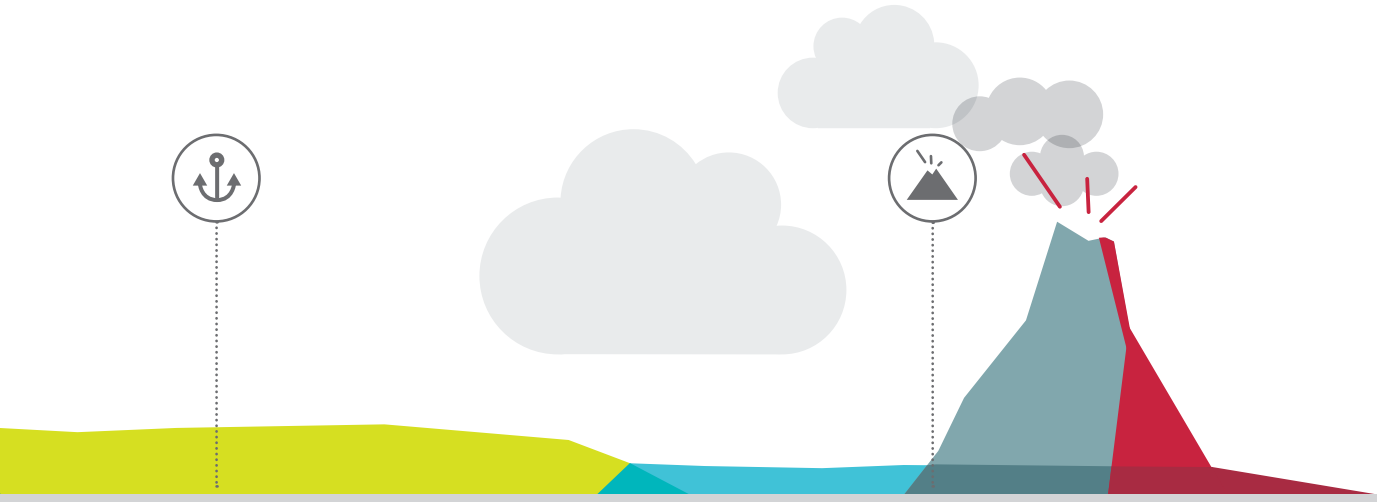
Humidity resistance

Meets the requirements of AS/NZS2728:2013 Sections 2.8 and 2.9

QUV resistance (durability of coating system)

Meets the requirements of AS/NZS2728:2013 Section 2.8 and Table 2.4

Note: Tests are conducted on a flat panel.



Severe marine
ISO Category 4

Very severe
ISO Category 5

BEGINS between 100-400 metres from the coast. May extend inland depending on local conditions	Off shore and within 100-400 metres from the coast. May extend inland depending on local conditions	Geothermal

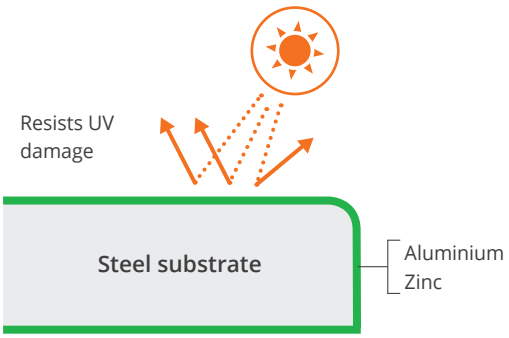
AlumiGard *

These are general guidelines only. Building location, design & aspect need to be taken into account.
Go online to colorcote.co.nz to check which product will be warranted.

***To ensure warranty will be given, check with ColorCote before using in these areas.**

Built to last

ZinaCore is a hot-dipped aluminium/zinc alloy-coated steel substrate. The outer layer is an acrylic or polyester top coat, using the latest infrared reflective pigments, baked on to a polyester primer. The result is an extremely durable paint system built to resist UV damage from New Zealand's harsh sun, providing excellent colour and gloss retention.



If your site matches the climatic conditions and you want roofing and cladding that will retain its good looks and protect for many years at a very affordable price, this could be the right ColorCote product for your project.

Warranty terms

Pacific Coilcoaters offers warranties of differing lengths on ZinaCore for residential buildings in ISO 1-3 environments, depending on whether the product will be used for roofing or cladding.

		Environment (ISO CAT) 1-3
Roofing	Paint	18 yrs
	Perforation	30 yrs
Wall cladding	Paint	15 yrs
	Perforation	15 yrs

Refer to specific warranty information for full terms and conditions, including exclusions and minimum maintenance requirements. Buildings close to industrial areas which are be exposed to corrosive chemicals may require ZinaCore X (for added protection via PVDF paint). Visit colorcote.co.nz and complete the warranty enquiry form.

Performance

Outdoor durability

ColorCote ZinaCore and ZinaCore X, under normal well washed conditions of exposure, can be expected to show no cracking (other than that which may occur during forming), flaking or peeling of the paint film for 15 years from the date of installation.

Colour change during service will depend on the colour chosen, aspect, design of the structure and the environment.

Some chalking may occur. A maximum rating of 2 is expected after 20 years exposure, when measured in accordance with AS/NZS1580.481.1.11:1998.

Scale is between 0 and 5 with a lower number indicating less chalking.

The above are subject to minimum maintenance requirements.

Recommended end uses

ZinaCore has very good colour and gloss retention and is suitable for roofing, cladding, and rainwater goods. ZinaCore is ideal for interior uses, and exterior environments where corrosion levels are moderate. It is also suitable for fencing applications.

ZinaCore X has outstanding colour and gloss retention and is suitable for roofing, cladding, and rainwater goods. ColorCote ZinaCore X is ideal for industrial sites where there is a high risk of deterioration from corrosive elements in the environment.

For information concerning product use in areas not covered by ColorCote ZinaCore or ZinaCore X, refer to the ColorCote, MagnaFlow or AlumiGard technical information brochure or contact ColorCote for details.

You can check which ColorCote product is right for your building by making a warranty enquiry online at colorcote.co.nz or by downloading the free ColorCote app.

Warranty app is available on the App Store and Google Play.

Important

ColorCote ZinaCore and ZinaCore X are not suitable for use in the following situations:

- **Animal shelters where excessive ammonia fumes can accumulate due to inadequate venting, or where direct contact with animal effluent can occur.**
- **Water tanks or areas where a constantly wet environment is maintained.**
- **In direct contact with concrete or where lime deposits are evident.**
- **In contact with soil (allow a 75mm run off below cladding sheets to ground level).**

Roof pitch

Do not use a pitch less than three degrees (eight degrees for standard corrugated profile) to avoid ponding and premature degradation of the coating system.

Handling and rollforming

To avoid damaging the paint surface the material must be handled carefully during transport and rollforming.

ColorCote does not recommend the use of rollforming lubricants on ColorCote products.

The use of rollforming lubricants will affect performance of pre-painted metal and will lead to staining and uneven premature fading.

Touch-up paint

ColorCote is a baked on paint system which has different weathering characteristics to standard air drying paints. **Do not use touch-up paint on ColorCote products.** Minor scratches should be left alone.

Storage of coil

On no account should coils be allowed to get wet. Rain or condensation is drawn between the surfaces by capillary action, and then cannot evaporate normally. This can cause deterioration of the coating leading to a reduced life expectancy and poor appearance. The same applies for finished roofing and cladding sheets.

Rollforming performance may be affected if coils are stored for more than 12 months.

Clean up

Installation procedures involving self-drilling screws, drills and hacksaws etc will leave deposits of swarf and metal particles. These particles including blind rivet shanks, nails and screws should be swept and washed from the roof regularly. **Refer to the MRM Code of Practice for further information.**

Site practice

If nestable profiles become wet while closely stacked, formation of wet storage stain or 'white rust' is inevitable.

To minimise the possibility of inadvertent damage:

- **Inspect deliveries on arrival.** If moisture is present, individual sheets should be dried immediately with a clean rag and then stacked to allow air to circulate and complete the drying process.
- **Well ventilated storage is essential.** Always store metal products under cover in clean, well-ventilated buildings.
- **Cross stack or fillet sheets** where outside storage is unavoidable and make provision for a fall to allow water to run off. Cover the sheets.

It is the responsibility of the roofing contractor to avoid damaging the roof sheeting during its installation and fixing. Never drag sheets from a pile. Remove by 'turning off' the stack. Lift sheets onto the roof, and do not drag over the eaves or the purlins. Use clean footwear. Remove swarf and other contaminants regularly. **Refer to the MRM Code of Practice for further information.**

Installation

Refer to the MRM Code of Practice for correct installation guidelines, particularly in regard to underlays/building papers, penetrations, flashings, fasteners, pitch etc.

Dissimilar metals

When dissimilar metals come into contact with each other, the electric potential difference between the metals establishes a corrosion cell, and accelerated corrosion can occur.

To avoid this problem, the following precautions should be observed:

- **Avoid discharges of water from brass or copper pipes on to ColorCote ZinaCore and ZinaCore X.**
- **Do not use non-galvanised steel, copper, brass, lead, stainless steel or monel metal in direct contact with ColorCote ZinaCore and ZinaCore X.**
- **Do not use lead flashings in contact with ColorCote ZinaCore and ZinaCore X products. Soft edge aluminium or notching of flashings are the best solutions.**
- **Tanalised timber contains copper, so must not be used in direct contact with ColorCote ZinaCore and ZinaCore X products. Use PVC tape or similar barrier to isolate potential problem points of contact between materials.**

Fastenings

Class 4 coated screws are recommended for both ZinaCore and ZinaCore X and will give the best service life.

ZinaCore and ZinaCore X – galvanised nails with pre-painted washers can be used.

Do not use stainless steel or monel fasteners on ZinaCore or ZinaCore X products.

In all cases ensure the fasteners are installed correctly with the ColorCote ZinaCore and ZinaCore X product.

For further details refer to the MRM Code of Practice or consult your fastening supplier.

Sealing and jointing

Where sealed joints are required, use only neutral cure silicon rubber sealant together with mechanical fasteners such as aluminium rivets. **Do not weld or solder ColorCote products.**

Cut edge sealing

ZinaCore – applying coil-on clear cut edge production lacquer will enhance the cut edge performance of ColorCote ZinaCore.

ZinaCore X – for cladding in severe environments, coil-on clear cut edge protection lacquer must be used to meet warranty requirements. Coil-on is not mandatory for roofs because of the washing effects of rain. However, it does enhance the cut edge performance of ZinaCore X.

Unwashed areas

These are typically those areas that are not washed by natural rainfall, such as the underside of eaves, sheltered roofs or wall cladding, under solar panels etc. These areas are excluded from warranty. ColorCote recommends the exclusion of unwashed areas by design wherever possible.

In cases where this is not possible, then a regular washing programme should be put in place. Contaminants should be removed by mechanical washing with water and a soft bristle brush at least every six months, or more frequently if contaminant build-up keeps occurring.

Leading New Zealand innovation in pre-painted steel and aluminium

40+

Manufactured and marketed in New Zealand for more than 40 years

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