**Technical Information** 

# Zina Core

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

colorcote.co.nz





# Raise your profile, not your costs

ColorCote<sup>®</sup> ZinaCore<sup>™</sup> 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.

Leading New Zealand innovation in pre-painted steel and aluminium Manufactured and marketed in New Zealand for more than 40 years

# **Zina**Core<sup>™</sup>

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<sup>2</sup> coating weight. Manufactured to AS 1397:2001.

## Pre-treatment

Corrosion resistant chromate free conversion coating.

#### Primer

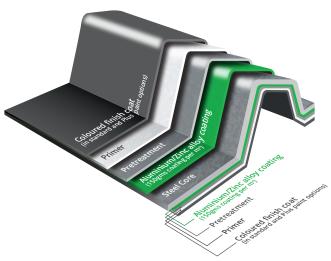
Flexible corrosion resistant primer. Nominal film thickness  $5\mu$  on the top side and  $5\mu$  on the reverse.

#### **Finish Coat**

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

#### **Backing Coat**

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



### Gloss

Nominally gloss levels are 25%, 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 Plus** uses exactly the same steel substrate as ZinaCore but comes with a more protective paint system for use in chemical or industrial environments.

#### Technical

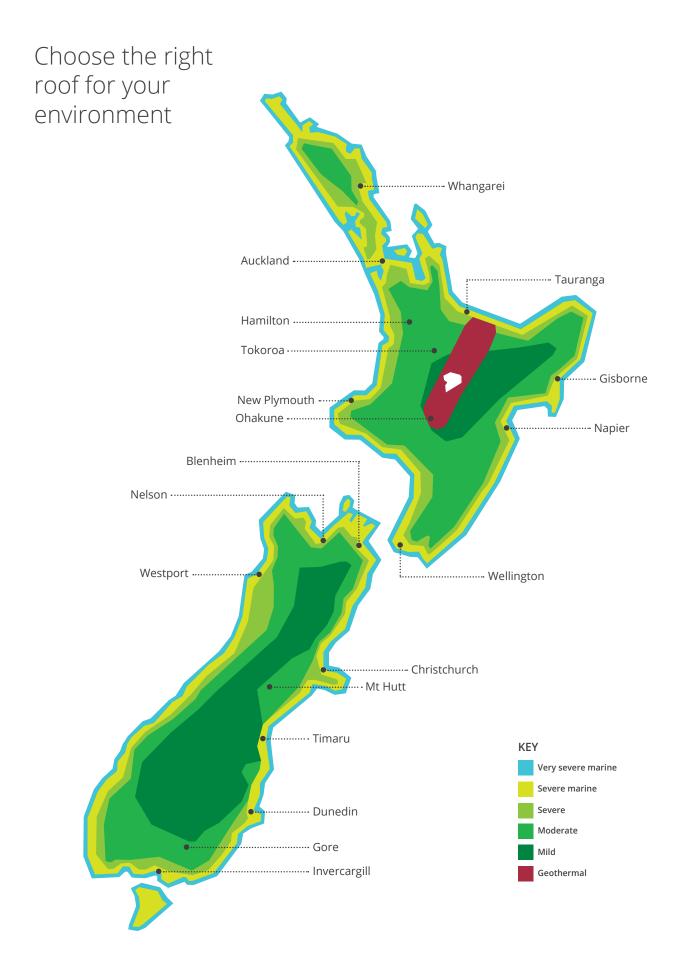
ColorCote ZinaCore Plus Conforms to AS/NZS2728:2013 Suitable for ISO9223:2012 Atmospheric Classifications C1– C4

#### Primer

Flexible corrosion resistant primer on both sides. Nominal film thickness  $5\mu$  on the top side and  $5\mu$  on the reverse.

#### **Finish Coat**

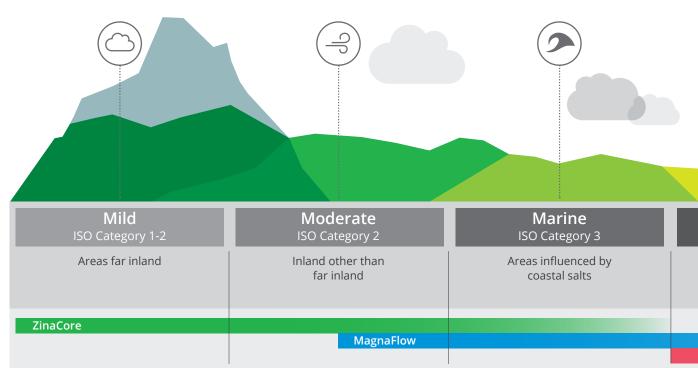
The finish coat of ColorCote ZinaCore Plus is a waterborne siliconised paint system that delivers added protection against chemicals or pollutants that may be found in industrial type environments. Ideally suited to applications such as airports, service stations, factories and warehouses.



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 e posure to corrosive chemicals such as airports, gas stations, fertiliser or dairy factories may require the ColorCote 'Plus' paint system to ensure roof or cladding is better 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 paint adhesion when bent around a diameter equal to five times the thickness of the sheet.



## Heat resistance

Suitable for continuous service up to 100°C. 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's 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

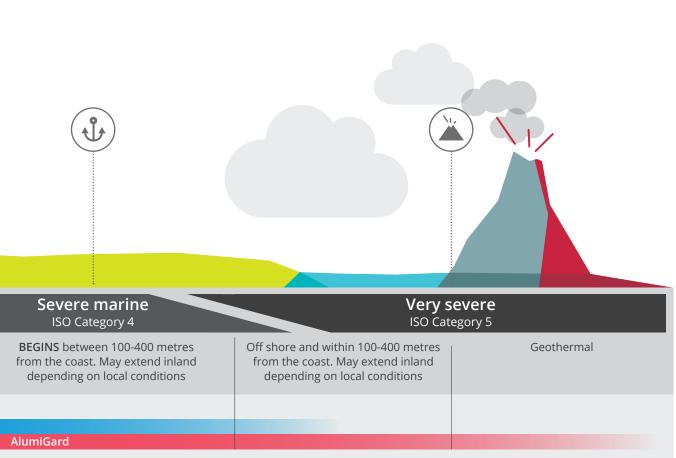
Meets the requirements of AS/NZS2728:2013 Sections 2.8 and 2.9



#### QUV resistance (durability of coating system)

Meets the requirements of AS/NZS2728:2013 Section 2.8 and Table 2.4 after 4000hrs exposure.

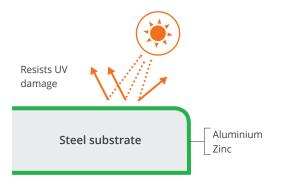
Note: Tests are conducted on a flat panel.



These are general guidelines only. Building location, design & aspect need to be taken into account. To ensure a warranty will be given, go online to colorcote.co.nz and complete a warranty enquiry form.

## 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

Commercial warranty details available upon request . Refer to specific warranty information for full terms and conditions, including exclusions and minimum maintenance requirements. Buildings close to industrial areas which are exposed to corrosive chemicals may require ZinaCore Plus (for added protection). Visit colorcote.co.nz and complete the warranty enquiry form.

# Performance

## Outdoor durability

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.

## Recommended end uses

**ZinaCore** is suitable for roofing and cladding. ZinaCore is ideal for exterior environments where corrosion levels are moderate, and may also be used for interior applications.

ZinaCore Plus is suitable for roofing and cladding in environments where there is a risk of deterioration from corrosive chemicals in environments, such as on industrial sites.

For information concerning product use in areas not covered by ColorCote ZinaCore or ZinaCore Plus, refer to the ColorCote MagnaFlow or AlumiGard technical brochures 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.

## Important

ColorCote ZinaCore and ZinaCore Plus 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).

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

# 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

## On site – Wet or humid conditions

On no account should uninstalled coils and sheets be allowed to get and stay 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 significantly reduced life expectancy and poor appearance.

# Off site – Long term storage of coils

Rollforming performance may be affected if coils are stored for more than 12 months. Warranty for material painted more than 12 months prior is by application to ColorCote only.

## 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 and filleted to allow air to circulate and complete the drying process.
- Well ventilated storage is essential. Always store metal products stacked and filleted under cover in clean, well-ventilated areas.
- Outside storage. Where outside storage is unavoidable, make provision for a fall to allow water to run off. Fillet the sheets and cover with tarpaulin, allowing air to move freely and circulate.
- Installation. Best practice is to install upon delivery to avoid exposure to wet or humid elements.

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. Avoid transferring sunscreen from hands or knees on to painted MagnaFlow as this can degrade the paint quality. 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 and storage.



## **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 contact or discharges of water from brass or copper pipes on to ColorCote ZinaCore and ZinaCore Plus.
- Do not use non-galvanised steel, copper, brass, lead, stainless steel or monel metal in direct contact with ColorCote ZinaCore and ZinaCore Plus.
- Do not use lead flashings in contact with ColorCote ZinaCore and ZinaCore Plus 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 Plus 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 Plus and will give the best service life. Galvanised nails with pre-painted washers can be used on ZinaCore and ZinaCore Plus.

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

In all cases ensure the fasteners are installed correctly with the ColorCote ZinaCore and ZinaCore Plus 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 and ZinaCore Plus– applying coil-on clear cut edge protection lacquer will enhance the cut edge performance of these products.

## Minimum maintenance

The service life is extended by regular washing. A manual wash every six months is recommended, more often if contaminants build up. Regularly inspect for damage and failing fasteners, and repair these. Failure to regularly wash areas that don't receive natural rainfall will void warranty.

## Unwashed areas

The underside of eaves, sheltered roofs or wall cladding etc are not washed by rainfall. ColorCote recommends the exclusion of unwashed areas by design wherever possible.

Where this is not possible, then a regular washing programme should be put in place. Contaminants should be removed by low pressure waterblasting (less than 1000psi) or washing with water and a soft bristle brush at least every 6 months, or more frequently in severe environments or if contaminant buildup keeps occurring.

For full information, see the ColorCote Minimum Maintenance Schedule.



Leading New Zealand innovation in pre-painted steel and aluminium



Manufactured and marketed in New Zealand for more than 40 years

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