

NEW ZEALAND
MAY 2011

The Beauty of Metallic™

COLORSTEEL® Metallic™



Developed by New Zealand Steel for the ultimate solution in beauty and design flexibility. The distinctive metallic surface draws on the environment and surrounding structures to enhance the appearance of your building with subtle yet remarkable effects. As light gently washes over the mica particles in the metallic finish a unique perception of depth is acquired. In addition the mica particles create an amazing effect as the appearance of the prepainted steel surface changes according to the varied lighting conditions and viewing angles.

Whether it is creating a distinctive architectural feature or regulating the conditions of incidental lighting, COLORSTEEL® METALLIC™ will complement and enhance the aesthetic design of your building.

Behind the intelligently formulated technology of COLORSTEEL® METALLIC™, lies the COLORSTEEL® brand for prepainted steel roofing giving you the assurance of a warranty supported by New Zealand Steel.

COATINGS

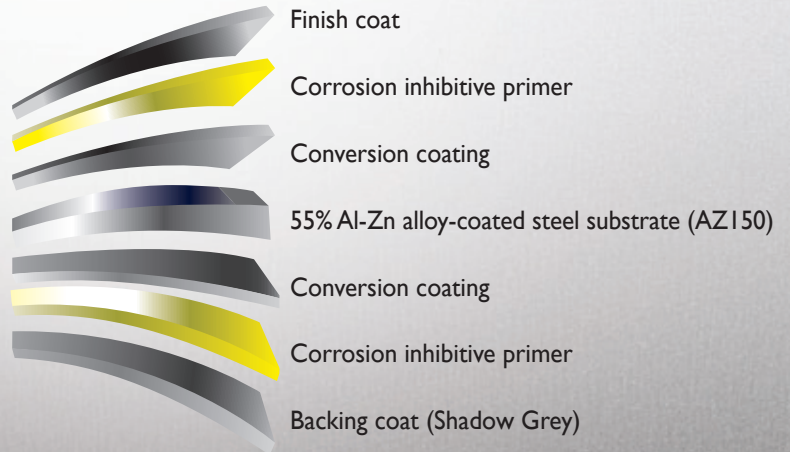


Figure 1



no rotation



45° rotation



90° rotation



180° rotation

GEOMETRIC METAMERISM

The metallic type paint systems obtain their unique lustre from the addition of mica particles to the paint. These particles, whilst being responsible for the unique appearance, also result in a visual effect known as geometric metamerism. Geometric metamerism is a phenomenon where the colour of the painted surface will appear to be different dependent upon viewing angles and lighting conditions. In order to illustrate this effect, Figure 1 shows 4 disks punched from the same sample of COLORSTEEL® METALLIC™ Silver. As the illustration shows, when the same material is rotated through 45°, 90° and 180° a significant inherent difference in colour and appearance can be observed.

Due to the unique nature of pearlescent finishes as used on COLORSTEEL® METALLIC™ prepainted steel, certain precautions are necessary when ordering and installing this product.



Silver

NEW ZEALAND WARRANTIES

New Zealand Steel will provide warranties on a case by case basis for COLORSTEEL® METALLIC™ prepainted steel product used as a roofing or cladding product on the basis that it will not perforate through corrosion within 15 years in a moderate coastal (ISO C3) or moderate inland (ISO C2) environment. In addition, maintenance work must be undertaken on the roof and cladding structures as outlined in our 'Maintenance' section of this information bulletin as a pre-condition to validating and supporting the warranty document provided. Lack of maintenance will invalidate the warranty offer. Warranties will not be provided where COLORSTEEL® METALLIC™ prepainted steel is used in exposed coastal areas where prevailing wind conditions result in salt laden sea air depositing chloride ions on the surface of the roofing and cladding applications.

MAINTENANCE

Regular washing of COLORSTEEL® METALLIC™ steel products increases the durability from attack by airborne salts and pollutants. Rain washing of roofing will remove the salts and pollutants. Cladding should be manually washed every 6 months and unwashed areas and areas of high risk should be manually washed every 3 months. (High risk areas include around flues and extractor vents, under eaves, television aerials, trees and sites prone to mould, lichen, bird droppings or debris).

ROLLFORMING

Rollformed sections of COLORSTEEL® METALLIC™ steel often display striking effects due to the varying angles of incident light. The customer should be aware of this visual effect as well as the potential for variation between vertical and horizontal orientation. Accessories will be subject to different conditions of incident lighting compared to flat wall and profiled panels.

INSTALLATION

In order to prevent mismatching, all sheets on a project should be aligned in the same direction. To assist in this regard use the New Zealand Steel branding on the reverse of the sheets to align the flat wall and profiled panels. For COLORSTEEL® METALLIC™ product the brand will also include arrows to further highlight this requirement. Care should be taken to ensure that when fabricating architectural panels a suitable system exists to convey this information to the installer. Caution must be taken during installation to ensure that adjacent panels fit flush and flat relative to one another. Failure to do so will again result in appearance variations. Touching up minor surface scratches on COLORSTEEL® product is not recommended. Minor scratching will not affect the life of the product and is rarely obvious to the casual observer. If the surface scratching is severe the material should be replaced.

ACCESSORIES

It should be noted that “matching” accessories (such as gutter clips) which are not made from COLORSTEEL® METALLIC™ steel will be subject to a metamer effect (as explained on the previous page). This is due to the differences in paint chemistry and method of paint application between COLORSTEEL® METALLIC™ steel and post painted or powder coated accessory items.

FURTHER INFORMATION

For additional information, literature or technical assistance, please contact:
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ORDERING

Due to the metamer nature of these paint systems different batches of paint may vary slightly in colour. In order to minimise appearance differences it is strongly recommended that all requirements for a particular project are processed in one production run using the same batch of paint. The rollformer should inform their New Zealand Steel Customer Services Officer of all COLORSTEEL® METALLIC™ steel requirements for a given project so that orders can be batched. Notifying New Zealand Steel is particularly important when a project calls for various sizes to avoid material being produced from different runs. Material will be consistent when painted in the one production run using the same batch of paint.

ENVIRONMENT

It is recommended that COLORSTEEL® METALLIC™ steel products be only specified and used in moderate marine (ISO category 3) and moderate inland (ISO category 2) environments. Refer Warranties Section for further explanation and information.

SUMMARY

- COLORSTEEL® METALLIC™ steel should only be used in moderate coastal (ISO category 3) or moderate inland (ISO category 2) environments.
- Order all material for one project at the same time.
- Inform New Zealand Steel Customer Services Officers of the entire material requirements for a particular project.
- Install panels and sheets according to painting direction and ensure they fit flush and flat relative to one another.
- Do not mix material produced from different paint line runs.
- Be aware of the unique visual effects on rollformed sections and horizontal versus vertical exposure.
- Regularly wash claddings and unwashed and high risk areas.

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