

Specification for Colourgalv Marine

The information below is the coating specification for Colourgalv Marine available exclusively from Highland Colour Coaters & Highland Galvanizers.



Colourgalv Marine

1. Colourgalv Marine primer coat: Hot dip galvanizing applied in accordance with ISO 1461
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2. Colourgalv Marine mid coat: Epoxy powder coat applied in accordance with ISO 13438
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3. Colourgalv Marine top coat: Polyester powder coat applied in accordance with ISO 13438

Colourgalv marine is a triplex coating system for use on steel products in coastal and marine environments. The coating utilises the corrosion protection attributes of hot dip galvanizing and the durability of powder coating to provide a marine coating that is tough and long lasting. The two coat powder coating system has a higher durability than standard Colourgalv.

Technical applicator requirements

The following conditions are necessary for Colourgalv Marine to be applied, all of which are met by Highland Galvanizers and Colour Coaters.

- The hot dip galvanizing should be applied in accordance with ISO 1461
- The process should be carried out under a robust quality management system which is audited annually to comply with BS EN ISO 9001:2008 or equal
- Components should be labelled or identifiable throughout the process ensuring traceability.
- All parts of the coating should be applied in one factory to ensure the product is not exposed to any contaminants between coating stages
- The powder coating should be applied in accordance with BS EN ISO 13438:2013 – the standard for powder application onto a galvanized substrate
- The coater should hold approved applicator status for powder coating onto a hot dip galvanized substrate
- The galvanized surface should be fully finished prior to powder coating
- A full immersion pre-treatment system should be used ensuring all component surfaces are chemically treated prior to coating. This should include the application of a conversion coating to provide adequate adhesion between the galvanized and powder layers
- The pre-treatment, powder application and curing should be completed in one production shift. Materials that do not achieve this should be returned to the start of the process
- Sample panels should be processed during the shift when the job is coated, and a suite of destructive and other tests performed on them to ensure the coating meets specification.
- The components should be inspected and measurements taken on thickness and gloss levels prior to despatch
- Materials should be suitably packaged prior to despatch

Erection and ongoing care

- Care must be taken during handling and installation to ensure the coating is protected from damage
- Materials that are being stored on site should be adequately protected from site operations

Coating Attributes

Galvanizing

- The coating is applied to all surfaces, both internally as well as externally
- Superior corrosion protection for exposed or external steel.
- Up to 100 years lifespan with no maintenance for galvanized steel, depending on the location.
- Galvanizing is a non-permeable coating that has a higher hardness rating than steel
- Sacrificial protection built in to coating through electrolytic/cathodic protection
- Superior edge protection compared to paint systems
- Factory controlled process producing a repeatable high quality finish
- Allows quicker and easier site erection reducing time on site and site congestion

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- The epoxy layer has a high chemical resistance which ensures the galvanizing does not oxidise in the salt rich atmosphere
- The galvanized layer is consumed far slower than without the polymer coating providing increased corrosion protection to the product
- Environmentally responsible coating that releases no VOC's during application
- Powder application ensures even coverage over the whole product
- UV protection ensures that coating remains colourfast
- Powder coating provides a tough, durable and abrasion resistant coating
- Reduces the need for onsite painting
- No major maintenance for at least 15 years (Annual wash down recommended)
- Performance guarantee available on request - the length of guarantee is dependent on the location and environmental conditions
- Approved Akzo Nobel touch up procedure available should on site welding be required

Additional information

Capacity – components with an envelope size of 7m x 3m x 1.1m and weighing up to 750kgs are able to be coated using the Colourgalv Marine system

Colourgalv Marine primer coat

No shot blasting is required for a standard coating in line with BS EN 1461:2009. Minimum coating thickness of Colourgalv primer coat varies dependent on steel substrate thickness, with minimum thickness quoted in standard BS EN 1461:2009. Shot blasting can be utilised to provide a thicker galvanized layer for protection in the harshest C5M environments. To achieve that thicker coating we recommend shot blasting to SA 2.5 prior to coating

Materials with moving parts are generally not suitable for the galvanizing process. Sliding latches and drop bolts should be designed with adequate tolerance built in.

Steelwork will require to be adequately vented in order that it can be processed effectively and safely. For further information on this and general design tips for galvanizing please contact us on the phone numbers below

Colourgalv Marine top coat

Available in hundreds of colours and several different gloss levels; matt (30%), satin (50%) & gloss (70%). Minimum coating thickness of Colourgalv polyester top coat in accordance to BS EN 13438:2005 is 60 microns. Aerosol touch ups can be used for repairing installation or transport damage.

For further information please visit www.higalv.co.uk or call 01236 731 444