

MARINE COAT FINISH



Barbican® vertical bar fencing

Marine coat has been specifically designed to provide long lasting, tough coating for exterior applications to mild steel, galvanised steel and aluminium. It is based on an alloy of acid modified polyolefins. Therefore it is halogen free and the combustion fumes are low in smoke and have a very low toxicity index.

Marine coat is resistant to stress cracking, adverse weather condition, detergents, salt spray and typical airborne pollutants. The coating maintains excellent adhesion to the metal substrate without the need for separate primer. The material also provides a good degree of electrical insulation, abrasion and impact resistance.

- The abrasion rate of Marine coat is half that of standard coatings and the fading rate is 1/20th
- For installations within 50 -500m of salt water or estuary

Whatever the application, Marine coat has undergone long-term field tests to prove that it can provide:

- A long life with superior corrosion and abrasion protection
- Excellent grip, feel and electrical insulation
- Resistance to chipping and attack from light, pollutants, chemicals and vandals
- An attractive, environmentally friendly finish

Applications

Marine coat is recommended in a number of environments as follows.

Playgrounds

The equipment found in children's playgrounds is often prone to harsh climatic conditions as well as the wear and tear of rigorous and continual use. Marine coat is ideal in these environments. It is durable but also smooth to the touch and graffiti can be easily wiped clean. Using appropriate cleaners.

Swimming Pools

Legislation around the world is requiring that swimming pools are secure to avoid accidents. Marine coat is resistant to the fumes from chlorinated pools.

Offshore

Marine coat is one of the few coatings that can be used successfully in marine environments and can withstand years of battering from sea spray and waves.

Low mould growth and fouling rate

Marine coat contains no reactive ingredients and provides little 'anchor' or food for seaweed, barnacles and lichen. Whilst not specifically anti-fouling, the rate of growth of algae, fungus, mildew, and marine flora or fauna is slower than on many other coatings.

Graffiti removal

Marine coat is impermeable to paints. Therefore, often you can wipe the graffiti off with just a cloth, but a small amount of solvent on the cloth will help. Standard water-based graffiti removal products remove the paint within just a few wipes.

SPECIFICATIONS AND TECHNICAL DATA

Additional Benefits

- Excellent environmental credentials - no VOCs, no TGIC, no phthalates, no isocyanates, no halogens and no heavy metals
- Approval for contact with food and drinking water
- Superior resistance to salt, sea, sand and sun
- Vandal and graffiti resistant
- Sound and electrical insulation properties
- Excellent coverage of edges and welds
- Very low smoke in event of fire

Marine Coat is a thermoplastic coating powder that can be applied by either fluidised bed dipping or by electrostatic spraying. The following laboratory and field tests have been performed on suitably pre-treated metal:

- Salt spray testing to ASTM B117 has exceeded 20,000 hours with no blistering, cracking, corrosion or flaking.
- Under-film corrosion from a scribe tested to ASTM B117 for 1,000 hours on suitably pre-treated steel is between 0 and 0.5mm
- Loss of adhesion on testing to ASTM D 3359-A is zero
- After 2,000 hours QUV (ASTM G53), Xenon arc (ASTM G26) or five years in Florida at 45 degrees to the sun by the sea, there is no significant change in colour, gloss or mechanical properties
- At suitable coating thickness, Marine Coat will protect metal from impact of stones to automotive specifications (e.g. SAE 400), and to water industry standards (WIS 4 52 01 or AS/NZS 4158) and from aggregate slurries (ASTM A926-94)
- Marine Coat has been tested to ASTM A 926-94 (salt and grit). After one million cycles all other coatings (including fusion-bonded epoxy and galvanising) were completely stripped. Over half of Marine Coating still remained

Recommended coating thickness		200 to 220 microns
Appearance		Smooth/Glossy
Gloss	ISO 2813	70
Abrasion	Taber ASTM D4060/84 H18, 500g load, 1000 cycles	60 mg weight loss
Salt Spray	ISO 7253 Steel	Results after 1000 hours
	- Scribed	Loss of adhesion less than 10mm from scribe
	- Unscribed	No loss of adhesion
	Aluminium	
	- Scribed	No loss of adhesion
	- Unscribed	No loss of adhesion
Chemical resistance	- Dilute acids 60°C	Good
	- Dilute alkali 60°C	Good
	- Salts (except peroxides) 60°C	Good
	- Solvents 23°C	Poor
Weathering	QUV ASTM G53-77	2000hrs - No significant change in colour colour or loss of gloss
	Florida 45°C facing south	3 years - No significant change in colour or loss of gloss