

Pacific Interior Paint System Details

Pre-treatment:

The pre-treatment is carried out in a 12-step dripping plant:

- cleaning (degreasing)
- pickling in acid bath (removes the dull-grey aluminum oxide film)
- passivating (the panel surface is passivated = made stable by adding titanium and zirconium elements to the surface)

After each of these treatments the panels are rinsed several times with clean water. Finally the panels are dried in hot-air ovens. This treatment ensures good paint adhesion as well as an optimum protection against corrosion.

Paint:

Paint is a polyester/melamine paint (DIN 55950 and DIN 55958) applied by a spray gun in a 25-40 micron layer. Afterwards the paint is oven hardened at 180 degrees Celsius for about 10 minutes. The process is environmentally friendly as the paint is free from lead, mercury or chrome. It is possible to tone the paint to a very large number of color shades just like the color pigments ensure minimum color fading. As the surface is oven hardened it is very resistant towards graffiti spray which is almost always air hardening.

Quality control:

Color tolerance: Color deviation must be max. Delta E 1.0 – 2.0 depending on actual color.

Bending test: A 1 mm thick aluminum plate is bent over a cone. For a positive result the paint should not crack where the radius exceeds 2.25 mm (in accordance with DS/ISO 2408).

Ball test: The test is similar to that of the bending test but carried out in a different way. A ball-shaped weight falls on the panel from a height of 70 cm. For a positive result the paint should not crack meaning that the metal must not become visible (in accordance with ISO/TR 6272).

Scratch test: With a special grid cutter (a small "rake") two cuts are made at right angles to each other. The paint is then divided into a number of small separate fields. The edges are inspected with a magnifying glass and the edges of the squares must not be frayed (in accordance with DIN/ISO 6860, DS/EN 2409 and DIN 53151).