

# Maintenance conditions for coating

These are the maintenance conditions for coating that apply to all products sold and delivered by Heras BV.

#### A. Maintenance and cleaning.

The lifespan of a powder-coated object is negatively influenced by dirt and moisture, by the action of acids, salts and other aggressive substances. That is why timely cleaning is necessary to maintain the service life. The cleaning frequency is mainly determined by the degree of dirt load on the coated objects.

#### Critical factors are:

- · Location on the coast (salt precipitation)
- Location directly above ground level (splashing dirt)
- Placement of objects along public roads (road salt)
- Urban area (Gas emissions)
- Industrial environment (emissions of chemicals, flue gases, ore dust)
- Traffic load (sulphur compounds, nitrogen compounds, dust particles from brake linings, iron and copper particles from rail traffic)
- Covered areas (no sprinkling)
- Animal pollution (dogs, cats, birds))

If there are one or more of these load factors, we speak of an increased load factor; in all others cases of a normal load factor. The extent to which the coated surface, whether or not in combination with the underlying substrate, can be affected by the above factors depend o:

- The type of substrate
- · The type of surface treatment
- · The application
- The severity and duration of the burdening factors

It is therefore important that the cleaning times are determined on the basis of timely inspection and, if necessary, the cleaning frequency is adjusted. During this inspection, particular attention must be paid to the degree and nature of the contamination and to the pollution-bearing factors present. Practice has shown that a well applied surface treatment, if cleaned in time, it will retain its protective and aesthetic properties for a very long time.

The cleaning frequency indicated below can be seen as an indication. On the basis of the above factors must the cleaning frequency can be adjusted if necessary. It is the client's responsibility to establish the proper frequency.

## **B.** Cleaning frequency

At a normal load factor, the coating should be cleaned at least twice a year.

With an increased load factor, the objects should be cleaned at least 3 times a year.

For projects in the immediate vicinity of public roads, this applies immediately after the spreading season cleaning must be done to remove the road salt.



## C. Cleaning agents

For all cleaning agents to be used, these may not be the materials used and their surface treatment damage or damage. Only the use of neutral agents, with a pH value between 6 and 8 are allowed. In addition, these means should not scratch. Cleaning using steel wool, sandpaper, solvents et cetera is strongly advised against as this may damage the products, in which case any guarantee will no longer apply.

Cleaning with a high pressure installation can cause damage.

For light contamination of the powder-coated surface, it is advisable to use the same agents as for the cleaning of glass is necessary. The above-mentioned instructions must be observed. There always serves to be rinsed generously with water.

Special products developed for this purpose must be used to remove stubborn dirt.

Pollution from graffiti (paint sprays / felt-tip pens) is sometimes very difficult to remove. Strong solvents such as acetone, M.E.K. etc should not be used. These products attack the paint layer.

[Source: VMRG Quality Requirements and Advice 2002]

## D. Reconditioning advice

Reconditioning is only permitted if the sum of the spots to be reconditioned does not exceed 1% of the total surface of the galvanized part and the place to be reconditioned does not exceed 100 cm2.

The following reconditioning advice applies to hot-dip galvanized products:

- 1 Remove any loose flakes of zinc. By sanding, filing and / or brushing dirt and corrosion products and then degrease. The adjacent zinc layer, which is still intact, is also spread over a width of approximately 10 mm clean and degrease.
- 2 Apply a minimum of 2 layers of zinc dust compound with a long-haired brush to a dry layer thickness of approximately 100 μm. The zinc dust compound must contain at least 92% zinc dust by weight in the dry layer.
- 3 Cover the zinc dust compound with an aluminum or iron shimmer finish paint.
- 4 The use of zinc-containing paint in aerosol cans is not recommended due to the low build-up thickness



## **TECHNICAL ADVICE.**

Reconditioning advice for high-gloss polyester powder coating system.

Advice number: 42094001

#### REPAIR OF HIGH GLOSSY POLYESTER POWDER COATING SYSTEM.

#### The surface.

If the substrate consists of blasted hot-dip galvanized steel with a polyester powder coating as a top layer and damages have occurred after application of the powder coating system, the following can be done for maintenance purposes.

## The pretreatment.

- The surface around the places to be repaired should be degreased with benzene.
- The bare zinc surface should be cleaned of any brown rust, zinc salts and / or zinc oxide.
- This can be achieved by sanding the surface well with sandpaper.
- · Sand the still good adhering coating around the damage. (possibly with Scotchbrite).

#### The finish.

- Coat the areas to be repaired (the bare zinc and the surrounding powder coating) with SIKKENS REDOX 3185 PRIMER / SEALER
  or equivalent product.
- Apply an extra layer of primer in places where the zinc layer is no longer present. Dry film thickness 40  $\mu$ m.
- Treat the areas thus updated twice in the correct color with SIKKENS REDOX PUR 3353 or equivalent. Dry film thickness  $35 \, \mu m$

# REDOX EP 3185. This is a two component corrosion resistant epoxy zinc phosphate primer / sealer.

The properties: lead and chromate free.

- anti-corrosion.

- good adhesion to steel and zinc.

- easy to work with brush.

Processing data: - processing temperature 10 - 50 degrees Celsius.

- dilute 0-5% with Redox 0258

# REDOX PUR 3353. This is a two-component high-gloss top coat based on aliphatic polyurethane.

The properties - high gloss.

excellent weather resistance.good impact and wear resistant.

- easy to work with brush.

Processing data: - processing temperature 5 - 50 degrees Celsius

- dilute 0-5% with Redox 0826.