DOC-357:2026
General maintenance and cleaning advice for coated metal parts

Regular maintenance and cleaning of coated metal parts is essential in order to maintain the intended service life. It is important that end users are familiar with the correct maintenance methods. Proper and frequent cleaning ensures that:

- The appearance is maintained
- The properties of the coating remain optimal
- Defects are noticed quickly

After cleaning, there are various methods to further extend the service life of coated metal parts. For an organic coating (such as a powder coating), this can be done by applying a preservative wax layer.
Observed defects should be remedied as soon as possible to prevent a defect, such as corrosion, from worsening.

Cleaning frequency

How often an object should best be cleaned depends on how severe the environmental factors are. The corrosion categories set out in NEN-EN-ISO 9223 provide a good guideline for this. See the appendix for how to make an estimate. In case of doubt, always seek advice from an expert.

Table 1: Guideline for minimum cleaning frequency of inorganic coatings[1]

Type of surface[3]	*Exposed to rain?*	*Clean once every …*			
		C1 - C2	C3	C4	C5
Vertical surface	Yes	24 months	12 months	12 months	6 months
Vertical surface	No	24 months	12 months	6 months	6 months
Profiled	Yes	24 months	12 months	12 months	6 months
Profiled	No	12 months	12 months	6 months	6 months

[1] for example anodization, chrome plated or galvanized coatings

Table 2: Guideline for minimum cleaning frequency of organic coatings[2]

Type of surface[3]	*Exposed to rain?*	*Clean once every …*			
		C1 - C2	C3	C4	C5
Vertical surface	Yes	24 months	12 months	6 months	6 months
Vertical surface	No	24 months	12 months	6 months	4 months
Profiled	Yes	24 months	12 months	6 months	4 months
Profiled	No	12 months	6 months	4 months	3 months

[2] for example powder paint, liquid paints and varnish coatings
[3] see example images on the next page

Cleaning materials and agents

It is important that the end user is aware of the best way to carry out maintenance and cleaning. A standard cleaning plan can help with this:

1. Remove coarse dirt by rinsing with tap water (heated if necessary).
2. Apply a pH-neutral cleaning agent and allow it to act; see below.
3. Loosen dirt deposits using, for example, a soft cloth, brush, white non-woven nylon hand pad or sponge (avoid abrasive materials such as scouring pads or steel wool).
4. Rinse thoroughly with reverse-osmosis water (demineralized water) or tap water.
5. Optional: post-treat with a preservative (wax) layer

The cleaning agents used must not damage the coating or surrounding materials and must meet the following criteria:

- pH-neutral (pH 6-8)
- Free from corrosion-promoting substances such as chlorides and sulfates
- Free from solvents (in the case of coatings such as paint and powder coatings)
- Free from abrasives
- Free from bleaching agents

Ensure that cleaning agents used on objects around the coated metal parts are not harmful to the metal if they come into contact with it.

Preferably use a white non-woven nylon hand pad, a soft cloth or a sponge. Avoid abrasive materials such as:

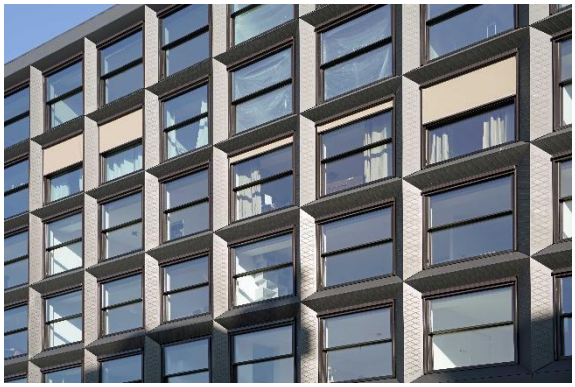
- hard brushes
- metal wool (e.g. aluminium or steel wool)
- scouring pads
- sandpaper.

Cleaning with a high-pressure washer can cause damage; make sure you obtain proper advice on this. It is recommended that cleaning work be carried out by specialist companies that use certified employees.

Maintenance and repair

As soon as severe discoloration, damage or corrosion (e.g. rust) is observed, it is important that this is remedied correctly as soon as possible. Engage the appropriate experts for advice and repair.

Images of designs that are considered “profiled”:

Images of designs that are considered a “vertical surface”:




Appendix: Corrosion category

Below is the informative translation of Table C.1 from NEN-EN-ISO 9223:2012; no rights can be derived from this translation.

Table 3: corrosion categories according to NEN-EN-ISO 9223

Corrosion category	*Examples of outdoor environmental conditions*	*Examples of indoor environmental conditions*
C1 very low	Dry or cold areas with very little pollution and humidity, such as some deserts, the Central Arctic and Antarctica.	Heated spaces with low relative humidity and very little pollution, for example offices, schools and museums.
C2 low	Temperate areas with little pollution (SO_2 <5 µg/m³), such as rural areas and small towns. Dry or cold areas with short periods of humidity, such as deserts and subarctic areas.	Unheated spaces with fluctuating temperature and relative humidity. Low probability of condensation and little pollution, for example storage rooms and sports halls.
C3 medium	Temperate areas with medium pollution (SO_2: 5 µg/m³ to 30 µg/m³) or some influence of chlorides, such as urban areas and coastal areas with low chloride deposition. Subtropical and tropical areas with little pollution.	Spaces with a moderate probability of condensation and moderate pollution from production processes, for example food-processing plants, laundries, breweries and dairy plants.
C4 high	Temperate areas with high pollution (SO_2: 30 µg/m³ to 90 µg/m³) or significant influence of chlorides, such as polluted urban areas, industrial areas and coastal areas without salt spray, or exposure to de-icing salts. Subtropical and tropical areas with medium pollution.	Spaces with a high probability of condensation and substantial pollution from production processes, for example industrial processing plants and swimming pools.
C5 very high	Temperate and subtropical areas with very high pollution (SO_2: 90 µg/m³ to 250 µg/m³) and/or a strong influence of chlorides, such as industrial areas, coastal areas and sheltered positions on the coast.	Spaces with a very high probability of condensation and/or very high pollution from production processes, for example mines, industrial caves and unventilated sheds in subtropical and tropical zones.
CX extreme	Subtropical and tropical areas with very long periods of humidity and very high SO_2 pollution (>250 µg/m³), including production and environmental factors, and/or a strong influence of chlorides, such as extreme industrial areas, coastal and offshore areas, and occasional contact with salt spray.	Spaces with almost permanent condensation or prolonged exposure to extreme humidity and/or heavy pollution from production processes, for example unventilated sheds in humid tropical zones with incoming outdoor pollution, including airborne chlorides and corrosion-stimulating particles.

For more details, see NEN-EN-ISO 9223 (including Table 2) and/or NEN-EN-ISO 12944-2 (Table 1).

Prepared by: ION Vereniging Industrieel Oppervlaktebehandelend Nederland

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