





SYSTEM BEZ OKAPOWY GALECO

# Maintenance and repair manual Steel Gutter Systems

Roof gutters are exposed to many types of air pollutants and interactions between components

## The main risk factors are:

- sulphur, chlorine and nitrogen compounds, mineral salts, dirt and soot. All these contaminants, along with water and UV radiation, affect the durability of the paint coat.
- as far as durability of the coated steel sheet is concerned, the most critical damage is that done during installation.
  The damaged areas are vulnerable to contaminants that come into direct contact with the layer of zinc under the paint coating or even with the steel core.
- reactions between galvanized components of different electrochemical potential in an acidic environment create local galvanic cells that in turn initiate the corrosion process.

that may cause damage and shorten the life of the gutter system.

The effect of pollutants in the air is particularly strong in industrial and coastal areas. Emission of pollutants containing sulphur or chlorine are particularly dangerous as they weaken the coatings and shorten their life, so it is very important to regularly clean and maintain the gutter systems.

## Main stages of inspection and maintenance of the gutter system

#### 1. Inspection after installation:

After installation of the gutter system, remove all loose items such as loose fittings, scrap metal pieces, drilling chips and other metal particles from the gutter interiors. Any damage to the surface should be immediately touched up.

#### 2. Annual inspection:

Galvanized gutters and gutters made of coated sheet metal should be checked regularly from inside. Inspection should be carried out at least twice a year. When any coating faults are found, they should be rectified immediately to extend the service life of the gutter system. Annual inspection should include the following: Removal of any possible blockages and dirt by flushing. If necessary, wash the entire gutter system. Dirt, soil and blockages in the rainwater drainage system create a corrosive environment.

#### 3. Condition of fittings:

Inspection of the mounts, brackets and gutter connections should be performed at least twice a year. Damaged or partially loose connections cause leakage and the risk of corrosion. If the mount or bracket is damaged, replace it immediately.

#### 4. Condition of the paint coating inside the gutter:

Clean and check the inner surface, as well as the edges of the gutter system. Peeling, uneven discolouration, blisters, cracks and local scratches are signs that repair is needed.

## **Maintenance manual**

All discovered paint coating damage or scratches to the paintwork should be repaired as soon as possible, using only paints suitable for the surface. It is not recommended to use paints in spray.

Prior to painting, clean the damaged area with white spirit or a cleaning agent, wipe off traces of corrosion with a cloth or fine sandpaper and degrease the surface.

Paint the damaged area, applying 1-2 coats, depending on paint manufacturer's recommendations.

The area should be painted using the smallest brush possible. If the damage extends to the primer layer only, it is enough to paint it once. However, if the damage is deep down to the zinc coating, it is recommended to apply two layers.

It is recommended to protect the cut edges at the stage of the system installation. A touch-up paint can be used for this purpose. When the gutter edge is damaged, proceed in accordance with general maintenance guidelines.

#### 5. Visual inspection of the external paint coating:

A visual inspection of the outer surface should be carried out once a year, as part of general inspection. A more thorough inspection should be carried out every five years within the warranty period. The coated surfaces should then be inspected from a distance of 1.5 meter. After the warranty period, the external surface should be checked every two years.

#### 6. Washing and dirt removal

Rainwater is usually sufficient to keep the surface clean. Foulants such as leaves from trees, however, should be removed from gutters at least twice a year. The coating should be cleaned with a soft brush and water or a pressure washer (<100 bar). Hard to remove water stains can be removed using a cloth dampened in white spirit.

Please note that the use of unsuitable or excessively powerful cleaners will damage the coating.

#### Systems made of Luxozinc sheets:

Due to the nature of the galvanized component coating, it is recommended to paint the inside of the gutter after one year of ageing, using a paint intended for galvanized surfaces.

The manufacturer does not recommend the installation of systems made of Luxozinc combined with materials that may accelerate the corrosion process, in particular with bituminous or copper materials.

if it is impossible to prevent the contact of the Luxozinc sheet with materials affecting its life, cover the sheet surface with protective coatings based on acrylic resins.

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