MAINTENANCE INSTRUCTION

The longevity and lasting beauty of urban furniture products lies in durable and high-quality materials, on the other hand, regular maintenance. Products that are exposed to extreme weather conditions and which are under heavy use tend to get dirty and fade over time. To preserve the original quality of Extery products, consistent care is necessary.

We recommend performing maintenance every spring to keep the furniture in good condition and extend its service life.

This maintenance manual describes how to perform maintenance on wood and metal surfaces in the Extery product range:

1. Wooden surfaces

- 1.1 tropical wood
- 1.2 thermo-treated ash
- 1.3 linax pine
- 1.4 painted pine

2. Metal surfaces

- 2.1 stainless steel surfaces
- 2.2 hot-dip galvanized steel surfaces
- 2.3 cor-ten steel surfaces

3. Hot-dip galvanized surface coatings

- 3.1 powder painted surfaces
- 3.2 anti-graffiti laquer coating

1. Wooden surfaces

Wood is a living material that reacts to weather conditions and over time changes its appearance. To maintain its aesthetic appearance and ensure the long-term durability of its technical properties, regular surface maintenance is essential.

The actual needed maintenance frecuency depends highly on the location of the furniture but on average the maintenance should be performed once a year in spring. Skipping the maintenance makes the original tone of the wood fade away and turns gray over time.

It is important to know that the fading of the wood tone is not considered as a quality defect.

1.1 Tropical wood

Tropical wood is often the preferred outdoor wood material for its quality, durability and stability. In addition to its strength and quality, tropical wood has a very unique appearance. Untreated tropical wood is freshly light brown with a delicate pink undertone. Over time, the shade of tropical wood changes to silver gray. Tropical wood is very dense in structure. Due to its high density, tropical wood does not absorb oil but remains on the surface of the wood, which means that the oil applied to the surface wears off unevenly and evenly. For this reason, we do not oil tropical wood, but offer it naturally.

The tropical wood in our selection is always **FSC** marked.

Tropical wood is relatively maintenance-free wood. In order to preserve the aesthetic properties of wood, it is sufficient to clean the surface of the wood of dirt at least once a year in the spring.

Cleaning the surface from dirt

At least once a year, preferably in the spring, wash the wood surface with clean running water and a sponge. If necessary, use soapy water or a mild cleaning agent. For heavier dirt, sandpaper with a grit of P100 or higher may be used.

Required items:

- Cleaning agent (soapy water or a mild detergent)
- Running water / pressure wash
- Cleaning cloth, sponge, or brush

1.2 Thermo-treated ash

The goodness of the thermo-treated ash lies in its durability, beauty, dimensional stability, environmental friendliness and quality. Thermo-treatment is a computercontrolled process of heating wood. Procedure changes the cellular structure of the wood - moisture, bacteria and acids are removed from the wood. Such nutrient-poor wood is not suitable for growing fungi, rot and mold. The whole process does not include any chemicals and is very friendly for the environment.
During the heat treatment, the structure of the wood changes throughout the thickness of the material, and the wood also has a characteristic brown color on the inside. The tone of the thermo-treated ash is deep brown.

In order to maintain the fresh appearance of the heat-treated island, we recomend that the wood be cleaned and oiled once a year in the spring.

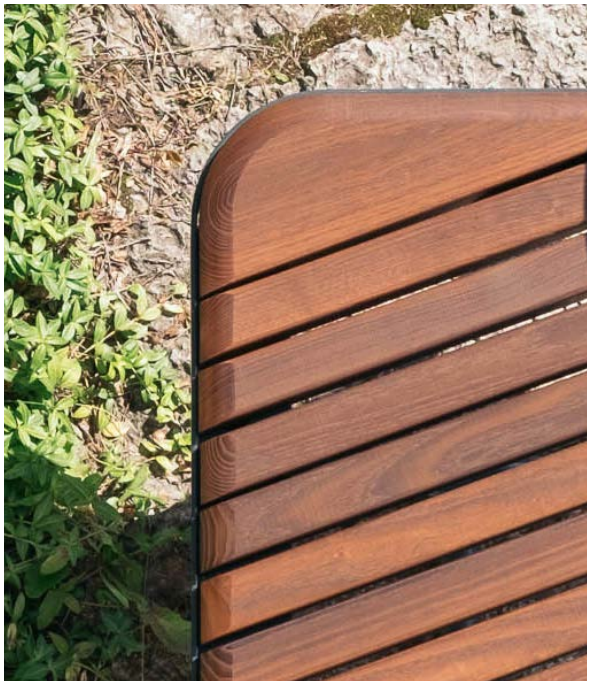
MAINTENANCE STEPS:

1. Cleaning the surface from dirt

For the best results, the wood surface must be cleaned of dirt and any previous treatment layers must be removed before oiling.
A mild cleaning agent is suitable for this purpose. Clean the wood surface and rinse with running water. To achieve the most even result for the new treatment, any remaining old finish should be sanded down with sandpaper, and the sanding dust removed with a damp cloth.

Required items:
- Cleaning agent (soapy water or a mild detergent)
- Running water / pressure wash
- Cleaning cloth, sponge, or brush
- Sandpaper, grit P120

After cleaning, allow the surface to dry for a few hours up to one full day (depending on the weather) before proceeding with oiling.



2. Oiling the surface

Before applying the oil must be thoroughly mixed in the jar so that all the compounds are well mixed. Apply the oil to the wood surface with a clean sponge or a fleece cloth. Avoid applying too much oil.
Remove the excess oil with a dry cloth to obtain an even result. Immediately remove the oil stains from the metal surface with a cloth. Dried oil does no longer come off the metal.

Required items:
- Osmo Oil 010 or Tikkurila Valtti Furniture and Terrace Oil (color: brown)
- Sponge or Osmo fleece oil cloth for application

Allow the surface to dry for at least 4 hours before use.

Working Conditions:

During the maintenance oiling and drying process, it is important to observe the following:
- Air temperature: Minimum +5°C;
- Relative humidity: Must be below 80%
- Weather: Do not apply oil during rain or in direct, intense sunlight

1.3 Linax pine

We use high-quality, dense Nordic pine, impregnated with a preservative and vacuum-boiled in linseed oil on all six sides. This environmentally friendly process ensures dimensional stability, moisture resistance, and protection against rot, even in extreme climates.

The Linax treated pine wood in our selection is always FSC certified.

A 15-year warranty against rot is provided. To maintain this warranty, the wood must be kept free from dirt and mildew. Cleaning should be performed without high-pressure washers or harsh chemicals, as these can strip away the protective oil layer. Since wood is a natural material, minor cracks may develop as it ages.

Linseed oil-treated pine will gradually develop a natural grey patina as it weathers. To prolong the wood's durability, it's advisable to apply a fresh oil treatment every 3–6 years, taking into account your local climate and the amount of use the wood endures.

MAINTENANCE STEPS:

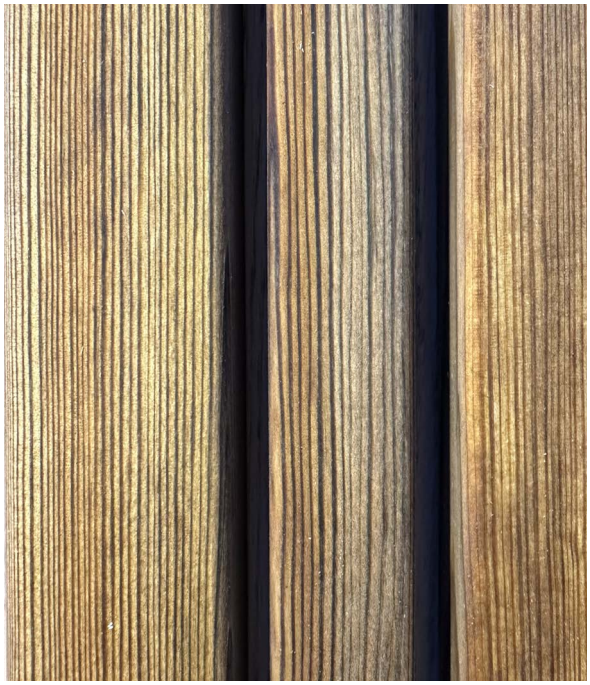
1. Cleaning the surface from dirt

At least once a year, preferably in the spring, wash the surface of the wood with clean running water and a sponge and, if necessary, use soapy water or a mild detergent.

Required items:
- Cleaning agent (soapy water or a mild detergent)
- Running water
- Cleaning cloth, sponge, or brush

Do not use high-pressure washers.

After cleaning, allow the surface to dry for a few hours up to one full day (depending on the weather) before proceeding with oiling.



2. Oiling the surface

Before applying the oil must be thoroughly mixed in the jar so that all the compounds are well mixed. Apply the oil to the wood surface with a clean sponge or a fleece cloth. Avoid applying too much oil.
Remove the excess oil with a dry cloth to obtain an even result. Immediately remove the oil stains from the metal surface with a cloth. Dried oil does no longer come off the metal.

Required items:
- Linax linseed oil or other linseed based oils.
- A sponge or a fleace oil cloth to apply the oil.

Allow the surface to dry for at least 4 hours before use.

Working Conditions:

During the maintenance oiling and drying process, it is important to observe the following:
- Air temperature: Minimum +5°C;
- Relative humidity: Must be below 80%
- Weather: Do not apply oil during rain or in direct, intense sunlight

1.4 Painted pine

Regardless of the type or color of the paint, the painted wooden surface also needs maintenance. The condition and maintenance of colored pine must be carried out at least once a year.

MAINTENANCE STEPS:

1. Cleaning the surface from dirt

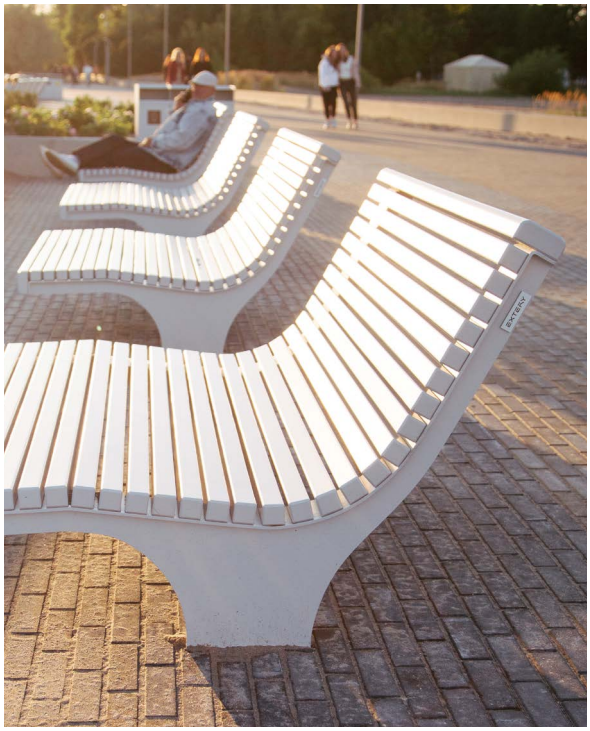
At least once a year, preferably in spring, wash the painted surface with clean running water and a sponge and, if necessary, use soapy water or a mild detergent.

To remove **paint** and **graffiti** use a strong cleaner. If this method is not sufficient or damages the painted surface we recommend to continue as described in step no. 2.

2. Repairing nicks and damage

Paint damage that was identified during the assessment must be removed in order to avoid rot in the wood. Proceed as follows:

- Scrape the damaged area with a suitable scraper or sand it smooth with sandpaper. Recommended grit: P180–220.
- Clean the treated area from dust with water and sponge, use soapy water if necessary. Rinse and allow the surface to dry thoroughly.
- VBefore painting treat the revealed wood surface with a wood preservative impregnating agent. Let it dry. Moisture trapped in the wood can cause wood rotting.
- Cover the damaged and treated area with a suitable shade of outdoor paint. If necessary apply 2 layers of paint. Let the firstlayer of paint dry thoroughly before applying the second layer of paint.



*** Apply the paint with a brush or pistol.**

Important to know before you start painting:

- Mix the paint thoroughly with a wipe before applying the paint.
- The surrounding air temperature has to be at least +5 degrees and the humidity below 80%.
- Direct sunlight should be avoided during painting besause the drying process is rapid in a direct sunlight. As a result, the durability of the paint layer suffers.

2. Metal surfaces

Maintenance frequency: at least once a year.

When performing maintenance on metal surfaces, initially perform a visual assessment and check in advance:

- Are there loose or loose parts. Tighten the fasteners if necessary.

- Is there any major damage to the product. If necessary, ask the manufacturer for replacement parts.

- Make sure that the air temperature is between +5 and +35 degrees during maintenance.

2.1 Stainless steel surfaces

Stainless steel is extremely strong and has excellent properties. Despite the very good properties, it is also necessary to maintain the surface of stainless steel regularly, at least once a year.

MAINTENANCE STEPS:

1. Visual inspection and assessment

Evaluate the condition of the product surface and check the fastenings. Tighten if necessary.

2. Cleaning the surface of stainless steel from dirt

- Use soapy water or a mild detergent to remove dust and dirt. Rinse with clean running water.
- For heavier stains use existing household cleaners. Rinse the surface with clean running water.

- Remove grease and oil stains with alcohol-based cleaners. Rinse the surface with clean running water.
- If the surface of the product is vandalized with paint or graffiti use special graffiti removal tools.

Avoid: Abrasive industrial chemicals and / or hydrochloric acid chemicals (HCl).

2.2 Hot-dip galvanized surfaces

Hot-dip galvanized steel is very durable and suitable for outdoor conditions. Hot-dip galvanizing is a process in which steel products coated with a layer of zinc. The undamaged galvanized surface provides the product with rust protection for many years. Zinc reacts with oxygen in the air to form zinc oxide, which reacts with water molecules in the air to form zinc hydroxide. Reaction of zinc hydroxide with carbon dioxide produces an impermeable, very stable and insoluble dull gray layer of zinc carbonate, which covers the underlying zinc layer very tightly, preventing it from corroding.
In order for hot-dip galvanized surfaces to remain durable and beautiful for a long time, regular surface maintenance is required at least once a year.

MAINTENANCE STEPS:

1. Visual inspection and assessment

Evaluate the condition of the product surface and check the fastenings. Tighten if necessary.

2. Cleaning the hot-dip surfaces from dirt

- For dust and dirt use soapy water or a mild detergent. Rinse with clean running water.
- Remove grease and oil stains with an alcohol-based cleaner. Be sure to rinse with clean water.
- If the surface of the product has been vandalised with paint or graffiti, use specialised graffiti removal agents.

Avoid:

The use of scrapers or abrasive materials, as these can damage the galvanised surface and reduce its anti-rust protection.

Important to know: The grayish white oxide layer on the surface known as white rust, is not dirt or a defect that should necessarily be removed. White rust does not damage or weaken the surface of the product. If desired the layer can be removed by pressure washing.

2.3 Cor-ten steel surfaces

Cor-ten is a high-strength structural steel with exceptional weather resistance. It is an almost pure carbon steel, lightly alloyed to create a protective patina layer on its surface to withstand the elements. This patina layer is initially reddish-brown (similar to rust) and darkens over time. In industrial and more aggressive environments, the patina forms faster and becomes darker than in cleaner rural settings.
However, the protective patina cannot form if the steel surface is constantly damp or dirty. Rainwater is often sufficient to keep the surfaces clean.

MAINTENANCE STEPS:

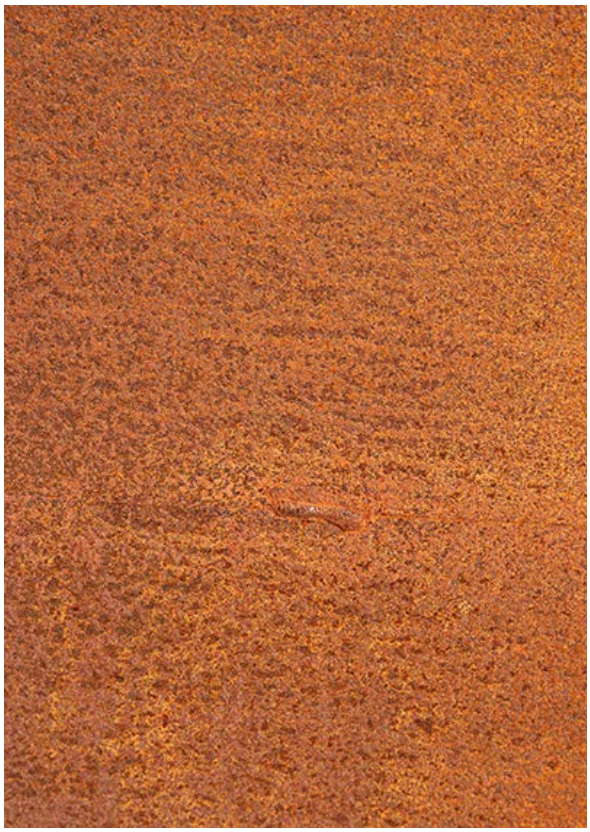
1. Visual inspection and assessment

Assess the condition of the product's surface and check the fixings. Tighten if necessary.

2. Cleaning dirt from Cor-ten steel surfaces

Any dirt residue that rainwater cannot wash away can be removed with a soft brush, a mild neutral soap or detergent and water, or a high-pressure wash (up to 100 bar).

Rinse thoroughly from top to bottom to remove all soap residue.



Avoid:

Any type of scrapers or abrasive materials—including brushing, sanding, or other mechanical treatments. The use of acidic or alkaline cleaning agents is also prohibited.

3. Hot-dip galvanized steel coatings

Hot-dip galvanized steel that is coated with powder paint has the highest resistance to moisture and corrosion. Graffiti varnish makes the surfaces of the product easy to clean and keeps the original appearance of the product longer. Although the coatings are used to protect the steel surface it is also necessary to clean and maintain the coated surfaces.

3.1 Powder coated surfaces on hot-dip galvanized steel

In urban outdoors powder coating gives hot-dip galvanized steel a long-lasting corrosion protection and keeps the aesthetic properties of the product longer. To keep the product properties beautiful for as long as possible, regular surface maintenance is required at least once a year.

MAINTENANCE STEPS:

1. Visual inspection and assessment

Evaluate the condition of the product surface and check the fastenings. Tighten if necessary.

2. Cleaning of powder coated surface from dirt

- For dust and dirt use soapy water or a mild detergent. Rinse with clean running water.
- For heavier stains existing household cleaning agents can be used. Rinse washed surfaces with clean running water.
- In the case of paint stains or graffiti, it is necessary to use special graffiti removal liquid (for example: 3M GR1500) and low pressure washing. Be careful not to damage the original paint surface while using the graffiti removal. If this method does not work or the painted surface has been damaged, proceed as described in section 3.

3. Damages and scratches on the product surface

- Scrape the affected area evenly with a suitable scraper or sand it smooth with sandpaper. The recommended grit is P180–220.
- Clean the sanded area with water and a sponge. Use soapy water if necessary. Rinse and allow the surface to dry thoroughly.
- Make sure that the surface being painted is dry. Apply a sufficient amount of outdoor paint on the treated surface. If necessary apply two layers of paint. Allow the first coat of paint to dry thoroughly before applying the second coat of paint.

*** Apply the paint with a brush or pistol.**

3.2 Antti-graffiti laquer

An additional protective layer can be added to the surface of the product to maintain the good appearance of powder coated products and to reduce maintenance costs. As a side effect, the varnish adds shine, so the surface of the finished product is not matte, regardless of the type of powder paint chosen. The anti-graffiti varnishing process is similar to powder coating. The varnish is based on polyurethane and a barrier substance is released during its processing.

This solution is designed to allow easy and quick removal of most forms of graffiti and is recommended for use where there are increased requirements for graffiti resistance. Typical applications include train, tram and bus products, bus shelters,

Instructions for removing different types of dirt from anti-graffiti varnish:

Dirt	Cleaning method
Enamel spray	90% denatured alcohol, acetone, trichloroethylene.
Water-based marker	Wipe with a clean cloth.
Permanent marker	90% denatured alcohol, 1:1 mixture of denatured alcohol and detergent, acetone, trichloroethylene, tetrachloroethane.
Lipstick	Wipe with a clean cloth.
Shoe polish	Wipe with a clean cloth.

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