ISO PAINT NORDIC ROOF TREATMENT GUIDE CLEANING AND COATING









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ROOF CLEANING

The equipment and methods explained in this application guide can be seen in a video on <u>www.isopaint.com</u> under video or <u>here</u> (<u>http://www.isopaint-roof-restoration.com/Video-33258.htm</u>).

All types of roofs must be cleaned thoroughly for dirt, paint residues and other impurities because removal of all types of growth (algae, fungus, moss and lichens) is very important.

Effective cleaning has to be done with a high-pressure washer e.g. Den-Jet, Aquila, Kärcher or Putzmeister.

If using a lance use at a minimum of 150 Bar and minimum 15 litres per minute.





The most effective way of cleaning a roof and our recommendation is to clean the big surfaces with a high-pressure roof cleaner box e.g. the Den-Jet Roof Cleaner or Mosmatic Roof Cleaner.



Best effect is at a pressure of about 220 bar and 30 litres of water per minute.

The high-pressure roof cleaner box works very fast and it is not as aggressive as high-pressure cleaning the roof with a lance. The cleaner box cleans more effective and it is less likely to cause damage to the roof material as using a lance. There is a bigger risk of breaking roof tiles by walking all over the roof with a lance. There is also the risk of making a

hole in a roof tile or to destroy the surface of the roof material with a lance by continuous high-pressure on a small area. This is a problem you do not have with the Roof Cleaning box.

All edges should be cleaned with for example a high-pressure edge cleaner and a metal brush.







When cleaning it is important that you pick up the dirty water, moss, asbestos fibers etc. One simple method is by blocking the gutter down pipe, and using a pump to extract the water from the gutter and divert it through a filter.





Attention:

Cleaning with too high pressure, small nozzles or hot water will in some cases force a lot of water into the roof material and consequently increase the moisture content. It is very important to wait a few days to let the material dry, before coating to avoid blistering caused by moisture. Protect the ceiling with plastic if water can penetrate openings in the roof material, while cleaning it with high pressure.



DESINFECTION

Iso A-Clean is concentrated and shall be diluted with minimum 1:20 or maximum 1:50. 1 litre **Iso A-Clean** in 50 litre of water.

If a roof is very dirty or full of algae and moss, you can apply **Iso A-Clean** a few days before the cleaning, to make the cleaning easier. **Iso A-Clean** helps the removal of organic material with maximum effect after 2-3 days.

Iso A-Clean can be applied with electric or manual low pressure pump, airless pump and other high pressure pumps.

After cleaning, you apply Iso A-Clean to disinfect the roof.

Iso A-Clean is soap and you only apply enough that it remains on the roof. The white soap should not run down the roof into the gutter, because then you have applied too much.

Do not allow Iso A-Clean into pools, rivers, lakes or the ground.

After high-pressure cleaning and application of **Iso A-Clean** the roof has to dry. Too much humidity in the roof material can cause bubbles in the roof coat and it will start to peel off.





Application of ISO PAINT NORDIC coatings

The application can be done with roller, brush and **airless pump**.

The edges are easiest to coat with brush or roller.

The fastest way of coating a roof is by applying it with an airless pump e.g. Graco 695, Graco 795, TriTech T7 or Wagner 34.







Instruction for application on CONCRETE ROOF TILES



After cleaning



After coating

ISONIT CONSTRUCTION PRIMER

Is applied for maximum quality and longer lifetime of the **Isonit** roof coating and roof. It is a transparent water like impregnation, vapour permeable, and doubles the adhesion. It strengthens the surface of the roof material, penetrates deeply and binds any friable or loose surface material. It will also give perfect adhesion for **Isonit**, **Isonit Rubber** and **ClimateCooler**.

Isonit Construction Primer has got an impregnating effect that keeps the material dry and free of frost damage.

It is applied at low pressure with an electric or mechanical low-pressure pump or an airless pump, and in sufficient quantity that it makes the surface wet but not look blank.

It HAS to penetrate the material. Do not apply too much.

Recommended application pressure: 3 to 5 bar. **Spreading range**: About 6 m² per litre depending on the absorption. **Drying time**: At 20° C and a humidity of 65 % about 1½ hours.

At a maximum 24 hours after the application of Iso Construction Primer you must apply Isonit. If you wait longer, there is a risk that the impregnating effect will make the adhesion of Isonit difficult.



Instruction for application on CONCRETE ROOF TILES

ISONIT

Is applied with brush, roller or airless pump.

Recommended application pressure of the airless pump is 180 to 200 bar.

Always apply two thin coats. First coat diluted with max 20 % water.

Second coat undiluted. In summer on hot days, second coat can be diluted with up to 10 % of water.

On concrete tiles you can apply 3 coats to get a smooth surface.

Temperature of the surface to be treated: From $+5^{\circ}$ C to $+50^{\circ}$ C. There should be maximum 2 % of humidity in the roof material.

Recommended paint thickness:

Undiluted: $200 \ \mu\text{m} - 275 \ \mu\text{m}$ in wet corresponding to $64 - 90 \ \mu\text{m}$ when it is dry. **Diluted with 20 % of water**: $220 - 300 \ \mu\text{m}$ wet corresponding to $60 - 85 \ \mu\text{m}$ when it is dry. Too thick a layer can cause bubbles in the roof coat.

Colors and gloss: See Technical Datasheet of Isonit or Iso Paint Roof Color Chart. Spreading rate undiluted: $3 m^2 - 6 m^2$ per liter depending on the absorption.

Spreading rate diluted with 20 % of water: About 3,5 m² per litre depending on the absorption. **Drying time**: 1 - 6 hours depending on temperature and humidity. 1 - 2 hours at 20° C and 60 % humidity.

It is important that the first coat is dry before applying the second coat.

Application conditions: The temperature must be between 5° C and 30° C and max 80 % of humidity.

If the concrete roof material is in poor condition, we recommend treating it with **Isonit Rubber**. If the concrete roof material is in very poor condition, it is sometimes better not to treat the roof to avoid reclamation.

Do always make an adhesion test and see detailed technical datasheet on <u>www.isopaint.com</u> before applying **Iso Paint Nordic** roof coatings.





Instruction for application on FIBRE CEMENT ROOFS

ETERNIT PRIMER



Is applied for maximum quality and longer lifetime of the coating and of the roof material. It is colorful, like a coating, vapour permeable, and gives double adhesion. It strengthens the surface of the roof material, penetrates deeply and binds the friable or loose surface material to the rest of the roof sheet or tile. It also gives perfect adhesion for **Isonit**, **Isonit Rubber** and **ClimateCooler**. It encapsulate the asbestos fibres.

Eternit Primer has got an impregnating effect that keep the material dry and free of frost damage.

Temperature of the surface to be treated: From +5° C to +50° C There should be maximum 2 % of humidity in the material to be treated.

Recommended paint thickness: Undiluted: $110 \ \mu\text{m} - 150 \ \mu\text{m}$ in wet corresponding to $30 - 40 \ \mu\text{m}$ when it is dry. Only one coat undiluted. Ready to use.

Is applied at high-pressure with airless pump. **Recommended application pressure** 180 to 200 bar. **Spreading rate**: About 4 - 6 m² per liter depending on the absorption. **Drying time**: At 20° C and a humidity of 60 % about 1 hour. **Colors**: Redbrown and Black.





Instruction for application on FIBRE CEMENT ROOFS

ISONIT

Is applied with brush, roller and airless sprayer. **Recommended application pressure** of the airless pump is 180 to 200 bar. **Always apply one thin coat – undiluted**.

For extra high cosmetic finish you can apply a second coat undiluted.

Temperature of the surface to be treated: From +5° C to +50° C There should be maximum 2 % of humidity in the roof material.



Recommended paint thickness:

Undiluted: 200 μ m – 275 μ m wet corresponding to 64 – 90 μ m when it is dry.

Colors and gloss: See Technical Datasheet or Iso Paint Roof Color Chart **Spreading rate undiluted**: $3 \text{ m}^2 - 6 \text{ m}^2$ per litre depending on the absorption. **Drying time**: 1 - 6 hours depending on temperature and humidity. 1 - 2 hours at 20° C and 60 % humidity.

Application conditions: The temperature must be between 5° C and 30° C and max 80 % of humidity.

If the fibre cement roof material is in poor condition, we recommend treating it with **Isonit Rubber**. If the fibre cement roof material is in very poor condition, it is sometimes better not to treat the roof to avoid reclamation.

Do always make an adhesion test and see detailed technical datasheet on <u>www.isopaint.com</u> before applying **Iso Paint Nordic** roof coatings.



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Instruction for application on CLAY TILES



HYDROBLOCK

Natural slate cannot be coated with coloured coatings.

By impregnating a cleaned and disinfected clay tile roof you protect the roof material against humidity, frost damage, rain, pollution, dirt, algae and moss.

You restore the original colour and look and actively bond the surface. **HydroBlock** has got a self-cleaning and water repellent effect. Prevents salt efflorescence.

Can be applied with brush, roller, electric or manual low-pressure pump. **Recommended application pressure** of the airless is 3 - 5 bar. **Only one coat**. It is transparent and ready to use and should not be diluted.

Recommended thickness: Sufficient to make the surface look wet.

It can take up to one week before **HydroBlock** has full chemical reaction with the material and perfect impregnating effect.

Temperature of the surface to be treated: From +5° C to +50° C There should be maximum 2 % of humidity in the roof material.

Spreading range: $3 \text{ m}^2 - 5 \text{ m}^2$ per litre depending on the absorption.

Drying time: 1 – 6 hours depending on temperature and humidity. 1 hour at 20° C and 60 % of humidity.

Application conditions: The temperature must be between 5° C and 30° C and max 80 % of humidity.





You do not apply a second coat of **HydroBlock** or another product on top of **HydroBlock**, as it is neither possible nor necessary.

You have perfect protection in one layer of HydroBlock.

If for some reason you want to apply a second layer, it must be applied within one hour after the application of the first layer.

See detailed technical datasheet on <u>www.isopaint.com</u> before applying **Iso Paint Nordic** roof coatings and impregnations.



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Instruction for application on NATURAL SLATE



HYDROBLOCK SB

Natural slate cannot be coated with coloured coatings.

By impregnating a cleaned and disinfected a natural slate roof you protect the roof material against humidity, frost damage, rain, pollution, dirt, algae and moss.

You restore the original colour and look and actively bond the surface. **HydroBlock SB** has got a self-cleaning and water repellent effect. Prevents salt efflorescence.

Can be applied with brush, roller, electric or manual low pressure pump or airless pump.

Recommended application pressure of the airless is 3 – 5 bar. **Only one coat**. It is transparent and ready to use and should not be diluted. **Recommended thickness**: Sufficient to make the surface look wet.

It can take up to one week before **HydroBlock SB** has full chemical reaction with the material and perfect impregnating effect.

Temperature of the surface to be treated: From +5° C to +50° C

There should be maximum 2 % of humidity in the roof material.

Spreading range: $3 \text{ m}^2 - 5 \text{ m}^2$ per litre depending on the absorption. **Drying time**: 1 - 6 hours depending on temperature and humidity. 1 hour at 20° C and 60 % humidity. **Application conditions:** The temperature must be between 5° C and 30° C and max 80 %

Application conditions: The temperature must be between 5° C and 30° C and max 80 % humidity.





If for some reason you want to apply a second layer, it must be applied within one hour after the application of the first layer.

IMPORTANT !

Please note that you cannot coat natural slate with paint, as it contain oil and the surface can be fragile !

See detailed technical datasheet on <u>www.isopaint.com</u> before applying **Iso Paint Nordic** roof coatings and impregnations.



Instruction for application on METAL



ISO RUST CONVERTER

Iso RustConverter does not remove rust, but mixes chemically with rust creating a black inert substance that can be painted, concealing the existence of any rust and preventing further corrosion. The tannic acid reacts with iron oxide (rust) and chemically converts it to iron tannate, a dark-colored stable material.

Is an excellent primer for Iso Metal One Coat and other paints.

You only apply **Iso RustConverter** on spots or areas with rust, but can apply the complete roof or façade, if it is faster or for perfect adhesion between metal, **Iso RustConverter** and the top color as for example **Iso Metal One Coat** or **Isonit**.

On top of Iso RustConverter you apply Iso Metal One Coat (page 15) or Isonit (page 6).

Temperature of the surface to be treated:

From +5° C to +40° C and the metal has to be dry.

Application.

Iso RustConverter is applied at low pressure with an electric or mechanical low-pressure pump, airless pump, brush or roller.

Recommended paint thickness:

Just enough to make the surface look wet and not blank. Only one coat undiluted.

Recommended application pressure 3 to 5 bar. Spreading rate: About 10 - 15 m² per liter. Drying time: Approximately 1 hour at 20° C and a humidity of 60 %.

Do always make an adhesion test and see detailed technical datasheet on <u>www.isopaint.com</u> before applying **Iso Paint Nordic** roof coatings.





Instruction for application on METAL roofs and façades



ISO METAL ONE COAT.

ISO Metal One Coat is used on roofs and façades of metal such as steel sheets, steel pre painted façade sheets, iron, aluminum and galvanized metal. Has a good adhesion on plastisol and polyester coated steel sheets.

The surface must be clean and dry before applying the paint. Rust must be removed and the corroded areas treated with **ISO RustConverter.**

Iso RustConverter is applied with brush, roller or airless sprayer. Recommended application pressure of the airless pump is 180 to 200 bar. Always apply two thin coats – undiluted. Recommended paint thickness: Undiluted. 200 μ m – 275 μ m wet corresponding to 64 – 90 μ m when it is dry. Temperature of the surface to be treated: From +10° C to +40° C Colors: Grey, Oxide-Red, Black and Anthracite. Other colors available. Spreading rate undiluted: 4 m² – 5 m² per liter. Drying time: 1 - 2 hours at 20° C and 60 % humidity. Application conditions: The temperature must be between 10° C and 40° C and max 80 % of humidity.

Do always make an adhesion test and see detailed technical datasheet on <u>www.isopaint.com</u> before applying **Iso Paint Nordic** roof coatings.

















