RUSSWOOD

SIOO:X
Patented Wood Protection

SiOO:X Original application instructions

Coats 1 & 2 - SiOO:X Wood Protection

SiOO:X Wood Protection is the first component of the SiOO:X impregnation and wood protection system. SiOO:X treatment reacts with moisture and atmospheric CO2, and cures to form a flexible silica network within the fibres of the wood surface. This creates a protective envelope, increasing the wood's resistance to biological attack from invasive decay fungi and insects. In addition, as the SiOO:X system cures it develops a light driftwood grey colour to the wood surface.



The full curing process takes around 2-3 years depending on local climate conditions, though a significant colour change will be underway within 1-2 months.*

Within 6 months the timber will have taken on a light, silver lustre, and the greying process will continue until the system is fully cured. This effect happens consistently around a building, mitigating the impact of differential weathering. The resultant surface is firm and smooth. The SiOO:X Impregnation system gives a life of 10 years for decking surfaces, 15 years for cladding and is very easy to maintain. It is water based and friendly to the environment.

Preperations
SiOO:X can be used to treat new or old wood. If necessary clean the surface and remove any oil, paint, algae and blackened regions. Protect all adjacent surfaces from splashes (especially glass and aluminum). Use gloves and eye protection.

Application advice
To get the best penetration it is recommended to use a sawn wood with a coarse surface structure. At the least sanding with a 60 grit paper will open the timber and help to achieve good penetration. Take up of the treatment depends on timber species and surface condition.

The timber needs to be dry. Avoid rain. Avoid application in strong sunlight as the treatment will dry too quickly. Lowest temperature for use: +6°C. Shake and stir before and during treatment. Wipe away any spills immediately with a wet cloth. Treat the end grain and joints. We recommend that the timber be fully coated when possible.

How to apply SiOO:X Wood Protection
Apply a first coat flooding the dry surface using a soft brush or sprayer. Let the treatment soak into the wood and brush away any excess. Allow to dry for at least 2 hours. Then in the same way apply a second coat and allow to dry for at least 4 hours.

After completing Coats 1 & 2, please move on to Coat 3.
See instructions on the next page.

FAQs, consumption guidelines, and important information can be found at the end of this document.

Coat 3 - SiOO:X Surface Protection

SiOO:X Surface Protection is the second component of the SiOO:X Impregnation wood protection system. The Surface Protection reacts with the Wood Protection and the wood surface to create a protective layer, sealing in the Wood Protection and preventing leaching as the full system cures. SiOO:X treatment reacts with moisture and atmospheric CO2, and cures to form a flexible silica network within the fibres of the wood surface. This creates a protective envelope, increasing the wood's resistance to biological attack from invasive decay fungi and insects. In addition, as the SiOO:X system cures it develops a light driftwood grey colour to the wood surface.



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Preperations
Protect all adjacent surfaces from splashes (especially glass and aluminum). Use gloves and eye protection.

Application advice
Avoid rain. Avoid application in strong sunlight because the treatment will dry too quickly. Lowest temperature for use: +6°C. Shake and stir before and during treatment. Wipe away any spills immediately with a wet rag.

How to apply SiOO:X Surface Protection

When the Wood Protection has dried for at least 4 hours, and before any heavy rain, apply the coating of Surface Protection. Put it on evenly and abundantly with a soft brush or a sprayer. Permit the fluid to be absorbed for a few minutes. Then continue till the wood is saturated. The surface is ready to use after about an hour.

After 12 to 14 months the treated surfaces will have hardened. For horizontal decking surfaces it is recommended that a second coat of Surface Protection is applied after a year, and every 4 years thereafter. At this stage clean the surface with an alkaline cleaner and a soft brush and then make the second application. After this is done the horizontal surface is sealed. With vertical cladding surfaces there is no need to apply a second coat of Surface Protection.

Should it rain before the Surface Protection is applied grey silicon crystals are deposited. The Wood Protection withstands some showers of rain but it is important to get the Surface Protection applied before heavy rain to seal the Wood Protection and to avoid wash out. The silver grey colouring develops and matures over time.

FAQs, consumption guidelines, and important information can be found on the next page.

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FAQs, consumption guidelines and important information

Consumption guidelines

CONSUMPTION	1st treatment	2nd treatment
SiOO:X Wood Protection (Estimated 3.5m²/litre)	6-8m²/litre (*est.*)	10-12m²/litre (*est.*)
SiOO:X Surface Protection	7m²/litre	

Please note: Consumption of fluid varies depending on the type of wood, surface structure and age. The products are sold in cans of 5 litres.

FAQs - SiOO:X Wood Protection

What is SiOO:X Wood Protection?
The first two coats in SiOO:X's silicon-based wood protection system.

How does it turn out?
A natural light silver-grey surface develops. The treated timber benefits from increased resistance to invasive decay fungi and insect attack. The timber is UV resistant and vapour permeable.

Where do I use SiOO:X Wood Protection?
Beneficial for cedar, larch, douglas fir, sweet chestnut, oak, various modified woods such as ThermoWood and Kebony, heart pine, teak and some hardwoods. New as well as old timber can be treated including previously pressure impreg-nated timber. SiOO:X is designed for timber with minimum durability class 3 or better.

How much will I need?
On sanded surfaces 1 litre is estimated to cover 6–8 square metres with the first coat and 10–12 square metres with the second coat. With new sawn surfaces the uptake could be increased by 30%.

What equipment is needed?
Open container, brush or spray equipment. The treatment can be factory applied with vacuum coating equipment providing the benefit of good quality control and enveloping of the timber - see www.russwood.co.uk.

How long does it take for the wood to brighten?
Immediately after treatment the wood is yellowish brown. It brightens after contact with moisture. After about a year the surface will turn pale grey; after more time it will transition to a silver-grey patina.

What does SiOO:X Wood Protection contain?
Silicon, potassium, natural plant parts and water.

What do I do if I have questions?
Contact Russwood using hello@russwood.co.uk, or call us on 01540 673 648.

Store at temperatures of 5–30 deg °C. Shelf life in well filled sealed containers is up to 6 years. Dispose of used packaging as hard plastic. In case of contact with eyes or skin wash with water. In case of contact with eyes or skin, wash with water.

FAQs cont. on next page.

FAQs - SiOO:X Surface Protection

What is SiOO:X Surface Protection?
The third coat in SiOO:X's silicon-based wood protection system.

How does it turn out?
A natural light silver-grey surface develops. The treated timber benefits from increased resistance to invasive decay fungi and insect attack. The timber is UV resistant and vapour permeable.

Where do I use SiOO:X Surface Protection?
Beneficial for cedar, larch, douglas fir, sweet chestnut, oak, various modified woods such as ThermoWood and Kebony, heart pine, teak and some hardwoods. New as well as old timber can be treated including previously pressure impregnated timber. SiOO:X is designed for timber with minimum durability class 3 or better.

How much will I need?
You will need about 8–12 m2/L per coat.

What equipment is needed?
Open container, brush or spray equipment. The treatment can be factory applied with vacuum coating equipment providing the benefit of good quality control and enveloping of the timber - see www.russwood.co.uk.

How long does it take for the wood to brighten?
Immediately after treatment the wood is yellowish brown. It brightens after contact with moisture. After about a year the surface will turn pale grey; after more time it will transition to a silver-grey patina.

What does SiOO:X Surface Protection contain?
Silicone emulsion and water.

What do I do if I have questions?
Contact Russwood using hello@russwood.co.uk, or call us on 01540 673 648.

Store at temperatures of 5–30 deg °C. Shelf life in well filled sealed containers is up to 6 years. Dispose of used packaging as hard plastic. In case of contact with eyes or skin wash with water. In case of contact with eyes or skin, wash with water.

***SiOO:X treatment can draw soluble extractive colourants out of the wood surface on initial application, and some timbers may show a patchy/ uneven colour in the first few weeks. This balances out quickly once the timber is installed and exposed to normal weather conditions.**