SiOO:X APPLICATION INSTRUCTIONS

STEP 1 - SiOO:X WOOD PROTECTOR

SiOO:X Wood Protector 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.

PREPARATIONS: 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.

STEP 1 – SIOO:X WOOD PROTECTOR: 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

STEP 2 - SiOO:X SURFACE PROTECTOR: Finish the treatment using the Premium Surface Protector again flooding the surface and brushing away any excess

WHAT IS SIOO:X WOOD PROTECTOR? The first of two steps 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 PROTECTOR? 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? On sanded surfaces 1 litre is sufficient 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.sioo.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 PROTECTOR CONTAIN? Silicon, potassium, natural plant parts and water. Tested according to standards EN 46 and EN 113

WHAT DO I DO IF I HAVE QUESTIONS?

Read more at www.sioo.co.uk or contact your dealer.

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.

CONSUMPTION	1st treatment	2nd treatment
SiOO:X Wood Protector	6-8m²/litres	10-12m²/litres
SiOO:X Surface Protector	8-12 m²/litres	

N.B! Consumption of fluid varies depending on the type of wood, surface structure and age. The products are sold in cans of 3 and 5 litres.



STEP 2 – SiOO:X SURFACE PROTECTOR

SiOO:X Surface Protector is the second component of the SiOO:X Impregnation wood protection system. The Surface Protector reacts with the Wood Protector and the wood surface to create a protective layer, sealing in the Wood Protector 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.

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.

PREPARATIONS: 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. Don't forget to treat the end grain and joints. For more information please see www.sioo.co.uk.

STEP 2 – SiOO:X SURFACE PROTECTOR: When the Wood Protector has dried for at least 4 hours, and before any heavy rain, apply the confoundation of Surface Protector. 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 Protector 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 Protector.

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

WHAT IS SIOO:X SURFACE PROTECTOR? The second of two steps 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 PROTECTOR? 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.sioo.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.

CARE: Keep the surface clean from dirt and algae with a PH neutral cleaner or SiOO:X Maintenance Wash.

Airborne fungal spores are a normal component of the outdoor air. Fungal spores can settle on surfaces and can germinate under favourable moisture conditions. In some cases this can cause stain fungi to manifest on timber as dark grey/black spots/blotches. This effect is most common during the first 2-3 years of the cladding's service life, during the wetter parts of the year. In drier months stain fungi will recede. This can recur until the surface sugars of the timber are exhausted, whereupon the stain fungi will die off and residual marks will fade over time. Stain fungi can be addressed more quickly by application of a mild fungicidal wash if desired, and residual marks will normally fade over several weeks. SiOO:X Pre Wash can be used to address instances of heavy staining.

WHAT DOES SIOO:X SURFACE PROTECTOR CONTAIN? Silicone emulsion and water

WHAT DO I DO IF I HAVE QUESTIONS? Read more at www.sioo.co.uk or contact your dealer.

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SiOO:X

Wood Protector

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SiOO:X UK Distributor www.russwood.co.uk mail@russwood.co.uk

