



Sioo:x

WOOD PROTECTION

Cleaning and maintenance of Sioo:x treated surfaces
Cladding

CLEANING AND MAINTENANCE OF SiOO:X TREATED SURFACES – Cladding

LOOKING AFTER YOUR PROJECT

Wood contains natural substances like cellulose and hemicellulose, which can also contribute to the growth of mold and algae. Cellulose and hemicellulose are complex carbohydrates that, when exposed to moisture, can serve as a food source for microorganisms like mold and algae. This makes wood particularly vulnerable to fungal attacks if not properly treated. The porous structure of wood allows moisture to be easily absorbed, further increasing the risk of microorganism growth. To prevent this, it is important to treat the wood with protective coatings or impregnation that prevent moisture absorption, thus reducing the risk of black spots and mold.

Wood is a natural material and even when treated with some wood protection or a preservative it can be impacted by dirt and atmospheric fallout. Dirt and pollution can lead to the formation of algae and fungal growth.

The key is to understand that timber surfaces, no matter how treated, need to be cared for and maintained. Early removal of accumulating dirt and early stage of algae or fungal spore through a regular care and maintenance program, will lead to a sustained beautiful appearance. Although the SiOO:X treatment provides protective resistance to the penetration of algae and fungi, they can hold on to the surface and have a negative aesthetic effect. This is especially a problem in humid climates, wet times of the year and on special exposed parts of the building.

WEATHERING

Weathering is the chemical and physical change that occurs when timber is exposed to the weather. It occurs in the surface of the timber. When timber is exposed outdoors without a protective coating, the surface undergoes rapid changes to both its appearance and its texture because of exposure to sunlight, particularly UV-light, rain, snow, ice and wind. When SiOO:X is applied as a protective coating, the undesirable effects of weathering are mitigated.

LEACHING AND TIDE MARKS

Wood contains a variety of naturally occurring chemicals that are soluble in solvents and are known as extractives. These substances, as well as other special compounds in wood such as tannins in oak, thujaplicin, and polyphenols in western red cedar, can also leach out. Leaching of these substances can be uneven and may result in areas of the wood where the extractives are concentrated. Once water soluble extractives have fully leached, there will be no further development of tide marks. A special positive function of the SiOOX system is that such tide marks are much less frequent with SiOOX applied than without SiOOX, for example on bare wood. But SiOOX also has advantages in this aspect compared to treatment with oils and acrylates.

FUNGI AND ALGAE

In the early stages with new timber, particularly the resinous timbers such as larch and cedar, extracts from the timber rise to the surface where they can attract dirt and this along with moisture can result in a food source for stain fungi to grow on

the surface. SiOO:X protects the timber from any fungal penetration and fungal decay but algae can develop on the surface in some circumstances, particularly in shaded sides and when there is a high degree of moisture and or adjacent vegetation. Where this occurs, when possible, the surface should be cleaned. Over time as the timber matures the emission of extracts will cease. Airborne fungal spores and especially mold spores are normal component of the outdoor air. Spores are released into the environment from fungi growing on dead or decaying organic matter in the soil or elsewhere in the environment. Fungal spores can settle on surfaces and can germinate when moisture or high humidity is present. This can occur on non-biocide treated timber and even with biocide treated timber, as the biocide leaches or deteriorates with time. If fungal spores colonies are found on SiOO:X treated timber, they should be cleaned away with SiOO:X Maintenance wash and/or XMould, at an early stage after at least one year. A horizontal surface such as decking are more prone to be affected by the accumulation of dirt and needs to be periodically cleaned.

CLEANING AND MINOR SURFACE REPAIRING

The cleaning of SiOO:X treated surfaces is much easier, as the surface is toughened by the treatment and cracking and splinting is reduced. The resulting smooth lustrous surface facilitates effective maintenance. Periods of rain or damp weather is especially favourable for airborne spores, which can often be found on areas of wood that are in the shade or exposed to the weather. Black spores need nutrients to grow, and they get these from natural sugars in the wood. These substances are leached out of the wood in the first 1-4 years. The presence of black spores also decreases as the SiOO:X Wood Protection matures and gets stronger.

Regular brushing and occasional washing away of leaves, soil or debris will keep the surface clean and defend against algae growth. When necessary, and if there is algae growth or black spores on the surface, use XMould. The product is specially

developed to cooperate with SiOO:X-treated surfaces and is fully compatible with the SiOO:X system and keeps the Wood and Surface protection intact. XMould is also gentle on other surfaces.

Cleaning also gives a good opportunity to inspect the surface to see if there is any damage to the surface from operational wear, such as scratching or scuffing. These damages can be repaired by applying the SiOO:X Pigmented Panel Surface Protection (for clear, SiOO:X Premium Surface Protection Panel) the affected area. Were the integrity of the surface treatment has been physical damage, apply SiOO:X Pigmented Panel Wood Protection (for clear, Premium Wood Protection Panel) to the affected area, followed by the SiOO:X Pigmented Panel Surface Protection (for clear, SiOO:X Premium Surface Protection Panel with right colour).

Keep in mind that: Cladding should not be cleaned in the first year as the surface protection is particularly vulnerable.

CLEANING LEVELS – SiOO:X TREATMENT ON CLADDING

Always wear protective gloves, eye protection and head protection if needed.

Light dirt

A: Carefully brush the surface with a soft brush and be particularly gentle with Panel Colours to avoid damaging the pigments. Make sure the surface is free from dust, pollen and loose particles.

B: If necessary, clean gently with SiOO:X Maintenance Wash (PH7). Avoid products with a pH lower than 5 or higher than 8, as they impair the performance of the surface protection. Never wash with soft soap and a high-pressure washer, as this will damage the SiOO:X treatment.

Note! Cladding should not be cleaned in the first year as the surface protection is particularly vulnerable.

B1. Dilute 1 dl Maintenance Wash in 8 liter of lukewarm water. 1-liter diluted Maintenance Wash is sufficient for approx. 125-250 square meters. If very dirty, use 2 dl of Maintenance Wash.

B2. Apply the diluted product to a surface and leave for 20 minutes.

B3. Rinse well with water.

B4. Leave the surface to dry.

Heavier dirt

C: If cleaning according to step B was insufficient, or if more stubborn surface growth, such as black spores and algae, this can be treated with XMould. The product is specially developed to cooperate with SiOO:X-treated surfaces and is fully compatible with the SiOO:X system and keeps the wood and surface protection intact. It is also gentle on other surfaces. Use XMould at temperatures above 0°C.

C1. Dilute 1 part of XMould with 4 parts of water. 1-liter diluted XMould is sufficient for approx. 20 square meters.

C2. Spray on the diluted XMould fluidly so that the product penetrates the surface. It can also be applied with a brush. Use safety glasses, waterproof gloves, and a respiratory protection. Protect adjacent metals, glass and plants. Wipe up any spills.

C3. It is important that the product is allowed to dry slowly as it is active when wet. Do not use any drying equipment and protect the treatment from direct sunlight and rain.

C4. Do not rinse off

For dirt that cannot be removed by Maintenance Wash and XMould

D. The strongest and most effective cleaning treatment is SiOO:X Prewash.

For heavy growth, graffiti, grease, or other discolorations, removal is only possible through scrubbing with SiOO:X Prewash.

Before applying the Prewash, mask all glass, metals, electrical cables, and lights. Also, protect plants that are nearby.

D1. Dilute 1-part SiOO:X Prewash with 4 parts of water for normal cleaning. 1 litre concentrate is enough for 20–50 m²

D2. Apply SiOO:X Prewash using a paintbrush, a different type of brush, a sponge or spray and allow it to sit for at least 10 minutes.

D3. Scrub with a brush or high-pressure washer (wide spray)

D4. Rinse with water and let the wood dry.

NOTE!

SiOO:X Prewash effectively dissolves and removes SiOO:X Surface Protection. Therefore, it is essential to reapply SiOO:X Surface Protection to maintain optimal durability. For enhanced protection, it is also recommended to apply an additional layer of SiOO:X Wood Protection before reapplying the surface protection. If it is a coloured system, you should apply wood protection before surface protection.

After approximately 3–7 years, if needed, apply a second coat of SiOO:X Panel (Colour) Surface Protection following a thorough cleaning with SiOO:X Maintenance Wash or XMould.

After 12–18 years, clean the surface with SiOO:X Prewash and repeat the full treatment as originally performed. For detailed instructions, visit sioox.com.

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responsible to check for updates at sioox.com before using the product. It is not possible for Sioo to warn the user about every possible danger related to use of the product and the user must use common sense and good judgment. Please contact Sioo with any questions or concerns before using the product.