

Cleaning of extractive tide marks and black spore

Wood is a beautiful natural material. But like all natural materials it needs protection. However, protecting a material as complex as wood is challenging. Sioo is a surface protection system which gives excellent long term benefits because it is able to penetrate the wood structure. It differs from other surface protection systems because it modifies the wood structure at the cell wall level (technically this is known as an impregnation modification). Despite this, depending on the condition of the timber, how well it has been seasoned and how well it has been dried, very occasionally some staining conditions can sometimes occur.

Wood contains a diverse range of naturally occurring chemicals which, because of their mobility in solvents, are known as extractives. In new timber, these extractives can leach and may result in tide marks which are regions of wood where these extractives are concentrated. Tide marks in areas near overhangs or areas that are not as directly exposed to the weather are likely to persist, as it will take longer for the extractives to be leached from the surface of the timber at these locations. Once water soluble extractives have fully leached, there will be no further development of tide marks.

Black or grey spots can sometimes occur due to staining fungi on the wood. The staining fungi feed primarily on the starch in the sapwood and this continues until the starch is used up. This is highly characteristic of freshly felled wood, kiln dried wood that is not dried to a low enough moisture content, or wood that is dried but gets wet again. Black spots can occur due to surface molds, which can easily be checked by rubbing the surface with your fingers, if the black spots smear or are removed then the problem is mold and this can be removed by cleaning. Chemical staining can also result in black spots forming. This is common in tannin-rich species such as oak which react with ferrous fastenings. These can be removed with proprietary oxalic acid based treatments. Fungal spots occur under the SiOO:x protection layer and are less easily removed. They are found in the sapwood only and do no harm to the wood. They are more likely to occur in the later autumn and in the winter when the wood has a raised moisture content. The 'spottiness' will disappear with time as the SiOO:x protection system cures and as the onset of longer days results in photobleaching of the stains.

Tide marks and surface black molds can typically be removed using the Sioo alkaline based cleaner. The Sioo Wood Protector itself is strongly alkaline and has a strong cleaning action.

If either of the above occurs the recommendations are to initially clean the surface with the Sioo Cleaner. Apply/rub the cleaner into the affected area and leave to soak for 15/20 minutes. In the case of the Sioo Cleaner it can be diluted with up to 50 parts water. For strong and persistent staining it can be used in neat form. Wash off the applied cleaner.

If the marking is not fully removed rub some Sioo Wood Protector (Step 1) onto the affected area and leave to soak for 20 minutes and then wash away.

After cleaning apply a coating of Sioo Surface Protector (Step 2) to the cleaned area.

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