

Technical Tip

Blue Stain

Blue Stain is also known as sapstain since it occurs in the sapwood of a log and not in the heartwood. It is caused by several types of fungi that only infect green or very moist logs. Although called blue stain the colors these fungi produce can be blue, purple, gray, brown, yellow, orange and occasionally red. Typically blue stain first appears in lumber mills or logging yards on logs before they have had a chance to dry. Once wood has dried to below 20% moisture content it is no longer susceptible to infection by blue stain fungi.

One characteristic of blue stain is that it usually goes deep into the wood. Fortunately, blue stain fungi have no effect on the strength or structural soundness of the wood and do not cause decay. It is just a cosmetic thing. Unfortunately, once blue stain has formed there is no way to remove the color from the wood. Bleach, cleaners or oxalic acid are not effective for removing blue stain and, since it is not just on the surface, even sanding will not remove it. The only effective way to combat blue stain is to prevent its formation while the wood is in the process of drying or before it reaches a drying kiln.

There are only two solutions to blue stain, replace the stained wood or try to hide it with a heavily pigmented stain.



Cross section of blue stained log



Blue stained logs in a wall