

Technical Tip

How to Use M-Balm and E-Wood

Both M-Balm and E-Wood are two component epoxies that are used for repairing soft spots, rot pockets and other types of defects in logs and timbers. Although they can be used individually, they are typically applied as a pair with each product playing a specific role.

M-Balm

When the A and B components of M-Balm are mixed together they form a low viscosity liquid. In other words it is not much thicker than water. The purpose for this low viscosity is to allow the product to soak into wood fibers. After about 15 to 20 minutes the liquid M-Balm will begin to harden and once hard any loose, friable wood fibers will be consolidated into a solid mass. One limitation of M-Balm is that the wood must be very dry, 15% moisture content or less, for the M-Balm to be able to soak into the wood. This presents a challenge when attempting to repair areas that have been damaged by decay since typically these areas are quite damp. The best thing to do in these cases is to remove the source of the moisture by eliminating any leaks or draping some plastic film over the area to prevent rainwater from saturating the wood. You must wait until the wood is dry before attempting to repair it.



Cleaned out decayed pocket with some loose wood fibers.

Note: When repairing wood that has been damaged by decay fungi we recommend that the area first be treated with Shell-Guard to eradicate any decay fungi that may still be alive and to prevent any future infestations from reoccurring. The Shell-Guard solution may be applied while the area is still wet or moist but it is still important that the wood be allowed to dry before applying M-Balm.



Applying M-Balm.

The easiest way to apply M-Balm is with some type of plastic squeeze bottle like a clean, empty mustard container. Just be sure to mix the two components together before you pour them into the container. You need to be aware that within a few minutes after being mixed together the liquid gets hot, very hot! The greater the volume the hotter it will get. The heat is the result of an exothermic chemical reaction that takes place between the A and B components. It's best to mix small quantities of M-Balm at a time not only for this reason but since mixed M-Balm hardens in just 15 minutes any product that's not

applied within that time will end up being unusable. M-Balm can be applied with a brush but once the M-Balm begins to cure the brush will become hard and will have to be discarded. Whichever application method you use try to avoid getting any M-Balm on the surface of the wood. It's impossible to cover cured M-Balm with a paint or stain and any spots of M-Balm that get onto the visible surface will always stick out from the rest of the wall.

Whenever you are planning to fill a pocket or void using E-Wood or any other type of wood filler it's important to first use M-Balm to consolidate any loose wood fibers present on the inside surfaces of the void. Wood fillers and putties like E-Wood will not adhere to loose fibers and if you don't consolidate them first with M-Balm you run the risk that the patch will fall out of the void sometime in the future. It is not necessary to wait until the M-Balm cures before filling the void. Being an epoxy it will cure even in the absence of air.



Wood fibers consolidated with M-Balm.

E-Wood

E-Wood is a two component epoxy putty that can be used to fill holes or voids in wood. E-Wood should not be used to fill checks or gaps between logs since once it cures it has no flexibility and any movement will cause it to pull away from the wood. E-Wood is somewhat challenging to mix together since both components are thick and putty-like. Equal amounts of both A and B component must be kneaded together by hand until the color is uniform throughout the mass. Once it is thoroughly mixed it can then be pressed into the void and shaped to match the contour of the surface. If desired a texture or pattern may be worked into the surface of the uncured E-Wood to help it blend in with the surrounding wood. Stain can be applied to the surface of the E-Wood either before or after it has cured. E-Wood will begin to harden in about an hour or two so you have more time to work with it than you do with M-Balm. Being an epoxy, no shrinkage will occur once the E-Wood is in place.



Cavity filled with E-Wood.



Stain applied to E-Wood.

For additional information about M-Balm and E-Wood see: **“M-Balm & E-Wood”** and **“How to Repair Large Voids”** technical tips.