



Treating Timber Floors Naturally

The final result after the natural oil was applied.

Angela and her husband initially used conventional floor treatment products in their floor sanding company. They were not happy with the results, however, and, after finding the Livos products worked well, they took over the distributorship.

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HAVING bought our first home, the first thing we wanted to do was to remove the disgusting carpet in most of the rooms and the outdated and worn vinyl in the kitchen area. The next question we faced was how to optimally treat and maintain it over, hopefully, a long life.

And the journey begins ...

Polyurethanes

Ordinarily, we would have used polyurethane, and the logic of this is (pardon the pun) clear: good quality polyurethanes offer an impermeable finish, as long as the surface is not worn or broken, and leave a hard-wearing gloss or semi-gloss surface. However, thanks to the current Information Age we are living

in, we have become much more aware of the many downsides polyurethanes come with, including the emission of isocyanates and solvents during application and in the curing process, along with the ongoing release of low levels of solvent over the following weeks and months which could affect not only the people applying the finish but the occupants. These chemicals are sensitizers, and can have health effects, including the



Floorboards after carpet removal.



The floor, with nails punched and puttied, after removing the vinyl.

potential to contribute towards 'sensitisation', the development of hyper-sensitivity by the immune system.

Other downsides we discovered included the more practical difficulty of spot-repairing polyurethane floors without leaving visible seams or requiring a major sanding operation. The edge bonding effect can also lead to problems such as uneven gapping. This is where a number of timber floorboards stick together and other boards significantly open up along a joint. We also found out that with soft timbers the boards may split. None of these were acceptable options.

Water-based products

We also considered water-based products. They are often called non-toxic urethanes. One reason we considered them was to reduce the effects of solvent 'off-gassing' and its effect on us humans and the environ-

ment. These coatings are not as hard as the traditional two-pack polyurethane varieties and come at a higher cost.

There are a number of other negative issues that needed to be considered too, such as quality, disposal problems and the use of biocides (pesticides and fungicides which kill living organisms — EPA, NSW). Being a coating system, once the surface is worn or damaged, to achieve an even look the whole floor would more often than not require re-sanding.

Tung Oil

We were, unfortunately, surprised with the modified Tung Oil group of products. Our thoughts were that Tung Oil was an environmentally-responsible product. Imagine our surprise when we discovered that Tung Oil modified polyurethanes, commonly known as oil-modified polyurethane (PU), are basically a

PU resin in a Tung Oil base plus other solvents such as turpentine and white spirits. As far as floor finishes go, the oil modified PUs tend to have more oil on the surface and less polymer, which results in a less protective layer so they wear out faster. (This we found out from an industrial chemist friend). Again, if the surface is broken and or worn off, sanding seemed to be the only form of total repair. Some products actually allow for spot repair, but then we were told you need to ensure that it is the same product and that the area is completely clean of all contaminants, otherwise there is rejection between the two coats.

It turned out that all PUs (including water-based ones) contain some sort of cross-linking agent, typically a toluene di-isocyanate (TDI). TDI is nasty, causing respiratory problems including asthma. Some of the solvents used may cause cancer. We were becoming more and more convinced that we would not



First stage of sanding.



Sanding completed.

be going down this path. Remember, just because you cannot smell something it does not mean there is no quiet 'off-gassing'.

During this process of research we reflected that our children and pets are closer to the floor than we are. They would be inhaling more of the fumes. This was turning out to be quite an exercise. Currently, product labelling laws in Australia do not require full disclosure of ingredients, so it was interesting indeed to see how much information the suppliers and shop assistants actually knew about the products they were selling or what they simply read from the labels.

Natural penetrating oils

For us the choice had become easy: to use natural penetrating oils. They are very easy to apply and for rejuvenation and spot-repairing the oil can simply be rubbed on the worn areas leaving no visible edges. Also, as they

gave off no toxic odours we could continue working in other areas of the house.

After looking into three other natural finishes we chose the Livos range of floor oils. The main reason was that they have a full ingredient disclosure on their labels. We were also able to speak to someone who had their floors done some years back and then see the floor. We were also advised on how to apply it correctly. As they were German products, and knowing how strict European standards are, as well as the company being in existence for well over 30 years, I knew that this was not a new product range on trial.

We worked hard to find the right product to suit our needs. For us the Livos range had the best environmental and personal health credentials. Added to this was the parent company's willingness to provide all information requested without delay or question — no green-washing at all.

This exercise took more time than we anticipated. However, it was well worth the result and knowledge found along the way. To make the right decision, you must seek out as much information as possible and not accept everything you're told. Check out the ingredients in the products. Obtain information from users of the products, certainly not from someone who hasn't even used the product before. See a floor already completed or work completed by a tradesperson. Also, consider that you may need to compromise, for example, on the gloss level, for a healthier option. Above all, if you are applying the project yourself, follow the directions. You have the choice!

- For more information on Livos products have a look at the website www.livos.com.au or phone Anro Floorcare Pty Ltd on (03) 9779 3405.