

Help and advice



Sid Bourne on installing solid wood flooring

Float solid wood and you'll likely be sunk

I AM one for adopting quicker installation methods if it is proven that they do work properly. But I see many weird installations which go wrong on a regular basis.

The one that still annoys me more than any other is floating solid load bearing floors just using a PVA. I see this type of installation fail more often than any other that I can think of.

I work for a German manufacturer of solids and under no circumstances would we advise you to float a solid wood floor.

But we still get calls from installers who, for whatever reason, think they know best, because they have installed hundreds of solids this way without any problems until now. Do we really believe this?

I attended one such problem installation where the installer who was very experienced. He claimed to have been installing solid wood flooring without any complaints for many years.

He actually boasted:

'I know more about wood than any person in the country. So don't you come here trying to tell me that I have not installed this material correctly. It is your wood that must have been too dry when I installed it.'

I usually don't for get a name or a face, especially where there has been a problem installation. So I asked this so-called expert: 'Don't you remember me?'

He replied that he didn't remember me. (He must be one of the only wood installers who doesn't read CFJ).

I told him to think back two or three years when I attended at least five complaints about his work, all involving the same problem.

In fact, one complaint went to court, and he lost. The judgement went against this self-proclaimed expert. But in the end he got off very lightly.

His response was that these were the only complaints he had ever received. I might have believed him, but thousands wouldn't!

But giving him the benefit of a serious doubt, I said: 'Okay, let's look at this disaster in hand.' And

'I believe in telling like it is, and I make no bones about criticising bad installers unless they are bigger than me. In that case I just shout a few choice words out of my car window when I am driving away'

disaster is the only word I can think of to describe the situation.

I know that some people reading this may think I am quite rude. Well it's the only response I think is justified when I meet pig-headed installers like this.

I believe in telling like it is, and I make no bones about criticising bad installers unless they are bigger than me. In that case I just shout a few choice words out of my car window when I am driving away.

Anyway, the installation in question was a 180mm wide plank installed onto a concrete base with no underlayment whatsoever.

It was installed in a lounge, diner and hallway with no breaks and no expansion gaps. In many areas of the lounge the floor had lifted by over 30cm. It was up by over 45cm in the diner and hallway and both were unusable.

Fortunately, most of the material could be recovered and re-installed correctly. However, the so-called expert wood floor installer also had to buy another couple of metres extra material.

But he was having none of this.

'Who will have to pay for the extra wood planks?' he asked.

'You will,' I told him. He responded loudly, making his feelings clear: 'F\$@£% off!'

Just at that moment the lady consumer popped her head round the door. 'That man will not be fitting my floor!' she stated.

She told me that she would prefer to pay for a proper expert to undertake the job. And I gladly gave the name of a person I knew could do the job correctly.

Hearing this, the wood flooring expert promptly left, with a number of choice words that I won't repeat here.

The good news is that the person I had recommended so impressed the lady consumer that she paid him immediately and added an extra amount by way of a tip.

By the way, he had to level the floor and apply a liquid dpm before starting to install the wood. So everyone was happy,

except our previously mentioned wood flooring 'expert' who continues to claim that he never ever gets any complaints.

I did try to find out where this so-called expert bought his product from but to no avail.

Please don't read this to mean that I am having a go at all installers. My concern is with people who go round nicking the work off the real experts and do the job cheap and cash in the hand.

Naturally, some of the blame must also go on the dear old consumer who wants something done for nothing and when it goes wrong they plead insanity. They never knew what they were doing in hiring the first cowboy to knock at their door.

I live in hope that one day all the real expert installers will be qualified and recognised by the public for their skills and, of course, be entitled to a fair day's pay.

So please all you would-be installers of real wood floors, get on courses.

Learn to do it right, and you will be surprised on how much pleasure you get from achieving a high standard of work. **CFJ**

Sid Bourne is technical director at Grundorf Terhurne and has over 25 years of installation experience.

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Peter Kaczmar on wood flooring problems

Pick a whole in engineered

I AM often taken aback at how often technical problems in the flooring sector seem to arise in runs or spates where a particular issue is responsible for identical, or similar, defects at different locations.

While it is not uncommon to find such periodicity in aspects of flooring, dependent to a large extent on seasonal fluctuations such as gap opening or swelling, there are those occasions where there is no immediately obvious causal link.

A particular case in point recently occurred to me where I was called out to several successive inspections to investigate the development of cracking within the wearlayer of engineered woodstrip flooring.

There is nothing particularly remarkable in this

when taken on face value – until the construction of the boards in all these cases was shown to consist of a hardwood wear layer bonded to a conventional 11-veneer plywood base, complete with balancing veneer. In each case, though, the flooring was made by a different manufacturer.

The floors in question were all installed into high-value properties with under floor heating and showed a characteristic cracking and fissuring of the surface which extended through the full depth of the wearlayer.

Each case was mirrored in its own potentially litigious background of claim and counter-claim, where the cause was attributed either to a too high moisture content at the time of installation, or to

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Help and advice



Peter Grant on data logging when measuring damp

If the client says chop! chop! Start logging

LAST month we looked at the oft neglected importance of calibrations and calibration checks. I also made reference to data logging as a technique to help you adjudge whether or not the room conditions and the inevitable changes that always take place will impact negatively on the new floor you have fitted.

I always follow the maxim that forewarned is forearmed and in extreme cases this might even lead to you suggesting to your customer that they consider a different floor system to the one they had in mind – perhaps a vinyl, textile or tile product instead of wood.

So what is involved in data logging? No, you do not take a chainsaw to your computer whilst running a spreadsheet, though, come to think of it, this would be quite a cathartic experience if your relationship with your PC is anything like mine!

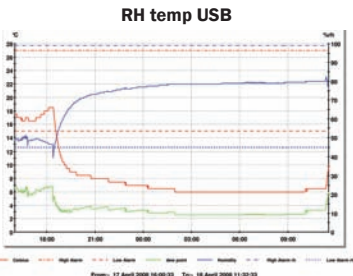
You are actually equipped already for basic data logging but probably don't realise it or understand it. Let me explain; put simply, all data logging basically comprises is the taking or observing of sequential readings.

If you visit the site on Monday and take moisture readings, do the same on the following Tuesday, Wednesday Thursday etc then effectively you have created a picture which of course may or may not indicate trends. Problem is that this kind of attention to detail is both time consuming and expensive and also not a little intrusive to your client.

The good news is that data logging technologies have come on in leaps and bounds over the past two years or so and prices have fallen to realistic levels. This now means that everyone who operates on a professional level within the industry can now afford to include these tools in their armoury.

What is perhaps most instructive is the simultaneous logging of the ambient room temperatures and relative humidity along with the same values within a humidity box affixed to the floor.

You may even choose to go a



stage further and add or substitute a probe in a humidity sleeve drilled into the floor slab.

Most of these loggers come complete with software you install on your PC and one simply sets up the desired logging interval which can range from less than a minute to days or weeks. The logger is then

disconnected from the PC and operates under its own battery power source until you retrieve it.

The data is then downloaded and can then be displayed in a graphical format and saved as an Excel or .csv file for record keeping and further analysis if required.

I know I am biased as someone who enjoys the technical side of flooring, but believe you me, most people find it most instructive and fascinating to have a record of what is really happening 24/7 in their own houses as well as in their client's properties.

If this has whetted your appetite for technologies and tools that really will help you,

particularly when the going gets tricky, then do please feel free to contact me directly on either 07885 221675 or pgrant@tesco.net and I will send you a fact sheet on how to choose a system that suits your needs and pocket together with details of available devices on the market.

Until next month, happy logging to one and all! **CFJ**

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Peter Kaczmar on wood flooring problems

Picking a whole in engineered

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the regime of underfloor heating temperatures.

It would be relatively easy to make a cogent argument to place the blame on one or both of these factors, but the sheer consistency with which they occurred led me to believe that the problem was more systemic than circumstantial.

Current standards provide little guidance on the manner of construction of multi-layered parquet. EN 13489 which deals with these systems focuses on the types of flooring available and the pattern design, without mentioning the internal or core construction of individual flooring elements.

It stands to reason that different constructions of engineered flooring elements will influence the manner in which the floor as a whole will perform.

The moisture and movement dynamics of, say, a floor engineered with a core constructed from laminated softwood billets running counter to the direction of the grain of the wearlayer will be fundamentally different to one where the core consists of plywood which will therefore respond differently to changes in climatic conditions.

This is not to say that one type of floor should be used in preference to another – but one must at least be aware that certain constructions might be more accommodating of particular environments and specification approaches than others.

This is reflected in the above examples where the wearlayer consisted of medium movement species and where the plywood base, its inherent stability effectively holding it rigid, could not respond to, or accommodate, the natural movements of the wear layer.

Consequently, any internal stresses created by natural shrinkage could not easily be dissipated,

resulting in fissuring of the wearlayer.

On reflection, it appears obvious that in such a scenario a more careful selection of species for the wearlayer becomes critical, since even relatively small movement disparities may, in certain circumstances, cause problems.

While this may seem obvious where underfloor heating is used, the same disparity in responsiveness is still likely to hold true even where the floor is not directly heated.

This is because the moisture dynamics of the core may also differ substantially to that of solid wood, as with the above example, where the multiple gluelines bonding the plywood together altered the moisture dynamics of the core, with the result that similar fissuring could occur in response to normal day-to-day fluctuations in humidity.

I must reiterate that this does not mean that one particular type of flooring construction is inherently better or worse than another, but I will stress that in-service performance and functionality are inextricably linked with all aspects of floor construction.

If a single component is in some way mismatched, the system may be compromised.

With increasing sophistication in the manufacture of engineered systems, manufacturers must be more conversant with how the constituent parts are likely to interact with each other to achieve a desired performance specification – and they must act on this knowledge by selecting components which are mutually compatible in their movement characteristics and moisture dynamics. **CFJ**

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