

Help and advice



Martin Cummins on changes in the flooring industry

From crunchy nuts to climate obsessives

IT may not be apparent to many of us in the flooring industry just how much has changed during our careers.

A floor is a floor after all, so surely other than fashion changes (brighter, more varied colours, logos, etc) the products are there to perform a function. The function – safe, comfortable, hardwearing and decorative – is still the same, isn't it??

However, take a leap back 30 years or so and visualise a typical flooring installation.

Floorcoverings for contract work would have included crunchy vinyl tiles (with asbestos), foam backed carpets, plenty of linoleum and cork products, and a very limited range of sheet vinyls with fibre-bonded carpets still being in their infancy.

The smoothing compound range was basically latex with standard water mixes and

adhesives were most often highly solvented.

Although flooring was typically completed as one of the final jobs in a building, competing with other trades for available time and space was not the major issue.

Often site conditions, however, were very poor with health & safety a pretty much unknown phenomena.

The product ranges were generally simple and clear.

The methodology and approach to the installation were also straightforward as fitters knew what products they needed and how to install them. Halcyon days...or maybe not!!

But the flooring industry has moved on. There is now a much greater variety of floorcoverings, required to be laid on a much wider variety of floors, in a much greater variety of circumstances.

The purpose of the flooring may

now be different, requiring it to fulfil acoustic needs, conductive properties, ease of removal and replacement etc.

No two flooring installations can now ever be assumed to be the same, especially with the inclusion of new materials and situations such as calcium sulphate screeds, floating timber floors or under floor heating.

Additionally, moisture problems are much more prevalent due to fast tracking of projects and also the types of floorcoverings being used.

Add to this the health & safety and time pressures (particularly from our friend the PFI project) and suddenly a flooring contractor has a lot more to consider.

So if products have changed, site situations and conditions have changed, substrates are changing, time pressures are changing, legislation is changing,

you have to ask yourself ...are you changing too?

Manufacturers and trade organisations have a responsible part in this ever changing environment and need to ensure the correct understanding, knowledge and information is available to the flooring contractor.

However, they cannot make you change...as the old psychiatrist light bulb joke goes...you have to want to change.

The most successful companies will be the ones prepared to move with the times, to invest in training of both long-termers and newcomers to the industry and to embrace new products and methodologies.

Over the next few months I'll be looking at what's changed over the years but more importantly what's changing in the industry

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David Gatfield on dealing with moisture

Finding damp? Don't cross your fingers (or your legs)!

THE Contract Flooring Association describes dampness as 'the biggest cause of failure in contemporary flooring installations'.

And who would disagree, especially at this time of year when we are experiencing cold and damp?

We've all been to sites where the vinyl flooring is blistering and lifting. Or the joints are splitting, not due to poor welding for once, but because the adhesive has been degraded by moisture and has released the flooring, putting stress on the welded joint that it was never designed to cope with.

The client is usually blissfully unaware that there could be or ever was a moisture problem in his building.

He informs you that the old 'Marley tiles' which were removed so that the new vinyl sheet flooring could be installed were never any trouble, and is incredulous when you present him with a couple of goldfish from the first blister you split to prove your point.

It is a common story repeated thousands of times a year and is due to a number of factors.

Fast-track building practice, where insufficient time is available to allow subfloors to dry out adequately, is a constant concern to all manufacturers of contemporary floorcoverings; when a failure occurs it is often the floorcovering which is blamed – at least until the true cause can be proved.

In such a time-pressured situation, some flooring contractors may be 'bullied' into installing flooring using acrylic or pressure sensitive adhesives, which as a general rule have the moisture resistant properties of flour and water, onto subfloors which cannot be fully dry.

Old buildings without an integral DPM are also a common source of damp related problems, particularly when old flooring, such as tiles fixed in A TA (Asphalt Tile Adhesive), is lifted and a new sheet vinyl is laid.

Any moisture present in the subfloor or passing up from the

earth unhindered by the presence of a bit of 1200 gauge visqueen, no longer meets a barrier of a moisture repellent adhesive or the tiling itself. Rather than continuously permeating the old tiled floorcovering via the joints, it now builds up to a point where it can cause problems.

With the new floorcovering any such moisture will first hit a layer of adhesive which is at best moisture sensitive and not designed to deal with moisture levels in excess of 75% RH.

Furthermore, the plasticized sheet flooring which has replaced the semi rigid tiling is flexible and unstable when loose, resulting in rapid failure once the 'flour and water' have given up the ghost.

It doesn't have to be this way and often isn't. Anyone with a bit of common sense would test for moisture as a matter of course before proceeding with any flooring work onto a cementitious surface, even above ground level

on new build if it is found that the RH level is 75% or above.

Any sensible person would take steps to avoid the situation where everybody looks to you as the expert for a solution once the job has gone wrong, often at your expense.

Should you find that the subfloor is too damp to proceed with a flooring installation, the obvious and cheapest answer is to let it dry either naturally or speed up the process with dehumidifiers. If this is not an option due to time constraints, the application of a surface DPM is the logical conclusion.

Moisture really is the biggest single cause of failure in contemporary flooring installations – don't let one of your jobs add to the total. **CFJ**

David Gatfield is Altro's northern region technical services manager

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Help and advice



Peter Grant on measuring dampness

Air today, gone tomorrow, and the floor becomes a soak

A SUFFOCATING floor is bad for the environment. No do carry on reading, I'm not about to harangue you about saving the planet, measuring your carbon footprint or how wicked it is to even think about exotic hardwoods entering the saw mill!

However, you do need to consider how your new floor will live and breathe.

Where you live, the type of house you live in and your lifestyle preferences will all have an influence on the floor, some more than you would think.

So what exactly am I getting at? Imagine you have acquired a dilapidated old barn to convert into your des res.

You have discussed the plans with your nearest and dearest and your architect, decided how you wish the interior to look and feel, but essentially you aim to retain the appearance and style of the original barn, which could be 500 years ago.

You might also want under floor heating, double glazing and to stop any nasty troublesome drafts to chill your ankles as you sit in 'period' comfort sipping fine malt!

Such a building would be mainly constructed from oak timber frame and in filled with stone and/or brick plus lath and lime plaster. Such a construction 'breathes' quite naturally.

Whether in the original build this was by design or a happy accident nobody really knows but it does breathe and this confers several benefits on the building and its occupants.

For example, when it rains, not uncommon in this country, the structure takes up moisture.

This does not necessarily translate into gallons of water flooding into the building, but it does raise the moisture content of the walls and hence the surface humidity of those structures and this in turn will raise the internal relative humidity.

Likewise, as the sun comes out and the structure dries, it leaves the interior pleasantly cool (by the process of latent heat of evaporation for those of you not awake in double physics!)

Damp air internally was not a problem because most of the excess moisture was removed from the building through natural ventilation via open eaves and windows i.e. it was drafty!

Go forward a few hundred years and we put in double glazed sealed units, block of f all vents and fit state of the art t door seals to eliminate the drafts!

You know a 'but' is coming and it is simply that the building is now suffocating. If you don't remove damp air from within the property this creates a vapour pressure differential between that air and the other construction materials.

For example, your splendid solid wood floor will gratefully soak up the moisture as it is in a dry state - 9% moisture content as fitted being equivalent to an ERH of around 40%.

This will be particularly apparent in the summer when the underfloor heating is switched off and a summer rain raises RH of the air.

What will you notice? The floor may crown. You might be tempted to sand it flat and re-finish. If you do, then beware of the time when the underfloor heating goes back on in the autumn. The floor will now dry out from below and that crowning may re-appear along with gaps you wouldn't want to fall into!

OK, so we know what causes the problems, how do we sort it out?

The clue is in controlling or, more accurately, managing the environment. There is little you can do to influence what happens outside the building apart from changing the Range Rover for a Prius (or is that a 'Pious'?), if our dear lords and masters in Westminster are to be believed!

The interior, of course, is a different matter. If you have compromised the natural ventilation of the building then you should take steps to correct it by providing for extract

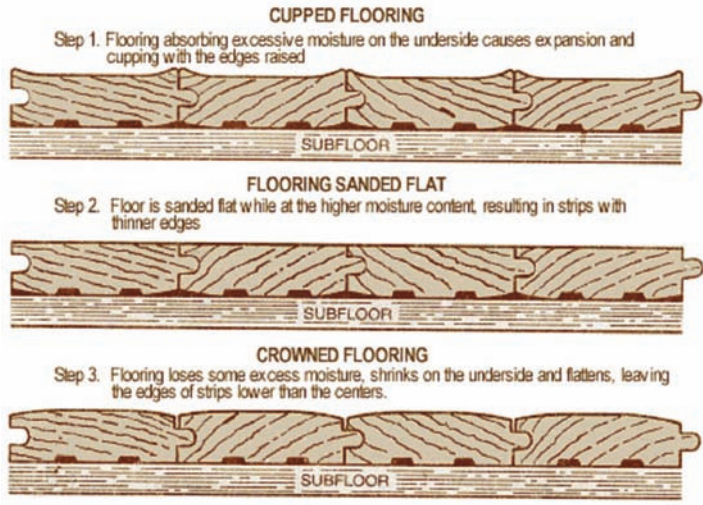


Illustration by courtesy of www.nofma.org

ventilation in key wet areas such as kitchen and bathroom.

This needs to be balanced with appropriate passive vents in other areas such as bedrooms to ensure that damp air can be removed before it wicks into dry materials and/or condenses onto cool surfaces and aids the growth of moulds.

How do I know what goes on with the atmosphere inside my house? A thermo-hygrometer of course!

Every house should have one and there is a welcome trend now for some supply and fit

flooring companies to price this into a job.

As an aid to providing a complete and professional approach, it is to be applauded.

Oh, and make sure you take your size 12 boots off before you come in, we wouldn't want to leave evidence of too big a carbon footprint would we, the government will tax it, don't you know! **CFJ**

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now and why it is important for you as a contractor to embrace these changes.

As well as alerting you to possible pitfalls, I'll be looking at how new products can help in this dynamic climate (and I don't mean global warming), such as pumping and spray systems, high temperature adhesives, low odour smoothing compounds, etc.

These things were not needed 30 years ago, but can have a major impact on today's world of

contract flooring.

I will also look at some of the important site considerations necessarily to help get the most out of new products and how manufacturers' guidelines and data sheets really are the key to a successful installation. Flooring may be static by its very nature, but the industry is now far from it and change is nothing but a good thing for all. **CFJ**

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