Technical article...

Getting sideways.

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When I mention getting sideways, I don't mean saving up for a track day to see just what the new work ute can do, or trying to drink your way through a month of rum rations during a long lunch. I mean the emerging trend of installing a floor across the short direction of a room instead of down the longest run as we were all taught during our apprenticeships.

> Now, while I curse what I assume is a misguided Block contestant for starting this new trend in what I call 'making Phil's life more challenging' design, I'm coming to realise that perhaps it's not ALL bad.

Don't get me wrong, it can cause all sorts of headaches – it can create excessive lateral expansion pressure where there was just no need for it; it can make peaking and cupping look worse than necessary; and it can make a room feel a bit shorter than it might be.

But, it can bring some positives to the table too – specifically with floating floors, floors that tend to suffer from peaking on end joints, and floors with pattern repeats.

Why these flooring types? Well let's look at the issue floating floors can face first.

Floating floors require larger room shapes and individual areas to be broken up into 'rafts'. This is known as compartmentalisation (and there is a great info sheet on it for the ATFA members reading this). Basically, it means that each area needs to be free to move independently from other areas. The diagram below explains how it works:

As you can see from the diagram, the flooring runs down the long hallway as we would all expect. But this puts the control joint across the timber grain. Now, while the joint between Raft 2 and Raft 3 is nicely aligned with the timber, if we only had the hallway leading into the main area, turning the boards sideways would help hide the control joint.



Compartmentalisation into three rafts

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Have a look at these two doorway transitions on a job Mint are currently installing. It's clear that a joint running with the grain is a bit less noticeable.



The second issue I mentioned where this can help is peaking on end joints.

When looking over ATFA inspections in prefinished products over the last 12 months, peaking on end joints seems to mainly pop up in two scenarios. These are adhesive-fixed engineered floors and hybrid floors over long runs.

Within these two categories, drop lock systems seem to feature a little more heavily, but that may be slightly misleading given a large proportion of products installed have a drop lock style end joint.

In any case, installing a floor across the widest width of the room will reduce the pressure on the end joint system and transfer it to the side joint. Now I know some of you will be thinking that this will just create peaking or cupping/crowning pressure, and to an extent you are correct. But if you look at a standard board of around 180mm wide and 1800mm long, the pressure per lineal mm of joint system is 1:100. That is, an end joint is only 180mm wide and is holding back 1800mm length of movement (1:10). A side joint is 1800mm wide and only holding back 180mm of movement (10:1). So, side joints are inherently more stable than end joints in product with lengthways movement.

The third benefit of putting a non-timber board sideways (vinyl-based products and laminates) is that pattern repeats can be more difficult to identify – especially in narrow areas like hallways or galley kitchens where each board can be used as two halves, effectively double the amount of pattern repeats.

But what does it look like? Well to be honest, I'm coming around. Don't get me wrong, I think I would still prefer the look of the floor running down the longest length and towards glancing light, but that's also most likely because that's what I'm used to (and I have solid timber floors without control joints!).

As you can see from the kitchen floor below, with shorter run this can actually look really great.



At then end of the day, it matters less what we like and more about what our clients want – and they are increasingly wanting to get a little sideways! The best thing we can do is to be aware of the issues and benefits this change can make and keep an open mind! You never know, you might find this emerging trend to your liking.