



**John Roberts on welded joints in imper vious materials**

## Motifs can be welded cold as well as hot

THERE was an article by Terry Wolfe in January CFJ, about a meeting he attended at Guys Hospital in London. Terry mentioned joints in a motif. I have inspected a number of hospitals with motifs set into the flooring; most were not welded, except for one which was welded only after the joints had failed.

Two motifs, which were not welded, had failed due to water ingress from a leaking pipe. The result was a poor appearance and unhygienic material. Fortunately, these motifs were in the corridors, not the wards. But nevertheless hygiene should be a hospital's priority.

I understand that the architect did not specify welding, apart from the main straight joints. This may be due to a lack of knowledge. People specifying projects such as these are often unaware of cold as well as hot welded joints.

Motifs usually look better if not welded with a thicker weld rod. Welding intricate motifs is a highly skilled operation which, even when carried out to a high standard, still affects the appearance.

Consideration must also be given to the cost of hot welding a motif which I suspect would not be entertained by the main contractor. It should be included in the cost of the installation. We often hear complaints about the cost of a big job, so main contractors often try to avoid paying for intricate welding.

I'm sure that most flooring contractors have experienced this type of scenario, but complaining will be to no avail, particularly in the present economic climate.

Cold (instead of hot) welding is possible for installing motifs. There are cold welding systems for some types of imper vious floorcoverings. Consult your material

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manufacturer for their preferences.

I have seen many failed hot welded joints whilst inspecting installations. The most common problem is a broken weld, creating gapping. This is usually caused by poor or no grooving. I also find joints that are lifting. Often the two edges are cut or just placed together, leaving a gap to accept the weld.

The problem with this method is that the weld rod only welds to the two top edges, reducing contact with the material by up to 75%. The joints normally break down when exposed to normal heat, foot traffic and cleaning. When the area is heated to normal temperature (usually higher than when installing the product), the material tends to move and create pressure at the weakest point, normally the gapped welded joint.

Even when the join is prepared correctly, the weld may be applied before the adhesive has cured which can take over 24 hours, if the conditions are too cold.

Welding on the same day often breaks down the adhesive along the join. This normally allows the join to peak, which not only looks poor but creates a wear along the join. I suggest leaving the join for as long as possible after installation to allow the adhesive to cure before welding. Avoid welding the same day at all costs!

I have even met a so-called expert, who says that he can overcome the problem by leaving the adhesive short of the join. This is supposed to stop it from oozing through the join, when heated. He is right; it does stop the

adhesive creeping through the join! But the join still lifts, as there is no adhesion along it.

There is always something new out there for trained and competent installers and those who wish to learn. I discovered a brilliant new tool from Mozart at Domotex last year. I demonstrated it at the Harrogate National Floor show on the Floorbrand / Roberts / TAOFS stand last September.

The tool is designed to enable the user to cut off the excess weld, leaving a small amount for cooling purposes. The guide plate is twisted around, revealing the cutting blade.

The tool is ergonomically designed to fit comfortably into the hand and has less exposed cutting edge (safety in mind) – the cutting edge is about the width of the weld rod.

When using it, you press down onto the finger plate until the blade touches the guides, after which you just push the tool forward over the weld.

An advantage is that the cutting edge lasts a lot longer, particularly on safety flooring, and you do not have to sharpen the edge as with previous spatulas. Replacement blades are moderately priced.

The time saving just on sharpening far outweighs the cost of the blades. But most importantly, it is easy to use with really good results.

More information on this tool from Floorbrand. (T: 01787 282201) **CFJ**

**John Roberts is founder of TAOFS and a prominent consultant in the flooring trade. TAOFS (The Academy of Flooring Skills) offers training in all types of floorcoverings. See course details on page 22**

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**David Gatfield on wall and ceiling systems**

## Contractors ought to think vertically

YOU may remember my mutterings last month about the advantages of incorporating wall cladding as part of a service to customers. As I pointed out for every floor there are normally four walls and as such, four times the area to get your teeth into – not to mention the extra money to be made.

Many flooring contractors are familiar with fixing flooring to walls and ceilings; it has been used for many years in clean rooms and other pharmaceutical situations to provide a hygienic and easily cleanable surface for

sensitive areas.

Some years ago I did the walls in a chip shop for an acquaintance. I never got paid as every time I called for the money he'd 'just gone out!' I did eat a lot of free fish and chips while I was waiting though.

Anyway, around 20 years ago, we started marketing a walling product more robust than standard flexible PVC for areas where a hygienic surface was needed with impact resistance.

Initially it was available in white, hence the name Whiterock), but today it comes in a variety of

colours. The product is available 2.5mm and 3mm thick. It can be fixed directly to different wall surfaces with a two-part PU adhesive. Also in the range are colour coded transition strips and jointing systems.

Corners are normally 'thermal bent' on site, in other words heated on a long heating element then bent to the required shape and angle.

After the adhesive is applied the preformed section is fixed in place. Hot welding on some of the range is also an option, as is mastic sealing. We also

manufacture the system in kit form with pre-bent angles.

Our 'Quickclad' range is thicker and more rigid and is fitted into a galvanised metal framework. It can be used where a wall surface is damp or friable and direct fixing is not an option.

Advantages include impact resistance and ease of fixing to a wide range of substrates with little or no preparation. Oh and we also do ceiling systems. **CFJ**

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