

Help and advice



Dr Eric Brown on when odour can create a stink

Smelly carpets should not to be sniffed at

FROM time to time we are faced with odour problems. That is to say the owner of a carpet complains that since their carpet was installed, he or she has developed headaches, symptoms of allergies, or simply feel nauseous. Such complaints are difficult to address.

Readers may remember the furore that arose in the US some years ago. An employer bought a new carpet for his offices and shortly afterwards complaints of nausea began to be reported by his staff.

Ultimately he decided that this was a problem related to the office itself and moved. Because the carpet was new, he took it with him to the new offices. When the complaints persisted the carpet was identified as the culprit.

At some stage the media got involved. My understanding is that an experiment was carried out that involved passing air at 50degC over the surface of the carpet and then directing the resultant air stream down a tube.

At various points down the tube, white mice were held captive in the air stream. (Hard to see such an experiment taking place these days!).

When they were released they staggered about a bit and some, if not all, died. In the eyes of the researcher this meant that the carpet was giving off toxic fumes.

Surprisingly she never conducted a control experiment. That is to say there was no experiment where mice were subjected to exposure to air at 50degC without the presence of the carpet.

Ultimately her work was discarded although it cost the carpet industry some considerable effort to do so since this had featured on TV.

There is no doubt that carpets give off VOCs (volatile organic compounds). Are we not all familiar with the 'new carpet smell' which, in my experience most people actually like.

There is a problem, however, that once a complaint of this nature arises, hysteria within the workforce seems to develop and suddenly everyone is complaining with the same symptoms.

I once had to go to a control room of a nationally known organisation that shall remain nameless. In this control room, a large screen on one wall showed the location of trains at various stages of their journey.

The screen dominated a large area of one wall and most of the rest of the room was in darkness.

After the control room became operational, staff started complaining of headaches and related malaise.

The carpet was blamed. I wonder what effect sitting in semi-darkness all day also had on the workers well-being?

The Carpet and Rug Institute in the US have now introduced a green labelling scheme for carpets that involves sampling from the manufacturer and measuring volatile organic compounds emitted by the carpet.

This is a fairly sophisticated way of testing. However, for local complaints where the first objective is to determine whether the odour is truly from the carpet or if it arises elsewhere, I usually advise sealing an off-cut in a polythene bag, opening it a week later – and taking a good sniff! **CFJ**

Eric Brown writes manuals on investigating carpet complaints.

■ www.cleaningresearch.org

Further information on
■ T: 01943 462389



David Gatfield on resin flooring

Resin flooring an all-round performer

WHEN most customers think of flooring, they think of pre-manufactured flooring delivered in rolls or boxes, be it vinyl, rubber or carpet.

Resin flooring, however, offers unrivalled versatility and all round performance to suit many environments that cannot be matched by such 'off the peg' floorcoverings. This versatility has been pinpointed as one of the main reasons for the growth in the resins market – now estimated to be worth £43m to £45m, split equally between the epoxy and polyurethane markets.

Although bespoke options are available with other products, resins are manufactured specifically for each individual situation, meaning that a vast array of colours, textures and finishes can be achieved.

The main benefit of a resin floor is that, when professionally laid, it is locked both mechanically and chemically to the underlying substrate, becoming an integral part of the building structure and giving a hardwearing, long lasting surface.

Apart from incorporating necessarily structural movement joints it is seamless, providing a smooth easy to clean surface with no joints where dirt can build up.

You can install a resin floor almost anywhere that you would look to install either a vinyl or carpet. Systems can be tailored to customers' individual requirements and budget. Thicknesses range from 70 microns per coat on a two coat application for use as a sealer/dust proof on walls or floors in general commercial and light industrial situations, right up to 9mm for the heaviest duty resin screed you're likely to find anywhere, and every system you can think of in between.

There are epoxy or polyurethane (PU) resins to cover eventualities from self priming coatings to seal a warehouse floor, to installations of heavy duty screed systems in aircraft hangars housing commercial aircraft.

The basic difference between the two resin types is that the PUs are slightly more flexible and a lot more chemically resistant,

installation times are a bit quicker than with the epoxies too, which means that shutdown times are kept to an absolute minimum.

Subfloor preparation is very important and if a resin floor goes badly wrong it's often due to insufficient or ineffective preparation prior to the primer being applied.

Primers are designed to seal and form a chemical and/or mechanical bond to the subfloor and if the prep is right the primer and subsequent flooring system will become an integral part of the subfloor and give many years trouble free service.

Resin systems can also be used to form corporate logos if required although it's fair to say that a high level of skill with a trowel would be needed before you tackle a coat of arms!

Seriously though, resin flooring systems are invaluable where standard contemporary floor coverings are not man enough for the job and their inclusion into our portfolio of products has greatly increased our area of operation within heavy industry and beyond.

Another driver behind the growth of the resin flooring market is its increasing appeal for a wide range of industries. Although resin floors started life in the industrial sector, they are now being widely installed in a range of buildings from hospitals to schools – offering design, durability and performance.

Choices range from the textured to very smooth, from plain to patterned (great for hiding scuff marks) and from matt to highly reflective.

A wide range of business sectors, other than industrial, are now starting to realise the huge benefits of installing resin flooring.

Although 'general industry' still holds a large proportion of the market, it is now surpassed by the food sector and closely followed by the drink industry.

Other sectors using resins include pharmaceuticals and cosmetic. **CFJ**

David Gatfield is Altro's northern region technical services manager

Further information on
■ T: 01462 489405