

Pioneering hospital refurb brings wall-to-wall benefits

St Richard's Hospital, in Chichester, has become the first hospital in the UK to install an advanced wall covering - manufactured from woven glass.

The pioneering move will save the Royal West Sussex NHS Trust thousands of pounds in on-going maintenance bills and significantly reduce the risk of hospital infections like MRSA and C-Diff.

The textile glass wall covering, which is hung like wallpaper, is largely unknown in the UK but is by far the most widely used product in countries such as Holland and Norway, which both have a zero-tolerance approach to hospital infections.

In Germany, it has been used for more than 20 years and is installed in more than 95% of hospitals there, even in the most sensitive areas like operating theatres and intensive care units.

The decision by St Richard's, as part of its three-year refurbishment programme, could set a trend that would save the UK taxpayer millions of pounds if replicated across other NHS Trusts and private hospitals.

More importantly, because the glass wall covering is anti-static, impermeable and has fully sealed "joints" when painted, it can withstand the most aggressive of cleaning regimes.

This fact is particularly significant in light of Gordon Brown's recent pledge to conduct a "deep clean" of hospitals as part of the fight against superbugs.

The wall covering, known across Europe as Glass Déco Fabric, is manufactured in Germany by Vitrulan, the world's leading supplier of textile glass wall coverings.

Michael Wadey, development officer at St Richard's Hospital, was the catalyst behind the decision to use Vitrulan. It followed a visit by him to the University Hospital in Heidelberg, Germany.

In 1987, Heidelberg was one of the first in the world to install Glass Déco Fabrics, and because of its extreme durability, it is only now – 20 years later - that they are carrying out their first redecoration, which in many areas means just a single coat of paint.

Mr Wadey said: "If I ever had any doubts about the Vitrulan product, I certainly didn't have any after visiting Heidelberg. It is still hard to believe that they have not had to redecorate once in the last 20 years – it still looks as good as new."

The St Richard's refurbishment will eventually include the entire redecoration of every ward, corridor, reception area, operating theatre and consulting room on the 437-bed premises. The new wall covering will replace the traditional method of painting directly onto plaster walls.

So what is Glass Déco Fabric?

The product is a textured wall covering that comes in one-metre-wide rolls, similar to traditional wallpaper, and is hung in a similar fashion to traditional wallpaper. But that is where the similarities with traditional wallpaper end.

For a start, Glass Déco Fabric is extremely impact resistant, meaning it would take a great amount of force to permanently mark or damage its surface. This is hugely significant in a hospital environment, where the walls take a regular barrage of blows from people, trolleys and other heavy equipment.

The Glass Déco Fabric, when coated with the correct paint, is extremely easy to clean. The seams between each section of wall covering are sealed and almost invisible, both due to the paint and the fact that glass does not shrink or expand when wet or when exposed to extreme temperatures. So the factory-cut edges butt together perfectly. A damaged plaster wall, on the other hand, is a perfect breeding ground for germs and bacteria – as are the grouted joints of ceramic tiles due to the organic starch content.

Because the glass fabric is so stable, it can withstand regular, aggressive cleaning without leading to any surface damage to the wall covering whatsoever. This is not the case with basic painted wall surfaces.

And then there's the cost.

Mr Wadey explained: "While the initial outlay is greater than traditional decoration costs, the on-going payback is potentially enormous.

"Painting plaster walls in the old way would cost us in the region of £20,000 for the main hospital corridors, but we would be looking at redecoration every 18 months or two years. Using the Glass Déco Fabric costs us £45,000 for the same area, but that will last for 10-plus years without the need to redecorate. Even if we don't have to touch it for five years, that's still a bonus – and that really is a worst-case scenario. The figures speak for themselves."



“We’ve done a 10-year plan of where we want to go with St Richard’s Hospital. Due to my non-NHS background, I’ve always worked on long-term plans. In UK hospitals, we’ve simply got to start looking beyond the normal two or three-year plans.

“Here in the UK we are only 20 miles across the water from our European colleagues, yet we seem to have this ostrich mentality when it comes to trying something new, which is quite sad.”

Ever since the refurbishment of the first ward at St Richard’s – Fishbourne Ward – was completed, there have been nothing but positive comments from staff and patients alike about the new glass wall covering.

“There’s no issue with marking or damage on the walls. Marks like coffee stains will just wipe off, but with the old walls they would stay there unless you added a new coat of paint,” said Mr Wadey.

“The cleaners are saying that the improvement to their job has been incredible. It makes their lives much easier. The sheer robustness of the glass fabric combined with the correct paint coating means with the new micro-fibre cleaning system, the walls can be wiped down without damaging the wall surfaces, which they couldn’t previously. This can only help our battle in the UK to control hospital infections.”

The pioneering approach by St Richard’s coincides with on-going media reports of a worsening crisis in hospital-related infections in the UK. In September, Prime Minister Gordon Brown ordered a “deep clean” of hospitals to tackle the spread of infections like MRSA and Clostridium difficile. And last month (October), Health Secretary Alan Johnson announced a new package of measures to tackle the problem.

Chris Sheppard, UK sales manager for Vitrulan, said UK hospitals should be taking every proactive step possible to reduce the risk of infection – not just the most obvious ones, and not merely reactive steps once infection has been identified.

“Most of the reports into hospital cleanliness refer to matrons or hand-cleaning or improving the isolation process within hospitals once an infection is identified,” he said. “But Walls have been largely ignored.

“Wall hygiene in hospitals is extremely important. It is a fact that most infections are passed on by hand contact, so by limiting the chances of germs accumulating on the walls you are also limiting the chances of germs being passed from person to person.”

He added: “Gordon Brown would find it impossible to conduct any ‘deep cleaning’ of hospital wall surfaces when the substrate you are cleaning is not impermeable – like damaged plaster board, walls that show signs of cracks or poorly painted substrates. Germs simply have nowhere to go and nowhere to breed on a sealed glass wall covering.”

St Richard’s has reinforced its efforts at tackling germs with the installation of automatic hands-free taps in bathroom areas and more alcohol-based “soap” dispensers.

Mr Wadey also intends to replace all ceramic tiles in shower and bathroom areas with Glass Déco Fabric rather than stick to his original plan of merely coating the tiles in the same anti-bacterial Biosan paint as is being used to coat the glass fabric.

The Vitrulan wall covering being installed throughout St Richard’s is called Aqua Plus Pigment 633. The rolls already incorporate a paint coating, so the contractors at St Richard’s need to apply only two further coats of the Biosan paint to achieve the required durability, hygienic and aesthetic finish. The innovative 633 fabric is also manufactured and supplied with pre-applied adhesive, which becomes activated when moistened with water.

The easy application procedure has particularly aided St Richard’s, as contractors need to work alongside the busy day-to-day traffic of hospital corridors. There’s no need to transport or store buckets of paste on site, and because the glass fabric is much stronger

and more stable than traditional wallpaper, it is much quicker and easier to hang.

The results are obvious at St Richard’s. It is even believed that because the Glass Déco Fabric provides a more attractive and expensive-looking finish than painted plaster walls, it also generates a psychological benefit for staff and patients. The theory is that people are less likely to abuse the décor if it looks good – thus providing another knock-on benefit to the already reduced maintenance cycle.

Mr Wadey added: “For a long time, I’ve not been happy with the finishing on the old walls. The glass fabric is 1,000 times better because it’s so robust.

“We needed to find something that covered the walls but was also robust and washable. With the Glass Déco Fabric we’ve also got something that really enhances the finish of the walls.

“There are certain aspects of working culture and patient culture we need to address in the UK, but the concept of this wall covering being able to lift people, so that they actually comment on how much better it looks, means the idea of people respecting their hospital environment much more is not at all unrealistic.”

Mr Wadey now believes it is only a matter of time before the rest of the UK’s hospitals start to recognise the huge impact that a simple choice of wall covering can bring.



