

## **KEIM Mineral Paints – Technical Digest**

Tacking Hospital Infections with Photocatalytic Paints

## 1. The Problem

Hospitals and other health care environments are subject to stringent cleaning regimes to ensure that infections are not transmitted between patients, visitors and staff. Cleaning needs to be frequent and thorough, to remove bacteria which might otherwise propagate on a variety of different types of hard surfaces.

Even with the most effective cleaning procedures, bacteria still poses a threat, especially to people with supressed immune systems. Further solutions and preventative measures are available to reduce and prevent the spread of bacteria and infection.

## 2. The Solution

Part of the solution can be the use of photocatalytic paints. Photocatalytic paints, such as Keim Ecosil-ME contain a light activated catalyst. This catalyst, in addition to improving air quality and removing airborne pollutants\*, has the ability to degrade and destroy both living and dead bacteria cells on the painted surface. In independent testing, living bacteria was reduced by an average of 99% and dead cells were completely removed (MICOR Certificate to Test Report 11072008-1) by the use of Keim Ecosil-ME.

Keim Ecosil-ME works by using, both natural and artificial light, and even in darkness has some effect on bacteria, making it an ideal decorative choice. The increasing introduction of UV lighting in hospitals, with its own well documented support in helping to control bacteria levels, provides an excellent light source to increase the photocatalytic reaction of the catalyst on the paint surface.

Keim Ecosil-ME can be applied onto any mineral surface (such as plaster, plasterboard, concrete and brickwork) and onto surfaces painted in existing paint coatings. In addition to the benefits outlined above, Keim Ecosil-ME helps to increase light reflectivity, remains completely colourfast, is resistant to mould and fungal growth and has anti-condensation properties.

\*For further information please see 'Sensitive Environments for Sensitive People' and 'Photocatalytic Reduction of Formaldehyde and Acetaldehyde Gases'.

For further information regarding the all of features and benefits of Keim Mineral Paints please contact our sales office - sales@keimpaints.co.uk or 01952 231250.

