Seamless wallcoverings – resistant to disinfectants

Deutsches Herzzentrum Berlin
MRBS Architekten und Ingenieure, Berlin

The objective when planning and designing a wall system for sensitive hygienic areas and laboratories in hospitals is to obtain one that exhibits a marked resistance to disinfectants – an important issue during the planning and designing of these rooms. Furthermore one has to consider the eventual necessity of increasing the load carrying capacity if modern building materials such as plasterboards are to be used. The following system results in matching the objective almost perfectly.

ROHDE KG developed a unique wall covering system consisting of two basic keystones. High quality proven glass fibre textiles coupled with recently developed innovative PUR coatings in DD quality, chemically cross-linked with a suitable hardener. The combination of the two leads to a hygienic seamless wall, which avoids incorporation of biocides in the coatings. There is the danger that dispersions and latex paints can build a building ground for bacteria due to their plasticity.

All the DD-PUR paint coverings - Finish 435 (semi gloss) or Finish 434 (semi matt) - are solvent free and miscible with water. A base coat is taken for sealing eventual pinholes followed by applying two topcoats. This results in a wallcovering, which shows extraordinarily high chemical and mechanical resistance.

Tests are conducted at the Material Research and Examination Institute for the Building and Construction Industry Leipzig e. V. to check the resistance of coatings to those disinfectants most frequently used in German hospitals and high-risk laboratories. The EN ISO 2812-1 method was adopted. The Institute undertook these tests with the coating and demonstrated convincingly that it withstood the rigours of being cleaned with the selected disinfectants.

A further criterion on which a coating is judged is its UV light resistance. The “Deutsches Herzzentrum” (German Cardiac Centre) conducted tests in Berlin over an extensive period and the positive outcomes resulted in the system being chosen for the intensive care unit (ICU) building extension. The system is also resistant to blood stains.

Helmholtz Centre for Infection Research, Braunschweig
Architects Doranth Post, Munich

The Safety Laboratory of Charité Max-Planck-Institute in Berlin – conducting also tests on genetically modified bacteria – and classified as holding Containment Level 3 Status – have selected the TEXTILES GLASGEWEBE system.

TEXTILES GLASGEWEBE systems meet the most stringent international wallcovering fire regulations and conform to BS476 part 6 fire propagation and part 7 class 1 surface spread of flames, which combines to give them a class “0” certification.

The fields of application cover all high risk sectors: This extends from operating theatres, recovery and ICU wards, to those involving nuclear medicine, pathology and laboratories with ultra-clean air systems. Furthermore, the coating system is easy to apply, saves considerable site-time and installation costs and is available in almost every conceivable colour.

Further information can be obtained from www.rohde-germany.com or mail@rohde-germany.com