

GERMAN CANCER RESEARCH CENTRE (DKFZ) IN HEIDELBERG

Professional installation of resilient floorings in this internationally renowned science complex

The German Cancer Research Centre (DKFZ) in Heidelberg is the largest bio-medical research institute in Germany, where more than 1,000 research scientists study the mechanisms of the illness, identifies its risk factors and develop new strategies for its prevention, diagnosis and therapy. Research work at such a high level as is carried out here also requires working surroundings which are in excellent condition.

After more than thirty years of intense use the building, built in the 1970's, was no longer

in condition to guarantee the standards expected of a modern research centre. In order to carry out their internationally-renowned research work, the management decided that the structure of the 8-storey building and the documentation centre (which includes records rooms, offices and a series of areas generally required for archiving documentation) needed to be completely renewed. The work was financed through a contribution of 70 million Euros from the German Federal Ministry for Education and Research and around 7 million Euros from the Office for Science, Research and Art of the Federal State of Baden-Württemberg, as well as a donation from the Max Planck Society for the Advancement of Science.

The first step was to completely demolish and redesign the 130 m high east wing, while all



the laboratory activities continued in the other half of the complex. After two years of work, the research scientists in the centre were able to be transferred into new, bright, modern offices so that work on the west wing could start, which took another three years. Three more floors were also added to the three existing floors of the documentation building. The client insisted that the interior of the building should be designed in such a way that it helped optimise the researchers work and made communication easier. The areas dedicated to the laboratories, for example, benefitted in particular from the new design module: the building, which originally had 3 sections, was redesigned to have just two. This allowed more spacious laboratories to be created which were more suited to research work. A glass wall divides the office area from the laboratories area, allowing natural light to penetrate into the laboratories. The new administration and documentation



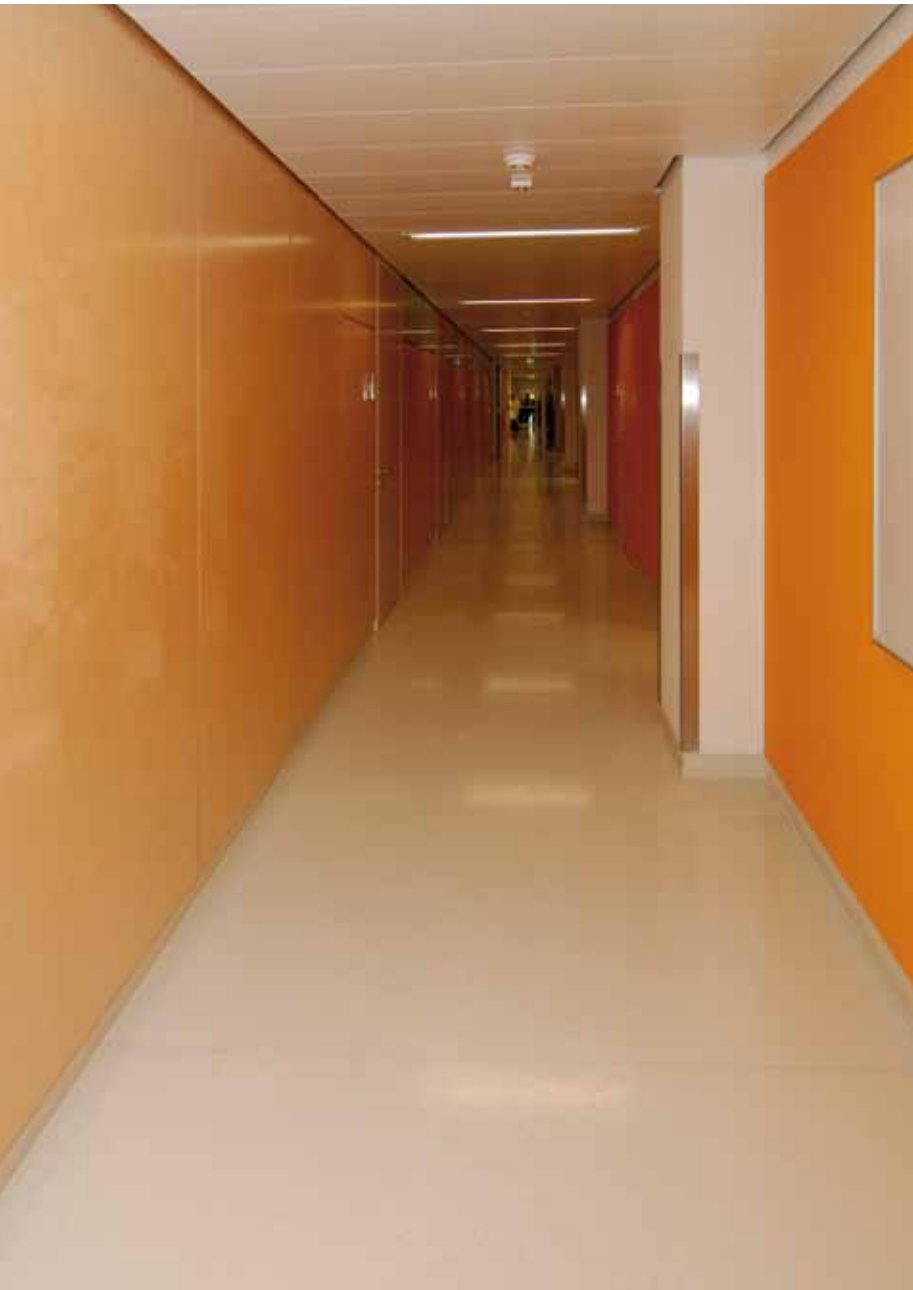
areas were designed around criteria of flexibility, transparency and efficiency. For example, in the documentation centre, the administration areas have been laid out around a communal area illuminated by natural light passing through a skylight. Thanks to the use of sliding doors, this area may also be used as a reception area for visitors and as a communal area for those who work in the centre. Both buildings have meeting rooms, a library and a small kitchen on each floor. The ground floor entrance is particularly spacious and bright, offering lovely views of the internal courtyard.

The Installation of Resilient Floorings: a Masterpiece in Renovation

Because of the specific requirements of the client and the final use of the centre, resilient floor coverings were chosen for the renovated rooms. Since the existing flooring had been very poorly installed, with poorly prepared substrates and mistakes made when bonding the flooring, the entire structure of the floors had to be renovated, and what is more, in a very limited amount of time. The company contracted with installing the flooring, Müller & Olsen from Neuweiler (Germany), worked in close contact with technicians from Mapei GmbH, one of the Group's German subsidiaries, which was involved in the project by

On the left. In the laboratories in the east wing, new conductive floorings were installed using ULTRABOND ECO V4 CONDUCTIVE (which has now been replaced on the market by ULTRABOND ECO V4 SP CONDUCTIVE).

Above. The German Cancer Research Centre (DKFZ) in Heidelberg, which was recently renovated, is the largest biomedical research institute in Germany.



Below. The Nora synthetic rubber floorings in the corridors in the east wing were installed with ULTRABOND ECO V4 SP after preparing the substrates with PRIMER MF, ULTRAPLAN MAXI and ULTRAPLAN.

supplying materials and technical assistance on the building site.

Installation work started in 2007 in the east wing and required the use of chemical products which guaranteed rapid work phases without compromising the quality of the end result.

Which is exactly why a highly technological, highly flexible system of Mapei products was chosen. The system comprised the use of PRIMER MF epoxy primer, ULTRAPLAN MAXI and ULTRAPLAN smoothing and levelling compounds and ULTRABOND ECO V4 SP adhesive to install the “Norament 926 grano” rubber stairtreads supplied by Nora on the stairs and “Noraplan mega” synthetic rubber floorings in the corridors.

ULTRABOND ECO V4 CONDUCTIVE adhe-

IN THE SPOTLIGHT

ULTRABOND ECO V4 SP CONDUCTIVE

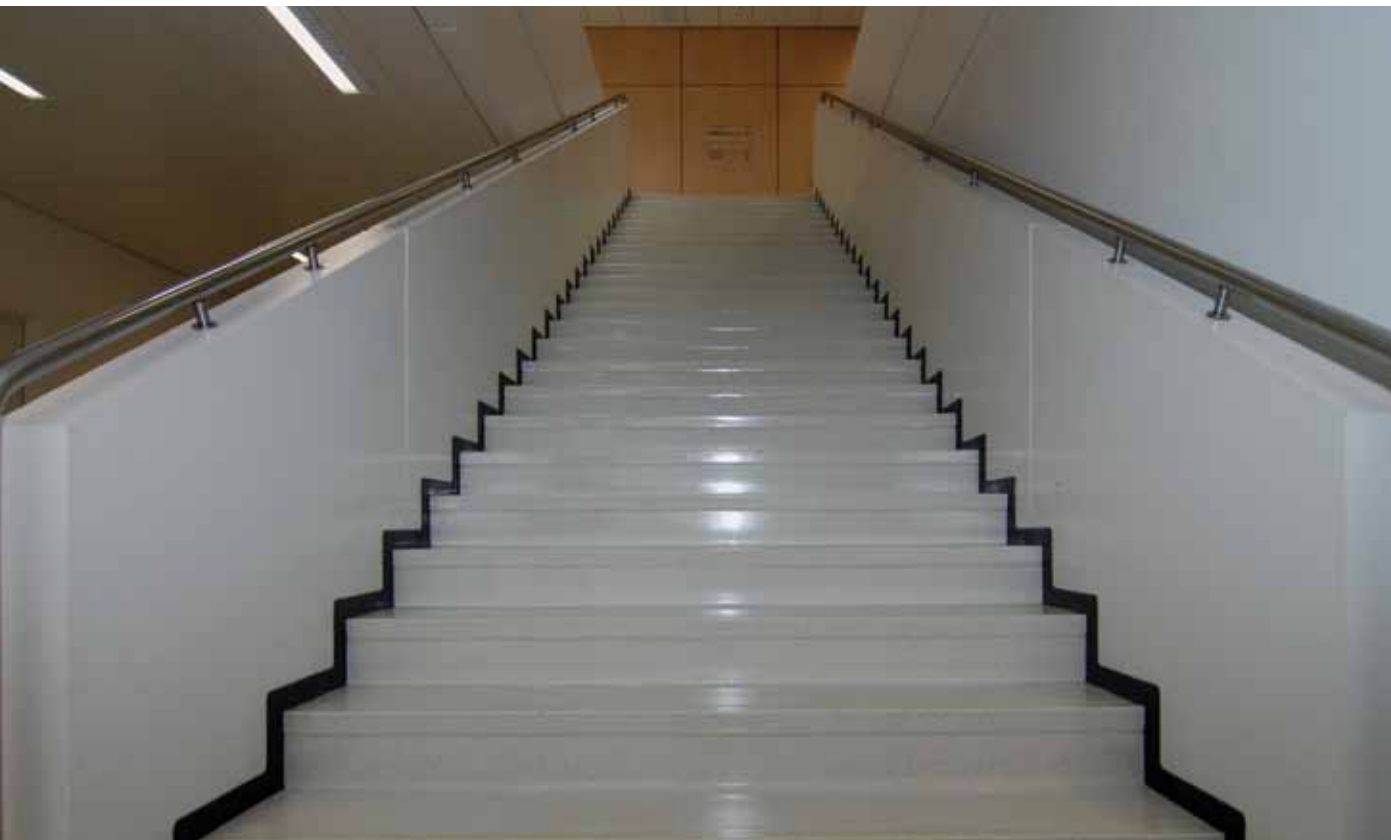
It is a synthetic resin based adhesive in water dispersion with special fibres that ensure electrical conductivity, formulated in an easily trowelable light grey paste. ULTRABOND ECO V4 SP CONDUCTIVE is the evolution of ULTRABOND ECO V4 CONDUCTIVE. It is used for bonding conductive vinyl floorings in all areas where discharges of static electricity could cause explosions or disturb electrical and electronic equipment, for conductive needlepunch and carpet floorings and on all absorbent and moisture-stable substrates normally used in building.

It can contribute up to **3 points** to obtain the **LEED** certification.



sive (which has now been replaced on the market by ULTRABOND ECO V4 SP CONDUCTIVE), on the other hand, was used to install conductive flooring in the laboratories. During the second phase of the project, which commenced in December 2008 and was completed in 2011, a further 11,000 m² of “Noraplan mega” synthetic rubber floorings were installed in the offices and in the documentation centre in the west wing using ULTRABOND ECO V4 SP adhesive after preparing the substrates with ULTRAPLAN MAXI, PRIMER MF and ULTRAPLAN.

Thanks to this renovation work, the German Cancer Research Centre in Heidelberg now has a building decorated in pleasant colours that help visitors find their way around the complex made from innovative materials. In 2012, the renovation project received the prestigious “Hugo-Häring” on the federal state level award in recognition of its architectural excellence from the regional section of the German Association of Architects (Landsverband des Bund Deutscher Architekten).



Above. ULTRABOND ECO V4 SP was used to install the Nora rubber floorings on the stairs in the east wing.

On the left. The substrates for the rubber floorings were levelled off prior to installation with ULTRAPLAN and ULTRAPLAN MAXI.

On the right. Installation of skirtings using ULTRABOND V4 SP.

TECHNICAL DATA

German Cancer Research Centre (DKFZ), Heidelberg (Germany)

Period of Construction: 1970's

Designers: Heinle, Wischer und Partner, Stuttgart (Germany)

Period of the Intervention: 2007-2011

Intervention by Mapei: supplying products for the preparation of substrates and the installation of resilient flooring

Designer: DKFZ Building Projects Department

Clients: German Federal Ministry for Education and Research; Baden-Württemberg Office for Science, Research and the Arts and Max Planck Society for the Advancement of Science

Laid Materials: rubber floorings by Nora systems GmbH and conductive floorings

Laying Company: Müller & Olsen from Neuweiler (Germany)

Mapei Co-ordinators: Günther Hermann and Bernd Schulte, Mapei GmbH (Germany)

MAPEI PRODUCTS

Preparing the substrates: Primer MF, Ultraplan, Ultraplan Maxi

Laying resilient flooring: Ultrabond Eco V4 SP and Ultrabond Eco V4 Conductive (the product has now been replaced on the market by Ultrabond Eco V4 SP Conductive)

For further information see the websites www.mapei.com and www.mapei.de