



# VICTORIAN COMPREHENSIVE CANCER CENTRE MELBOURNE

VINYL AND TEXTILE WALL AND FLOOR COVERINGS APPLIED IN A NEW HOSPITAL  
COMPLEX SPECIALISING IN THE RESEARCH AND TREATMENT OF TUMOURS

Located in the biomedical district of Parkville, a suburb of Melbourne, the Victorian Comprehensive Cancer Centre (VCCC) was inaugurated in July last year.

The hospital complex has become Australia's leading oncology centre for the research and treatment of tumours and for the quality of training for its medical and paramedical personnel, thanks also to the cutting-edge equipment available and the hospital's research laboratories.

The structure extends over an area of 130,000 m<sup>2</sup> and has thirteen floors above ground level and a further four floors below ground level reserved for parking.

Although the VCCC is separated from the Royal Melbourne Hospital by a busy main road, the two hospitals are connected by three covered bridges so that patients, visitors and medical personnel can move freely between the two structures.

## **A HOSPITAL DESIGNED FOR RESEARCH AND TREATMENT**

Something of a novelty in Australian hospital architecture is the large central atrium, known as the "Welcome Lounge". Illuminated by natural light, it stands at the centre of the structure and makes finding your way and moving around inside the hospital that much easier.

The complex has 160 beds for long-term patients, 110 beds

for the day hospitals and chemotherapy, 8 operating theatres, 28 treatment rooms for the doctors and nurses, 8 radiotherapy bunkers and 97 doctors' studios.

Plenty of space has also been set aside for teaching and training classrooms, as well as areas for seminars and meetings and a large conference hall.

The idea behind the VCCC was that it would become Australia's leading centre for the research and treatment of tumours: which is why it also has 10 research laboratories, where around 600 research scientists can carry out their work. The wet laboratories (specially designed structures where chemical substances, medicines and biological material can be tested in safety with no risk of biological contamination) are located on the upper floors of the structure. All the research areas were purpose-designed so that they could be reconfigured in the future and used for other purposes.

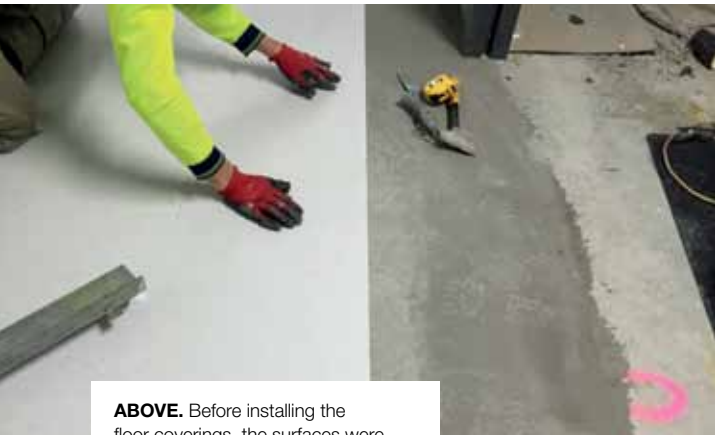
## **WELLBEING FOR THE PATIENTS AND SAFETY FOR THE HOSPITAL STAFF**

The directors and designers of the hospital specified the application of products which were not only rapid, but that also guaranteed the wellbeing of patients and the complete safety of the medical staff; which is why Mapei Technical Services proposed, where possible, a series of products with excel-



**TO THE LEFT.** A view of the exterior of the Victorian Comprehensive Cancer Centre

**ON THIS PAGE.** The vinyl floor coverings were installed with ULTRABOND ECO V4 SP multi-purpose adhesive in water dispersion.



**ABOVE.** Before installing the floor coverings, the surfaces were levelled with ULTRAPLAN. The vinyl floor coverings were installed with ULTRABOND ECO V4 SP.

lent performance characteristics that also have the capacity to guarantee a low impact on the environment and on the health of the workers using the products and the end users of the structure.

The intervention commenced by applying PLANISEAL EMB on all the concrete substrates, a two-component waterproofing primer, produced in the USA and distributed in Australia, that forms a vapour barrier and reduces the transmission of moisture.

The substrates (a total surface area of around 100,000 m<sup>2</sup>) were then treated with ECO PRIM T, solvent-free acrylic primer with very low emission of VOC. To create a perfectly flat surface before bonding the selected coverings, ULTRAPLAN

**IN THE SPOTLIGHT**

**ULTRABOND ECO V4 SP**

Multi-purpose, acrylic adhesive in water dispersion, with very low emission of volatile organic compounds (VOC) for bonding vinyl, rubber, polyolefin, carpets and needle-punch woven floorings on all common substrates of the building market. It has a particularly long open time. It can be used for static and dynamic loads, including intense loads, in residential, commercial and industrial environment. It can contribute up to **3 points** to obtain the **LEED** certification.



self-levelling, ultra rapid-hardening smoothing and levelling compound was applied on the substrates in layers from 1 to 10 mm thick.

In the bathrooms and in the areas with problems of damp (around 60,000 m<sup>2</sup>), the surfaces were also waterproofed with MAPEGUM WPS quick-drying, elastic liquid membrane before bonding the coverings. To provide extra strength, MAPETEX SEL non-woven polypropylene fabric was applied between each coat of MAPEGUM WPS.

In the areas around the drains, the substrates were initially primed with ECO PRIM T and then levelled off with UC LEV-ELLER quick-hardening skimming compound, produced and distributed exclusively in Australia, ideal for surfaces that require a high level of resistance to heavy loads and high volumes of traffic.

The intervention was completed by skimming all the uneven surfaces with LATEXPLAN TRADE smoothing compound with high compressive strength, suitable for substrates subjected to high volumes of traffic, and with PLANIPREP SC high-performance, fibre-reinforced skimming compound.

Once the substrates had dried out, the flooring company installed around 60,000 m<sup>2</sup> of vinyl flooring using ULTRABOND ECO V4 SP installation system - around 2,000 m<sup>2</sup> of vinyl flooring (Gertflor Taralay) was applied to the walls using ROLL-COLL acrylic adhesive in water dispersion.

To bond around 40,000 m<sup>2</sup> of self-laying carpet tiles (Interface Carpet Tiles), the product recommended was ULTRABOND ECO TACK tackifier in water dispersion for carpet tiles with very low emission of volatile organic compounds (VOC).

**TECHNICAL DATA**

**Victorian Comprehensive Cancer Centre (VCCC)**, Melbourne (Australia)

**Period of Construction:** 2011-2015

**Year of the Mapei Intervention:** 2015

**Intervention by Mapei:** supplying products for preparing, waterproofing and leveling substrates, for the installation of vinyl walls and floors and self-laying textile tiles

**Project:** Silver Thomas Hanley, DesignInc and McBride, Charles Ryan

**Client:** Victorian State Government

**Works Direction:** Plenary Health

**Contractor:** Floor91

**Installer Company:** Grocon

**Mapei Co-Ordinator:** Scott Coultts

(Mapei Australia Pty Ltd)

**MAPEI PRODUCTS**

**Substrates preparation:** Eco Prim T, Latexplan Trade\*, Nivorapid, Planiprep SC\*, Planiseal EMB\*, UC Leveller\*, Ultraplan

**Waterproofing:** Mapegum WPS,

Mapetex Sel

**Installation of vinyl coverings:** Ultrabond Eco V4 SP, Rollcoll

**Installation of textile coverings:** Ultrabond Eco Tack

**Products for sealing:** Mapeflex PU 45

\* These products are distributed on the Australian market by Mapei Australia Pty Ltd

For further information on the products see [www.mapei.co.au](http://www.mapei.co.au) and [www.mapei.com](http://www.mapei.com)