



INSTALLER:

Danrae Building Services Pty. Ltd

BUILDER:

Campus Living Villages Pty Ltd

ARCHITECT:

WATPAC Design & Construct

CHALLENGES:

- A waterproof membrane for a 1500 m² (16,146 ft²) roof that was to support more than 20,000 m² (706,293 ft²) of soil and extensive planting
- Structure spanned the car park of new student accommodation complex and was a significant element in making this predominantly concrete area environmentally green



PROBLEMS:

A new sustainable roof was being built over the UNSW Student Accommodation Car park Rooftop. A major part of the installation required the use of a roofing membrane that would be completely impervious to water and root penetration. The integrity of the product was critical, as any leaks would prove extremely costly and labour intensive to repair.

ARDEX Australia worked with WATPAC Design & Construct to find a product solution.



SOLUTION:

Ardex recommended Ardex **WPM 615 TPO** be specified as a flexible Thermoplastic PolyOlefin roofing membrane made from ethylene propylene rubber and polypropylene matrix, reinforced with a polyester weft. **TPO** was designed to be hot-air welded at the seams ensuring a fast installation. The product is safe and easy to use, since there is no open flame.

These properties and assurances from Ardex Australia were key factors in WATPAC's specification of the product for the UNSW project.

TPO was the perfect product to build the sustainable roof because of its own sustainable properties.

When manufactured, **TPO** uses a lower carbon footprint than most similar systems and can easily be recycled. **TPO** is also chlorine-free, and because of its formulation and installation design, the product yields no emissions harmful to the environment. WATPAC has expressed its satisfaction with Ardex. **TPO** and their desire to use it again. UNSW won awards in sustainability and multi-unit housing at the Randwick City Council Urban Design Awards and High Density Development at the UDIA NSW Excellence Awards for this project.

PROJECT REFERENCE - WATERPROOFING

