





## RMIT MELBOURNE TERRACE REFURBISHMENT

The refurbishment for RMIT Melbourne's terrace involved the rectification of a large leaking terrace area which formed part of a larger refurbishment project on the site.



Existing liquid membrane applied over tiles prior to works commencing.

The existing terrace was covered with a structural slab, screed, waterproofing membrane and tiles when originally constructed. A liquid membrane was also applied to the top of the tiles in an attempt to remediate the terrace due to a number of leaks that had developed over time.

Previous remedial works failed to take into account the water/moisture entrapped below the tiles and as a consequence the membrane applied to the tiles failed to remain watertight due to the effects of thermally induced heat gain and movement, causing vapour blistering and the subsequent rupturing and tearing of the waterproof coating applied.

It should be noted this is not a failure of the coating, rather but a lack of understanding of the effects of retained moisture and its future impact on any applied coating.

After our investigation and consultation with the client, Australian Waterproofing Consultants recommended that a new sheet membrane be applied over the existing failed waterproof coating. This new sheet membrane was loose laid over the terrace and mechanically fastened with the sheet overlaps and perimeter details being fully bonded and finished with a liquid waterproof membrane that is compatible with the structure and sheet membrane used.

This method of installation allows for any moisture retained beneath the waterproof membrane to freely dissipate. Any build-up of vapor pressure would be relieved without affecting the integrity or watertightness of the new waterproof membrane installation.

In order to protect the waterproof membrane pavers and artificial turf were set on pedestals to create an air gap between the waterproof membrane and wearing surface. This allows the free drainage of surface water and affords protection to the membrane. An added benefit to this method of installation is that the waterproof membrane can be easily inspected at any time.



New waterproofing membrane with pedestals and pavers being installed.



Finished installation featuring pavers and artificial turf on pedestals which can easily be lifted for maintenance inspection of the waterproof membrane and cleaning.

