

Film Type: OptiTune 22

Southbank, Victoria | Riverside Quay

Building owners seek to ease HVAC load and reduce tenant discomfort

П Tenants at Mirvac's Riverside Quay building had notified the Mirvac Facility Management team in regards to glare they were experiencing during winter, as well as hot spots during summer on the north and north west façade.

Mirvac approached Hanita Pacific to see if Solar Film installation would resolve both the glare and heat gain issues. Together, Mirvac and Hanita analysed the different films available, and selected one that would provide the best outcome.

Hanita worked alongside the building management team at Riverside Quay around office hours, with the utmost attention to work health & safety requirements, quality of install and with the minimum disruption to tenants.

The Mirvac Facility Management team is happy to report that after the installation, not only have the glare and hot spots been reduced, but there has been an improvement in the HVAC plant energy efficiency due to the reduction in solar heat gain through the glass façade.

Mirvac is extremely satisfied with Hanita Pacific, and would most certainly consider them again for future projects.

- Mirvac Group

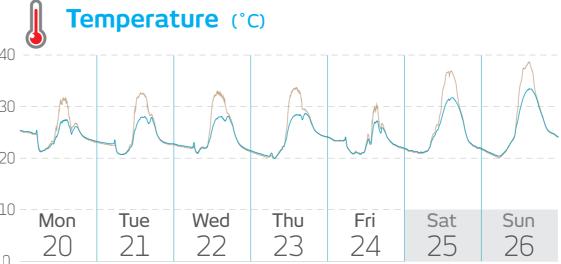


Temperature Logging Results

January 2014



Daily Solar Energy (kWh m⁻²) **Temperature** (°C)



Project Task

Mirvac Real Estate, owners of the three Riverside Ouav buildings, were experiencing significant heat related complaints from tenants in each of the buildings. From October through to April, sun shining through the northern end of the building would uncomfortably heat up tenants through the large glazed façades. This in turn caused the older design HVAC system to over-compensate and over-cool tenants in the southern end of the building. Recognising that a significant heat load problem existed, Mirvac contacted Hanita Pacific who provided their expert opinion on glazing upgrades.

Solution

After detailed analysis of the existing glazing, Hanita Pacific recommended the use of its high-performance, dual reflective OptiTune 22 film to control the heat load whilst maintaining the tenants' superb view of the Melbourne skyline. This provided the perfect balance between low internal reflection, minimal exterior façade change and provided a 31% increase in solar heat rejection.

Outcome

Hanita Pacific predicts the solar heat load on the HVAC systems to be reduced by up to 290,000kWh per annum. Temperature logging performed in January 2014 confirms a consistent 4°C temperature reduction behind the filmed glazing. This improved consistency of air temperature in the buildings now provides occupants with excellent comfort levels, whilst significantly decreasing strain on the HVAC system.



