

Window film increases comfort in the absence of HVAC

Film Type: **OptiLite 75 Xtra**

Project Task

Elizabeth railway station, situated north of Adelaide, was undergoing redevelopment as part of a line-wide upgrade.

A new station platform was designed and built, including a pedestrian overpass and accompanying lifts. However, when construction was completed it became apparent that something had to be done about the amount of direct sunlight entering the northern windows of the lift towers. No air conditioning systems existed within these structures, causing short vertical trips in sunny conditions to be unbearable for people reliant on using the lifts.

Being situated next to the railway line, reflectivity was also a concern. A solution would need to avoid increasing window reflectivity to maintain railway safety regulations.

Solution

OptiLite 75 Xtra window film was selected for its many characteristics. Constructed with non-metallised nano-particles, it has a low visible reflectivity. As a spectrally selective film, OptiLite 75 Xtra allows in a relatively high degree of visible light while blocking ultraviolet and infrared energy.

Designed for exterior application, OptiLite 75 Xtra was able to be installed on the exterior surface of the towers as access to the interior surfaces was impossible. An additional advantage of this is that when installed to the exterior surface, a greater amount of solar energy is able to be reflected even before it reaches the glass, allowing for a higher degree of heat rejection and lower risk of thermal stress.

