



Thermosash 
BUILDING ENVELOPE SOLUTIONS™

Solar Shading Facade Solutions

Solar Shading

Effective solar shading solutions form a vital aspect of sustainable building design to physically manage heating and cooling thereby enhancing occupant comfort and reducing energy consumption, as well as offering opportunities for architectural aesthetic expression. Thermosash engineers unique solutions to integrate solar shading devices into the facade to effectively meet architectural design intent and maintain a weathertight exterior.

Thermosash has over 50 years experience working within the facade industry in New Zealand as well as abroad. Thermosash has the capability and capacity to engineer a custom solution, manufacture the elements and products and install them on site - providing a totally integrated service which delivers the best value engineering through ECI (early sub-contractor involvement). Our products are tested and proven, and our solutions have included complex engineering features requiring innovation and expertise to deliver.

Our products and elements are prefabricated and unitised which streamlines production, anticipates just-in-time site delivery and enables our highly skilled installation teams to close in buildings rapidly - saving on programme time-frames and mitigating follow on trade risk.

Extruded and composite fins - project examples



Massey University Innovation Complex - Extruded aluminium solar shading integrated into facade.



University of Auckland Engineering 405 - Fixed external sunshades integrated into Thermosash PW1000 double glazed curtainwall.



ASB North Wharf, Auckland - Vertical solar shade fins suspended off the curtainwall face.



Zespri, Tauranga - Aluminium vertical fins and horizontal shading elements.



University of Auckland, B201 - Vertical solar shade feature fins integrated into Thermosash PW1000 unitised curtainwall.



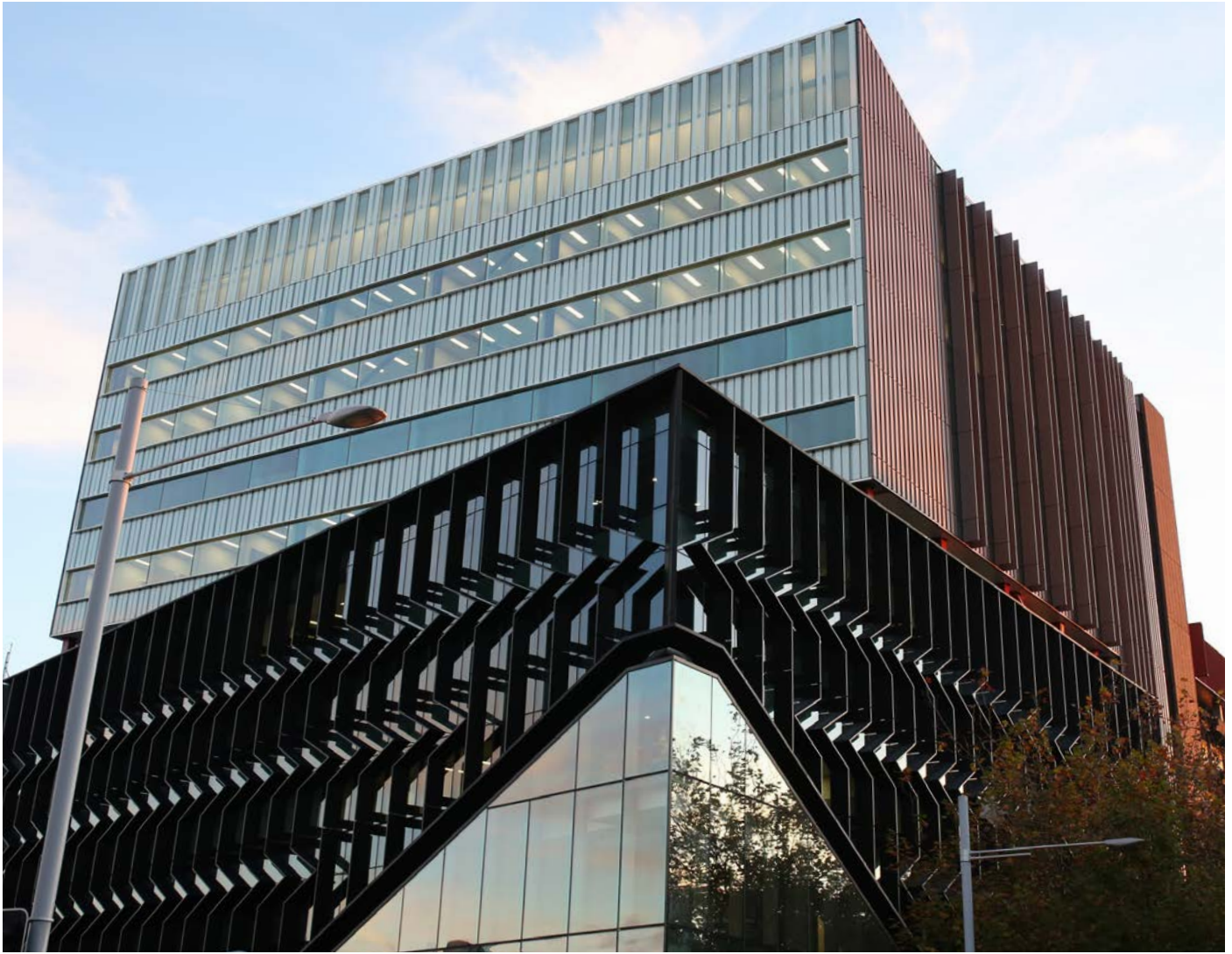
Ashburton Civic Centre & Library, Te Whare Whakere - Thermosash PW1000 unitised curtainwall integrated with vertical solar shading fins with actuators



Manukau Hub, Auckland - Vertical solar shade fins integrated into Thermosash PW1000 unitised curtainwall.



1-3 Unity Drive, Albany, Auckland - Fixed vertical solar shade fins integrated into Thermosash PW1000 unitised curtainwall.

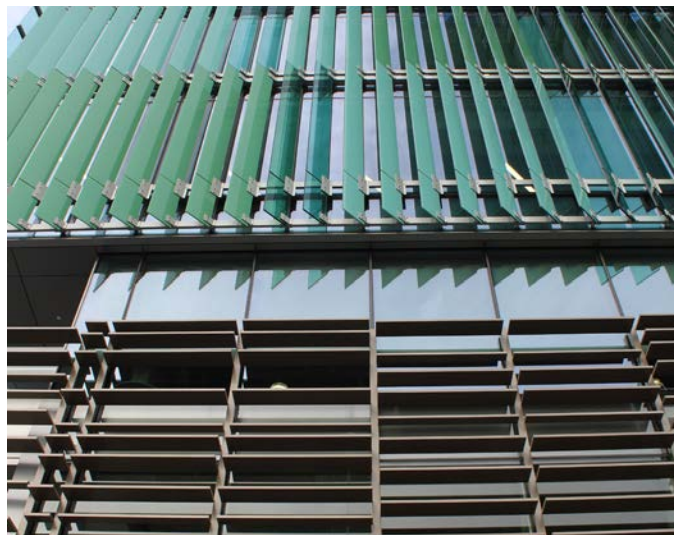


University of Auckland, School of Science 302 - Large chevron feature elements integrated into Thermosash PW1000 unitised curtainwall, and zinc clad vertical fins.

Extruded and composite louvres - project examples



Showplace, Christchurch - PW400 Unitised Curtainwall with integrated horizontal solar shade louvres.



Fonterra Building, Fanshawe Street, Auckland - Vertical and horizontal solar shade louvres



Wellington Regional Children's Hospital - Horizontal and vertical solar shading integrated into PW1000 unitised curtainwall.



AUT M1, Mana Hauora Building - Solar shading cantilevered off the PW1000 unitised curtainwall with a maintenance walkway incorporated behind the screens.



Meridian Energy Site 7, Wellington - Automatic window and louvre actuators, providing passive heating and cooling of the building.



University of Auckland, Thomas Building - Integrated sunscreen louvre sliders.



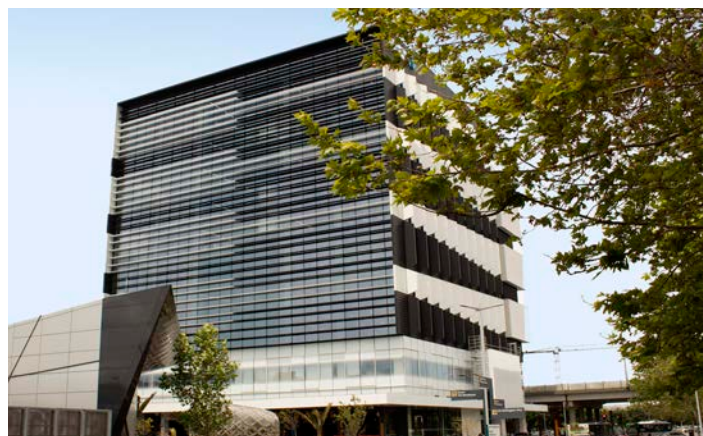
Oxford Terrace Apartments, Christchurch - Operable vertical elliptical louvres providing shading and privacy.



Private residence, Mission Bay, Auckland - Fully automated solar shade louvers



Holiday Inn Remarkables Park, Queenstown - Vertical and Horizontal solar shade elements.



Sylvia Park Office Tower, Auckland - Horizontal and vertical solar shade elements.

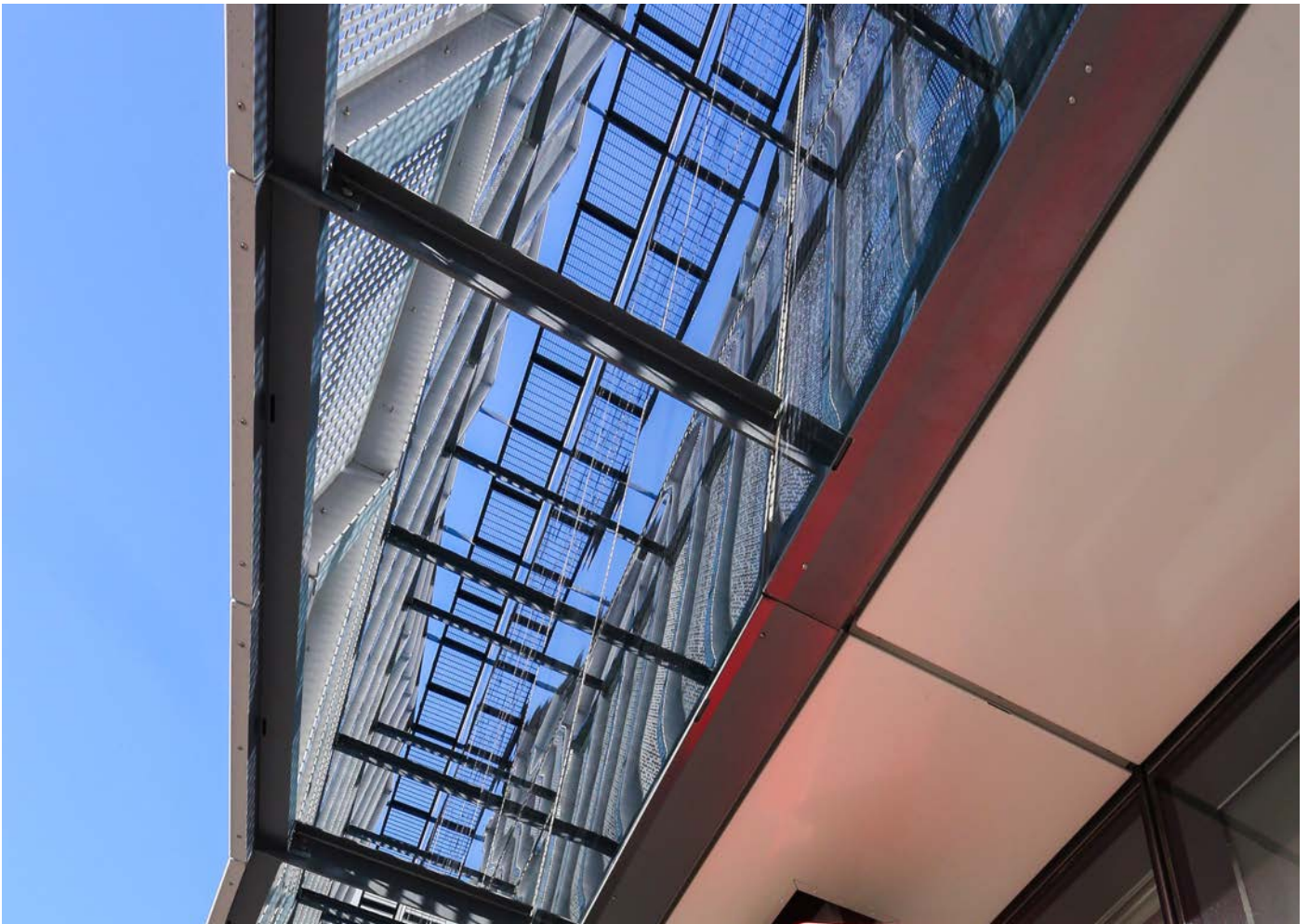
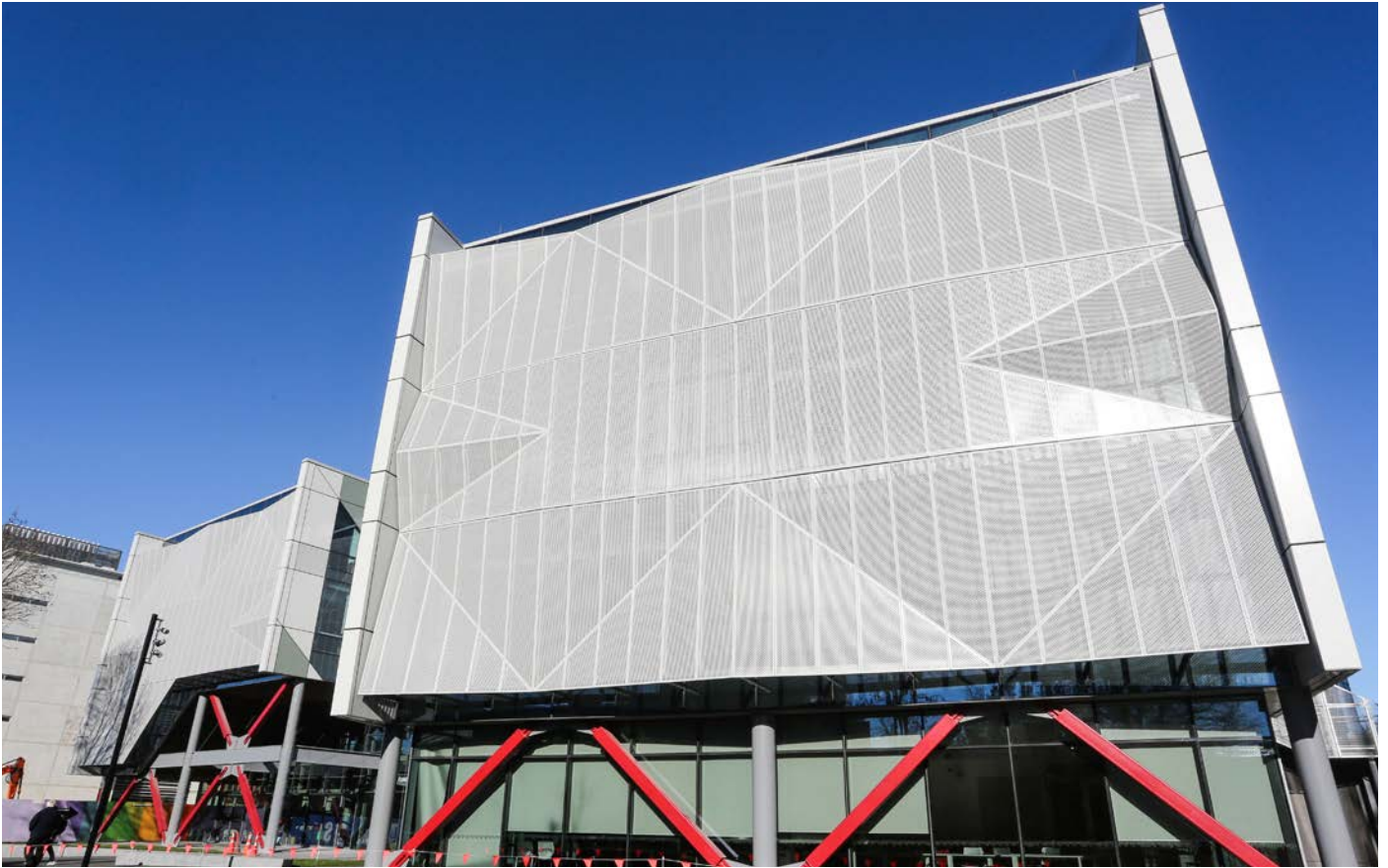


Napier Street GHD building, Auckland -Aluminium solar shade fins



Westgate Library - Horizontal solar shade louvers

Perforated solar shade screens - project examples



University of Canterbury, RRSIC building - Perforated folded aluminium solar shading screens



Smales Farm B-Hive, Auckland - Web grate solar shading screens,

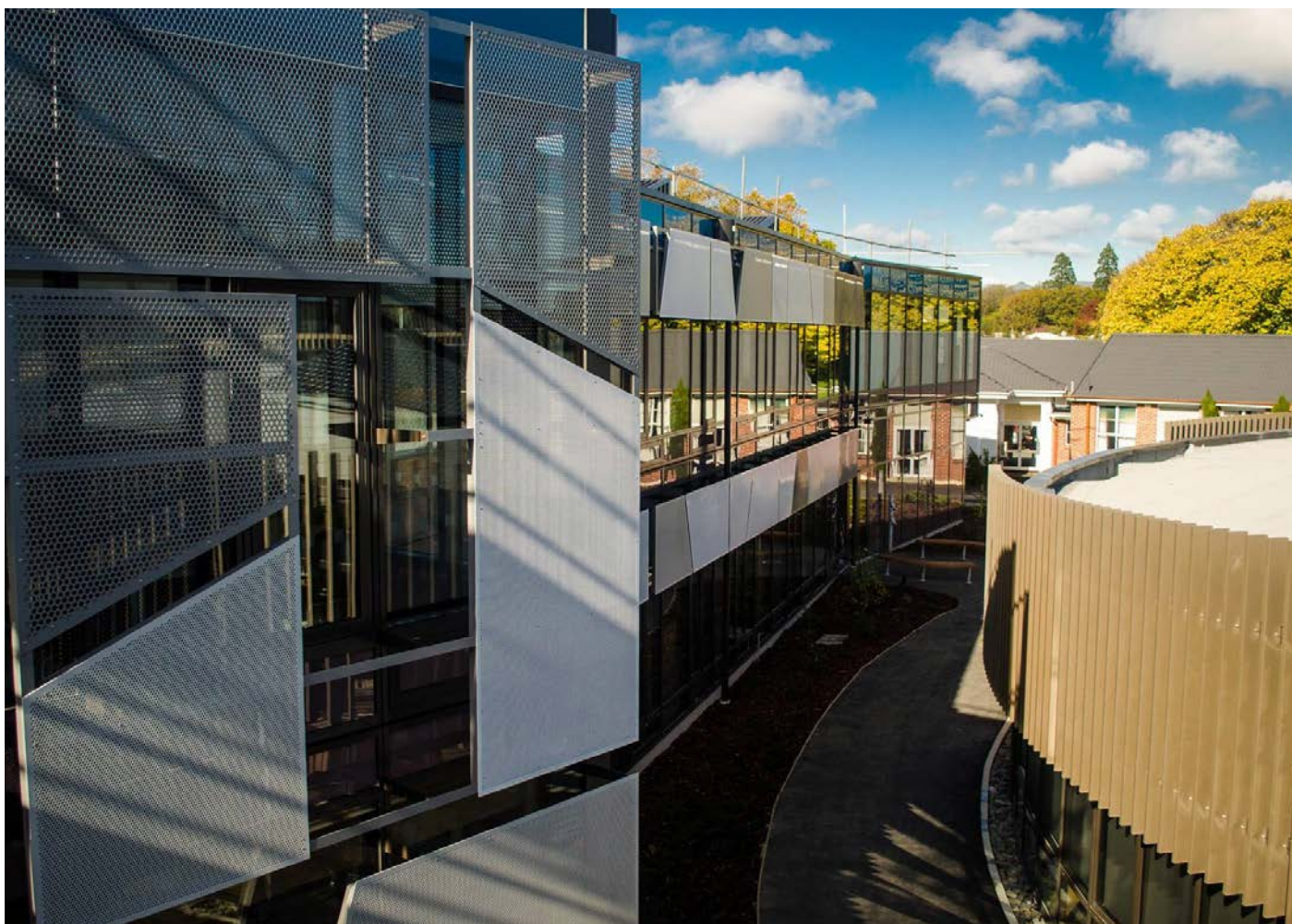


Blesdisloe Wharf Carpark, Auckland - Unitised perforated sheet metal incorporating an integrated green wall.





Paritai Drive, Auckland - Perforated solar shade vertical fin screens with actuators.



Rangi Ruru Girls School, Christchurch - Perforated aluminium solar shade screens.

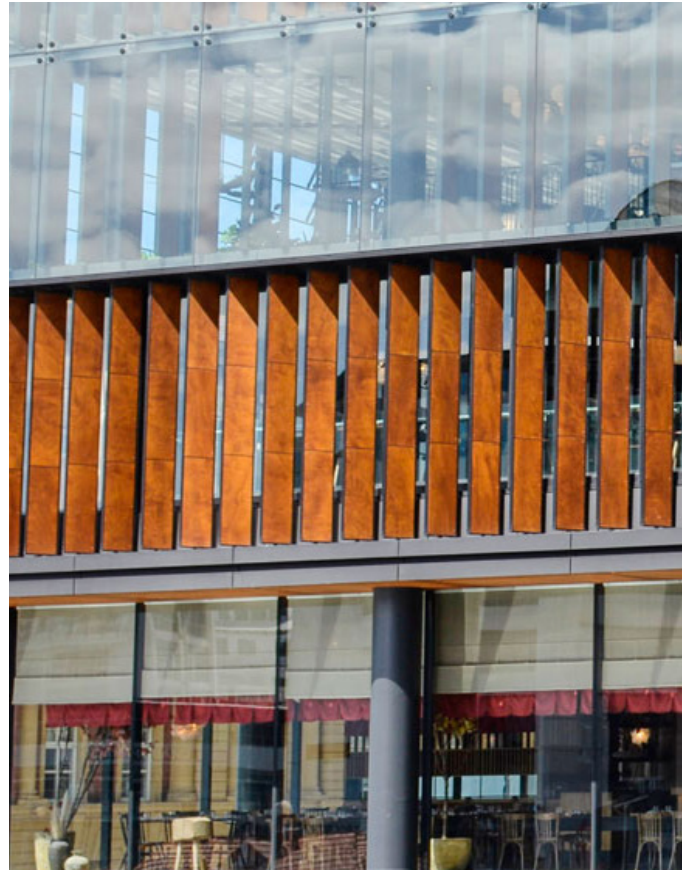


15 Huron Street, Takapuna, Auckland - Laser cut and perforated solid aluminium solar shade screens

Timber & Timber veneer solar shading - project examples

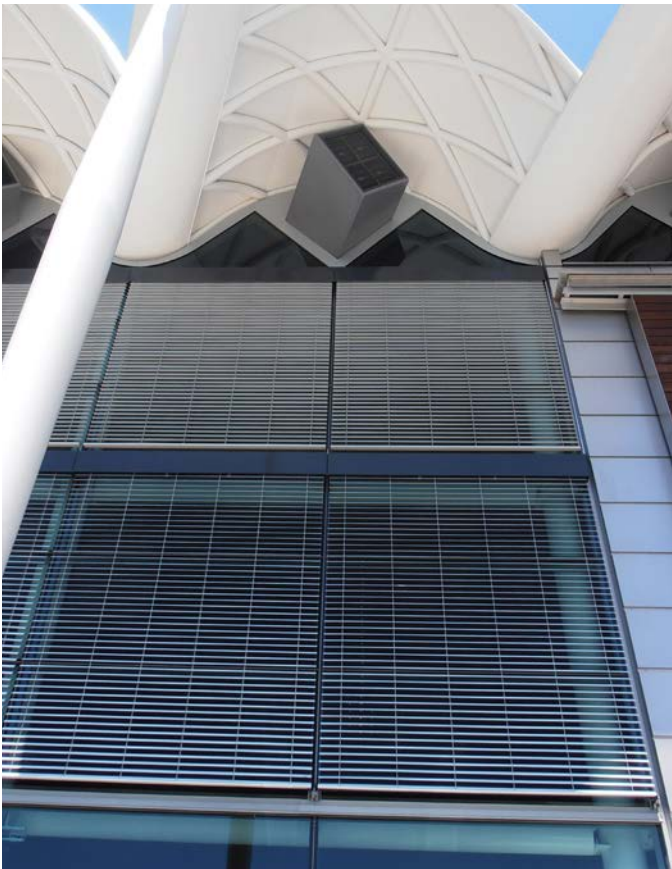


Meridian Energy Site 7, Wellington - Timber louvres integrated into curtainwall.

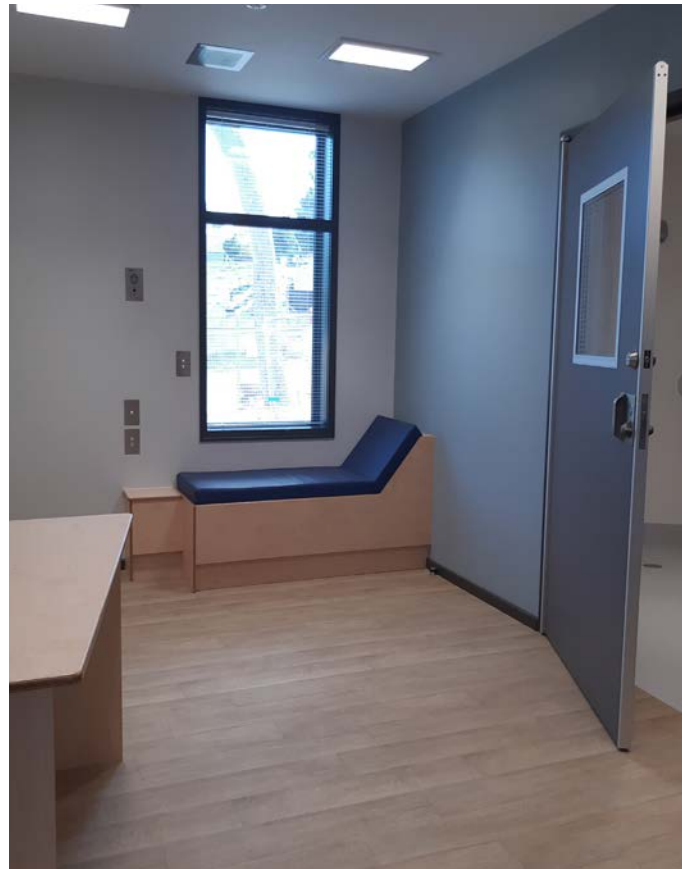


Commercial Bay, Auckland - Podema HPL timber veneer louvre fins with aluminium frames and end plates.

Venetian Blinds solar shading - project examples



Viaduct Events Centre, Auckland - External Venetian blinds for solar and sight screening.



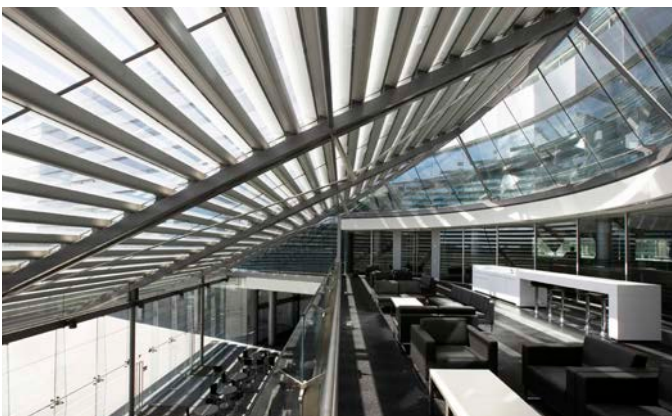
Mason Clinic Te Whatu Ora, Auckland - Integral Venetian blind to Thermosash DeltaGuard™ jockey sash windows providing a safe solar shading solution for the psychiatric clinic.

Terracotta Tiles feature solar shading - project example

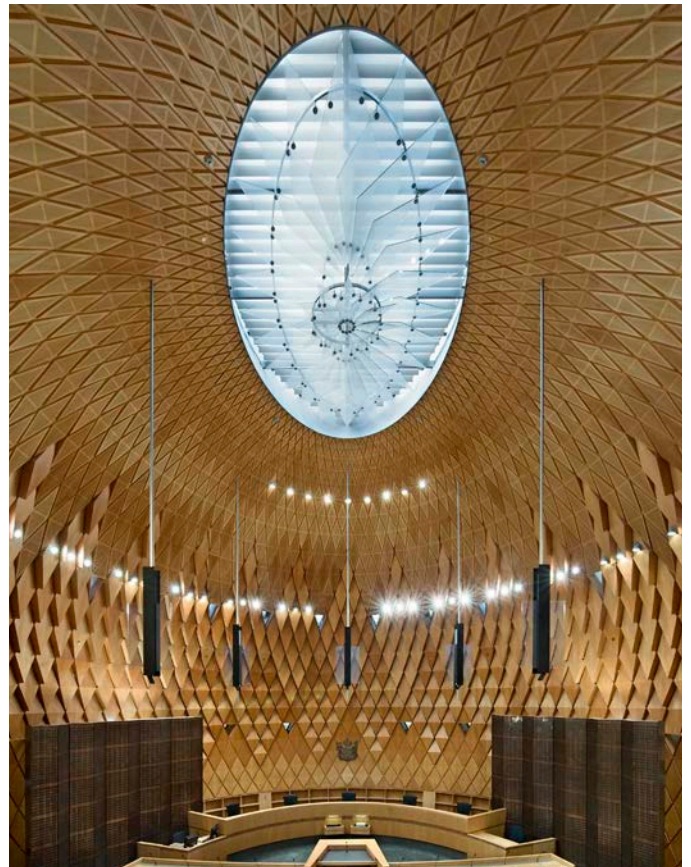


Hanna Building, King's School, Auckland - Terracotta tile solar shade vertical wings.

Rooflight feature solar shading - project examples



University of Auckland Business School - Custom feature solar shade to rooflight over the main entry.



The Supreme Court, Wellington - Internal custom feature actuated solar shade to oval double glazed rooflight.

Operable Roof Louvre solar shading - project example



Private home, Auckland - Motorised solar shading over large deck area.

Shadegrade™ & Shadetread™ - project examples



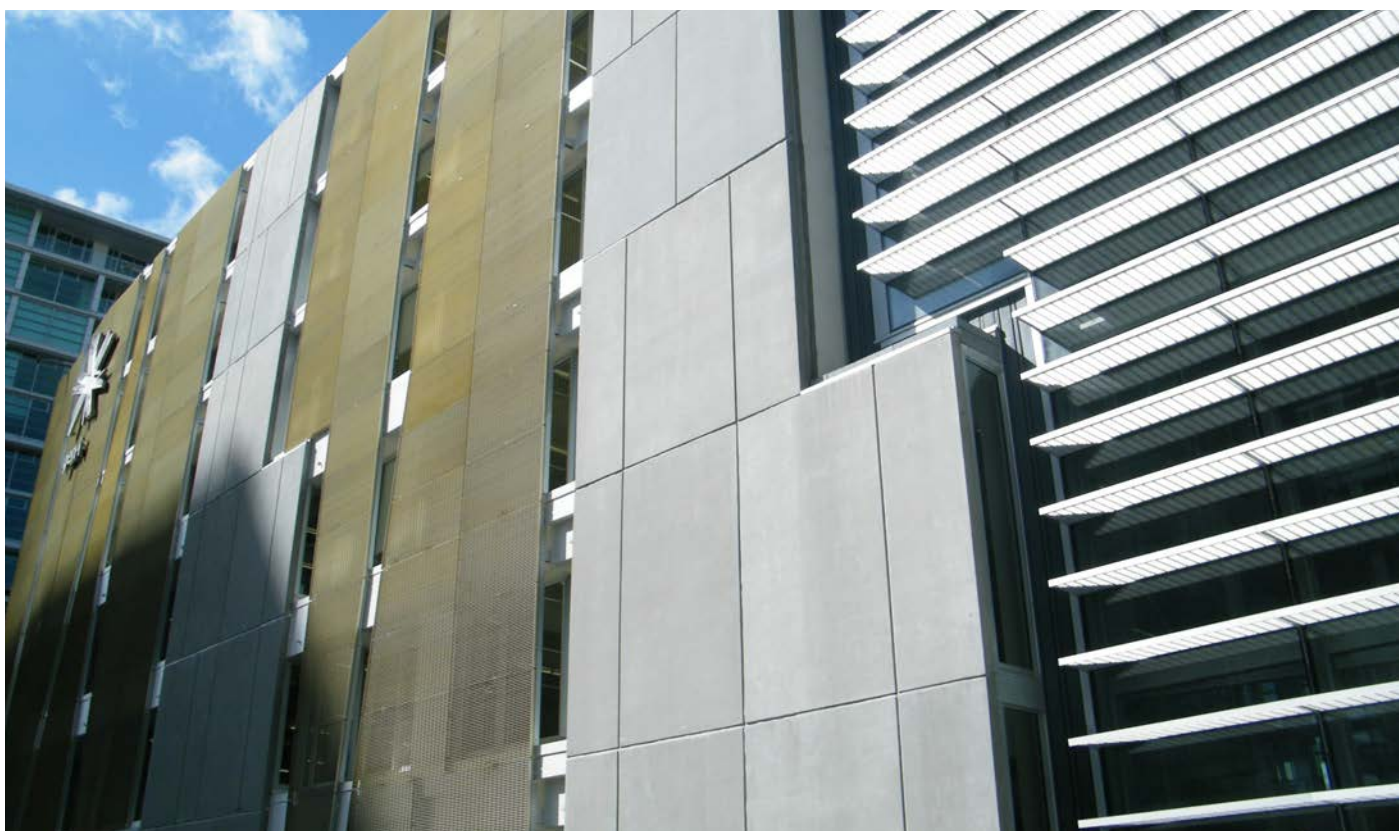
Victoria University of Wellington - Shadetread™ installed as solar shade device.



Warren & Mahoney offices in Christchurch - Shadegrate™ installed as solar shading to exterior facade.



Lysaght building, Auckland - Sliding canterlevered shadegrate™ system to facade.



Telecom Willis Tower, Wellington - Shadegrate™ and Shadetread™ installed as vertical and horizontal solar shading.

Solar shading glass fins and louvres - project examples



83 Victoria street, Christchurch - Frit glass louvres levels 1-5 of the 6 storey building.



Lambton Square Plaza, Wellington - Frit glass louvres with actuators



University of Auckland B405 - Coloured glass vertical solar shading fins.



University of Auckland, Thomas Building - Frit glass structural external twin skin louvres.

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