



INSOL®

ARCHITECTURAL FACADE TREATMENTS

THE CARPARK COLLECTION

“Car parks are exciting. Well, for us they are! They provide a canvas for relatively unrestrained architectural or artistic visions and bringing those visions to life has become a specialty for us. We get to showcase beauty on the outside and the beauty on the inside, which for us is how it all seamlessly comes together, with innovative building methodologies and minimum fuss. So yeah, car parks are exciting”.

GREG SIMMONS
CEO

33 LICHFIELD



There is a freedom from the shackles of habitable design that allows car parks to become so much more than their functional requirement. It allows creativity to flourish and grow into an artistic statement, transforming the urban environment and creating character where there often is none.

We have worked on some of the most spectacular car parks in New Zealand. Designs that sparkle at night, bringing a welcoming vibrancy to the immediate area. Designs that will develop and change over the years, bringing nature to the fore as plants creep and grow in a pre-planned fashion. Facades which articulate the structure to provide a recognizable human scale, while at the same time taking on an otherworldly appearance that is entrancing.

Behind the beauty is the craftsmanship that provides the link between the art and the functional requirements of the structure. The facade may create the fall protection barrier, or open up for ventilation whilst also using dappled light to bring life and movement to the shadows. It is this symbiosis of functionality and aesthetics that sets our work apart.

Over the years, necessity and budget has led to us inventing a number of fixing methods and developing a general approach to installation that reduces the disturbance to what is a busy urban area. Intelligent building methodology brings speed and efficiency, and is often accompanied by budget benefits.

Car parks are a speciality at Insol and the following pages showcase some of our favourites.

KING EDWARD BARRACKS

Project Credits

Location: Christchurch

Architect: Warren & Mahoney

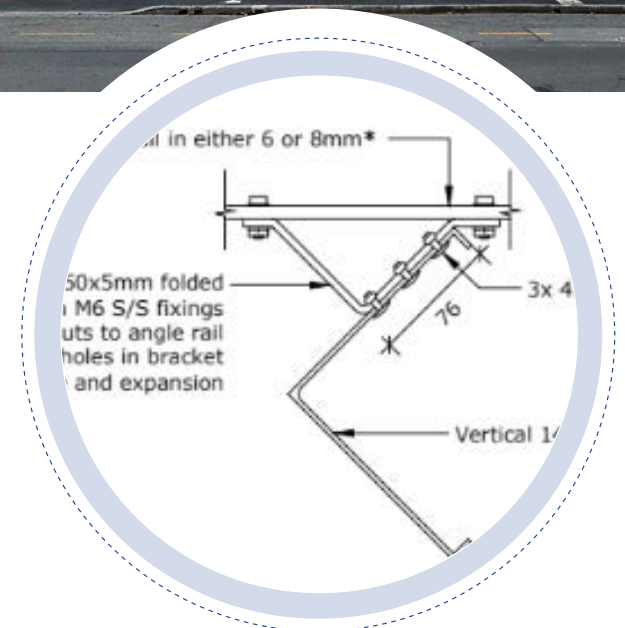
Builder: Southbase Construction

WEST END P



Engaged by the architects to provide a full design-build service for a louvred façade, different shades of bronze anodising form a rhythmic colour pattern over the façade. We developed a custom extruded blade profile and secondary aluminium support structure, then deployed a concealed bracketry system for a clean and appealing finish.

The result is a striking aesthetic which includes high performance double-bank ventilation louvres glazed into the window joinery frames.



HIGHBROOK CARPARK

Project Credits

Location: Auckland

Architect: JWA Architects

Builder: SMC Construction





A wonderful design with an appeal which will grow over the years as the appearance alters, creeping greenery taking over the corner of the building.

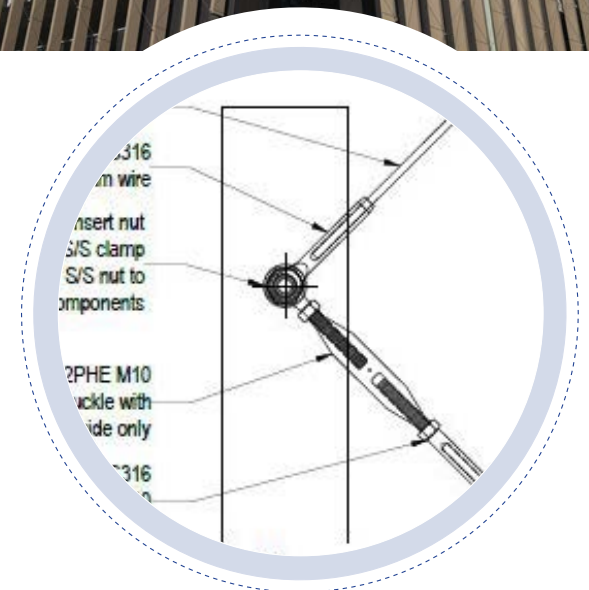
Its clever balance between the man-made and natural adds oxygen and freshness to functional purpose and needs.

Large 300 x 100 louvre fins were used for aesthetics, installed from a datum

line to help meet the correct position (5° angle from the vertical) and tolerances.

Any issues associated with the sub-structure tolerances were neutralised through a creative installation process, so the final lines matched the architectural intent.

Custom machined hardware was developed for the wire cabling system, which will be so critical over the years as the creeping plants take hold.



LICHFIELD STREET CARPARK

Project Credits

Location: Christchurch

Architect: +MAP Architecture

Builder: Clearwater Construction



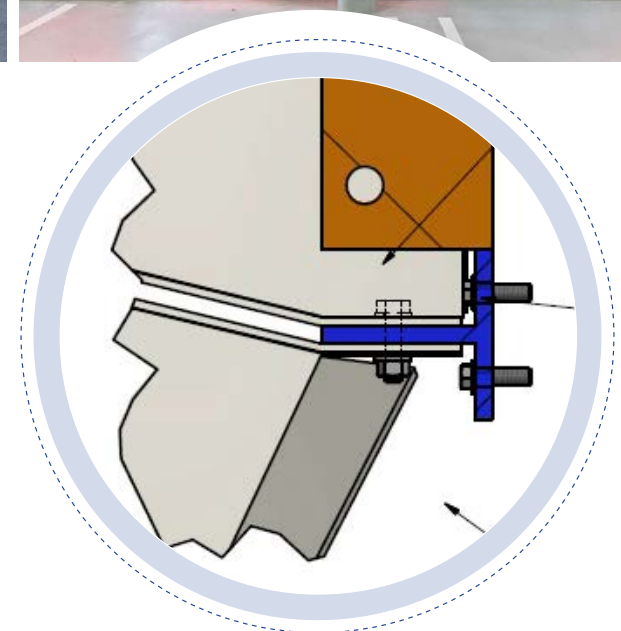


An 8-storey building with 805 spaces in the centre of Christchurch, Lichfield Street Car Park showcases a unique design that uses shadows and angles to subtly shift the appearance as the sun moves, breathing life and movement into the facade.

We provided an alternative design solution, fabricating large single piece aluminium modules with enhanced structural integrity. Attaching the facade to the primary steel structure was completed by hand lifting and fitting from access machines, negating the need for extensive cranes and scaffolding.

This simplified fixing methodology overcame restricted site access by a key roadway and offered considerable efficiency gains. An alternative extruded polycarbonate material for the translucent infills was developed, with suitable fixing details for facade integration.

The resulting pattern of large, flat aluminium diamond shaped 'scales' and translucent acrylic panels is consistent with the architectural vision and delivers an impactful presence in the heart of Christchurch, as it continues to reimagine itself.



LES MILLS CARPARK

Project Credits

Location: Auckland

Architect: Warren & Mahoney

Builder: Leighs Construction



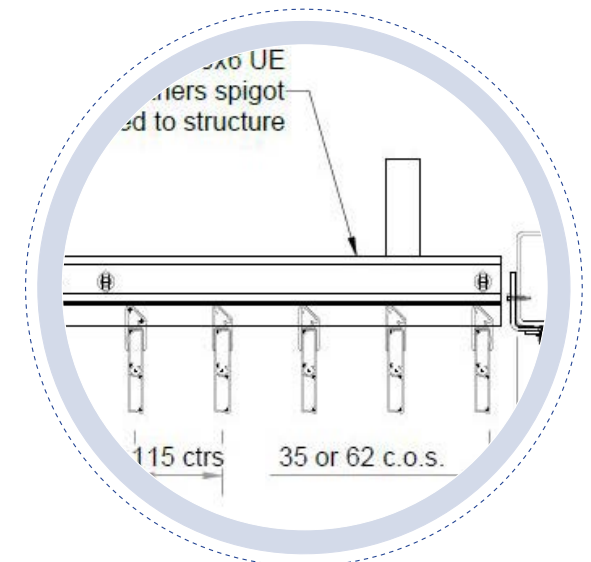


A design which called for a porous facade with textural depth, the aesthetics built with a three-dimensional diamond pattern that was perforated and interspersed with bronze tinted vision panels.

Through simplifying the structural steel frame and creating a three-dimensional effect within the facade panels, we were able to provide significant value engineering wins. This was further

complemented by designing the structural steel subframes to double as the vehicle barrier, with the facade acting as the fall arrest barrier.

The result is a distinctive building that looks different from almost every angle. By day, the landmark structure catches the eye. After sunset, it comes alive and sparkles to become a glittering addition to Auckland's nightscape.



HEREFORD CARPARK

Project Credits

Location: Christchurch

Architect: Peddle Thorp Architects

Builder: Calder Stewart Construction



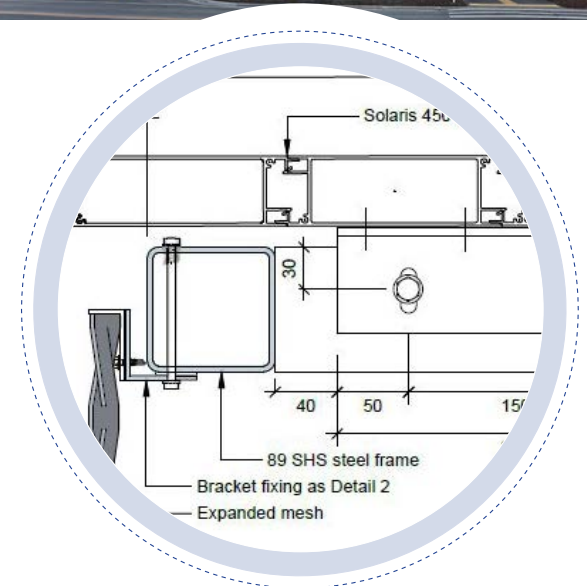


The Hereford Street Car Park presented a number of challenges. It required an innovative approach and adapted building methodology to retain the architectural intent and design integrity.

A multi-storey car park including a facade which could not be attached with the aid of any external access equipment, and an extremely tight budget and even tighter schedule. To meet the unique demands of the project, we designed bespoke fixing details to

modulise and pre-fit the facade screens to the primary building structure before it was craned into place, dispensing with the need for external access equipment.

The alternative design methodology and prefabricated componentry avoided delays, enabling a seemingly instant decorative facade of perforated sheet metal, and expanded aluminium mesh with wood grain finished louvre fins. The end result is striking, distinctive and visually beguiling.



TOKA PUIA CAR PARK

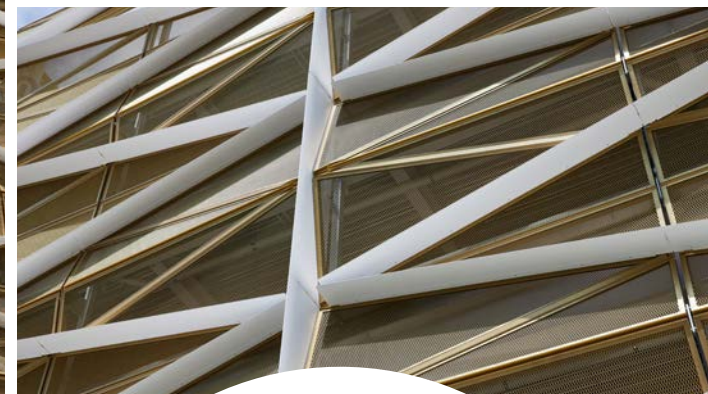
Project Credits

Location: Takapuna, Auckland

Architect: Ignite Architects

Builder: Argon Construction



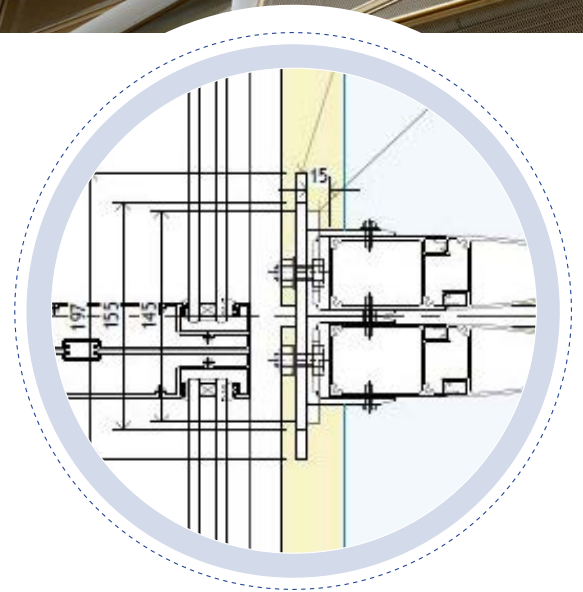


With an ambitious brief calling for single skin mesh stretched over an open area, the vision for the car park was both compelling and challenging. In particular, the intended substructure would add complexity and likely, cost. The diagrid, which provides the reference to the historical site, adds a wonderful extra visual dimension but similarly came at a complexity related cost.

Working in close collaboration with Ignite, the design was refined and adapted to simplify the installation process and reduce cost at the same time. A dapple textured mesh with a custom pattern was developed, the panel modules prefabricated and raised into place via hoist. It was a quick and straightforward

installation methodology, unveiling the 3-dimensional quality of the diamonds in quick succession to passers-by. By meeting the safety from falling regulations, the panels also serve an essential, functional purpose.

Toka Puia is a future-proofed facility that bookends trips downtown Takapuna. By daytime, the golden Tukutuku panels welcome you in, acting as a beacon for travellers and commuters eager to start their day. As night falls, the lights shine down the white diagrid, invoking the history of the Gasometer building and connecting the temporary occupants with the past as they ready themselves to leave, casting the day into their own history.



ORMISTON CARPARK

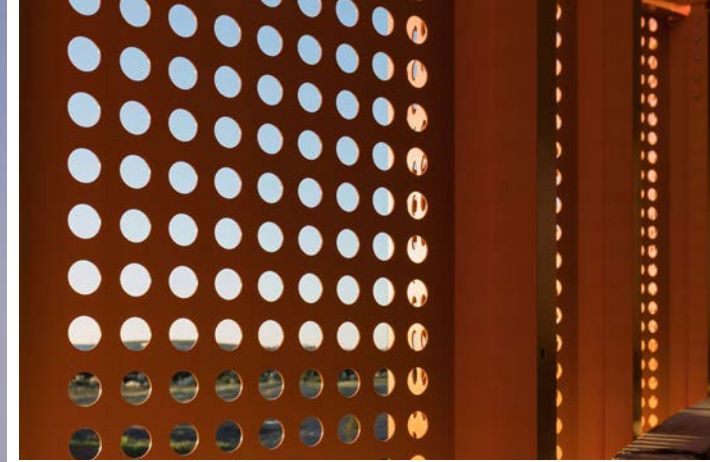
Project Credits

Location: Auckland

Architect: Jasmx

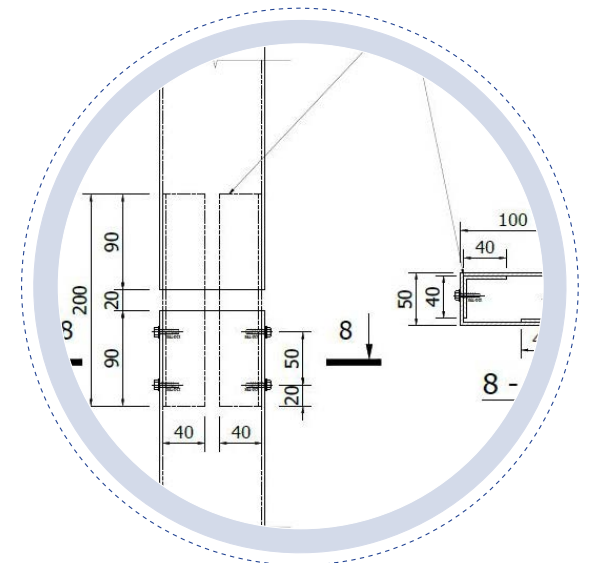
Builder: Scarbro Construction





Wrapping the curve of the car park and incorporated into the adjoining supermarket building, is a custom dapple pattern and custom louvre profile. For the wrap, a custom variation of the 'dapple light shade' pattern was developed. It carefully follows the contours of the parking ramp and is powder coated in burnt orange, the dappled light accentuating the entrance and exitway as it snakes its way from inside to outside. Chosen for aesthetics and longevity, the dapple panels will continue shining the way for vehicles for years to come.

The burnt orange colour was designed to seep into the adjoining structure, alternating with custom louvre profiles with a 'Storm Pearl' grey powder coated finish. The line of colour is reduced with the louvre height as the orange makes way for the grey, except for a final splash of colour further around the building. The custom louvres, of varying heights at the stairwell location, complete the car park and provide an aesthetically pleasing base design.





Our specialised services support projects with demanding architectural detail and complex construction methodology. We push boundaries and challenge convention, backed by research, testing and advanced design & engineering.

We specialise in design solutions for complex projects with demanding architectural detail and construction methodology. Our combination of experience and expertise in design, engineering, manufacturing and construction management makes us uniquely placed to bring visions to fruition.

We focus on an issue long enough to understand it - then we get to work on the solution. This is central to the Insol culture and the difference we bring. Working with architects on their vision, builders on their building methodology, or adjusting designs to meet budget. It's all completed with the considered efficiency you'd expect from the experts.

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