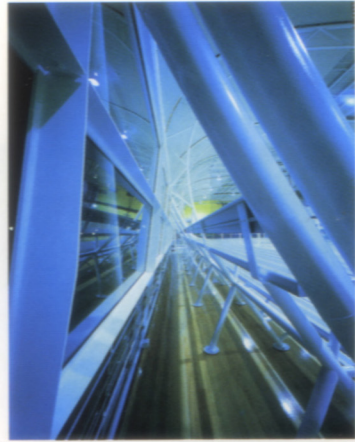




Универзитет
Сремски Карловачки

Geography
Creative Centre



Steel Centre

For Ed Lippmann's first major commission in the CBD, the architectural expression was always going to reflect a modern context, rather than the surrounding historical masonry architecture of The Rocks

King George V Recreation Centre / The Rocks, Sydney
Architect / Lippmann Associates
Review by Andrew Nimmo
Photography by Ross Honeysett

opening pages The steel and glass recreation centre challenges the assumption that one must defer to the neighbours and build in masonry.

detail Tapered steel t-section sub-framing supports the silicone glazed street facade while bleacher sub-structure provides the 'pure structure' aesthetic.

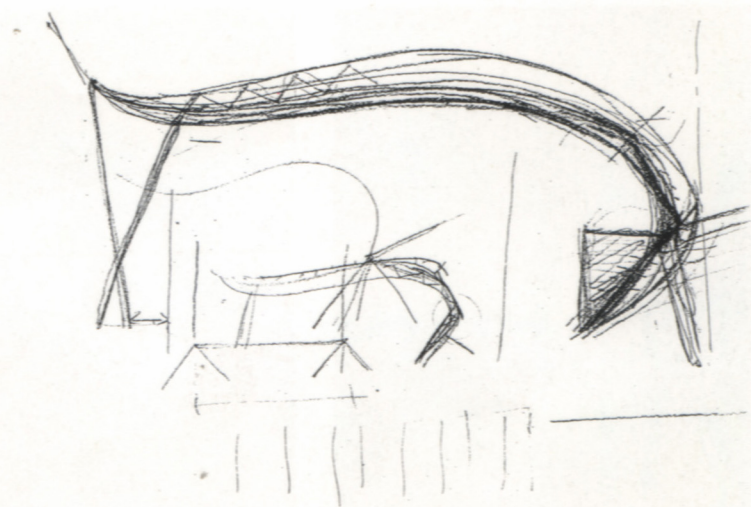
facing page, top left to right
Clear views of the mural are provided by day and night from outside the centre. The rear circulation spine covered by a glazed skylight also delivers the natural stack cooling system. High level louvres exhaust hot air entering low level louvres along the Cumberland Street facade.

Side and end wall – an expression of structure and skin. Custom-designed mini-orb panels continue the rhythm of the curtain wall punctuated by structural struts and metal framed glazing panels.

Aerial view looking north.

facing page, bottom left to right
A second entrance was created as a 'special events' entry between the courts. Rainwater downpipes strapped to the top chord of the pin-jointed roof truss, operable ventilation foils and glazing bands provide the architectural vocabulary.

The arching roof trusses accommodate three tiers of aluminium bleacher seating. The bleachers themselves were designed to allow maximum vision from the street into the sports hall and wall mural beyond.



● **The King George V Recreation Centre (KGV)**, was commissioned by the City of Sydney to replace a temporary centre displaced by Sega World in Darling Harbour. Lippmann Associates was awarded the project after it and four other architectural firms were interviewed.

This was an important project for Lippmann Associates. It was to be its first major commission in the CBD and would gain the firm valuable public exposure. The firm's appointment was a curious one, given the location of the site (The Rocks), and the very consistent architectural expression pursued by Lippmann Associates on previous projects (steel and glass rational modernism). It would have been a naive client that thought the consent authority (Sydney Cove Authority), would expect anything other than a masonry building, or that the architects would suddenly change design tack. From this point of view, the project in a sense was fated before the design was even commenced.

The site is a remnant piece of land left on the eastern side of the Bradfield Highway in Cumberland Street, The Rocks. To the north it reaches up to one of the many pedestrian access stairs to the Harbour Bridge, and to the south it tapers to a small children's playground shaped by the curving form of the bridge approach. The western edge is squeezed hard against the 13-metre high sheer wall of this road. The wall had been painted with a large trompe-l'oeil by community artists in the '60s, and it was part of the architect's brief to incorporate the mural into the new building.

Two issues were fundamental to the design solution – the issue of context (and by extension architectural expression), and scale. The bulk of the building is a sports hall housing two multi-purpose indoor courts, with a third outdoor court immediately to the north. The southern end of the building contains change rooms, a kiosk, general offices, plant rooms and a community room to the lower-level that opens to a barbecue area. The second level contains a large open room

for aerobics and circuit training that looks back into the double-height sports hall. Above this is a roof terrace set four metres below the edge of the highway.

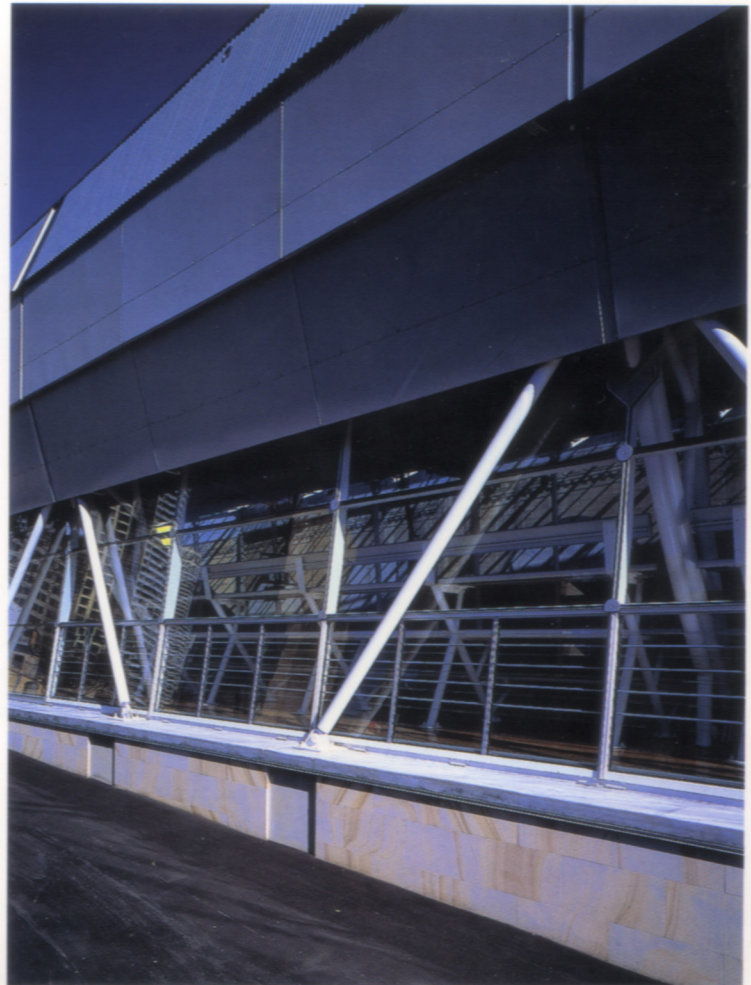
The site had a six-metre height restriction imposed on it at the street frontage, and this was at odds with the nine metres required at the court edge for competition. To resolve this, Lippmann proposed a curving cross-section that complies with the six-metre height control at the street, and then promptly continues on to the actual height required for the sports hall to operate. A series of faceted planes of flat metal sheets mark the six-metre control and conceals a street side box-gutter, before giving way to curving corrugated sheeting that follows the remainder of the portal profile. This hanger-like form is then extruded along the full length of the building.

The sports hall is realised with a series of tubular steel trussed portals that stop short of the muraled wall, leaving a continuous glass skylight to complete the roof and pick up the irregular geometry of the site. In the mornings, direct sunlight spills down the face of the mural, attracting the eye and helping to counter the linearity of the hall. Along with the translucent fibreglass roof panels at the ridge and continuous steel and glass wall at pedestrian height, the sports hall space has a luminescent lightness that is a joy to be in.

The southern end of the building is marked with a small canopy over a recessed entry that divides the two parts of the building. It is a fairly straightforward concrete framed structure that is made to conform to the persistent cross-sectional form and metal cladding established by the sports hall. Having settled on a form that is derived through function at one end, it seems inconsistent not to do the same at the other. Consequently, the extruded form seems to struggle in finding a credible conclusion at the southern end. Whilst the northern end, by virtue of the court layout, has an abrupt, but entirely logical conclusion, the southern end sees the form dissolve in a way that is not altogether convincing.

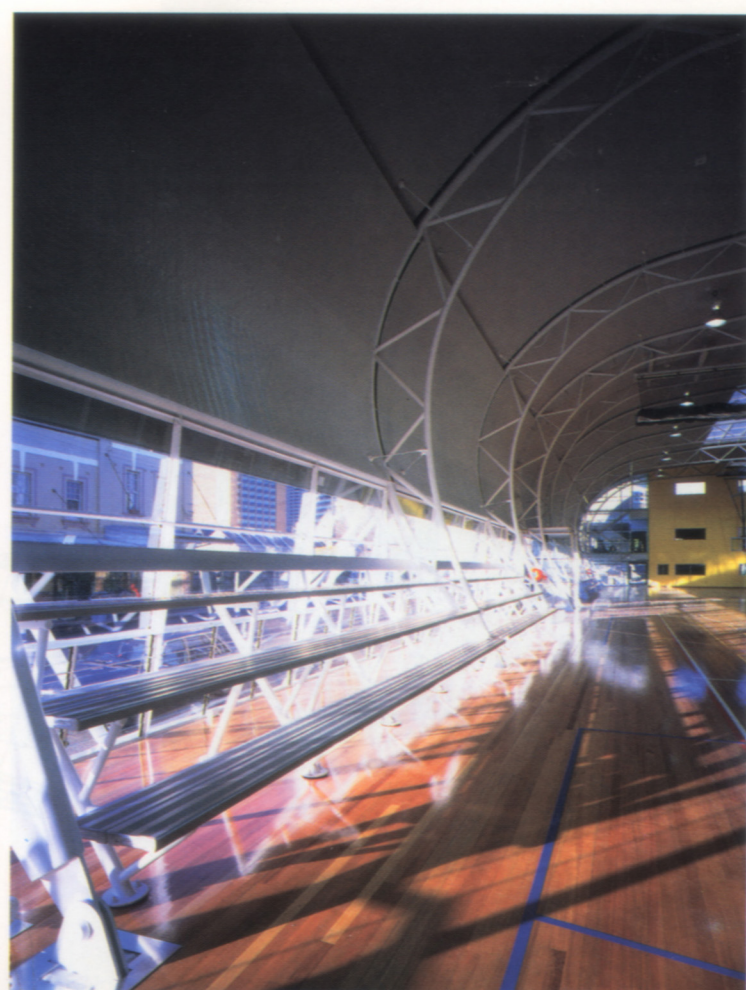
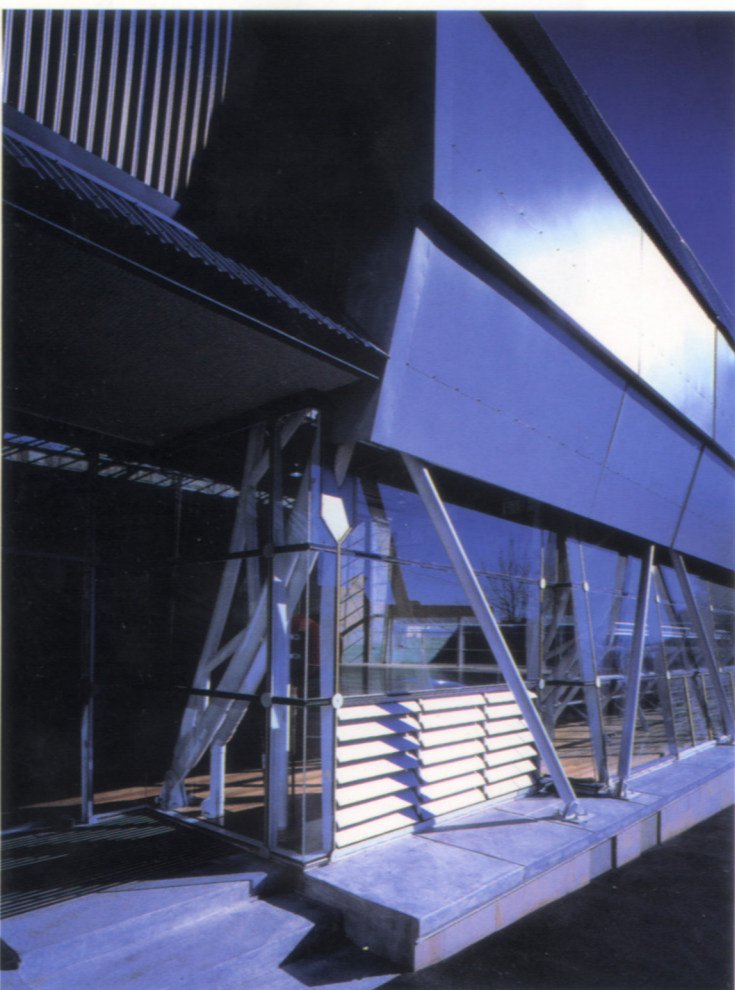


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facing page, top left to right
Side and end wall at night

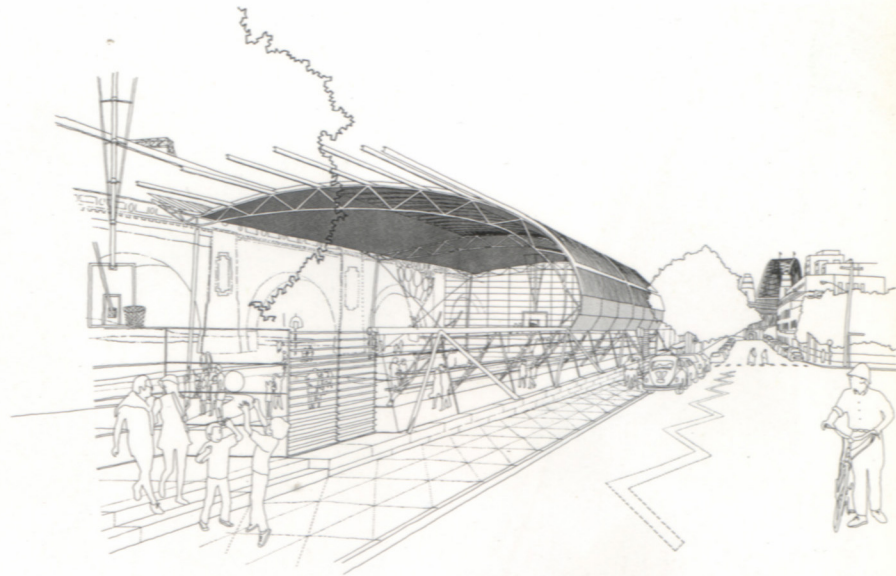
A three metre high, 100 metre long band of structural silicone glazing permits unimpeded views into this 'public' facility, community and arts/crafts room with sports hall beyond.

The 30 metre span pin-jointed roofing trusses respond to the nine metre court height while reducing the Cumberland Street facade to a lower scale. Natural lighting is provided via fibreglass rooflights, while at night dramatic lighting is provided by mercury vapour high-bay lighting.

facing page, bottom left to right

"Hands off" the Bradfield Highway mural (painted in the 60s by community artist Peter Day) integrated by Lippmann as part of the building's interior.

The faceted facade consists of custom-orb roofing, steel-faced foils, steel portal struts, fixed glass and operable glass louvres. The curving cross-section allowed the building to comply with the 6m height control at street side, and also with the 10.8m required over the centre court.



For Ed Lippmann, the architectural expression was always going to be informed more by the presence of the Bradfield Highway, rather than the surrounding architecture of The Rocks. The image of speed and movement prompted by vehicles going to and from the Harbour Bridge is clearly juxtaposed with the sedate and stable masonry buildings of The Rocks, and this in essence is the cause for the mixed criticism the building has received.

During building construction the design so enraged the *Sydney Morning Herald's* self-styled architecture critic, Leo Schofield, that he has described the centre as "...an act of vandalism on a Wagnerian scale". Geoff Bailey, of the Sydney Cove Authority, is also critical of the project and is regretful that it was ever granted approval. He says that the building should instead have acknowledged the historical context of Cumberland Street by reinstating the street edge with a building reflecting the pattern of punched openings evident elsewhere. He believes there was the opportunity to re-open a dialogue with the other buildings in the street, and mediate the disruptive form of the highway.

Bailey holds up the Rocks Square development by Tonkin Zulaikha Architects and the Park Hyatt by Anchor Mortlock and Woolley, as successful examples of how modern architecture that responds to its context can be incorporated in The Rocks. These buildings are in masonry, with clear historical references, yet confident as modern buildings. For Lippmann, the issue of the building's style was irrelevant. It should simply be a contemporary building appropriate to its place in history, as with the rest of The Rocks. Instead, Lippmann cites issues of scale and texture as more pertinent, and a purposeful transparency at street level.

It is the kind of debate that rages from time to time, and the issues concerned here are neither new nor unique. To say that it is the progressive versus the regressive is overly simplistic, and probably overly flattering to the architectural profession.

There is no doubt that architects pursuing a hard-line modernist expression have much to answer for in their arrogant dismissal of (or selective interpretation of), existing context. However, it is questionable whether limiting the architectural expression to masonry with regular punched openings (as suggested by Bailey), would necessarily produce a building more appropriate to the street. The 1980's Clocktower development in Argyle Street, with its lumpish proportions and inelegant detailing, shows how this approach can go very wrong. With the masonry skin reduced to little more than optical titillation, such a building lacks both the rigour and conviction of the original buildings that it is trying to respond to. Bailey agrees that the building could have been successful in materials other than masonry, but it is the lack of reference to the rhythm, detail and perceived weight of the masonry buildings which concerns him.

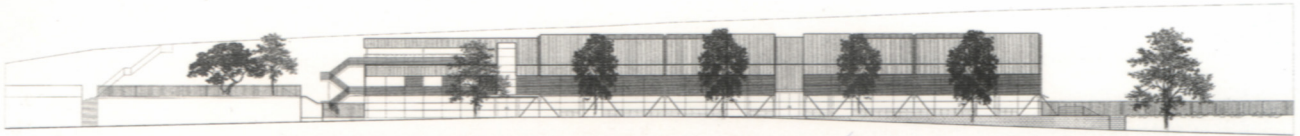
In the case of the KGV Centre, the site is not in the heart of The Rocks, but on the edge, closer to the high-rise buildings of the city than Argyle Street. It is part of a streetscape that was changed irreversibly through the disruption caused by the building of the Harbour Bridge, and that is the context.

In the end, what perhaps is more relevant is the issue of scale and the layering of history. What makes The Rocks a special place is not so much the homogeneity of building style (because there is none), it is the homogeneity of scale and the tracery of public spaces that allow the pedestrian to weave between, as well as around, buildings of varying age. There are few other precincts in Sydney that have retained this quality due to the pattern of site consolidation and the lifting of the 1950s height restriction of 12 storeys. In this regard, the building is both responsible and responsive.

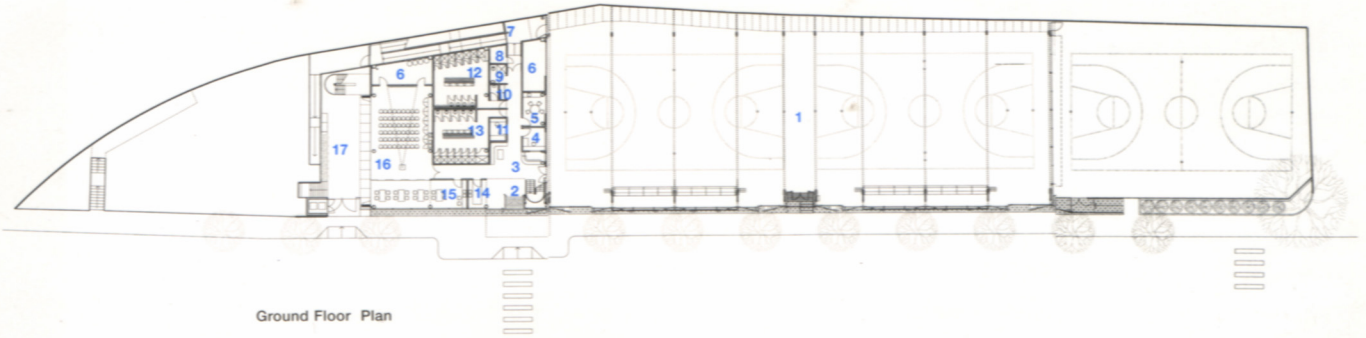
It could be that the precinct is not so delicate that it cannot handle the introduction of a little steel and glass.

Andrew Nimmo is a Director of Lahz Nimmo Architects in Sydney.





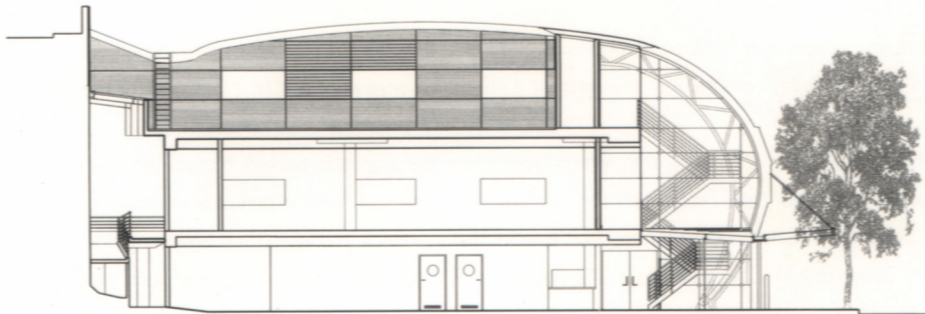
East Elevation



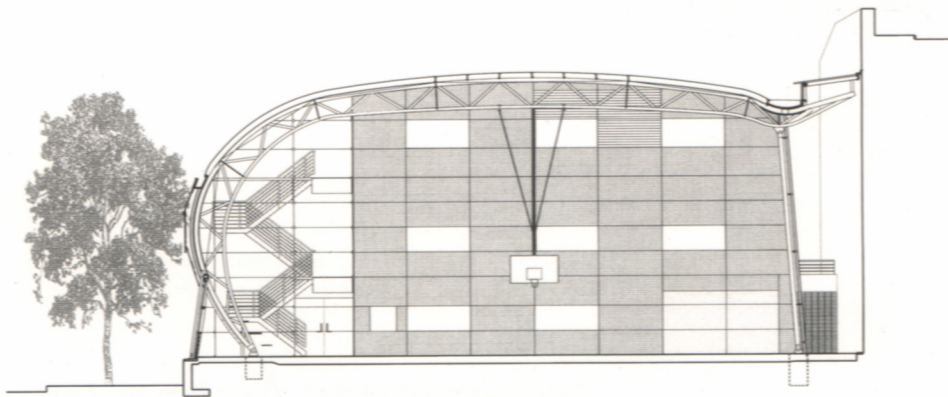
Ground Floor Plan



- 1 Sports Hall
- 2 Entry
- 3 Reception
- 4 Manager
- 5 Staff
- 6 Store
- 7 Ramp
- 8 Plantroom
- 9 Disabled Toilet/Shower
- 10 Cleaner
- 11 First Aid
- 12 Male Change
- 13 Female Change
- 14 Kiosk/Cafe
- 15 Arts/Crafts
- 16 Community Room
- 17 BBQ Area



Section through the southern end of the building



Section through the Sports Hall

Project Summary King George V Sports and Recreation Centre **Architect** Lippmann Associates **Project Team** Ed Lippmann, Rolf Ockert, Nerida Bergin, Scott Lester, Brett Sperling Client Sydney City Council Builder Buildcorp Budget \$3.4 million **Size** 2800m.(sq) GFA & playground/external court 1300m.(sq) **Time to Complete** 8 months **Consultants: Structural & Civil** Barry Young, Taylor Thomson Whiting **Electrical & Lighting** Les Mikolavczyk, Barry Webb & Ass. **Mechanical** Jim Ferretti MPI **Landscape Architect** Tramonte Jensen **Interior Fitout** Lippmann Associates **Acoustic** Renzo Tonin, Renzo Tonin & Associates **Quantity Surveyor** Bruce Davies, Bayley Davies & Associates **Materials: Walls** Metal skin, Colorbond Custom-Orb, LBI **Roof** Metal, Colorbond Custom-Orb, LBI/Long Life Roofing **Windows** Frameless structural silicone jointed, custom-designed laminated glass over steel sub-framing, Lidco; St. Ives Suite, Seapac Aluminium **Guttering** Stainless-steel, 1.2 mm pressed box gutters, Long Life Roofing **Wall Linings** Hardies Compressed Fibre Cement **Ceiling Linings** Perforated Mini-Orb, LBI/Long Life Roofing **Skylights** Fibreglass, Cool-Lite, Ampelite **Paint** Epoxy, Acrylic