

C



issue 27

Holy Redeemer Church  
Dovecote  
Indigo Slam

A

\$20.00(AUD)







Issue 27 May 2017  
ISSN 1833-0975

**Publisher**  
Cement Concrete & Aggregates Australia

**Editor**  
Joe Rollo

**Design**  
Garry Emery, Michael Hourigan

**Photographers in this issue**  
Yongkwan Kim, Patricia Campora, Simona Rota, Karolina Mysiuk, Nelson Garrido, David Roche, Sharrin Rees, John Gollings

**CCAA Offices**

**Sydney (National Office)**  
Level 10  
Altitude Corporate Centre  
163 O'Riordan Street  
Mascot NSW 2020  
PO Box 124  
Mascot NSW 1460  
Telephone 61 2 9667 8300  
Facsimile 61 2 9693 5234

**Melbourne**  
Suite 910, 1 Queens Road  
Melbourne VIC 3004  
Telephone 61 3 9825 0200  
Facsimile 61 3 9825 0222

**Brisbane**  
Suite 2, Level 2, 485 Ipswich Road  
Annerley QLD 4103  
Telephone 61 7 3227 5200  
Facsimile 61 7 3892 5655

**Perth**  
45 Ventnor Avenue  
West Perth WA 6005  
Telephone 61 8 9389 4452  
Facsimile 61 8 9389 4451

**Tasmania**  
15 Marana Avenue  
Rose Bay TAS 7015  
Telephone 61 3 6491 2529  
Facsimile 61 3 9825 0222

This publication is copyright. All rights are reserved. Apart from any fair dealing for the purpose of private study, teaching, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise without the written permission of the publisher and copyright owner.

© 2017  
Cement Concrete and Aggregates Australia

C+A is a magazine of Cement Concrete and Aggregates Australia (CCAA). CCAA is a not for profit organisation sponsored by the cement, concrete and extractive industries to provide information on the many uses of cement and concrete. This publication is distributed by CCAA for that purpose. Since the information provided is intended for general guidance only and in no way replaces the services of professional consultants on particular projects, no legal liability can be accepted by CCAA for its use.

CCAA respects your privacy. Your details have been collected to provide you with information on our activities, publications and services. From time to time your details may be made available to third party organisations who comply with the Privacy Act such as affiliated associations, sponsors of events and other reputable organizations whose services we think you may find of interest. If you do not wish to receive information from CCAA or wish to be taken off the database please write to the Privacy Officer, CCAA, PO Box 124, Mascot NSW 1460.

**Orders**  
C+A is published two times a year. Extra copies are available for sale through CCAA. To order copies please contact C+A at the above address or email your order to [CplusA@ccaa.com.au](mailto:CplusA@ccaa.com.au).

Email [CplusA@ccaa.com.au](mailto:CplusA@ccaa.com.au)  
Website [www.ccaa.com.au](http://www.ccaa.com.au)

# ISSUE

# 27

**Contents**

- 02 Holy Redeemer Church  
Tenerife  
Canary Islands  
Fernando Menis
- 12 Dovecote  
Braga Portugal  
AZO Sequeira Arquitectos
- 34 Indigo Slam  
Sydney  
Smart Design Studio

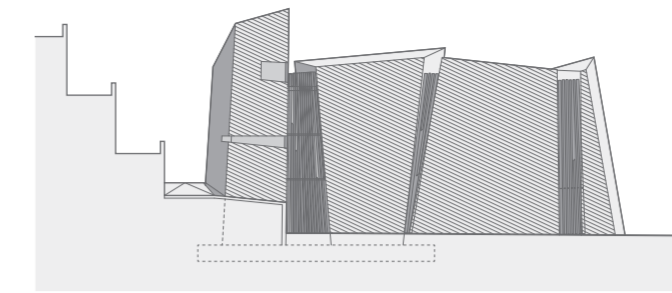


Holy Redeemer  
Church  
Tenerife  
Canary Islands  
Fernando  
Menis

# HOLY REDEEMER



tough, muscular and dramatic, wrought from insitu concrete and volcanic rock, the church appears as a mountain of peaks and craters



South Elevation

› Back in 2006, when this magazine was in its infancy, we published a couple of buildings designed by Fernando Menis at Tenerife, the largest and most populated island of Spain's Canary Islands. One of those, the Magma Arts and Congress Centre, on Tenerife's Adeje Coast, next to a motorway and between a rocky, volcanic, semi-desert landscape and the sea, we described as appearing "as a series of eroded monolithic rock formations sheltering beneath a billowing white roof."

The monoliths, of insitu bush-hammered concrete with an aggregate of local compressed volcanic ash, were arranged so as to define and enclose convention hall spaces and to support the flow of the enveloping roof. Overlapping fissures on the surfaces of the roof cast natural light and ventilation into the building, intensifying a sense of lightness in the roof.

The building was intentionally powerful, translating concrete, volcanic aggregates, local stone and native timbers into a contemporary and poetic language rich in physical density and visual coarseness, in tune with Tenerife's harsh volcanic landscape.

The Church of the Holy Redeemer in La Laguna, also on Tenerife, is no less expressive. Set on a site lower than its immediate surroundings, accessed along a series of walkway steps, ramps and zig zags, as if descending a mountainside, the church is packed with symbolisms of the natural world.

Tough, muscular and dramatic, wrought from insitu concrete and volcanic rock, Menis's plan for the church – there are also classrooms and an office – appears as a mountain of peaks and craters; like earth broken up by telluric forces, the concrete alluding to rock. Even here, in this small parish church at the edge of the urban sprawl of Tenerife, Menis has been able to create forms and spaces of such primal conviction that the building exudes a sense of the spiritual in a neighborhood of otherwise ordinary residential buildings and little communal focus.

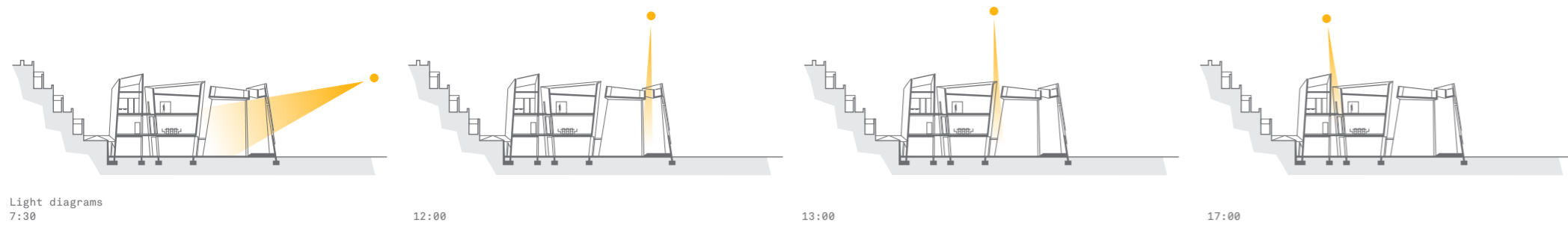
A juxtaposition of a simple set of four canted concrete forms, leant against each other to define sliced openings and enclose spaces, has resulted in an architecture of extraordinary force of materials, expression and subtlety of effects. There is a mastery of scale and light here, of texture and spatial flow, that converts the most elemental material (concrete) into the most outstandingly rich of experiences.

Four blocks of concrete are set against one another, leaning just so as to form 'fractures' in the facades to provide glimpses into what lies beyond; each fissure carefully calibrated and placed to allow light to fall precisely onto specific elements of the church at different times of day, tracking sun and cloud. Overlapping slices in the façade of one block create a large cross-shaped window behind the altar, visible from the nave. At dawn, the first rays of the sun flow into the church through this cross, falling to light the baptistery. At midday, a slice in the ceiling between the first and second concrete monoliths allows light to illuminate the altar below.

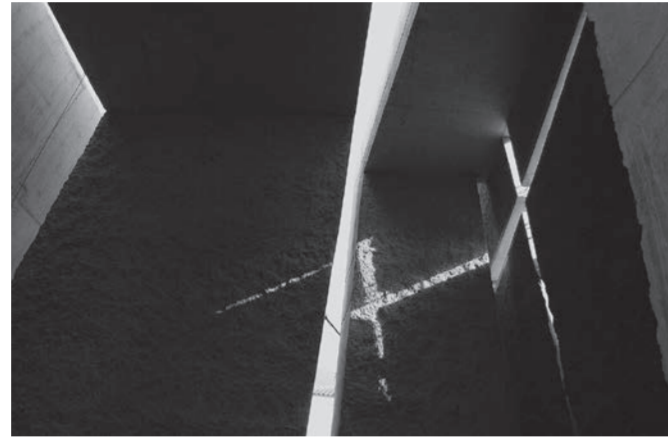
The board marked exterior of diagonally placed shuttering melds into interior facings of hand-worked surfaces to evoke the island's volcanic nature, reinforcing the cave-like nature of the building. Inside the church, concrete enriched with highly porous volcanic rock fragments, acts to improve acoustic absorption. Cavernous and luminous, of canted carved walls, wrought from concrete and volcanic rock, the small church of the Holy Redeemer is a powerful expression of the skills of Fernando Menis and his affinity with his native island of Tenerife. **Joe Rollo**







C+A  
06



each fissure is carefully calibrated and placed to allow light to fall precisely onto specific elements of the church at different times of day, tracking sun and cloud

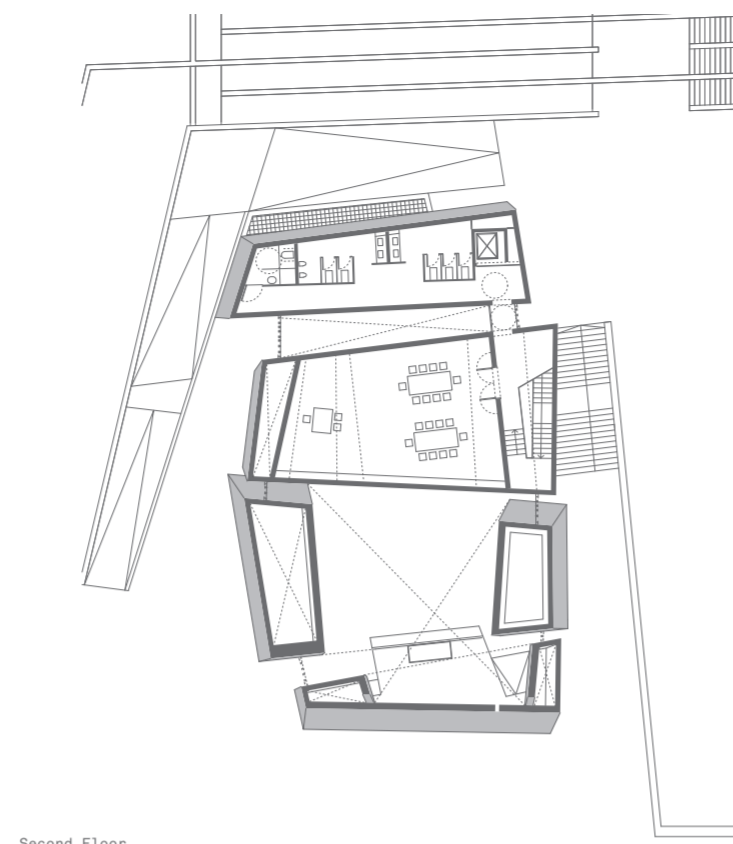




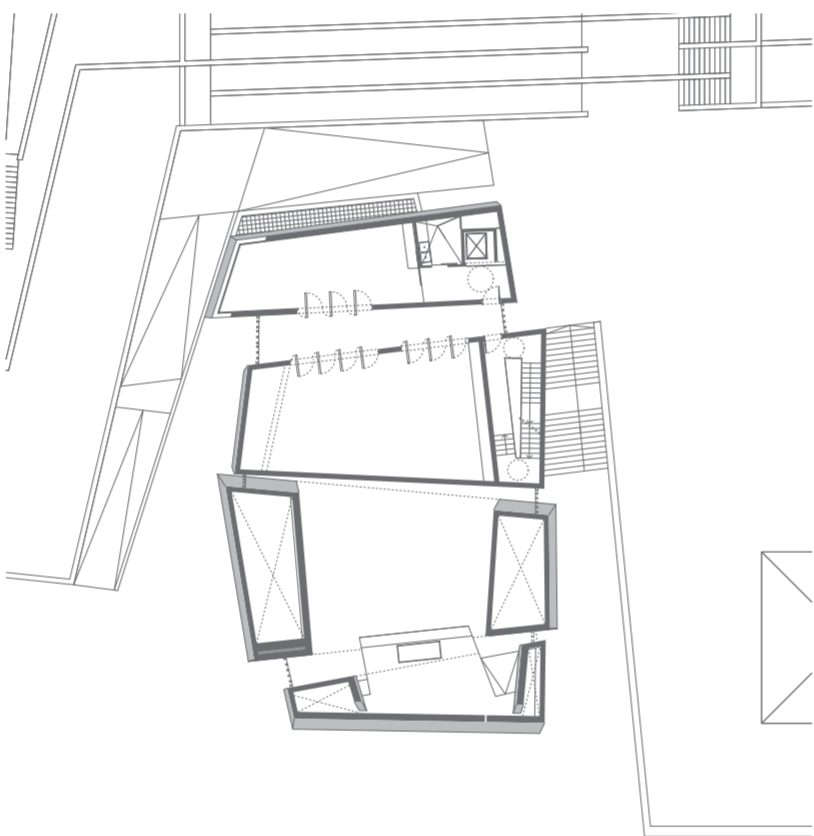
**Project Statement**

The building is set in a difficult topography with a very strong height variation, which is solved with a surrounding ramp giving access to the square and the second floor of the church. The project is meant to create a visual reference within the poorly designed neighborhood. The building appears impressive with its four independent volumes like big rocks. Between these rocks, there are narrow spaces acting like patios, allowing air and light to go into the building. Natural light plays an essential role. It filters through the narrow spaces between the rocks and reveals the rough textures of the concrete, giving both a sense of mystic presence and tranquility. The result is a place that encourages reflection, a meditation space where a person of any condition can go to find oneself in the temple or join with others at the social centre. The building stands stark, stripped of superfluous elements that may involve distractions from its spiritual essence. The balance of proportions between void and built was vital to developing the identity of the project.

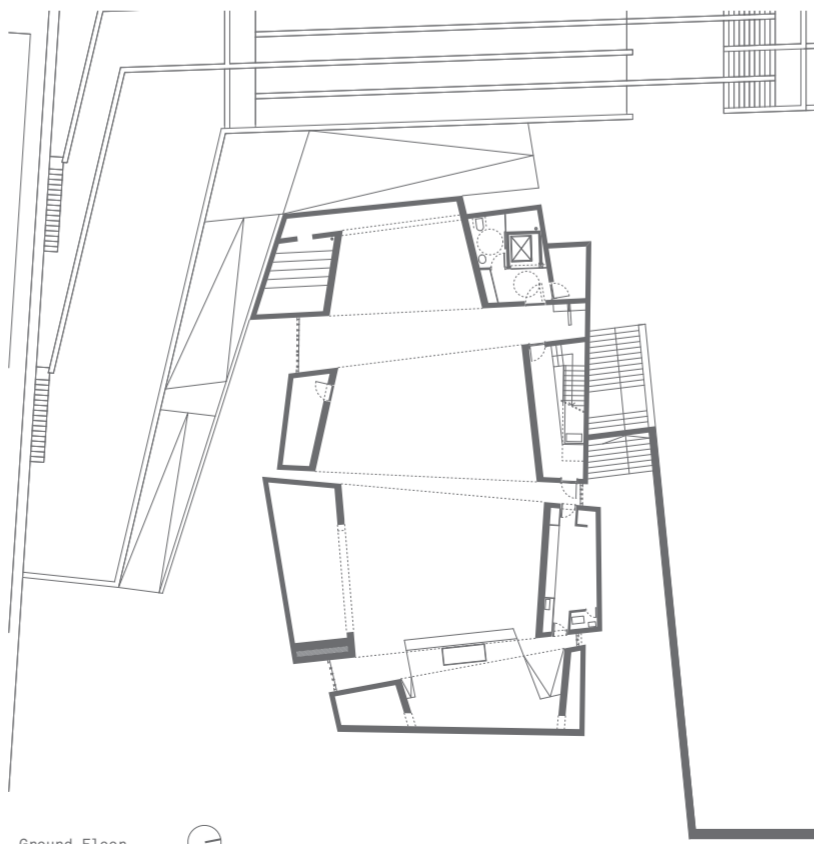
We chose to exploit the properties of concrete, based on its isotropic nature, energy efficiency and optimised by the thermal inertia of the walls. The building has good acoustics thanks to a combination of concrete and local volcanic stones (*picón*), which is manually broken afterwards. The result is an expressive rough finish with a degree of sound absorption superior to conventional concrete. **Fernando Menis**



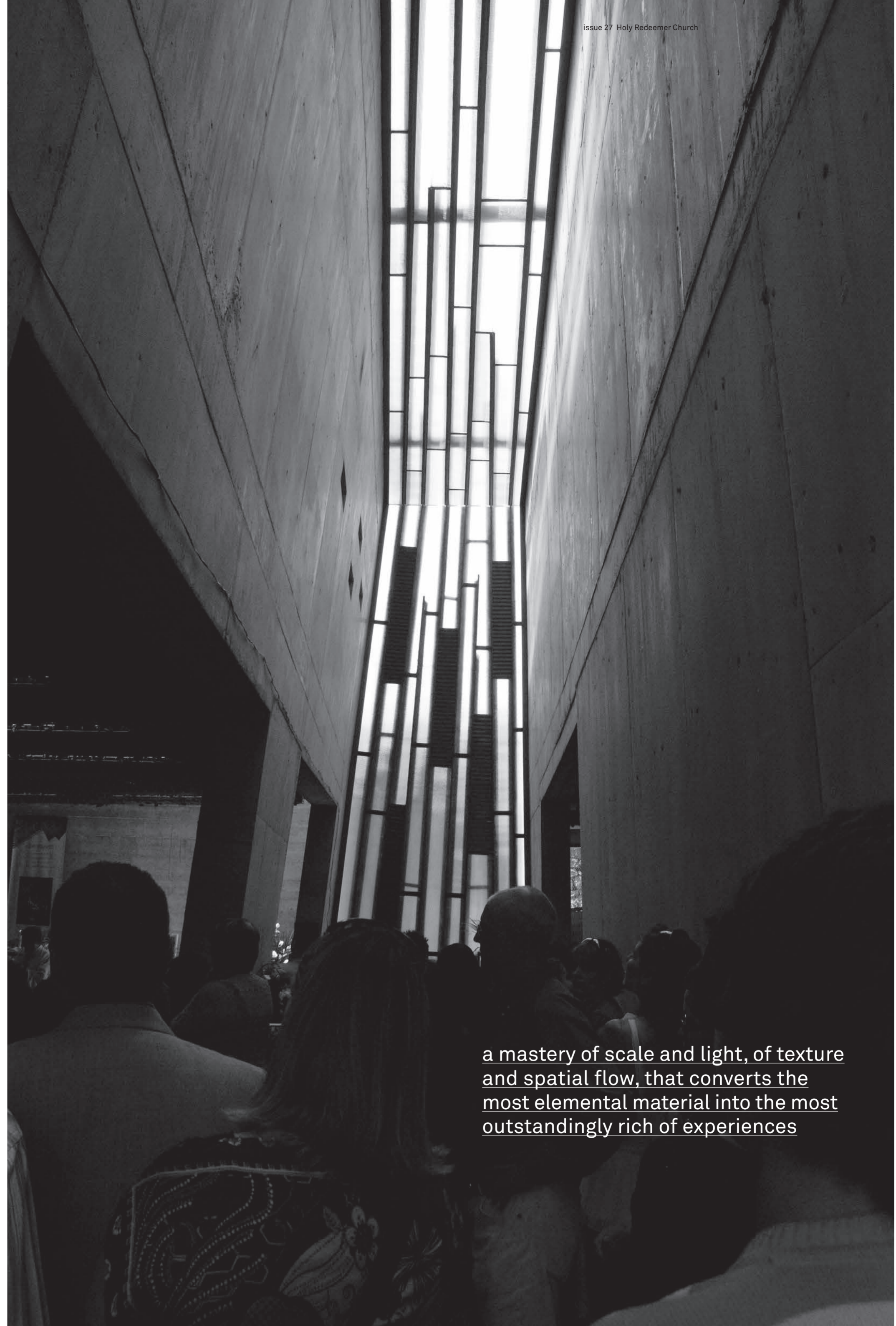
Second Floor



First Floor



Ground Floor



a mastery of scale and light, of texture and spatial flow, that converts the most elemental material into the most outstandingly rich of experiences



**Project** Holy Redeemer Church  
**Architect** Fernando Menis  
**Project Team** Juan Bercedo, Maria Berga, Sergio Bruns, Roberto Delgado, Niels Heinrich, Andreas Wehnacht  
**Support Team** Andrés Pedreño, Rafael Hernández (quantities survey) Audioscan (acoustics), Ojellon  
**Engineer** Milián Associats, Nueva Terrain SL (HVAC Systems, Plumbing, Telecommunications, Electricity)  
**Construction** Construcciones Carolina SL  
**Photography** Yongkwan Kim, Patricia Campora, Simona Rota, Karolina Mysuk





# DOVECOTE

C+A  
12

33





Indigo Slam  
Sydney  
Smart Design  
Studio

# CONCRETE SLAMS



› This extraordinary house for a Sydney gallerist and art collector is as fine an example of the use of concrete in architecture as you are likely to see in Australia today. Located in Chippendale, at the edge of the Sydney central business district opposite newly-completed Central Park and in sight of Jean Nouvel's One Central Park apartment towers, the house is a striking combination of complex insitu concrete forms, steel and glass.

While it is likely that the exterior won't be to everyone's liking – its scale and form fly in the face of conventional notions of domesticity – it has already become a landmark house on the Sydney landscape.

Extravagant and sculptural, the façade is an exercise in curve and counter curve, purposefully designed to manipulate light and views and privacy across its three levels. The exterior language is one of peeling and folding planes of insitu concrete – like paper cut-outs in a pop-up book – to create shade, balcony and spectacular light scoop in one. Complex plywood formwork and a year's work was required to make and place the forms to produce the near-flawless curves and planes of insitu concrete which make the façade.

The mastery in this house designed by Smart Design Studio, however, rests with its interior, in the manipulation of light and scale and materials. The deft choreography of these elements creates an experience of calmness and serenity, with an almost monastic quality that is lacking in the lively exterior.

Step past the remotely operated rusted-steel front gate and through a massive front door of aluminium, brass and glass and you find yourself in a surprisingly modest semi-circular vestibule, its low ceiling acting as a prelude to the drama awaiting beyond. From here, at the end of a small hall, the house explodes into a spectacular hall and grand stair which rises in four flights to a full height of 14 metres. Frank Lloyd Wright used compression and release to dramatic effect in works like the Robie House in Chicago. At Indigo Slam – the name is taken from the title of a Robert Crais crime novel – it is breathtaking. The palette is restrained: unadorned white waxed-render over insitu concrete and floors of sand-

coloured bricks, also waxed to a light sheen. The drama comes from the play of natural light cascading from the vaulted ceilings. The sense of calm is palpable and if you didn't know this was Sydney, you could be forgiven for thinking of Spain, a palazzo along the sun-drenched southern coast of Sicily or the city of Porto, Portugal, home to some of Alvaro Siza's most important buildings, from whose work the house seems to have drawn much of its inspiration. A reception hall to one side – with a dining table for 64 guests – is designed to cater for large numbers and receptions. This is a semi-public space, supported by a commercial kitchen, store, cool-room and basement level brick-vaulted cellar.

A landing half-way along the stairs leads to a suite of private bedrooms and bathrooms reached across a glass bridge to one side and a terrace and guest apartment, also struck in folds of insitu concrete, on the other, looking down into a small landscaped courtyard. At the top of the stair you step into a sequence of living, dining and kitchen spaces, lit in large part by natural light flowing over vaulted ceilings from the concealed light scoop.

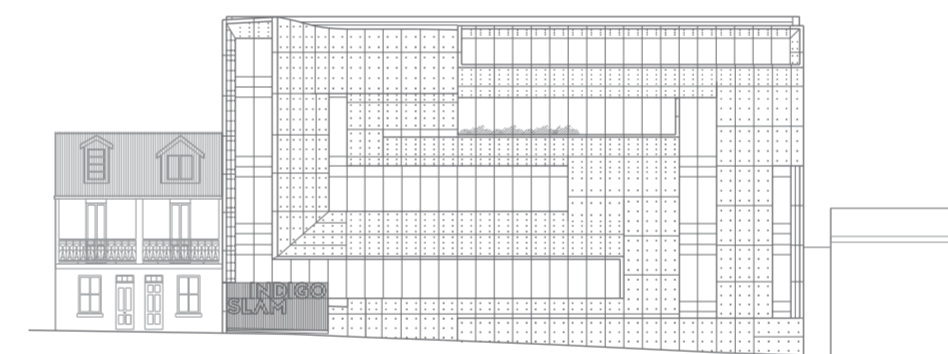
What's remarkable is that in spite of its grand scale, the private zones of the house are modest and rational in plan. All furniture was designed by Khai Liew, the internationally acclaimed Adelaide furniture designer and maker.

Indigo Slam won the Australian Institute of Architects 2016 Wilkinson Award for Residential Architecture (NSW) and the Robin Boyd Award for Residential Architecture at Australian Institute of Architects National Awards.

The jury citation for the Wilkinson Award probably describes Indigo Slam best: "This is an extraordinary house that adds to the reinvention of Chippendale as one of Sydney's artistic and cultural hubs through an extravagant sculptural exercise...the complex shifts of scale at each level of the house, together with refined control of views, balanced with privacy, make each and every space a delight to inhabit. The restrained material palette and nuanced detailing are simultaneously playful and inventive, tactile and understated, always allowing the play of light within the spatial composition to prevail". **Joe Rollo**

37

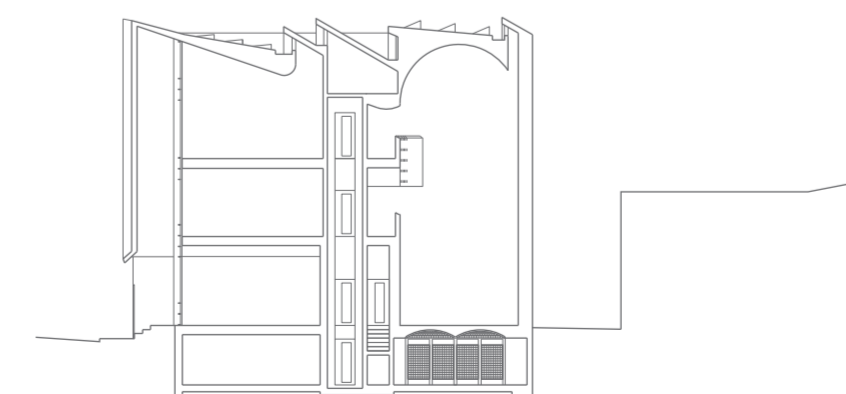
extravagant and sculptural, an exercise in curve and counter curve, purposefully designed to manipulate light and views and privacy



North Elevation



South Elevation



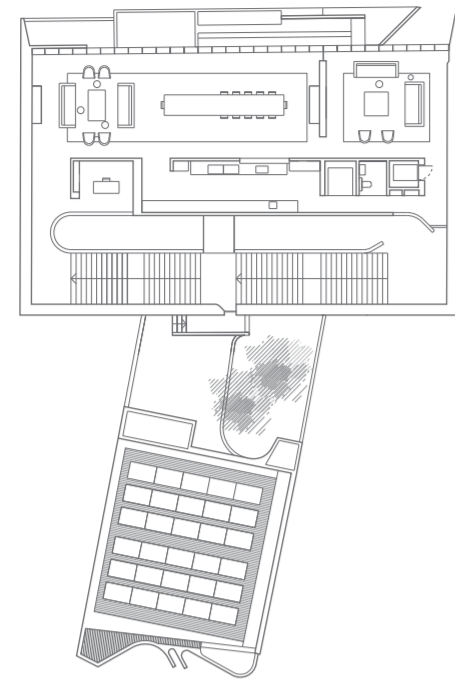
Section  
0 1 2 4m



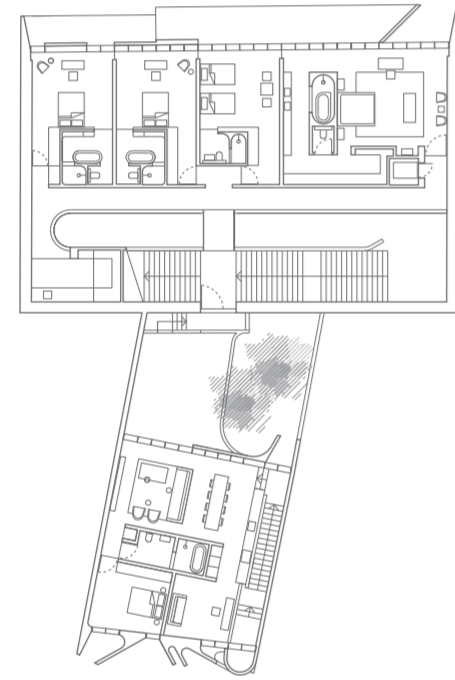




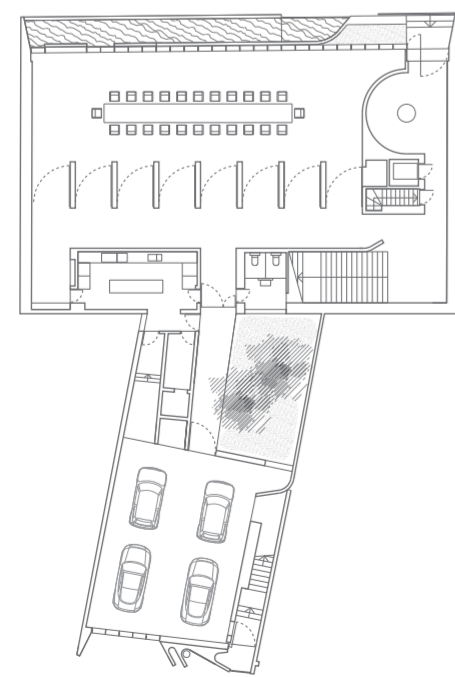
complex plywood formwork and a year's work was required to make and place the forms to produce the near-flawless curves and planes of concrete



Second Floor



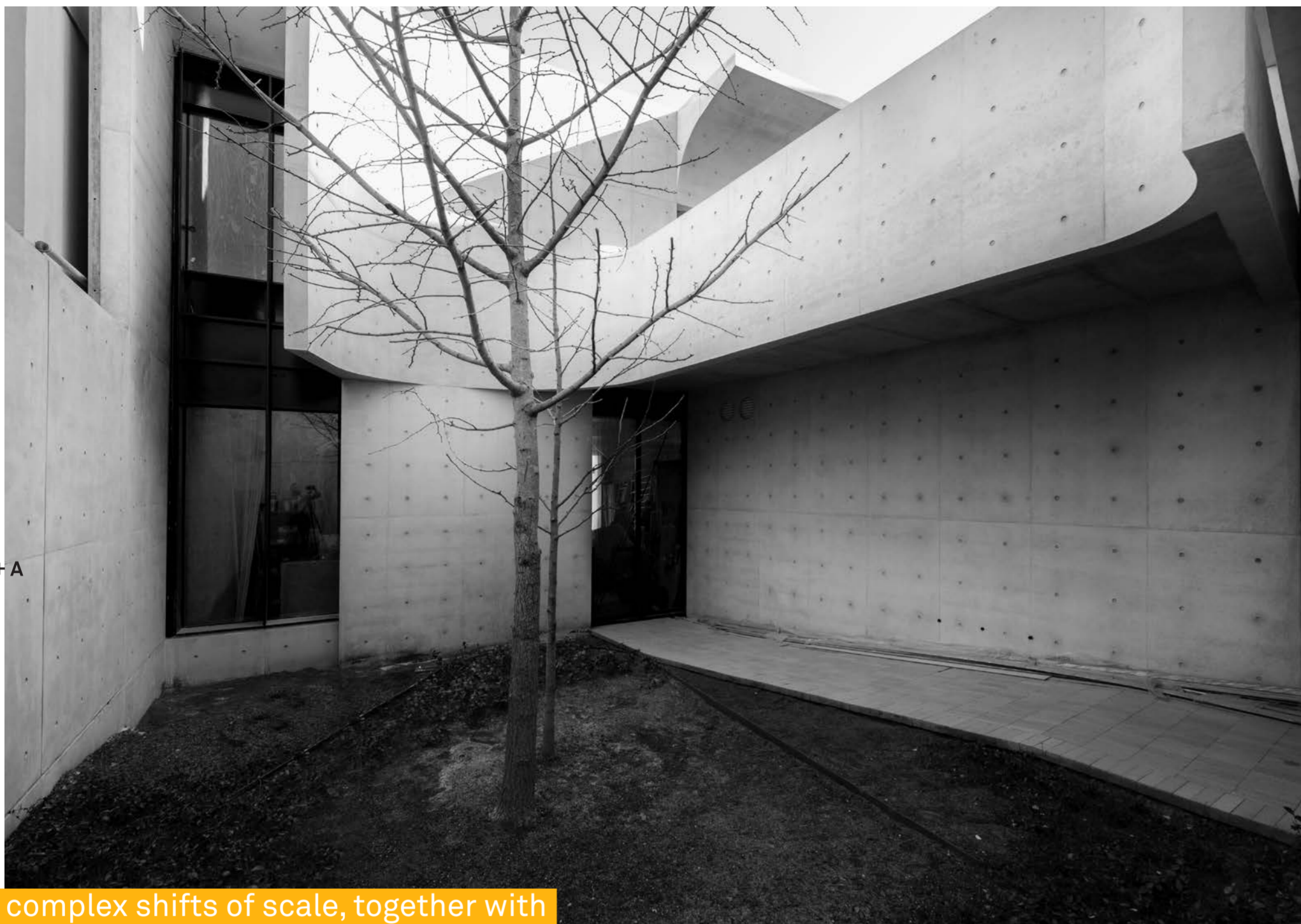
First Floor



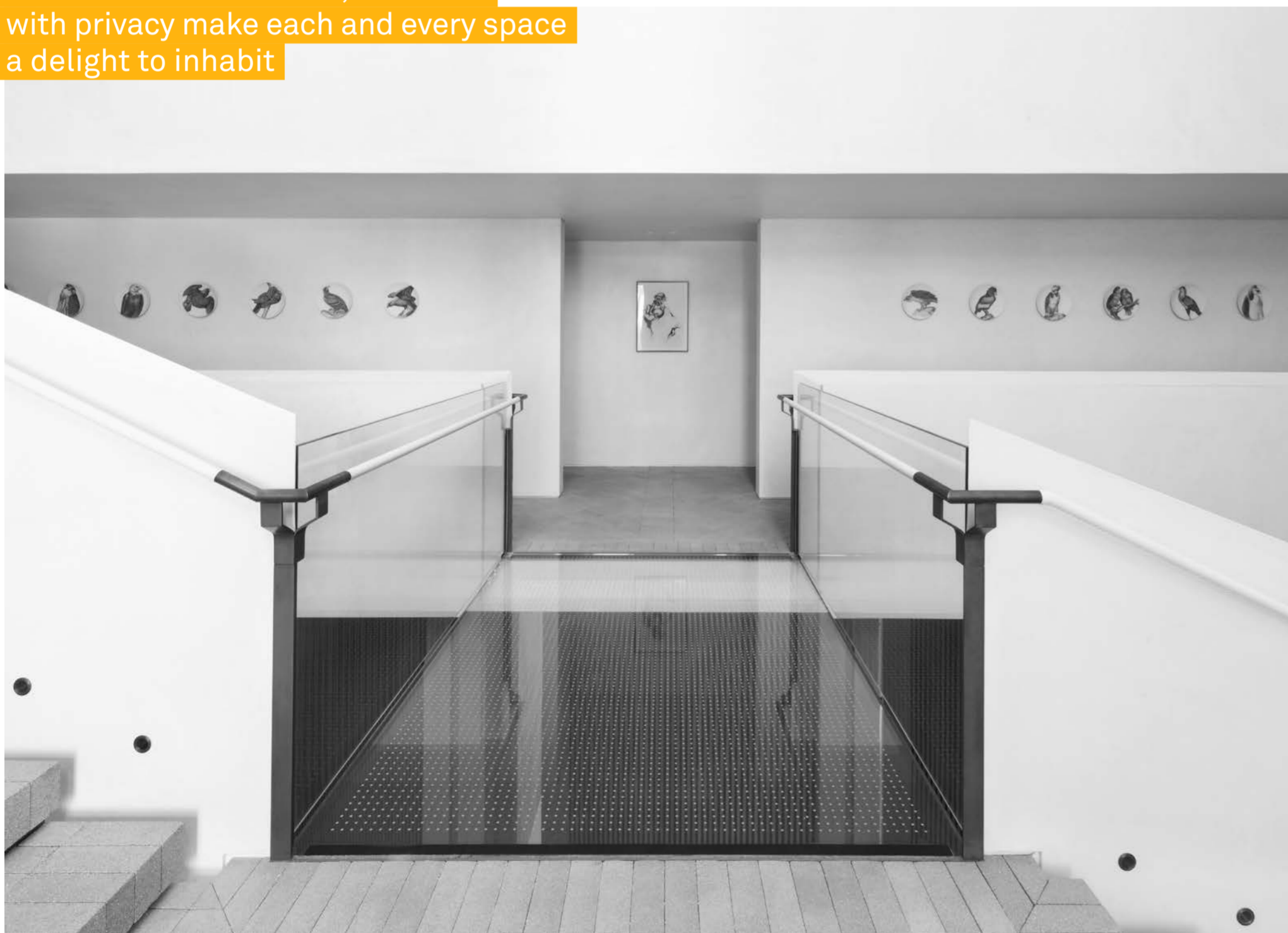
Ground Floor







complex shifts of scale, together with refined control of views, balanced with privacy make each and every space a delight to inhabit





**Project Statement**

A piece of sculpture to be lived in, this exciting project fronts newly-built Central Park in Sydney's Chippendale and creates an inspiring residence for an art collector. Behind a façade of sculpted concrete, serene living spaces and monumental halls create a dynamic spatial interplay of spare interiors in which the main decorative element is light.

The concrete façade is alive to the changes wrought by light, shade, sun, cloud, providing the new urban park across the road with a lively backdrop to public life. Approaching from O'Connor Street, a patterned steel screen opens to lead the visitor into a generous coved vestibule. From here, the space compresses to a low and narrow corridor before suddenly opening to a cavernous stair hall lit from concealed roof lights overhead. The room is a space unique in Australian residential architecture – grand and austere in its size and sparseness, but inviting and exciting as it leads upwards through the building.

As a counterpoint to this dramatic spatial sequence, the living areas leading off it are informal but inviting and intimate. Bedroom suites occupy the first floor, overlooking the public park to the north. The curves and planes of the façade here act as screens to provide privacy and shade. On the second floor, sitting and dining rooms overlook the park. A sky-lit kitchen and study look back into the building, creating views across the stair hall. To the south, a small garden flat and three car garage address Dick Street.

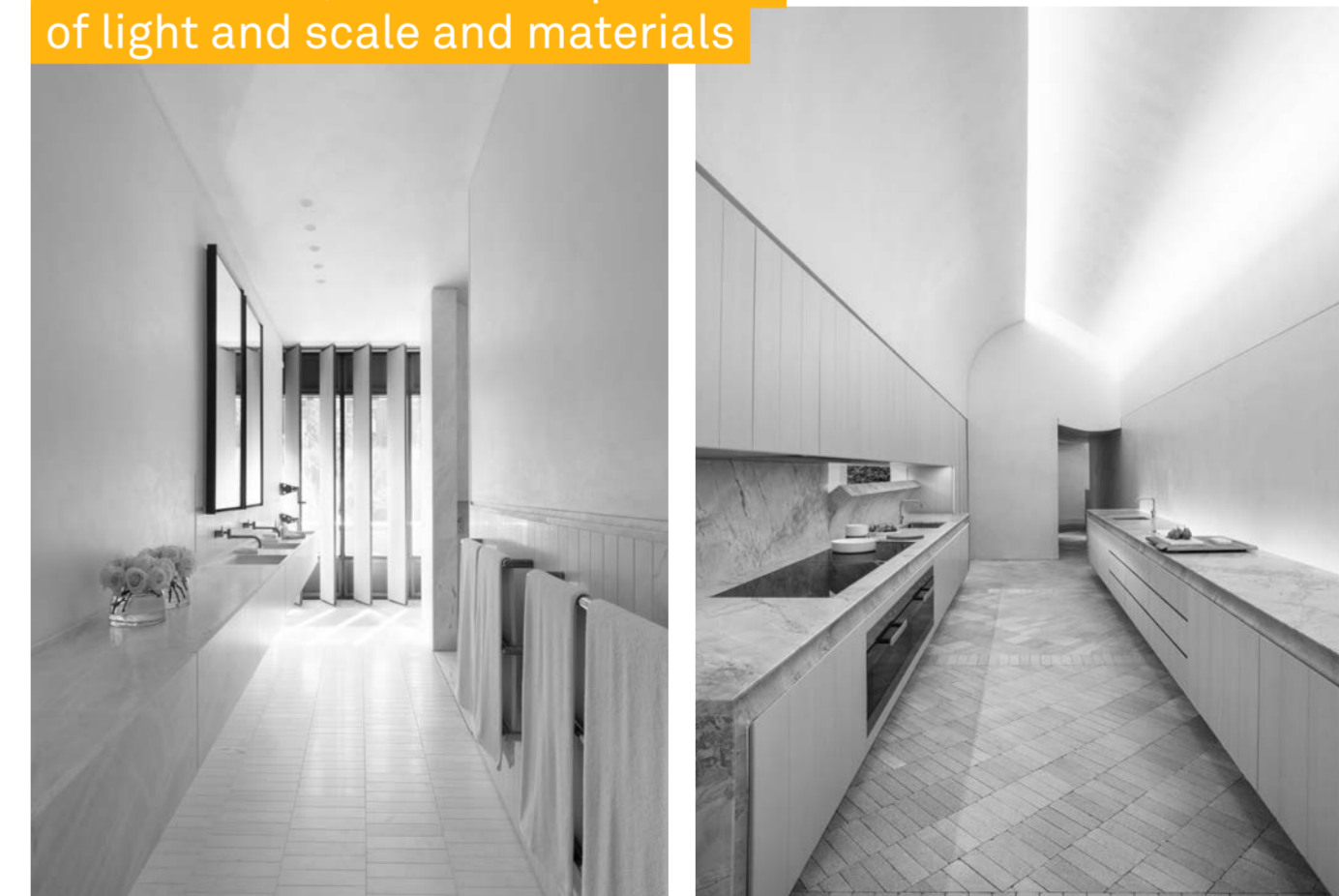
Spaces are large but not ostentatious. Internal finishes are modest and pared back: floors are brick-paved, walls are of set render, fittings are simple. The brief was for Indigo Slam to last 100 years. Materials were selected to wear and endure and fittings to last, with operable elements mechanically rather than manually operated. These include oversized vertical timber blinds which turn and retract by means of hanging chains and awning windows operated by geared winders. Brass armatures for these moving parts lend a finely grained detail to the interior and to the steel, glass and concrete of the building façade.

The project aspires to an exemplary level of environmentally sustainable design, with natural lighting, cross-ventilation, rainwater harvesting and adherence to passive solar design principles reducing the energy and water load of the building. Geothermal heating and cooling have also been incorporated into the design and solar hot water and photovoltaic cells populate the roof.

Indigo Slam represents a rare opportunity to add a large residence of substantial quality and architectural merit to the diverse neighbourhood of Chippendale, and participate in the reinvigoration of this part of Sydney as a place of architectural and cultural interest. **Smart Design Studio**



the mastery in this house lies in its interior, in the manipulation of light and scale and materials





**Project** Indigo Slam Residence  
**Location** Chippendale, Sydney  
**Architect** Smart Design Studio  
**Project Team** William Smart, Nicole Leuning, Luke Moloney, James Ho, Joey Cheng  
**Structural Engineer** Northrop – Brian Wood  
**Electrical Engineer** Northrop – Renata Oliveira  
**Hydraulic Engineer** Northrop – Leon Dimino  
**Project Manager** CPM Consulting – Chris Peter, Paul Ishak  
**Furniture Design** Khai Liew  
**Landscape Architect** Christopher Owen  
**Lighting Design** Steensen Varming – Emrah Baki-Ulas  
**Geotechnical Engineer** Jeffery and Katauskas – Todd Hore  
**Civil Engineer** Taylor Thomas Whitting – Kelvin Holey  
**Façade Engineers** Advance Design Innovations – Michael Whytlaw + Arup – Peter Romeos  
**Photography** David Roche, Sharrin Rees





Melbourne Terrace Apartments  
Nonda Katsalidis 1994

# REARVIEW

Movement and interest, texture and light washing over surfaces are some of the constants in buildings designed by Nonda Katsalidis. You only need look as far as the Republic Tower Apartments – 32 storeys of raw concrete and muscle – to understand where he is coming from. One of his earlier and best works is the Melbourne Terrace Apartments, a gritty, experimental corner block, right on the edge of the Melbourne CBD, looking across at the Queen Victoria Market. It is a flamboyantly decorated, compositional mishmash of serrated concrete panels, oxide-etched concrete balcony slabs, copper sheet cladding and classically-inspired concrete sculpture; massed and piled into an exuberant mix of colour, texture and art reminiscent of early twentieth century European models of residential typologies. The “palazzine” of Rome spring to mind. Broken into four separate compartments – though it appears as a single building – each with its own discreet street address, Melbourne Terrace is an exploration of ways to express the possibilities of prefabricated concrete in architecture that goes beyond the assembly of concrete boxes stacked one on top of the other.

Photograph: John Gollings

