

New Zealand Institute of Architects Incorporated



## NZIA Graphisoft 5th Year Student Design Awards 2013



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by Raphaela Ros

New Zealand Institute of Architects Incorporated



# NZIA Graphisoft 5th Year Student Design Awards 2013

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**Student portraits** 

NZIA Graphisoft

4. Introduction

# The NZIA Graphisoft 5th Year Student Design Awards

The 5th year Student Design Awards is a competition-based format involving four nominated students from each of New Zealand's three architecture schools: The University of Auckland School of Architecture and Planning, Unitec Department of Architecture and Victoria University of Wellington School of Architecture. From 12 presentations, the jury selects a single NZIA Graphisoft Student Design Awards winner, who receives a monetary prize of \$5,000. Two Highly Commended awards are also conferred.

The student design awards have now been running for more than eleven years and for seven of those years they have been kindly partnered by Graphisoft. One aim of the awards is to provide New Zealand's leading architecture students with exposure to a jury of high-calibre judges. In 2013, David Sheppard, from Sheppard & Rout, Camilla Block, from Australian firm Durbach Block Jaggers, and John Melhuish, from Herriot + Melhuish: Architecture, undertook judging roles. Alongside their critical expertise, jury members were selected for their strong ties to both professional practice and academia.

The student design awards are presentation based, with nominated students required to present significant final-year projects. Across the years that the awards have been undertaken, a high standard – with respect to both quality of presentation material and verbal explanation – has become customary. In 2013, as in preceding years, there was also evidence of another awards tradition: an incredible diversity in subject matter.

Perhaps no project was more left-field than that presented by University of Auckland student Raphaela Rose. Based on two key moments in Auckland's sexual history – the Prostitution Reform Act 2003 and the ongoing plans by the Chow brothers, notorious purveyors of houses of ill repute, for a CBD-based mega-brothel – Rose's project 'Sex(uality) and the City: Counteracting

the Cock-ups of Auckland's Main Strip', achieves the rare feat of combining architecture, parody and political and sexual folly into a stylish, sparely drawn package.

Like Raphaela, other students channelled social concerns through their work. For United student Tessa Crosby, the placement of health infrastructure at the city fringe is an outdated mode. Her designs for a regional oncology centre within Auckland's CBD demonstrated that urban medical facilities can enhance patient experience and bridge the gap between the medical profession and everyday life. Unitec's Daniel Smith, with a proposal for a school in Cambodia, recognised the importance of collaborative design in humanitarian aid projects, if heavy-handed results and neo-colonial impressions are to be avoided. The University of Auckland's Marianne Calvelo expressed the conflation of the domestic realm and the workplace with a proposed headquarters for Architecture + Women NZ within Auckland's St. Kevin's Arcade.

This year there were also projects with theoretical precedents. Ashley Benck, from Victoria University of Wellington, considered human integration with machines, investigating, with wonderful drawings, how the cyborg can be used as a catalyst to re-engage the body with architecture. Toby Coxon, also from Victoria University, interwove with his futuristic designs – for a not-so-humble bakery – ideas related to the Spinozan notion of 'affect'.

There were also projects rooted in the practical. Solutions to the looming spectre of sea-level rise were sought by Tara-Lee Carden (VUW). 'City of Flux' considers watery iterations of Wellington's CBD across the next century, with canals and architectural connections as suggested solutions. Further south, in Christchurch, a city looks to build anew – but what of its remnant architectural history? Unitec's David Cook proposed a theatre project inserted between the ruined façades of

old buildings, seeking a fine balance between responding to the past and preparing for the future. Extraction lands – oil fields, mines and quarries – and their re-use once mined to extinction provided a starting point for University of Auckland student Nathan Swaney. His designs for a shipbreaking yard and seafarer's centre were sited in Taranaki, where he sees the extraction of oil and gas putting the port town of New Plymouth on a finite timeline.

From old infrastructure to new, Hayden Grindell (VUW) looked at ways of integrating buildings traditionally associated with remote areas into urban environments. 'Date with Data' imagines how data centres, massive, strictly utilitarian building types, can be reconfigured to contribute spatially and technologically to urban Wellington.

Two final projects neatly summarise the geographical extremes New Zealand architects encounter. Michael Holehouse (Unitec) presented a range of architectural interventions for Waikato's Whangamarino Wetland based upon the inextricable link between the ground, water and vegetation – three factors which combine in different degrees to create ever-changing conditions for architecture. University of Auckland student Sacha Milojevic chose as his site the urban swathe of Newmarket his university has acquired from a brewing company. Sacha's ambitious reimagining of this suburb-connecting site is geologically complex, and carefully considered from many perspectives.

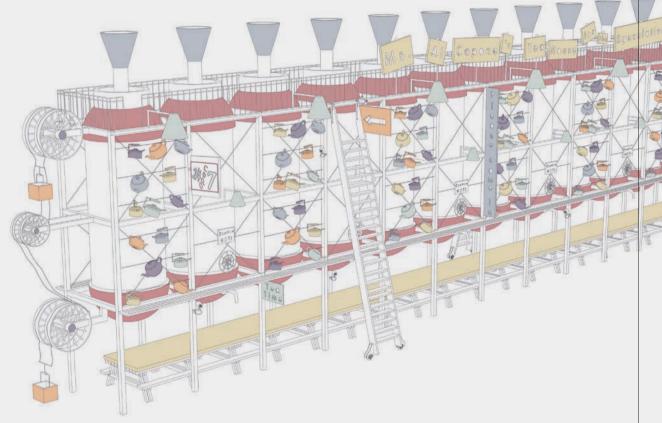
This year, the judges awarded the NZIA Graphisoft Student Design Award to Raphaela Rose. Sacha Milojevic and Nathan Swaney were both highly commended. Without exception, the jury reports that the students acquitted themselves with admirable equanimity. The NZIA offers all finalists congratulations and extends its best wishes for the future.

#### New Zealand Institute of Architects March 2014

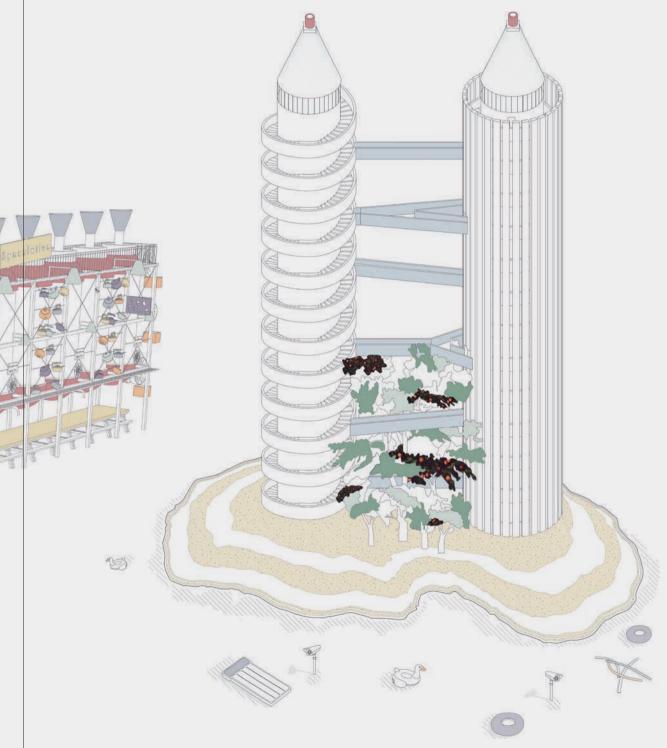
NZIA Graphisoft 5th Year Student Design Awards 2013

## Raphaela Rose

University of Auckland School of Architecture and Planning



Above 'Ms. Al Capone's Tea House for the Speculative', one of Raphaela Rose's 13 tongue-in-cheek structures proposed for Auckland's CBD. Right 'Rapunzel's Titillating Observation Tower', another of Raphaela Rose's spectacular modern-day, theme-park structures.



Winner

#### Raphaela Rose

University of Auckland School of Architecture and Planning

#### Sex(uality) and the City: Counteracting the Cock-ups of Auckland's Main Strip

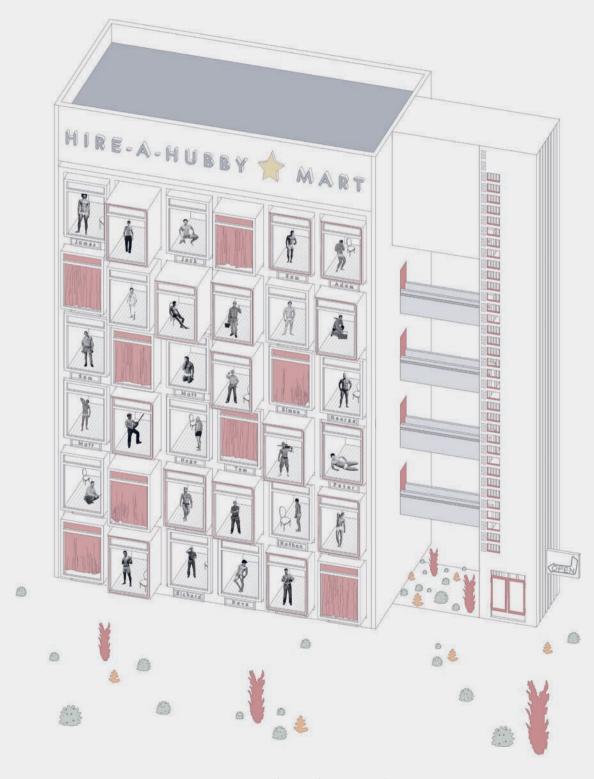
This project was provoked by two events in Auckland's sexual history: the Prostitution Reform Act 2003 and plans for the Chow Brothers' 'Super Brothel' in the heart of the city. What impact do these events have on the social ecology of Auckland and what does the changing perception of sexuality and sexual economy mean for the built environment? This project proposes a smaller-scale city, a 'speculative archipelago' comprised of 13 individual buildings. Each addresses the symbolic significance of different issues occurring in the sexualised body politic of Auckland city, while formally, each building responds to its respective situation. In oscillations between spectacular, primitive and refined, these buildings allow a voyeuristic gaze to fall upon politically defined architectural forms.

#### Citation

Architecture is cleverly and gainfully employed as a satirical tool in this mischievous project. The scenario calls for the city blocks containing the Sky Tower, casino and proposed new super-brothel to be surrounded by a fun park themed by recent local sex scandals. The result is a joyful, rollicking series of attractions, each of them like an exquisitely and wittily conceived fable. Beneath that sugarcoating, a subversive message filters through, undermining the current environment that has been foisted upon the city.



**Left** A couple of Johns, Banks (Act Party MP) and Key (PM), embroiled in a tea-time tête-à-tête. Right 'Liz Taylor's Hire-a-Hubby Mart' riffs on the famous actress's collection of husbands and Amsterdam's redlight district.



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Highly commended

#### **Nathan Swaney**

University of Auckland School of Architecture and Planning

#### Extraction Lands and the Permanence of Production

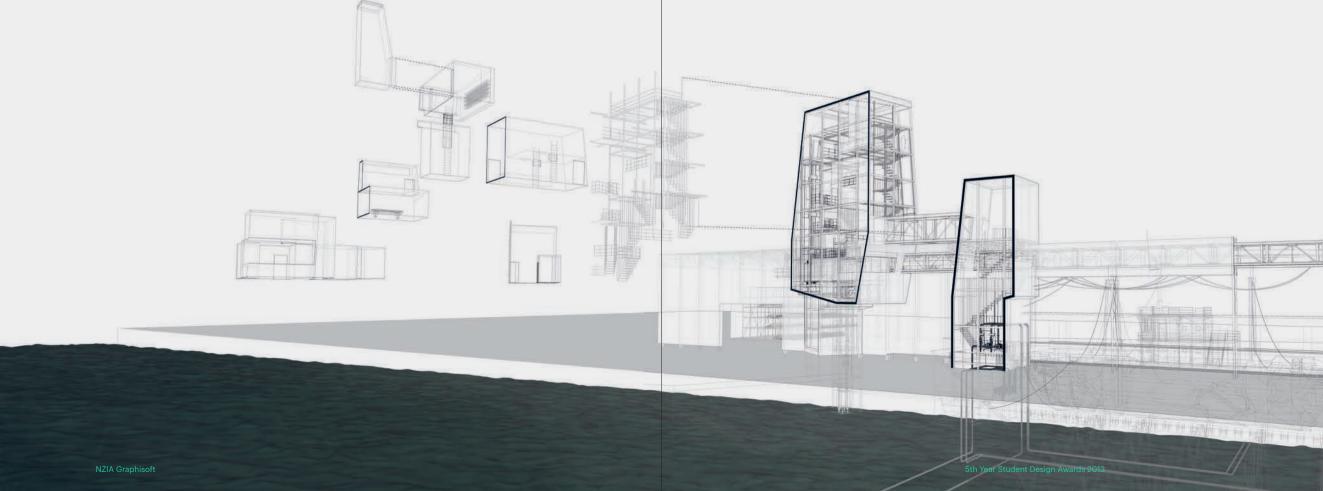
This design forms part of a wider discussion on how we have become reliant on the landscapes that provide for us. In extraction lands – oil fields, mines, and quarries – what role does architecture play once the resource is depleted? This project's context is Taranaki, with New Plymouth on a finite timeline thanks to oil and gas

extraction. The proposed Seafarer's Centre and Shipbreaking Yard has three main aims: to find alternative futures for the machinery once used in this process of extraction from the earth; to recycle some of the material produced by extraction efforts; and to attempt to re-engage the transient and disconnected operations of a reclaimed wharf site with the local community.



Above A render of a ship-breaking yard, one reimagining of alternate futures for redundant infrastructural objects. Below A threedimensional section of Nathan Swaney's Seafarer's Centre and Shipbreaking Yard. Citation

Offshore oil and gas rig hardware, salvaged and recycled as a ship-breaking yard, is this project's guiding idea. The scope is expansive and heroic. The themes of industrial decay and rebirth – as well as waterfront habitation – are convincingly juxtaposed.



#### 2.

#### Alexander (Sacha) Milojevic

University of Auckland School of Architecture and Planning

#### **Newmarket Campus as a Porous Megaform**

The impetus for this project is the University of Auckland's replacement of two outer-suburb campuses with a new 5.2ha campus on the site of the old Lion Nathan Brewery in Newmarket. The design is conceptualised as a dense and porous aggregation of overlapping places that are carefully excavated and geological in form. There are places for singular and group learning amongst ramps and roof terraces; there are shared spaces, retail opportunities, and places for transportation. The aim of this 'special place apart' is to be different from the rest of the city, yet contribute good urban design through built-in permeability.

#### Citation

Created with intelligence and intuition, this project offers a vision of an educational community, conceived in an organic manner from a series of single rooms outwards. It recognises the 'world apart' quality great universities share, yet does not ignore its urban context. Every part of this deftly presented scheme exudes a sense of passion for architecture.



Right One of the interior spaces – a carefully day-lit lecture theatre or performance space.





Finalist

#### 15.

#### **Ashley Benck**

Victoria University of Wellington, Faculty of Architecture and Design

#### **Bio-Body Reactor**

This thesis questions how the cyborg – as a hybrid creature, composed of organism and machine – can be used as a catalyst to re-engage the body with architecture. The method employed is iterative, with three key areas explored in the argument of the proposition: precedent, site and programme. The design method

concentrates on a process of fluctuation between the analogue and digital, micro and macro, body and machine. The inquiry also acknowledges and accentuates the current condition of Wellington City as a macro entity, and prepares it for the future by rethinking existing parts, such as the industrial mechanisms that could contribute to the city's energy generation.





Far left One of Ashley Benck's many building tests, which investigates the relationships between humans and machines.

**Left** A sketch exploring arterial networks.



#### **Marianne Calvelo**

University of Auckland School of Architecture and Planning

#### Mad Women: A Contemporary Architectural Translation of Domesticity

This project – a proposed headquarters for Architecture + Women NZ – is sited within Auckland's St. Kevin's Arcade, on Karangahape Road. 'Mad Women' is an investigation of how a contemporary translation of domesticity is being negotiated today. It recognises the developing conflation of the domestic realm and the workplace, historically viewed in spatial opposition, analyses the position of women within in the architectural profession operating within this blurred condition, and traces the development of an alternative framework of dynamic and flexible workspaces that are explored through a multi-layered drawing process.

Citation

One of Auckland's much-loved buildings, St. Kevin's Arcade, is reinterpreted as the headquarters for Architecture + Women NZ. The result is a genuine alternative to conventional workspace, with cleverly integrated children's play areas and flexible gathering rooms. The whole is intimate and intricate.

Below St Kevin's Arcade, at the edge of Myer's Park in Auckland, reimagined as an office for Architecture + Women NZ. **Right** A sectional view of the office, which marries aspects of home and office life in the form of flexible workspaces.







#### **Tara-Lee Carden**

Victoria University of Wellington, Faculty of Architecture and Design

#### **City of Flux: Liberating the Concrete Terrain**

City of Flux considers the Wellington CBD's potential response to climate change over the next century. The design component of this research is to modify a section of the existing urban fabric, like a hinge between land and sea, to accommodate, prepare and adapt for flooding. In order to form a design framework to respond to sea-level rise, internationally implemented adaptive strategies have been employed. The scheme operates as a water-management network, with an infrastructural backbone in the form of a high- and low-line canal system for ferry transport and three architectural connectors that allow direct access to buildings flanking the site.



This imaginative proposition grapples with the almost insurmountable problem of impending sea level rise. Moats, canals, locks and aqueducts are all employed to create a new urban playground and work precinct on the Wellington waterfront. The need to think beyond artificial property lines and take into account the city's underlying geomorphology is addressed directly and confidently.

Left Canals and connections envisaged as an architectural response to future sealevel rise in Wellington.

Right Drawings based upon strategies of sea-level rise adaption: accommodate, defend, retreat.



ACCOMODATE



DEFEND



RETREAT

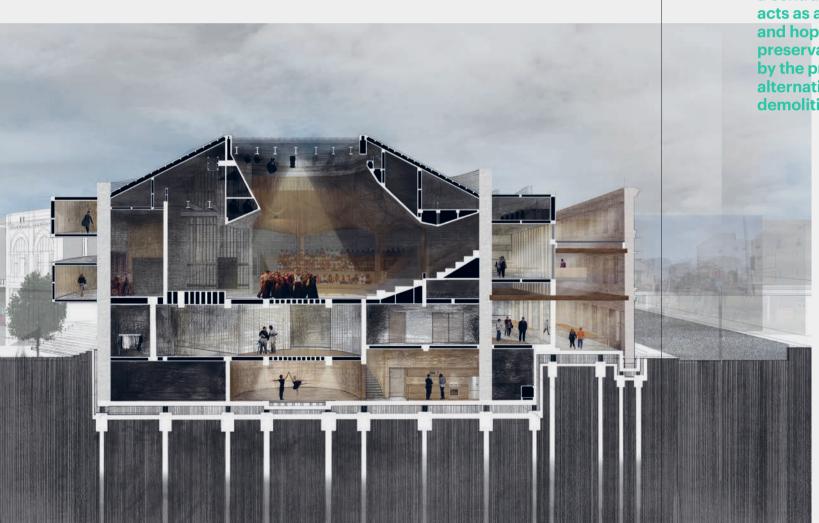
#### **David Cook**

Unitec Department of Architecture

#### **Reclaiming the Lost City**

This work addresses the historical pieces of architecture that have survived the Christchurch earthquake. What happens to these remaining fragments of history? The earthquakes have presented Christchurch with an opportunity to build a central city with new and exciting buildings, but what is to become of the surviving fragments

of Christchurch's architectural history? This project looks for the balance between responding to both the past and the future. Above all, it explores how a theatre project inserted between the ruined façades of old buildings might revitalise the city. This civic gesture invites people back into the city with an architecture that connects to their senses and memories.



Citation

This design for a civic arts space is a thoughtful response to some of the questions now facing Christchurch. Using materials lovingly rescued from earthquake rubble, a centrally placed oculus acts as a symbol of light and hope. The spirit of preservation embodied by the project provides an alternative to wholesale demolition.

Left A section of a theatre project conceived for space between façades of Christchurch buildings. An oculus is a key feature of the design.

**Right** An axonometric of the theatre project.



Finalist

#### **Toby Coxon**

Victoria University of Wellington, Faculty of Architecture and Design

#### **Desiring Affect**

Following recent ontological shifts within the social sciences, discourse within architectural and geographical circles has sought an understanding of space and the built environment through the lived experience of the body. This design explores the Spinozan notion of 'affect' as a strategic approach to design - that is, how to overcome experiential limitations of conventional design processes. This reconsideration of an everyday space - a bakery/café - seeks to engage at a visceral level. Moving imagery becomes a diagrammatic driver for the multiple imperatives of the design - program, movement and form - with a particular focus on the intangible conditions of space.

This ambitious investigation into the beginnings of the design process questions the fundamentals of static habitation. The result is a proposed bakery/ café composed of a sequence of sculptural, elastic spaces.

Bottom Chaffers Street Bakery incorporates moving imagery into its conceptual design. design in an attempt to break down spatial boundaries.

**Below** Various perspectives of the





NZIA Graphisoft

#### **Tessa Crosby**

United Department of Architecture

### Social Sutures: The Integration of the Medical Facility into the Urban Tissue

'Social Sutures' explores the relationship between architecture, urban design and healthcare. Hospitals, frequently, are large institutional complexes located on city fringes. What if a multifunctional institution was stitched into a city's urban tissue? This scheme – for a Regional Oncology Centre in Auckland's CBD – investigates just that. This work contends that such a design would provide greater social connection for patients and enhance inclusion, significance and belonging in the wider social context.



**Right** Axonometric of a regional oncology centre proposed for Auckland. Far right A cross section of the building in its heavily urban surroundings. Citation

This well-researched and articulated project relocates an oncology building from the isolated hospital campus to a central CBD site. It re-imagines the ground floor as a

public convention centre and the beginning of an architectural promenade through the site and building. The project is a humane and sensitively conceived piece of work.





Victoria University of Wellington, Faculty of Architecture and Design

#### **Date with Data**

This project explores the emerging architectural typology of digital data infrastructure, those places known, more commonly, as data centres. Data centres are the core physical infrastructure of digital information networks and are typically isolated from population centres due to functional constraints and potential tension with urban contexts. This design concept argues that the integration of digital data infrastructure within the city can be beneficial, and the design research addresses the context in which the physical infrastructure of global information networks can be reconfigured to contribute spatially and technologically to urban Wellington.

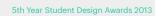
Citatio

An unglamorous and ordinarily unseen part of our infrastructure – data storage – takes centre stage in this project. Several solutions are investigated, one of them a self-contained tower of austere beauty. In another, complex, sectional relationships are explored to house disparate uses with deft integration of the ground plan.



Far left A massive data centre reimagined in a Wellington context.

Left The proposal seeks to amalgamate the functions of a data centre with more typical urban roles.





#### 20

#### **Michael Holehouse**

United Department of Architecture

#### Architecture for the Whangamarino Wetland

This project addresses the lack of access to the Whangamarino Wetland, a significant freshwater wetland situated in the Waikato. A range of architectural interventions scattered across the wetland have been explored, with each pertaining to a different part of this rare and important habitat. The project recognises the inextricable links

between earth, water and vegetation, with these three key factors combining in different degrees to create a variety of unique, ever-changing conditions for architecture.

**Below** A section of a viewing tower proposed for the wetland setting in the Waikato.

Right Render of a 'summer bridge', designed to accommodate seasonal variations in water level.



Citation

Conceived as a distilled series of poetic moments, this project sensitively opens the door to a previously inaccessible wetland. Considered, restrained archetypal forms (demonstrated by highly crafted models) have been designed to eloquently acknowledge the ground conditions on which they stand.



#### **Daniel Smith**

United Department of Architecture

#### Humanitarian Architecture, People, Place & Power

Architecture is often concerned with humanitarian needs. Often, the concern of the architectural profession is improving the quality of the built environment for those in need. This project, which recognises that without participatory design processes, humanitarian architecture risks being detrimental, expands the facilities of the Mercy School, in Cambodia. It creates a space for positive social engagement between the various groups of people within the community. Programmatic and social needs were achieved by designing boundaries and thresholds that reveal spaces for public social activities, while creating visual privacy where needed.

#### Citation

The challenges facing a Western architect assisting in a Third World country are at the heart of this project. After exhaustive consultation with the inhabitants of a Cambodian village, the designer has arrived at a sensitive, honest solution for a series of new public buildings. On a site with difficult climatic conditions a limited palette of materials and construction techniques has been harnessed to deliver a convincing, positive outcome.

Right Render of a proposed new Mercy School for Chhuk village in Cambodia.

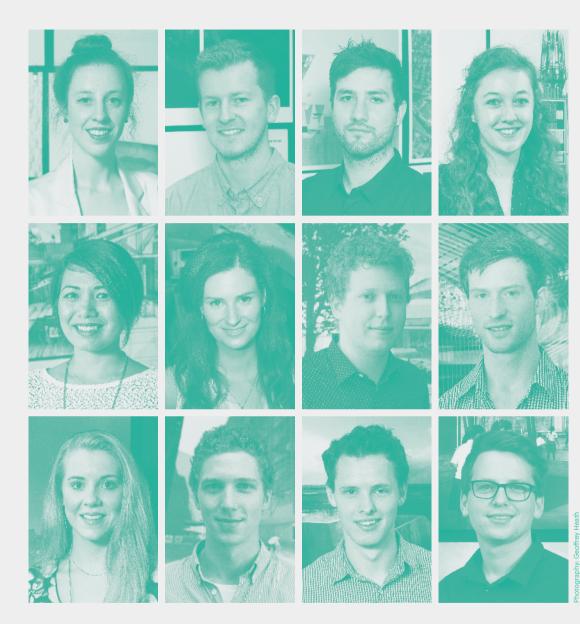
**Below** Exploded view of the assembly components for a lightweight structure.







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Raphaela Rose, Nathan Swaney, Alexander (Sacha) Milojevic, Ashley Benck Marianne Calvelo, Tara-Lee Carden, David Cook, Toby Coxon Tessa Crosby, Hayden Grindell, Michael Holehouse, Daniel Smith

