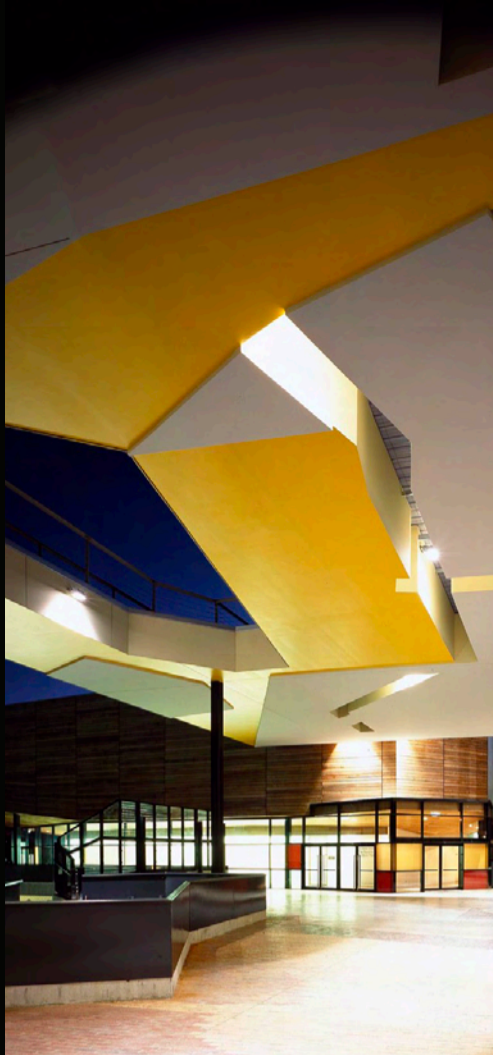


H2o ARCHITECTS EXPRESSION OF INTEREST NEW BUILDING FOR THE FACULTY OF ARCHITECTURE BUILDING AND PLANNING UNIVERSITY OF MELBOURNE



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H2o

BUILT PEDAGOGY

Extensive Experience Delivering Learning Environments

H2o architects has developed an international reputation for the successful delivery of innovative, progressive and sustainable projects in the educational field. A number of H2o's educational facilities have been published internationally, and Directors Tim Hurburgh and Mark O'Dwyer have been invited on many occasions to present their work to international forums.

Previous Successful Experience Working With University of Melbourne

H2o architects have had successful previous experience completing projects for University of Melbourne, including:

- Engineering Federation Fellowship
- Geomatics Computer Labs, Engineering Building
- Student Union various works, including Masterplan, Union Theatre, Info counter, Toilet Upgrade, Entry Upgrade, Basement Upgrade.
- Advancement and Communications Unit, Level 4, 766 Elizabeth St.
- Bullwinkles / Art Supply & Stationery Store relocation.
- School of Architecture, Dean's office refurbishment
- Old Commerce Building Level 2 Information Centre, Swanston Street
- School of Physics, Level 4,
- Building 175, Soils and Water Lab
- Building 170, Level 3 (School of Manufacturing & Mechanical Engineering)
- Earth Sciences, Room 220

Campus Integration

H2o architects have multi-faceted expertise in the delivery of commissions of campus scale, and over time we have developed our own interlocking implementation strategies to produce successful educational campuses, which are demonstrated in our previous work:

Heritage / Using What's There

Wherever possible, we engage with existing structures and resources on site as part of the design inception. Many of our previous projects have required sensitive adaptive reuse and extension of existing structures from the 19th and 20th century eras. Where existing buildings are required to be demolished, We recycle as much of the existing resources within the new building design as possible as an ESD initiative.

Three Dimensional Urban Connections

Our projects are distinct in their attention to the integration and connection of the design to the existing campus. H2o have utilised typologies such as the 'raised plaza', 'vertical streets', bridge links, internal streets and light voids to develop three dimensional interconnections to positively activate the building and the surrounding context.

Visual Transparency

Previous H2o projects demonstrate our approach to incorporating visual permeability into our designs in order to activate and enliven the campus. Previous projects deliberately locate active but under utilised spaces, such as gymnasiums, towards pedestrian areas with expansive glass. Single-loaded classrooms with external 'verandah' corridors develop a transparency of activity, and allows communication and display of in-process work.

Advanced Servicing

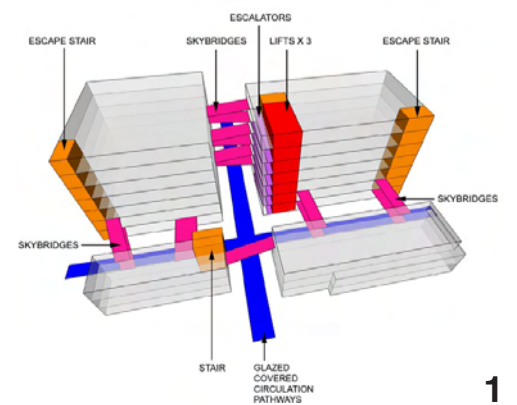
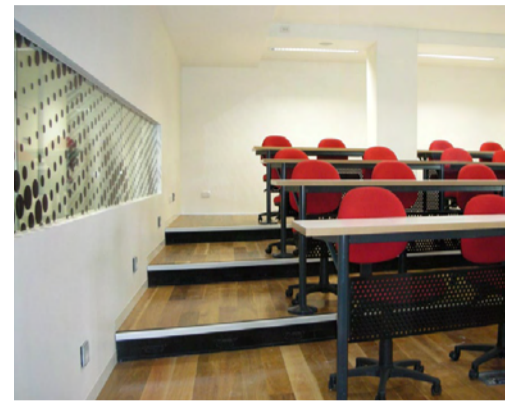
As part of our commitment to environmentally sustainable design, our projects utilise advanced servicing methods while ensuring these methods are practical and affordable. The fabric of our project designs include from the outset the fundamentals of servicing requirements to avoid expensive and failure prone systems.

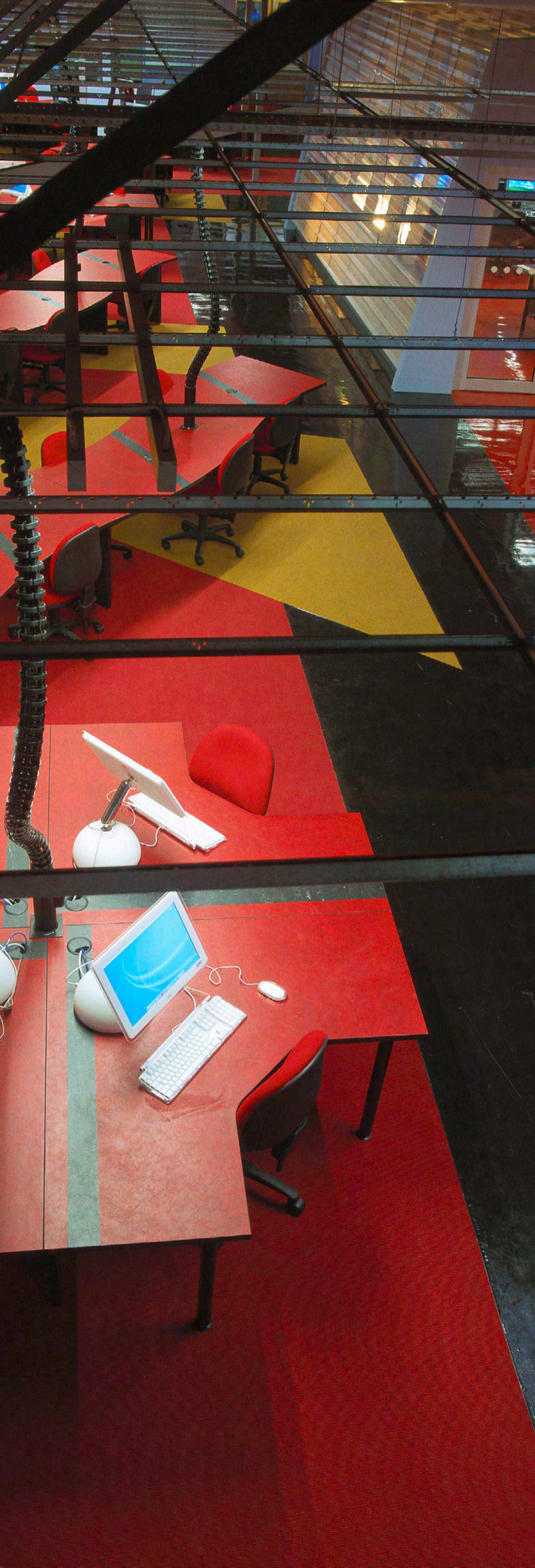
Iconic Expression

H2o understand the importance of a significant 'landmark' project to a University campus, and therefore the profile that could be achieved through the new ABP building for the faculty and the University of Melbourne. We have previously delivered unique designs for our tertiary clients that play a role in their greater community context.

Environmentally Sustainable Design

Environmentally sustainable design is intrinsic to the philosophy of H2o architects. Many of the above strategies are derived or informed by our sustainability agenda. Shallow floor plans with adjoining natural light sources from internal light voids or external verandahs also provide three dimensional interconnections and qualities of visible activation. Using existing materials and structures lessens the impact of the construction on global resources.





THE ACADEMIC ENVIRONMENT

Inspiring Work Environments

H2o architects have a significant reputation for the delivery of high quality work environments for clients in the education, commercial and government sectors. Each of our completed work environments have an individual personality as we develop the design through extensive stakeholder dialogue and consultation. We incorporate into our working environments best practice Environmentally Sustainable Design and Operational Health and Safety initiatives, and the built outcomes produced benefit the occupants through a healthier and safer workplace.

Flexible Academic Environments

Through our previous experience on educational facilities and commercial workplaces, H2o are at the forefront of changing methods of working environment design. Directors Tim Hurburgh and Mark O'Dwyer have been invited on many occasions to present their research on education environment dynamics to industry conferences.

H2o have developed its own interlocking design approach to produce flexibility and engaging diversity within educational facilities, as demonstrated below:

ACTIVE SPACE

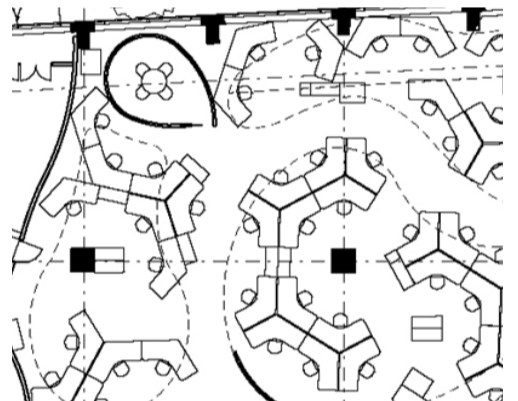
Breakout / 'Cross Pollination'

Vibrant, informal and active spaces are included that are conducive to relaxed meeting and exchanging of ideas. Kitchen facilities are often co-located to allow combined use as an eating area, and also ready access to internet facilities for impromptu sharing of resources or solitary browsing. Leisure facilities can be included to provide energy outlets and team bonding benefits across the faculty.



Resource

A centralised information and equipment resource with supporting furniture and facilities provides similar benefits to the breakout space of interaction and exchange while allowing collating of resources on diverse topics.



Interactive Workspaces

'Hot-desk' style workstations arranged in an open, communal and flexible format. The desks allow for the full-time and part-time academic staff to collocate and form working groups of varying sizes and dynamics. Hot desks are provided with appropriate servicing for technology equipment.



Delivering / Presenting / Meeting

Multifunctional spaces of flexible nature to provide an environment suitable for scheduled and unscheduled group meetings of a formal type. Spaces are required to be provided with the latest presentation technology that seamlessly supports the interactions of the group.



Individual Research / Processing

Individual based spaces of an office typology, which encourage the positive aspects of ownership such as security, storage, privacy, and acoustic separation.

Pod / Withdrawal Space

Small quiet space to withdraw to in order to think, that provides an alternative environment to an individual research office. The pod is a communal unit, and it's tectonic is derived to be inspiring and unique.



QUIET SPACE



THE DESIGN STUDIO

Inspiring Work Environments

H2o architects are renowned for our educational facilities and the excellent learning environments they provide. Through our work with the Department of Education and many tertiary institutions we have experience with the complex programmes of educational spaces that provide flexible formal and informal teaching and learning functions, while ensuring acoustic and visual privacy requirements are met.

H2o architects have developed our own design methodology of producing teaching and learning environments. This approach has continued to evolve with the advancement of education technology. Our approach introduces spatial arrangements that encourage interaction and generate varying working styles, as demonstrated below:

Universal Space

Flexible, adaptable, and 'unowned' space able to offer a variety of functions, including informal gathering, impromptu display, and gallery type display. A vibrant, and active space which can be co-located with amenities and leisure facilities to encourage interaction of students across year levels, with display activating discussion and debate.

Studios

The main focus of the teaching / learning programme, the studios need to be inspired in their layout to encourage peer-to-peer student interaction in between sessions of discourse and immersion in design related activities. While requiring acoustic and visual separation, studios should allow transparency to celebrate the activity they contain, and fully benefit from the professional culture of the activity within. Storage for student work-in-progress can double as temporary display to further add to the flavour of the space.

Resource / Library / Processing

The centralised information and equipment resource of the library needs to be the focus of the new building due to the significance of the collection, but also its benefits of interaction and exchange between staff and students. Dedicated space can be allocated for mental processing of the resources and issues of a wider context.

Project Space / Workshop

The hands-on creative nature of the workshop activity and its location on the ground plane lends an equilibrium focus to that of the library. Use of the workshop as a multifunctional project and active design space can be encouraged.

Delivering / Presentation

Multifunctional spaces of flexible nature to provide an environment suitable for scheduled and unscheduled group meetings of a formal format. Spaces are required to be provided with the latest presentation technology that seamlessly supports the interactions of the group.

Laboratories

Due to the integral role of the computer in the communication and development processes and the fluid nature of the activity, the laboratories will be a vibrant and dynamic space. Digital teaching pods can be created to allow instruction groups acoustic separation.

HERITAGE

Many recent H2o projects involve heritage buildings being sensitively adapted for new, contemporary uses. We are already very familiar with the University of Melbourne Old Commerce Building 132 through previous alterations to its interior. H2o's design philosophy recommends that where possible buildings be retained and reused to support a sustainable future. Our heritage experience provides us with insights upon sympathetic extension through scale and materiality to ensure a proper harmony between new and old.

Examples of these projects include:

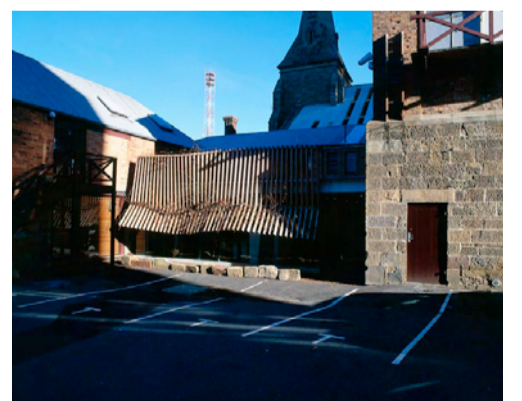
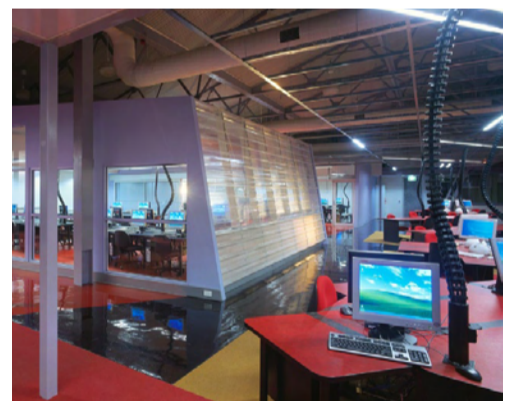
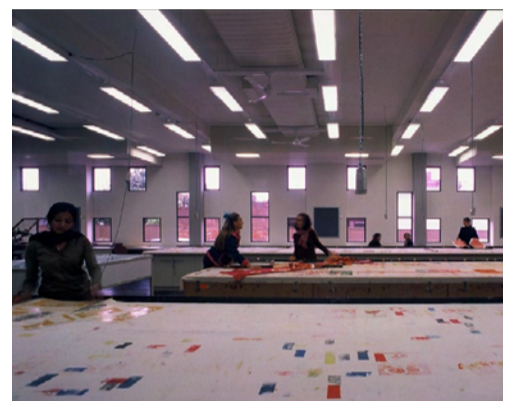
University of Melbourne Old Commerce Building, L2 Fitout,
Melbourne Campus, Victoria.

Hobart Real Tennis Club, Hobart, Tasmania

Victorian Arts Centre, Southbank, Victoria

Castlemaine Primary School,
Castlemaine, Victoria

RMIT University Building 512,
Brunswick Campus, Victoria





THE LIVING BUILDING

H2o architects have a national reputation for work in sustainable design, attested to by clients, awards, public lectures, chairmanship of ESD award programs and our recent contribution to a benchmark Commonwealth Sustainability performance for Commonwealth Buildings.

We have a specific approach to reducing building running costs and maintenance costs for our clients. We concentrate on the incorporation of practical and affordable integrated sustainable design features, that maximize use of natural light and fresh air linked to mechanical and electrical systems. Materials are rigorously selected for environmental soundness and length of durability. Post occupancy evaluation of projects by us confirms that sustainable designs are producing healthier and happier work environments with higher productivity and lower absenteeism. Tim Hurburgh and Mark O'Dwyer undertake numerous study tours of sustainable buildings, and transfer this knowledge by regularly presenting seminars on sustainable design to industry and education forums.

Innovations for designing sustainable buildings include integration of convergent technology, waste minimization strategies, central vacuum systems, design through life cycle cost analysis, maximise occupant and staff controls of light and air movement, minimisation of building and operation costs with appropriate material selection, integration of services in a Building Automation System (BAS), materials selection for environmental soundness and length of life span, enforce construction phase sustainable initiatives and design with an understanding of the requirements for ongoing Facilities Management.

Recent Constructed Benchmark Innovative Sustainable Institutional Work by H2o Includes:

Swinburne University Advanced Technologies Centre

Hawthorn, Melbourne, Victoria
 Scheduled to be amongst the first 5 star Greenstar rated educational buildings (by design).

Construction cost: \$80,000,000
 Project area: 18,000 sqm
 Completion: 2011

Deakin University International Centre and Business Building

Burwood, Melbourne, Victoria
 Construction cost: \$48,000,000
 Project area: 17,000 sqm
 Completion: 2007

55 St Andrews Place

East Melbourne, Victoria
 Victorian Government Property Group (Base Building) / Department of Parliamentary Services (Tenant)
 Upgrade existing building to 4 ABGR standard and 5 star Green Star rating.
 Construction cost: \$6,500,000
 Project area: 4000 sqm
 Completion: 2007

Deakin University Central Precinct Building

Burwood, Melbourne, Victoria
 Construction cost: \$45,000,000
 Project area: 15,000 sqm, 2006
 Completion: 2006

SES Headquarters

Department of Justice
 Southbank, Melbourne, Victoria
 RIAA Sustainability Award 2004
 Project Value: \$4,200,000
 Project Area: 2,100 sqm
 RIAA Sustainability Award 2004
 Completion: 2002

RMIT Building 513, TCF&L Facility

Brunswick, Melbourne, Victoria
 Construction cost: \$6,400,000
 Project area: 5,500 sqm
 Completion: 2001

RMIT Building 512, Computer Barn

Brunswick, Melbourne, Victoria
 Construction cost: \$3,200,000
 Project area: 1,200 sqm
 Completion: 2004

Benchmark ESD Project:

Deakin Central Precinct

An excellent example of our sustainable approach is the 2006 RIAA Awarded Deakin Central Precinct project in Burwood. Central Precinct is designed for simple, practical and affordable sustainable design. Complex technologically and sophisticated outcomes are avoided to reduce building costs and building management difficulties.

The Central Precinct project is sited for passive sustainable design and the optimisation of the effects of sun, wind and solar performance. The North Teaching Building is sited for passive shielding by the existing carpark structure, creating a long west facade orientated to the creek and exposed to high end-of-day solar loads. These loads are blocked from the facade with a screen of timber louvres over a wide external circulation terrace.

The West Hospitality Building has the thermally efficient siting of long north and south facades with an openable glazed louvre balcony and screening with minimal glazing to the east and west facades. The glass louvre balcony limits the impact of high thermal loads in summer by opening the louvres and shielding the building with the depth of the balcony. During winter, the balcony captures heat by closing the louvres and creating a northern orientated winter garden.

The Central Atrium is screened from hot north and cold south winds with openable glazed screens. The Atrium is planned to be adjacent to the main entries of all four buildings edging the space, allowing the uses within the buildings to flexibly occupy the Atrium. In this mode the Atrium becomes the Pre-function space for the South Lecture Theatre and the East Multipurpose Hall. Foyers are located in areas easily accessed and highly visible from the Central Atrium, with flexible and easily re-configurable work areas, for the indeterminate future of education.

Black Colorbond roofing with no insulation on top of the East Building Multipurpose Hall, provides additional heat to the above ceiling space – passively driving an air extraction engine. This engine assists the drive for low level fresh and cool air to enter from manually openable glass louvres at the base of the south elevation of the East Building Multipurpose Hall. The fabric of the facility is designed to optimise high thermal mass and good envelop insulation.

Other sustainable initiatives incorporated in the project include:

- Mixed mode temperature control with an accent on natural venting. The North, East and West Buildings have systems that allow heated air to rise to the top of internal shafts and be vented, and cause cool air to be drawn into the building from the sides of the accommodation.
- Mixed mode lighting facilities with an accent on day-lighting.
- A preference for sustainable and FM assisting materials.
- Additional insulation to all walls, roofs and ceilings.
- Many double skin brick walls, to provide high thermal mass and good envelop insulation, combined with exposed concrete floors and concrete ceilings to shield the interior spaces from external temperature fluctuations and maintain optimal interior conditions without applying additional energy.
- Skylights to the East Building Multipurpose Hall are estimated to provide daylighting for 60% of the Halls usage.
- Precast concrete provides a material with extensive internal thermal mass – allowing improved and sustainable thermal performance of the internal environment and no additional running costs.



CAPABILITY AND PROCESS

Capability

H2o have the demonstrated proven capability of completing a project of the size, scale, type and budget to the new building for the Faculty of Architecture, Building and Planning, and as we are based in Melbourne we are suitably registered with relevant authorities.

The following nominated members of our team will undertake the indicated roles through to completion. Our proposed team comprises several high profile designers and architects who have collective expertise and experience in many high profile local and international architectural and urban projects. We have worked on a number of similar projects and believe the proposed team will deliver the desired outcome for the University of Melbourne.

Our architectural and interiors team is augmented by the inclusion of specialist consultants. H2o architects has a strong working relationship with consultants and in combination possess a record of delivering high quality, well coordinated projects, on time and on budget.

Mark O'Dwyer - Lead Agent B.Arch (Hons), University of Melbourne

Mark has extensive project experience managing many of the varied projects of H2o including masterplanning, architecture and project management. He is particularly skilled at managing projects with fast track time lines and many divergent stakeholders and outside parties involved. These skills have most recently been utilised in his work with Swinburne University on the Advanced Technology Centre and with the University of Adelaide on their highly specialised Plant Accelerator Facility.

Tim Hurburgh - Design Director Dip Arch Tas., M.Arch Harvard, FRAIA

Tim is a nationally known designer with extensive masterplanning, project design and facility management skills and experience, particularly in the education sector. Tim's work has also focused on high profile ESD projects which include a number of award winning projects throughout Australia. Prior to forming H2o with Mark in 1999 he was the project director on behalf of Bates Smart Architects for Federation Square working with Peter Davidson, Don Bates and the LAB Architecture Team in London and Melbourne.

Alison Binks - Project Architect B.Design Interior Design, Uni. of S Aust.

Alison is currently completing work as a project architect for the Swinburne University ATC. Together with Mark and Tim she was involved in the germination of the concept and design that won the competition for this project. Her skills and experience include design, documentation and complex team management. Her experience over the past 15 years has included architecture firms in both New York City and Melbourne. In New York she worked with Kohn Pedersen Fox as designer of the interiors of Philadelphia International Airport new Terminal for US Airways. Since returning to Australia in 2002 Alison joined H2o and is now an Associate Director. She worked as project architect for both recent Deakin University projects, Central Precinct and ICBB.

Cameron Clifford - Design Architect B.Env. Des. B.Arch (Hons), Uni. of Tas.

Cameron is a highly talented design and documentation architect with high profile experience working in both Sydney and Melbourne. With H2o he was integral to the Deakin University ICBB project team, working from masterplanning through to documentation at the Deakin site office, collaborating with stakeholders and contractors in an on site construction administration role. He has since been successfully delivering educational facility projects from conception to completion. He brings with him extensive knowledge and expertise in many computer platforms and systems. Cameron joined H2o in 2004 and has since been appointed as Associate.

Process

H2o architects have successfully utilised and evolved the following methodology of collaboration on our previous institutional projects:

Single Contact Point

The Project director Mark O'Dwyer will be the Team's primary point of contact, and means of transferring all information to the H2o Project Team.

Collaboration

H2o architects understand the importance of a comprehensive User Design Brief in multiple stages for client sign off. We propose to develop and reconfirm the User Design Brief over multiple sessions, employing Powerpoint, over-head projectors, whiteboards and butchers-paper, and encourage all participants to interact and take ownership of the project. Tim Hurburgh and Mark O'Dwyer are successful facilitators, and allow all participants to be involved by listening to all opinions, while steering the session to a recordable outcome. (Output is issued at completion, allowing immediate evaluation and distribution to stakeholders.)

Monthly report

H2o architects appreciates the critical importance of communicating and co-ordinating with all members of the Consultant Team and Project Representatives, to achieve the best outcome. This is done through weekly consultant design meetings, and regular team updates issued to all parties by email. Each month and at the end of Project Stages, we issue a report summarizing the project status with time, cost and quality management details.

Managing User Group / Stakeholder Process

Every project is unique. It is essential to ascertain the specific requirements for each project. The users of this facility are best placed to determine what is required for their facility. Involvement of the users in the design process ensures that the facility best suits their needs. We listen to and learn from the users to produce a building that addresses their needs and strategic aspirations.

Client feedback

Client feedback will be highlighted to ensure that the building design responds at all times to the special requirements of each individual client and user group.

Design Management to ensure brief matching

The design process will be strategically managed using a combination of Microsoft Project and a customised Project Management package built from Filemaker data base. These two systems are used to create a detailed Project Action Plan, producing a list of deliverables for each phase of the process with an associated deadline and person responsible.

Client Presentations

Regular presentations will be made to stakeholders at all levels as the basis for information transfer and sign off.

Referees

The success of our approach can be confirmed by contacting our clients and referees. The list of repeat projects for long term clients also attests to the satisfaction levels of our process. Referees relevant to this project are:

Project	University of Melbourne Various Projects
Referee	Mr Michael Tracy, General Manager, Planning & Infrastructure Property
Contact Details	0425 860 063 M
Project	Swinburne University Advanced Technology Centre
Referee	Mr Andrew Smith, Director, Facilities & Services Group
Contact Details	0410 569 341 M
Project	Deakin University Central Precinct & International Centre & Business Buildings
Referee 1	Mr David Spedding, Former Director, Deakin University Property Services Division
Contact Details	0417 538 512 M
Referee 2	Mr Glenn Angus, New Works Construction Coordinator, Facilities Management Services Division
Contact Details	0417 351 491 M



MERIT

The continuous innovation of the H2o practice is recognised by organisations, industry groups and our peers by various awards and citations.

The work of the practice and public lectures explaining the philosophy of H2o architects have attracted wide public interest and our work has been recognised with the following awards:

Year	Award	Project
2008	City of Whitehorse Urban Design Awards, Best Commercial Building Award	Deakin University International Centre and Business Building, Burwood
	City of Whitehorse Urban Design Awards, Environmental Sustainability Award - Commercial	Deakin University International Centre and Business Building, Burwood
	Department of Education, School Design Awards - Best Secondary School	Point Cook Senior Secondary College, Point Cook
2007	RAIA Architecture Awards - Regional Prize	Castlemaine Primary School, Castlemaine
	BPN Environ - Sustainability Award	55 St Andrews Place, Melbourne
2006	RAIA Architecture Awards - Institutional New Award	Deakin University Central Precinct, Burwood
	Department of Education, School Design Awards - Best Primary School	Castlemaine Primary School, Castlemaine
	City of Whitehorse Urban Design Awards, Best Commercial Building Award	Deakin University Central Precinct, Burwood
	City of Whitehorse Urban Design Awards, Environmental Sustainability Award - Commercial	Deakin University Central Precinct, Burwood
	City of Whitehorse Urban Design Awards, Mayoral Award	Deakin University Central Precinct, Burwood
2004	Australian Timber Design Award - Outstanding Use of Timber in Public & Commercial Buildings	Deakin University Central Precinct, Burwood
	RAIA Architecture Awards - Sustainable Architecture Award	SES Headquarters, Southbank
	Banksia (Sustainability) Award - Shortlisted	SES Headquarters, Southbank
2003	Engineering Excellence Awards - Environmentally Sustainable Award	SES Headquarters, Southbank
	Dulux Color Awards - Commercial Finalist	SES Headquarters, Southbank
2002	RAIA Architecture Awards - Interior Architecture Award	Australia Post Rosslyn Street Processing Centre, Groundup Facility, West Melbourne
2001	Tasmanian Heritage Council - Heritage Citation	Hobart Tennis Club, Hobart
2000	Australian Institute of Building - Year 2000 Award	Australia Post Rosslyn Street Processing Centre, Groundup Facility, West Melbourne
	Master Builders - Excellence in New Construction (Buildings) over \$50M	Australia Post Rosslyn Street Processing Centre, Groundup Facility, West Melbourne

Project	Publication
Deakin University International Centre and Business Building, Burwood, Victoria	The Phaidon Atlas of 21st Century World Architecture, Phaidon, 2009
	Monument, March 2008
Deakin University Central Precinct, Burwood, Victoria	The Phaidon Atlas of 21st Century World Architecture, Phaidon, 2009
	Architecture Australia, September 2006
	The Phaidon Atlas of 21st Century World Architecture, Phaidon, 2009 Artichoke, February 2004
State Emergency Services Headquarters, Southbank, Victoria	Herald Sun, August, Nov 2003
	Sun Herald, 9 Oct 2003, p38
	Indesign, Issue 13, May 2003, pp 112-119
	Architectural Review, Issue 1274, April 2003, pp 52-55
	Steel Profile, Issue 81, Dec 2002, Cover and pp 30-38
	Architect, Oct 2002, p 20-21
RMIT University Computer Barn, Brunswick Campus, Victoria	Architect Victoria, October 2002, pp 20-21
	The Age Newspaper, Nov 2003
RMIT University Building 513, Textiles Building, Brunswick Campus, Victoria	L'Architecture d'Aujourd'hui, May 2001
	Wallpaper, April 2001
	Domus m, April 2001
	Jargon, January 2001
	Architecture Review, January 2001
Monument, February 2000	