

Zaha Hadid Architects (ZHA) is a multi award winning architectural practice with over 30 years experience. With over 3,000,000 square feet of built construction and a further 17,000,000 square feet in design or construction planning, Zaha Hadid Architects has 280 staff working in offices in London, Hamburg, Rome, Guangzhou and Beijing.

The practice's dynamic and innovative projects build on research in the interrelated fields of urbanism, architecture and design. Zaha Hadid Architects is widely regarded as an innovative architecture practice that constantly tests the boundaries of what is possible. New technologies and cutting edge production techniques are employed wherever possible and play an integral role in maintaining the offices position at the forefront of design.

Working with senior office partner Patrik Schumacher, Zaha Hadid's interest is in the rigorous interface between architecture, landscape, and geology as the Practice integrates natural topography and human-made systems that lead to experimentation with cutting-edge technologies. Such a process often results in unexpected and dynamic architectural forms moulded by the realities of site and building requirements.

Currently ZHA is working on a multitude of projects including: High-Speed Train Stations in Naples and Durango, the Guangzhou Opera House in China, the Aquatic Centre for the London 2012 Olympic Games; the Signature Towers in Dubai, the CMA CGM Head Office tower in Marseille, as well as major masterplanning projects in Bilbao, Istanbul, and the Middle East.

HBO+EMTB is an established design house experienced in the delivery of tertiary environments both in Melbourne and across Australia. Key elements of our contemporary design approach, including the application of sustainable design principles and emphasis on humanistic solutions, are evident in commissions from across the past century.

We create varied spaces for knowledge transfer, interaction and experimentation. Monash University, RMIT, La Trobe University, Australian National University, Australian Catholic University, University of NSW, Sydney University, Macquarie University, and Bond University have commissioned our services, which cover all facets of built environment design.

Our portfolio demonstrates capacity to deliver facilities that meet the requirements of design literate, well-informed & demanding stakeholders and end users. With specific expertise in facilities planning, our approach involves extensive consultation to account for the complex functional and social factors inherent in educational institutions.

The Innovations Building (Australian National University Canberra) reflects our ability to integrate spaces for research, theory, teaching & practice. This environmentally responsible building facilitated an active and collegial research environment, with the necessary support facilities. The design displays the processes & outputs of its occupants, and makes a feature of its adjustable environmental features.



05.1.1 Built Pedagogy















The approach of Zaha Hadid Architects is recognised for the integration of practice, teaching and research. Collectively, extensive teaching experience informs a thorough understanding of the importance of advanced studio & seminar based learning, the complex requirements of the academic environment. This experience includes:

Zaha Hadid has held the Kenzo Tange Chair at the Graduate School of Design, Harvard University; the Sullivan Chair at the University of Illinois, School of Architecture, Chicago; guest professorships at the Hochschule für Bildende Künste in Hamburg; the Knolton School of Architecture, Ohio and the Masters Studio at Columbia University, New York. In addition, she was made Honorary Member of the American Academy of Arts and Letters, Fellow of the American Institute of Architecture and Commander of the British Empire, 2002. She is currently Professor at the University of Applied Arts in Vienna, Austria and was the Eero Saarinen Visiting Professor of Architectural Design at Yale University, New Haven, Connecticut.

Patrik Schumacher has been teaching at various architectural schools in Britain, Continental Europe and the USA since 1992. He has co-taught a series of post-graduate option studios with Zaha Hadid at the University of Illinois at Chicago, Columbia University, at the Graduate School of Design at Harvard University, and at Yale University. In 1996 he started the "Design Research Laboratory" with Brett Steele, at the Architectural Association School of Architecture in London, and continues to serve as one of its co-director. Since 2004 Patrik Schumacher is also Professor at the Institute for Experimental Architecture, Innsbruck University. His extensive contribution to the discourse of contemporary architecture is also evident in his writings.

05.1.2 The Academic Environment

Library & Learning Center - University of Economics & Business, Vienna, Austria

Library & Learning Center – University Of Economics & Business Vienna, Vienna Austra 2008-2012

Program.

The LLC comprises a "Learning Center" with workplaces, lounges and cloakrooms, library, a language laboratory, training classrooms, administration offi ces, study services and central supporting services, copy shop, book shop, data center, cafeteria, event area, clubroom andauditorium.

Client.

University of Economics Vienna

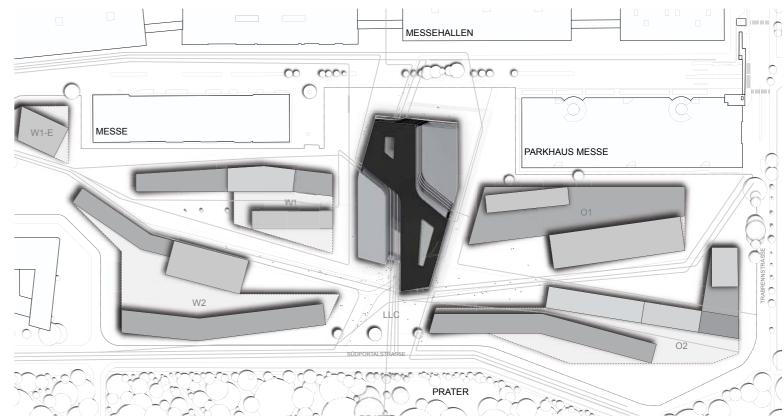
Consultants.

Structural Engineers:	Arup Berlin
M&E Engineers:	Arup Berlin
Façade Engineers:	Arup Berlin
Cost Consultant:	ATP Wien
Fire protection:	HHP West, Bielefeld
Render Studio:	Vectorvision, Leipzig

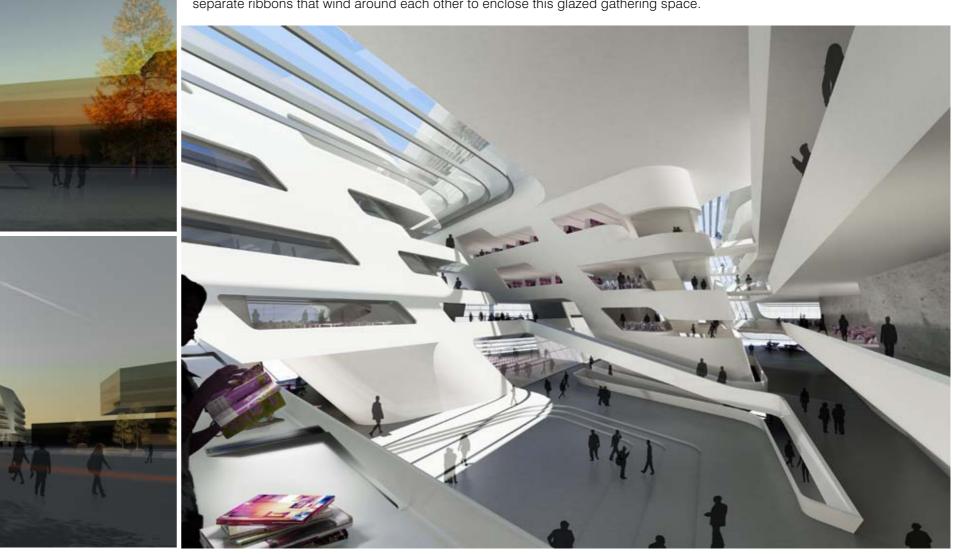
Size.

28.000m² net area

42.000m² gross area (205.000m³) 136m length, 76m width and 30m height (5 Floors)



The new Library and Learning Centre rises as a polygonal block from the centre of the new University campus. The LLC's design takes the form of a cube with both inclined and straight edges. The straight lines of the building's exterior separate as they move inward, becoming curvilinear and fluid to generate a free-formed interior canyon that serves as the central public plaza of the centre. All the other facilities of the LLC are housed within a single volume that also divides, becoming two separate ribbons that wind around each other to enclose this glazed gathering space.





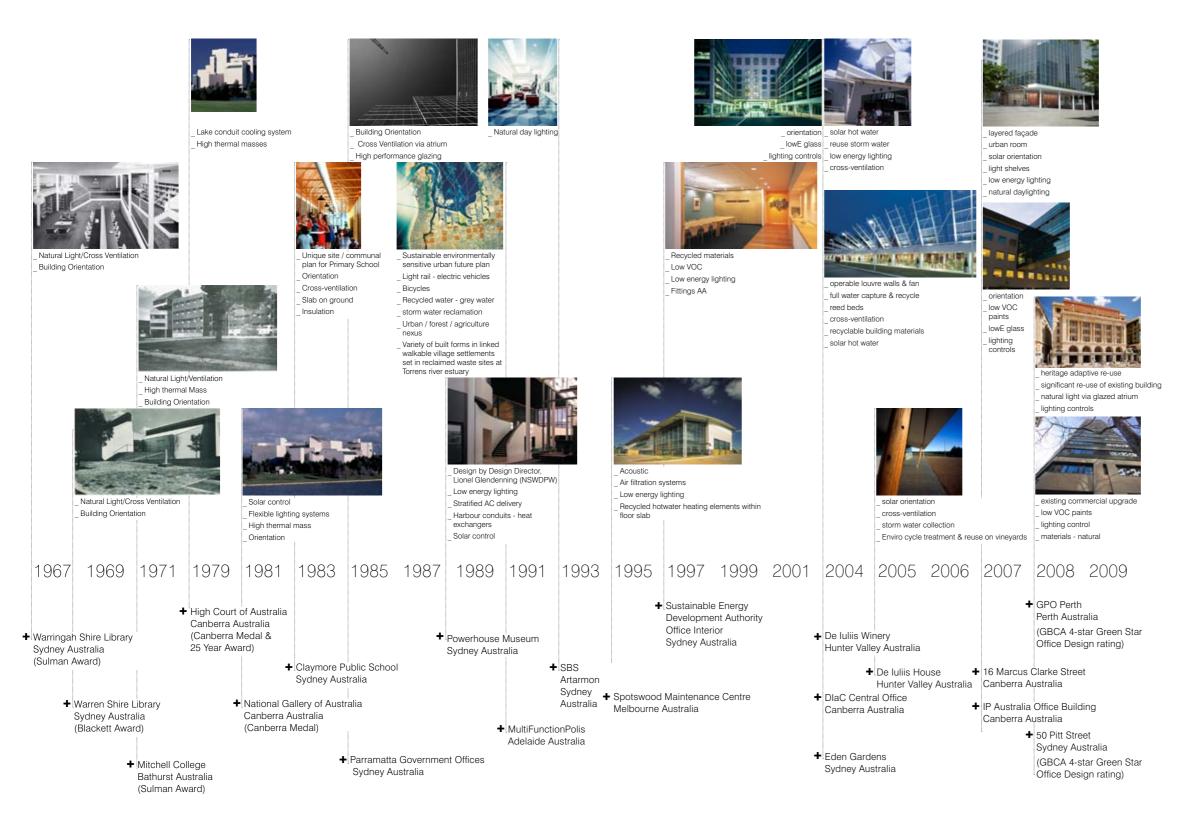
05.1.3 The Design Studio.

Chronological detail of HBO+EMTB's design of living buildings in an Australian context is below. This commitment to sustainability is not a merely response to current trends – we have practised responsible design for decades. We applaud the University's commitment to demonstrate an oustanding level environmental performance, and engage occupants in the monitoring & adjustment of their environment to foster both appreciation of environmental technologies and research opportunities.

As designers, we have primary responsibility for shaping sustainable built environments. We collaborate with clients and consultant teams to integrate sustainable design without compromising budgetary constraints. Whole life cycle costing, embodied energy costs, and product and systems flexibility are analysed in the context of projected operating costs, potential gains in productivity, payback periods, and energy ratings tools.

HBO+EMTB is an active member of the Green Building Councils of both Australia and New Zealand and over 25 employees have qualified as Green Star Accredited Professionals. This commitment to research, education and staff development ensures the latest ESD developments shape our thinking.

Noting the University's desire for a facility that is highly integrated into the surrounding campus, we confirm our capacity to offer expertise in commercially viable green initiatives across all our design disciplines including urban and landscape design, with particularly emphasis on water senstive urban design.



management

_ gbca green star agreement

environmental management system certification (ems) as part of assessments against iso14000 series standard

eco specified suppliers

_ specific waste management plan

resource reservation

low embodied water content materials

avoid wet process of constructions

_ rain water harvesting system for irrigation

grey water recycle system

_ water efficiency fixtures & fittings (3 6 wel stars rated)

low maintenance building products

 employ disassembly reusable products (prefabricated modular components / off site constructions)

_ designate space for recycling storage

energy efficiency / reduction of carbon emission

_ renewable energy source

energy efficient electrical equipment

low embodied energy materials

local sources of materials

_ cooling / heating / ventilation strategies that maximise use of passive sources

indoor environment quality

_ ventilation rates (gbca green star standard)

co2 monitoring systems

control glare level

_ provide external views

» vision glazing

» control noise level

» hvac systems at occupied space are provided with adequate attenuation

» building services design to incur noise level that meets as/zns standard

» sound proofing on walls and ceiling at areas needed high level of noise control (i.e. lecture theatre, class rooms, workshops)

_ minimise air pollutants

» minimised toxic out gassing materials

» use low volatile organic compound (voc) materials

» use low formaldehyde emission

» dedicate enclosed room with exhaust facility for photocopiers, printers and other air pollutant generating equipment.

» provide indoor garden with plants and water feature (vertical / horizontal)

 provide accessibility to air supply systems to allow cleaning regularly

_ maximise use of natural light

» glazing on north facade

 glazing on south façade with additional light shelves for winter sun

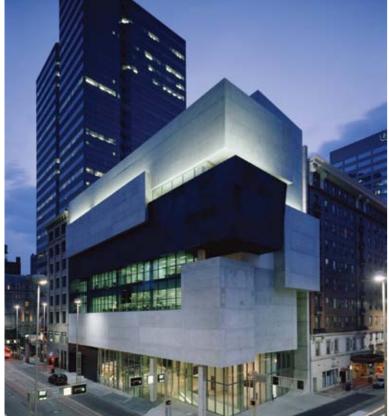
» light wells, skylight at atrium

energy efficiency artificial light

» separate switches in enclosed rooms

» light timer switches for intermittent utilised rooms

ZAHA HADID ARCHITECTS HBO+EMTB



Rosenthal Center for Contemporary Art, Cincinnati, USA, 1997 - 2003

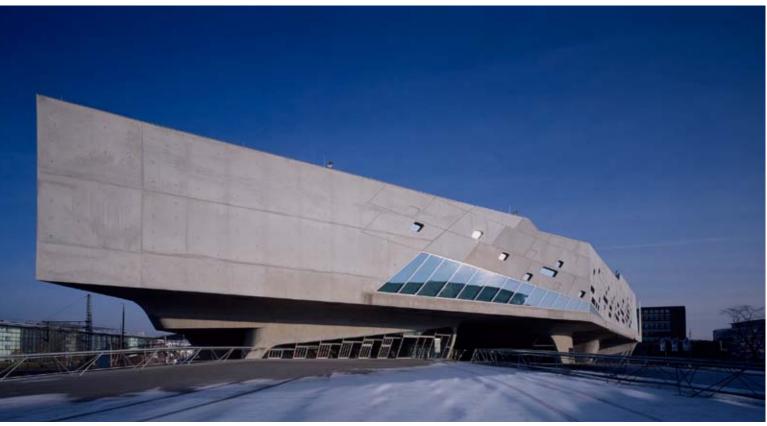
Program	Temporary exhibition space, performance space, education facility, offices, art preparation areas, and museum store
Client	The Contemporary Arts Center
Area	8,500m ²



Terminus Multimodal Hoenheim Nord, Strasbourg, France, 1991 - 2001

- Program
 Station for trams and buses, car-park for 700 cars, various functions [ticket offices, shop, bikes racks, public toilets]
- Client
 C.U.S [Communaute Urbaine de Strasbourg]

 C.T.S [Compagnie des Transports Strasbourgeois]
- Station 3,000m²



Phaeno Science Center, Wolfsburg, Germany, 1999 - 2005				
Program	Interactive Science Museum, Cafe, Shop, Auditorium			
Client	Neuland Wohnbaugesellschaft mbH			
Area	12,000m ² Phaeno Science Center			



National Museum of XXI Century Arts, Rome, Italy, 1997 - 2007

Program	Contemporary art and architecture centre, contemporary exhibition spaces
Client	Italian Ministry of Culture, Rome, Italy
Area	30,000m ²



CMA CGM Headquarters Marseille,
rance, 2005 - 2010

rogram	Head offices	and	parking
Client	CMA CGM		

the end office and search the solution of

64,000m² 33 Floors / 147m

Area

Zaha Hadid Architects believes a successful architectural project combines, in a creative way, the interests and concerns of the various stakeholders involved in the project. Nevertheless, it's recognised that a strong leadership body is always required for an expeditious decision making process. The office's approach to each project can be determined by its background experience: over ten years' worth of relationships with complex client bodies and stakeholder groups.

Regardless of the size of the project, Zaha Hadid Architects adopts a structured format to the project management aspect of the commission. It is our experience that only by this structured method of working can the interests of all stakeholders in the project be realised and implemented within time scale and budget. Decisions taken early in the design process have the greatest impact on the final capital and operating costs of the building. Therefore value engineering exercises involving senior design consultants from each discipline will run throughout the conceptual and design development phases. Issues of programme, cost and build-ability will be addressed regularly with project representatives.

The organisation of the project would involve Zaha Hadid Architects acting as lead designer from inception to completion, working closely from the outset with building engineers, both structural and building services.

HBO+EMTB (as the registered practitioner in the State of Victoria, Australia) would provide an established, accessible local presence in addition to provision of technical staff, statutory compliance expertise, management and production resources. The practice's capacity to deliver a facility of this nature is demonstrated by a varied portfolio of acnowledged projects and an enviable record for repeat business.

A suitably qualified consultant team would be compiled with a recommendation list made available to the University of Melbourne of engineers, cost consultants and other sub- consultant appointee names and qualifications. Project consultants are drawn from a pool of professionals whose skills and reputations are 'fit for purpose'.

Client Referees - Zaha Hadid Architects

Phaeno Science Center

Herr Wolfgang Guthardt City of Wolfsburg Dezernent für Kultur Sport und Schulen Goethestrasse 55 38440 Wolfsburg Germany T +49 (5361) 28-2762

Rosenthal Center for Contemporary Arts

David P. Crafts, Trustee 115 East Fifth Street Cincinnati, OH 45202-3998 USA T +1 513 721 0390

Client Referees - HBO+EMTB

RMIT

Darren Mckee Executive Director, Property Services T +61 3 9925 2428 E Darren.mckee@rmit.edu.au

LaTrobe University

Jim Colebatch Position: Deputy Director Palnning & Capital Projects T +61 3 9479 1965 E J.Colebatch@latrobe.edu.au

Monash University

Ross Merolli Project Manager T +61 3 9905 1148 E Ross.Merolli@adm.monash.edu.au

Zaha Hadid Architects

Awards. 59 Eaton Place, London -Gold Medal Architectural Design, British Architecture, 1982 Honourable Member of the Bund Deutsches Architekten, 1998 Honourable Member of the American Institute of Architects, 2000 Mind Zone, Millennium Dome, London - RIBA Awards 2000 Car Park and Terminus Hoenheim North, Strasbourg - Equerre d'Argent special mention, 2001 Car Park and Terminus Hoenheim North, Strasbourg - Red Dot Award, 2002 Bergisel Ski-Jump, Innsbruck - Austrian State Architecture Phonourable Mention, 2002 Car Park and Terminus Hoenheim North, Strasbourg - Ned Dot Award, 2002 Bergisel Ski-Jump, Innsbruck - Tyrolean Architecture Award, 2002 Commander of the British Empire, CBE, 2002 Car Park and Terminus Hoenheim North, Strasbourg - Mea vard 2003 Architect of the year 2004 - Blueprint Award Resenthal Centre for Contemporary Art, Cincinnati - RIBA Worldwide Award 2004 Zaha Hadid, Laureate of the Pritzker Architecture Prize 2004 London Architect of the year, London Architectoral Biulding) 2005 Finalist for the RIBA Stirling Prize (BMW Central Building) 2005 Gold Medal for Design, International Olympic Committee (Bergisel Ski Jump) 2005 Austrian Decoration of Science and Art, Commissions of Science Center) 2006 RIBA Medal, European Commercial Building of the Year (BMW Central Building) 4005 Finalist for the RIBA Stirling Prize (BMW Central Building) 2005 Gold Medal for Design, International Olympic Committee (Bergisel Ski Jump) 2005 Austrian Decoration of Science and Art, Commissions of Science Center) 2006 RIBA Medal, European Cultural Building of the Year (Phaeno Science Center) 2006 RIBA Jencks Award 2006 Academician, The International Academy of Architecture, USA 2007 Scottish Design of the Waard (Maggie's Centre Fife) 2007 Finalist for the Mies van der Rohe Award for European Architecture (Phaeno Science Center) 2006 AIA UK Chapter Award (Maggie's Centre, Fife) 2007 Finalist for the Mies van der Rohe Award for European Architecture (Phaeno Science Center) 2006 RIBA Medal, Buropean Award for European Architec

Publications. Hadid's work is widely published in periodicals and monographs which include "Zaha Hadid: Planetary Architecture Two" (no.11, 1983); "GA Architect: Zaha Hadid" (no.5, 1986, Japan); "Zaha Hadid", AA files (no.5, 1986); "Zaha Hadid", AA files (no.5, 1986); "Zaha Hadid" (no.5, 1991, Madrid); "GA Document Extra, Zaha M Hadid" (no.3, 1995, Japan); "Zaha Hadid 1992-1995", El Croquis (no. 73, 1995, Madrid); "Zaha Hadid 1996-2001", El Croquis (no.103, 2001, Madrid); "Zaha Hadid: The Complete Buildings and Projects" (Thames & Hudson, 1998); "Zaha Hadid -LF One" (Birkhäuser, 1999); "Architecture of Zaha Hadid in photographs by Helene Binet" (Lars Muller Publishers, 2000); "Zaha Hadid, Opere e Progetti" (Italy, 2002); "Zaha Hadid Architektur", (MAK, Vienna, 2003); GA Document (nos. 65 and 66. Japan, 200, "Zaha Hadid Space for Art" (Lars Muller Publishers, 2004); "Zaha Hadid 1983- 2004", El Croquis (2004, Madrid); "Digital Hadid" (Birkhauser, 2004); "Car Park and Terminus Strasbourg" (Lars Muller Publishers, 2004); "Zaha Hadid Complete Works" (Thames and Hudson, 2004); "BMW Central Building" (Princeton Architectural Press, 2006); "Zaha Hadid" (Catalogue for the Solomon R. Guggenheim Museum, 2006); "GA Document, Special Issue, Zaha Hadid" (no. 99, 2007, Japan); "Zaha Hadid" (Motta Architettura, 2007), Total Fluidity, Catalogue for Seoul Design Olympiad Exhibition (2008).

Exhibitions. Hadid's paintings and drawings have always been an important testing field, and a medium for the exploration of her design. Major exhibitions include a retrospective at the Architectural Association, London (1983), the Guggenheim Museum, New York (1978), the GA Gallery, Tokyo (1985), "Deconstructivist Architecture" at MoMA, New York (1988), the Graduate School of Design at Harvard University (1995), Grand Central Station New York (1995), the San Francisco MoMA (1997/98), The Venice Architecture Biennale (2002), "Zaha Hadid" MAXXI in Rome (2002), "Zaha Hadid Laboratory" in Yale (2002) - the National Building Museum, Washington (2002), "Zaha Hadid Architecture" MAK Exhibition Hall in Vienna (2003), The Venice Architecture Biennale (2004), "Zaha Hadid's paintings" at the Somerset House in London (2004), the Deutsche Bank Collection at the Deutsche Guggenheim Berlin (2005), 'Silver Paintings' at the ROVE Gallery, London (2005), 'Zaha Hadid' Guggenheim New York (2006) and The Singapore Art Museum, Singapore (2006). Hadid's work also forms part of the permanent collections of various institutions such as MoMA New York, MoMA San Francisco and the Deutsches Architecture Week, Sofia (2007); Airs de Paris at the Pompidou Centre, Paris (2007); Global Cities at the Tate Modern, London (2007); 'Zaha Hadid: Design & Architecture' at the Design Museum, London (2007); Maison & Objet, Paris (2008); Silver Paintings at Art Cologne (2008); The Venice 11th International Architecture Exhibition (2008); Total Fluidity, Seoul Design Olympiad, Seoul (2008).

Exhibition Designs. 'The Great Utopia', Guggenheim Museum, New York (1992); 'WishMachine' at the Vienna Kunsthalle (1996); 'Addressing the Century' at the Hayward Gallery, London (1998); Paper Art at the Leopold-Hoesch Museum, Düren (1996); Jewellery Exhibition, Zurich (2000); 'Borderline Exhibition' Palais des Beaux Arts, Brussels (2000) and in the Salieri Suille Tracce di Mozart and the Palazzo Reale, Milan for the Da Ponte Institute (2005); 25 Years of Deutsche Bank Art at the Deutsche Guggenheim, Berlin (2005); 'Elastika' for Design 05, Art Basel, Miami (2005); Tokyo Blossoms at The Haro Museum Installation, Tokyo (2006); The Wallpaper Magazine 10th Anniversary Exhibition, Milan (2006); Ideal House, IMM Cologne Fair (2007), Hauser & Wirth Gallery,

$\mathsf{HBO}\!+\!\mathsf{EMTB}$

Awards. Arts of Asia Gallery Auckland Museum - Silver, Spatial Design, New Zealand Best Awards Designers Institute of New Zealand (2008); Pacific Highway Upgrade: Brunswick to Yelgun - Commendation Urban Design Plans & Ideas, Planning Institute of Australia NSW (2008); Newmont Mining Tenancy, Perth Australia - InterfaceFLOR I2 Sustainable Design Award (2008); Hilton Hotel Interior Refurbishment, Auckland New Zealand - Bronze, Spatial Design New Zealand Best Awards Designers Institute of Australia NSW (2007); Deloitte Tenancy, Perth Australia - Corporate Interiors Award Design Institute of Australia WA Chapter (2005); Bonner Residential Estate, Canberra Australia - Award for Planning Excellence, Urban Design Plans & Ideas, Planning Institute of Australia NAC (2006) & NSW Planning Commendation Australia Institute of Landscape Architects (2005); AAPT Headquarters, Sydney Australia - Excellence in Construction Award, Interior Fitout AU\$10m to \$15m (awarded to consortium developer, St Hilliers), Master Builders Association of NSW (2005); Federal Government Department of Immigration & Multicultural & Indigenous Affairs Central Office, Canberra Australia - Project of the Year & Commercial Guver AU\$10m & Commercial Fitout & Environmental Best Practice - Commercial (awarded to consortium developer, Bovis Lend Lease), Master Builders Association of ACT (2005); Hilton Hotel Interior Design, Auckland New Zealand - Rider Hunt Building Award (1997); National Rail Corporation Locomotive Maintenance Centre, Melbourne Australia - BHP Metal Building Award (1996); The Modbury Regional Centre Study, South Australia Institute of Architects (1979); National Gallery of Australia Institute of Architects (1979); Karonal Gallery of Australia Institute of Architects (1979); Canberra Australia Institute of Architects (1979); Karonal Gallery of Australia Institute of Architects (1969); Warring Akard Institute of Architects (1967); Works designed by HBO+EMTB Design Director Lionel Glendenning ; Powerhouse Museum, Sydney Australia Institute