

MATERIALITY

Material Connections – Architectural Exemplars

MATERIAL CONNECTIONS

Architectural Exemplars

- geometrical connections
- mechanical connections
- chemical connections

Geometrical and mechanical – leather, timber, cord

Atelier Turner – detail – leather, timber, cord

http://atelierturner.squarespace.com/home/2012/12/11/its-all-about-the-details.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+atelierturner+%28Atelier+Turner+%5Bthe+blog%5D%29

image link

<http://static1.1.sqspcdn.com/static/f/713955/21237669/1355246921397/detail3-pin.jpg?token=LeHKSDvSAUuNTRsO3TT0rY5pakQ%3D>





Geometrical – timber

Detail - James Mudge Furniture Studio

<http://jamesmudge.co.za/>

<https://thepoetryofmaterialthings.tumblr.com/post/65541969518>



Geometrical – timber

<https://takeovertime.co/post/71163193455>



Geometrical and mechanical – timber, steel

Handrail detail _ Castelvecchio _ Carlo Scarpa
<https://www.pinterest.nz/pin/54043264256232874/>



Geometrical and mechanical – timber, stone, steel

Wood-to-stone joint in Japan

<https://www.pinterest.nz/pin/423197696217540897/>



This is a scarf joint in granite. These foundational carved plinth stone joints are no longer as common as they once had been in Japan. The photo was taken 11 Dec 2011 by Bjorn Nelson, Bjorn@juankenobi.com

<https://i.pinimg.com/originals/bb/35/c3/bb35c3216fe258a87200e4de151decb2.jpg>



Chemical and mechanical – CLT timber, steel

[BRDF CLT construction -credit Don Earhardt](https://www.flickr.com/photos/brdf/7931343690/sizes/h/)

UBC's Bioenergy Research & Demonstration Facility uses cross-laminated timber throughout the building. Building incorporates unique engineered member joining system.

<https://www.flickr.com/photos/brdf/7931343690/sizes/h/>



Mechanical and chemical – pin connections – timber, steel

Images @Pablo Jones

<https://www.flickr.com/photos/7767960@N02/7722578016/>



Mechanical – timber, steel – nails and plates

**The timber framing of the upper level of the rear section of the house.
Timber framed walls – PH1NZ New Zealand's First Passive House**

<http://passivehouse1nz.blogspot.com/2012/01/timber-framed-walls.html>



Principally chemical – concrete, bronze, glass, brass

Arquipelago Contemporary Arts Centre is located in The Azores. The stone façades are a palimpsest of change. Opening in the existing buildings are formed by structural stone arches or lintels of dressed Basalt with a gently curved profile. The new doors, windows and balustrades are all brass, which is gently weathering.

<https://www.blackcube.de/arquipelago-riba-international-prize-for-architecture/>



Chemical and geometrical – concrete, steel, glass, timber

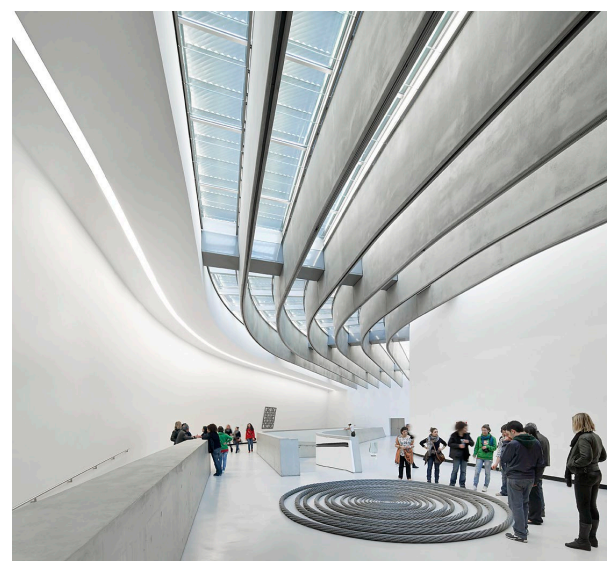
Ron Sang designed House, Remuera

<https://www.homestolove.co.nz/real-homes/real-homes-gardens/concrete-home-in-remuera-gets-incredible-pool-pavilion>



Plant of reinforced concrete structures warehouse concrete products

<https://www.kenyaengineer.co.ke/durability-of-steel-reinforced-concrete-structures-in-the-marine-environment/>



Chemical, geometrical, mechanical – concrete, steel, glass

Zaha Hadid | MAXXI Gallery, Roma

<https://www.huftonandcrow.com/projects/gallery/maxxi-gallery/>



Mechanical and geometrical – timber, small metal parts

Richard, Leplastrier. Lovett Bay House canopy, [Architecture Foundation Australia](https://panfilo.co/2013/12/07/richard-leplastrier/)
<https://panfilo.co/2013/12/07/richard-leplastrier/>



Mechanical – timber, steel, corrugated sheet

Belling House. Richard Leplastrier – Framing the View

<https://www.australiandesignreview.com/architecture/abc-to-premiere-documentary-on-richard-leplastrier/>

<https://drive.google.com/file/d/1OJy560uDy6Uii3t5wS6BJwTY4m0TX77I/view>





Mechanical – timber, fibre

Canoe construction Hawaii

<http://waakaulua.com/hanne.htm>



Mechanical – timber, fibre

Traditional Samoan Lashing Techniques @ Fale Pasifika, University of Auckland, by Sopolemalama Filipe Tohi

<https://i.pinimg.com/originals/3d/8f/ce/3d8fcea31c72843e95f41996a8946503.jpg>



Mechanical – timber, fibre, rock

Higher Atlas / Barkow Leibinger

Traditional Moroccan weaving on a wood frame loom a craft which involves organizing wool or cotton yarn

<https://images.adsttc.com/media/images/5018/7b5a/28ba/0d33/a800/0f71/slideshow/stringio.jpg?1414294430>

<https://images.adsttc.com/media/images/5018/7b56/28ba/0d33/a800/0f70/slideshow/stringio.jpg?1414294433>



Frank Gehry – Foundation Louis Vuitton - Model

<https://www.pinterest.nz/pin/178455203957613902/>

Mechanical – concrete, timber, glass

1D – 2D – 3D elements – composition and concept consistency

Louis Vuitton Foundation Museum, designed by Frank Gehry (image via [NYT](#))





1D – 2D – 3D elements – composition and concept consistency

**Mechanical, geometrical and chemical – concrete, timber, glass, steel, acrylic
Mitchell Stout – Narrowneck House**

<https://www.homestolove.co.nz/real-homes/home-tours/auckland-home-pushes-architectural-boundaries>

<http://htlnz.wordpress.com/wp-content/uploads/2014/10/Mitchell-Stout-Narrowneck-3.jpg>



1D/2D/3D compositions

Dave Mitchell and Julie Stout – Heke Street house

<https://www.mitchellstoutdodd.co.nz/hekest>



1D – 2D – 3D elements – composition and concept consistency

Mechanical and geometrical – timber, glass

Dave Mitchell and Julie Stout – Heke Street

https://images.squarespace-cdn.com/content/v1/5a307dd5ccc5c55d98a701f9/1513302298434-W9HR71SVVW4R2PTW5USI/ke17ZwdGBTodd18pDm48kGh2nrOR0K0fM19Y7-jztDh7gQa3H78H3Y0txiaiv_ofDoOvxcdMmMKkDsyUqMSsMWxHk725yiiiHCLlfrh801z5QP0ohDialeliMHgDF5CVIOqpeNLcj80NK65_fv751Uzc2OURh5u59G1HZiC9TTEtWcpDKXBgj7iKyggZvn5omIRBDXLxCO90FobHP-DnUkw/Heke+Street+House%2C+Freemans+Bay%2C+Mitchell+%26+Stout+Architects++2.jpg?format=1000w