



MPAVILION 2021 BY MAP STUDIO

EDUCATION
GUIDE

MPavilion is an annual initiative of the Naomi Milgrom Foundation that, since 2014, has brought leading architects from Australia and all over the world to Melbourne to design a temporary pavilion for the Queen Victoria Gardens. Each MPavilion hosts a diverse program of free talks, performances, workshops and educational activities and is open daily from November to March.

The ambition of MPavilion is to make architecture accessible as a field of design that is of central importance to the way we experience the world. The architects invited to design each MPavilion are chosen because they are both outstanding in their field and unique in their approach to architecture. This selection criteria has resulted in each new MPavilion being very different from the last in form, materials and building technologies used. At the close of the season each MPavilion is relocated to a new home. You can visit previous MPavilions at locations across Victoria, one is sited on a university campus and another is at the Melbourne Zoo!

How to use this resource

This resource introduces MPavilion and focuses upon the 2021 edition by Italian architecture firm MAP studio. It is aimed at students in levels/years 3-10 and its content is aligned with Victorian and Australian curriculum descriptors. It is intended as a source of insight for educators to draw upon for use either in the classroom or to help structure an excursion to MPavilion. Each MPavilion has its own dedicated resource and it is recommended that students visit more than one MPavilion to appreciate the contrasts between the designs of different years.



About the architects: MAP studio

MAP studio is an architecture, urbanism and design firm led by collaborators Francesco Magnani and Traudy Pelzel, and based in Venice, Italy. Magnani and Pelzel were each born and raised in Venice and met while studying architecture at university, before deciding to found their company in 2004. Alongside public and private architectural projects MAP studio undertakes urban renewal commissions, existing building restorations, and exhibition design.

MAP studio is guided by the belief that architecture is a process of constant dialogue between the client, architect, and other stakeholders. This working philosophy has resulted in their practice being highly consultative, involving collaboration and conversation with diverse experts at every step of the process. As well as designing new constructions, MAP studio has completed restoration projects on significant buildings including Casa Balboni, which was designed by iconic mid-century architect and fellow Venetian Carlo Scarpa.

MAP studio has won several awards including the Gold Medal for Italian Architecture, in 2018, and the Pietro Torta Award, in 2011; in addition, the firm has been nominated for the BSI Swiss Architectural Award, in 2014, and the European Union Prize for Contemporary Architecture – Mies van der Rohe Award, in 2013. Articles on the work of MAP studio have been published internationally, including in Casabella magazine, Architectural Digest magazine, The New York times newspaper and L'Architetto magazine.

Portrait of Traudy Pelzel and Francesco Magnani
(Image by Claudia Rossini)

What is architecture?

Put simply, architecture is the art and discipline of designing buildings. A person who practices architecture is called an architect, and to become qualified they must have studied architecture at university. The field of architecture is diverse, including very practical buildings, like hospitals, and also highly creative and expressive ones, like art galleries. And very often, architectural buildings combine both practicality and creativity together.

What is a pavilion?

Generally, pavilions are defined by their use as venues for recreation, culture or pleasure-related activities such as art exhibitions, music concerts, or as shelters at sporting events. Ordinarily, people don't live or work permanently in a pavilion and this is reflected in their designs - you are unlikely to ever find amenities such as a kitchen or bedroom in a pavilion. Because pavilions do not need to be functional for day-to-day work or habitation (living), they offer architects unique opportunities to take creative risks and to test experimental designs.

You might already have encountered some examples of pavilions in day to day life. For instance a bandstand in a park, a gazebo in a garden, or a grandstand at a football oval are all different types of modern pavilion. The word 'pavilion' is thought to have developed from the Latin word papilo, meaning tent, and the French word papillon, meaning butterfly. This is because very early examples of pavilions were large tents with extended fabric sections that were reminiscent of the spread wings of a butterfly. Some of the earliest known pavilions built from permanent materials were Chinese and date back millennia - to 1046-256 BCE!

Further exploration:

Investigate these historical and contemporary examples of pavilion design from Venice and around the world.

- Venezuela Pavilion by Carlo Scarpa, Venice, Italy
- Vatican Chapel by Sean Godsell Architects, Venice, Italy
- Barcelona Pavilion by Ludwig Mies Van der Rohe and Lilly Reich, Berlin, Germany
- Light Pavilion by Lebbeus Woods with Christoph A. Kumpusch, Chengdu, China

Key design: 2021 MAP studio MPavilion

The 2021 MPavilion by MAP studio is an unusual type of pavilion because, unlike most architecturally-designed buildings, its primary intention is to attract attention rather than provide shelter. Instead of a conventional roof – like you find on most houses – this MPavilion is crowned by an open, three-dimensional lattice of interconnected cubes that allow air, light and rain to pass through. This point of architectural difference is explained by the fact that the design of the 2021 MPavilion was inspired by the form and function of a lighthouse - a type of building the primary purpose of which is to attract attention from a distance, rather than provide cover. The architects titled their pavilion Lightcatcher to help audiences to understand their intentions.

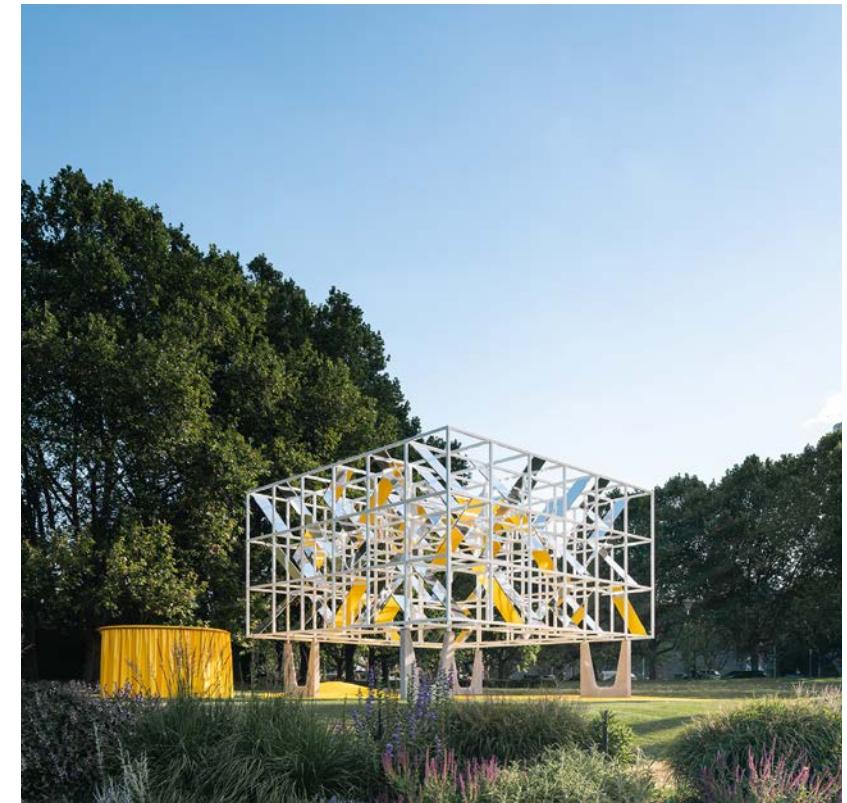
“Even from the beginning we did not work from the idea of a shelter (...) we found that the (strongest) idea was related to that of the lighthouse...”

—Traudy Pelzel of MAP studio in conversation with Naomi Milgrom AC

During the initial development of their design Pelzel and Magnani researched the MPavilion initiative and learned that each year a lively program of performances, talks and concerts takes place in and around the featured pavilion. Knowing the importance of this live program, which draws large and diverse audiences, MAP studio decided to devise a pavilion that could attract attention and communicate that interesting things were happening at the site - like a beacon in the landscape to catch the attention of passing crowds.

“We tried to investigate this relationship – a place where people meet – as a lighthouse in the park (...) but more than a shelter (...) a magnet, an attractor.”

—Francesco Magnani of MAP studio in conversation with Naomi Milgrom AC



To create a pavilion that would act as a ‘people magnet’ the architects focused on two visual aspects – colour and light. The colour they chose is a bright, vibrant canary yellow, which is popularly associated with sunshine, happiness and warmth. Due to its brightness, yellow is also the colour most often used for signage that needs to attract attention - such as for road works. This combination of positive associations and eye-catching qualities made yellow the ideal choice to draw audiences from afar.

The second visual element that the architects chose to incorporate into Lightcatcher was natural light. Each year the MPavilion is located in the Queen Victoria Gardens during the summertime, when daylight hours are long and Melbourne’s weather is mostly sunny. By considering the qualities of the pavilion’s site – including its weather – the architects realised that they could harness natural light to activate their pavilion. To achieve this they added reflective metallic, sheeting that acts like a mirror, to bounce beams of natural sunshine back out into the surrounding gardens - just like a lighthouse sends beams of artificial light out to sea.

“Collaboration is at the heart of the MPavilion, collaboration in everything we do.”

—MPavilion commissioner Naomi Milgrom AC in conversation with MAP studio

MPavilion commissioner Naomi Milgrom upholds collaboration as a core value of the initiative. For the 2021 edition, Milgrom set herself the challenge of finding a pair of architects who not only work collaboratively, but who also share a relationship. Because Pelzel and Magnani are a couple, the Lightcatcher can be understood as the product of both professional and personal collaboration, which distinguishes it as a unique example amongst the previous MPavilions.



Image by Anthony Richardson

Fascinating facts:

- The name of MAP studio is derived from the surnames of its two lead architects - Francesco Magnani and Traudy Pelzel – who apart from working together are also a couple.
- The Lightcatcher uses visual language rather than textual (written) language to communicate. This means that people who do not share a common dialect (another word for language) can understand the colour and light of the pavilion as features that are intended to say ‘look this way!', without having to use words. This makes the design accessible to audiences of diverse cultural and linguistic backgrounds.

MAP studio MPavilion 2021 design process

1. The first step taken by MAP studio was to generate five different possible designs for their MPavilion. These designs were created as digital drawings and then presented to Naomi Milgrom, MPavilion commissioner, for consideration.

“The Lightcatcher was quite extraordinary from the beginning, because it took a dimension that we hadn’t (previously) explored with the MPavilion, which was height. We felt that this (design) would explore things that we hadn’t explored before (...) to have reflectors within the context of its height as well, reflecting the sky and the buildings, the gardens (and) the trees (...) was a completely different way of looking both at the gardens and the pavilion.”

—MPavilion commissioner Naomi Milgrom AC in conversation with MAP Studio

2. Together, the trio discussed the strengths and weaknesses of each possible pavilion design before mutually selecting the Lightcatcher as the option to pursue. As part of their deliberations they considered the forms, materials and dimensions of the previous MPavilions, and noted that the Lightcatcher used height and reflective materials in a way that no other previous MPavilion had, which made it an exciting experimental choice.



LIGHT CATCHER
Final Design for MPavilion 2021

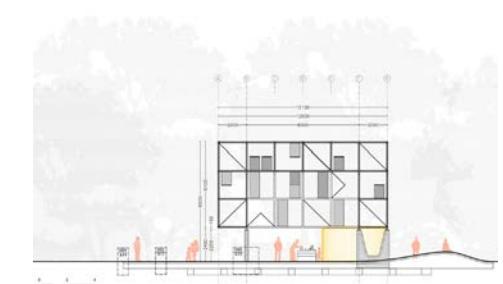
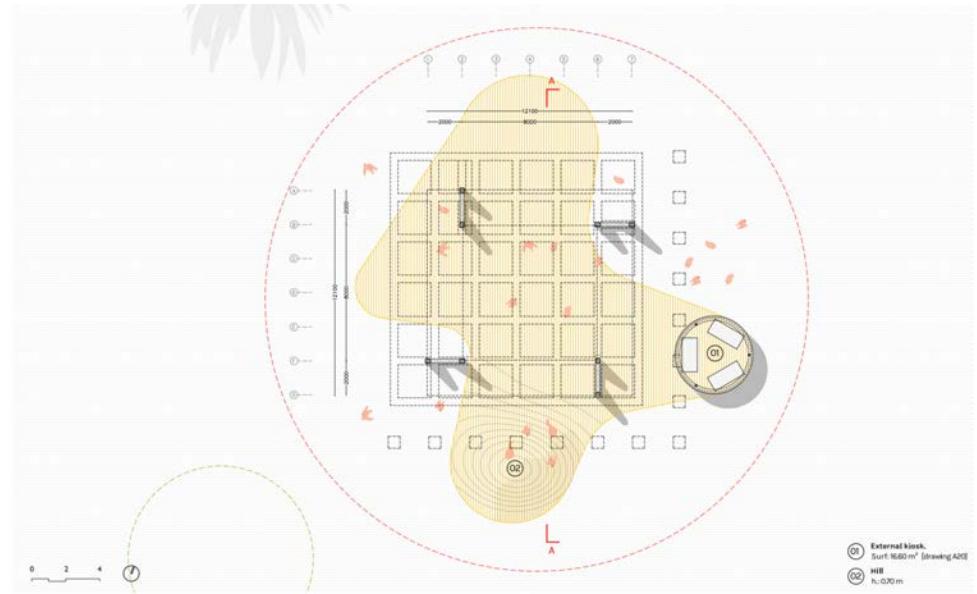
Model

3. The initial sketches for the Lightcatcher were then refined and translated into a three-dimensional model, a miniature version of what the full-scale pavilion would be. This was a useful tool for the architects to plan and test the complex arrangement of panels which sit within the gridded overhead structure.



Digital Models and Renders

4. Simultaneously, the initial plans were recreated as high-definition digital renders, set in a virtual version of the Queen Victoria Gardens. This was an important step because it helped convey how the MAP studio MPavilion would occupy its site.



Site Plan

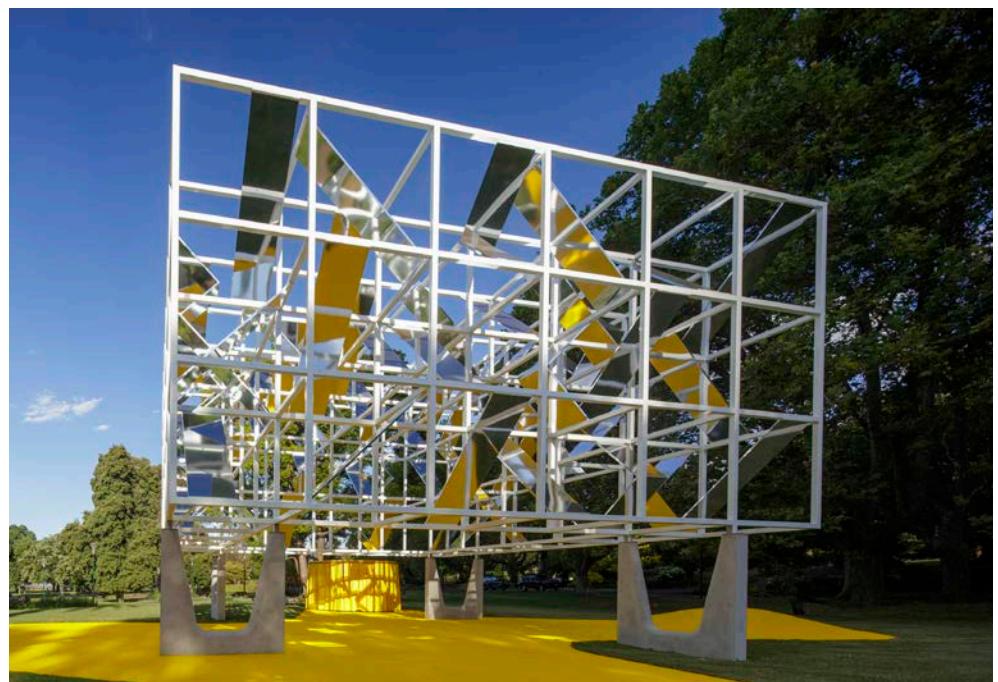
Section AA

Construction Drawings

5. The design was converted into engineering plans complete with measurements and notes specifying what materials were to be used and where. The architects chose to create the pavilion using a modular design, to make the eventual relocation of the structure to its new home as efficient as possible.

Construction

6. The pavilion was constructed onsite, with precast concrete 'feet' and modular cubic elements that had been fabricated elsewhere transported to the Queen Victoria Gardens.



Relocation

At the close of each season the current MPavilion is donated to a Victorian organisation, this is to make space for the next MPavilion. Interested organisations apply to 'adopt' each MPavilion and the most appropriate site is chosen. Recipients of MPavilions include the Melbourne Zoo, Monash University and the Hellenic Museum. This strategy means that each previous MPavilion remains available to visit, and Melbourne has also gained an accessible collection of diverse architecture by leading architects.

The new location for 2021 MPavilion is yet to be confirmed - please see MPavilion.org for the upcoming announcement of the MAP studio MPavilion's new home.

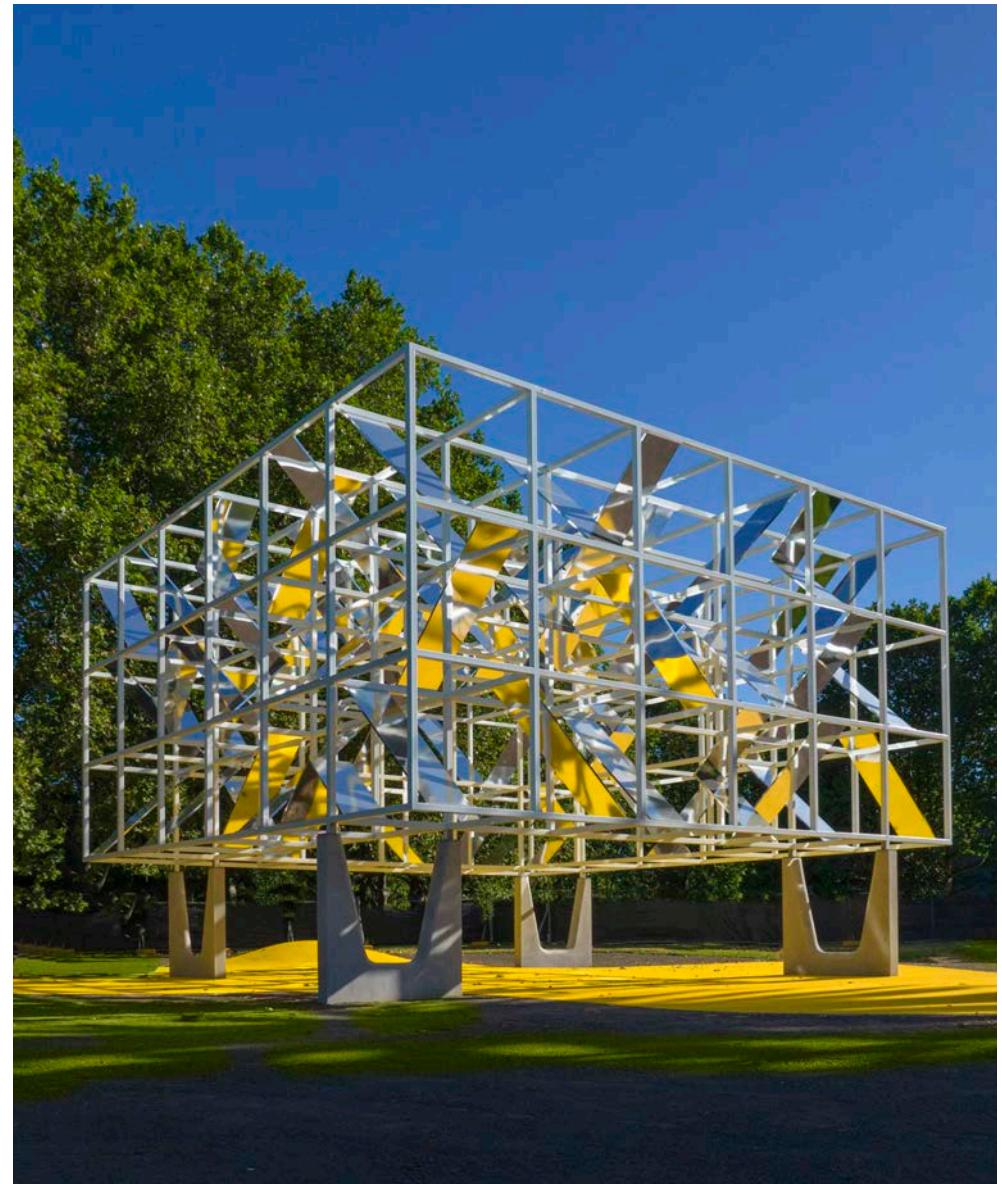


Image by John Gollings

Inquiry questions:

1. What does the bright yellow colour of the MPavilion remind you of, or make you feel?

2. Have you ever been in another building that has so many openings in its roof? Why do you think the architects designed their MPavilion this way?

3. If you could design the next MPavilion, what two colours would you choose and why? What would your colours make visitors feel or think about?

Activity:

Your task is to design your own pavilion that acts like a ‘lighthouse’ to attract attention. MAP studio used bright colour and reflective materials to catch light and stand out in the landscape of the Queen Victoria Gardens. What are some other materials or techniques you could use to create a pavilion that attracts people’s attention and makes them curious enough to think ‘what’s going on over there?’ Consider colour, height, width and shape. Choose a real life location for your pavilion and then consider how your design will attract attention by contrasting with its surroundings. Express your design as a drawing using coloured pencil and annotate your design to identify your chosen materials and construction techniques.

Excursion tool kit:

- Coloured pencils
- Paper or visual diary
- Hats, sunscreen and water bottles

Inquiry questions:

1. MAP studio's inspiration for their MPavilion was a lighthouse. Looking at the 2021 MPavilion, can you find relationships between it and the form of a lighthouse?

2. The Lightcatcher relates to its site in the Queen Victoria Gardens in very particular ways. How does it use materials to find harmony with the gardens? And how does it use formal qualities to stand out from its surroundings?

3. One of the primary aims of the 2021 MPavilion is to attract attention, which is different from the more conventional aim of providing shelter. What are the advantages of this choice? How does this design challenge audiences to rethink the role of architecture?

Activity:

Naomi Milgrom chose to commission MAP studio because she was interested to work with architects who operated collaboratively. Your task is to work collaboratively with a partner to design a pavilion that reflects the ideas both of you have as a cohesive design. A major part of collaboration is listening, so be sure to pay close attention to your collaborator's ideas. You may need to relinquish some of your ideas to make room for theirs, and vice versa - collaboration is about creative and personal balance. Once you have created a design drawing of your MPavilion, write an introductory paragraph together, and one short additional paragraph each, which explains how you both contributed equally to the final design. You may want to reflect on the process of collaborating - what was challenging? What was successful?

Excursion tool kit:

- Pens and pencils
- Loose leaf paper, digital device or visual diary
- Hats, sunscreen and water bottles

Primary school**Australian curriculum links:**

Design and Technologies / Processes and Production Skills:
([ACTDEP015](#); [ACTDEP025](#))

Generate, develop and communicate design ideas and processes for audiences using appropriate technical terms and graphical representation techniques.

Victorian curriculum links:

Design Technologies / Technologies and Society:
([VCDSTS023](#); [VCDSTS033](#))

Investigate the suitability of materials, systems, components, tools and equipment for a range of purposes; examine the materials and systems used in a public use system that affect the way people live.

Extension materials

- [MAP studio website](#)
- [Drone footage of the MAP studio MPavilion](#)
- [MAP studio and Naomi Milgrom AC in conversation, hosted by Peter Maddison](#)

Secondary school**Australian curriculum links:**

Design and Technologies Processes and Production Skills / Design and Technologies Knowledge and Understanding:
([ACTDEP034](#); [ACTDEK035](#))

Analyse ways to produce designed solutions through selecting and combining characteristics and properties of materials, systems, components, tools and equipment; Critique needs or opportunities for designing, and investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas.

Victorian curriculum links:

Design and Technologies / Creating Designed Solutions / Evaluating:
([VCDSCD044](#); [VCDSCD054](#))

Investigate the ways in which designed solutions evolve locally, nationally, regionally and globally through the creativity, innovation and enterprise of individuals and groups; Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved.

Planning your visit

Though the MPavilions change each year, the location remains the same. You can find MPavilion located in the Queen Victoria Gardens, directly opposite the The Arts Centre, on St Kilda Road. MPavilion is open twenty-four hours a day and diverse free programs run back-to-back throughout the season. You can plan your visit to coincide with education-centred events for students and teachers by checking [here](#).

The full-to-bursting program of free events for the general public can also be accessed [here](#).

Next steps

All but one of the previous MPavilions have been relocated to new locations within Melbourne and are available for viewing, most at no cost.

2019 MPavilion by Australian architect Glenn Murcutt has been gifted to the University of Melbourne.

2018 MPavilion by Spanish architect Carme Pinós is soon to be relocated.

2017 MPavilion by Dutch architects Rem Koolhaas and David Gianotten of OMA can be visited at **Monash University, Clayton campus**.

2016 MPavilion by Indian architect Bijoy Jain for Studio Mumbai can be visited at the **Melbourne Zoo** (Ticketed admission).

2015 MPavilion by British architect Amanda Levete for AL_A can be visited at **Docklands Park**. Admission free.

2014 MPavilion by Australian architect Sean Godsell can be visited at the **Hellenic Museum**.

Acknowledgements

This resource was written and compiled by Andrew Atchison for MPavilion, March 2021.

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