

A photograph showing a woman from the side, looking up at a large, modular wall sculpture. The sculpture is composed of numerous triangular panels in shades of pink, red, and white, arranged in a spiral pattern. The woman's right hand is touching one of the panels. The background is a light-colored, textured wall.

Spiral Pavilion

GENERAL INFORMATION

Location

C-Hub National Cheng Kung University Tainan,
Taiwan

Completion

October 2017

Exhibition

“Betwin Oceans”

2017 Taiwan Design Expo Circular Economy
International Exhibition



VAN'S ORIGINAL MATERIAL

Rotan, Rush

SAND TONNES

在世界各國中，中國的海岸線最大，每年產量約有 10 億噸沙子。這就是為什麼中國是世界上最大的沙子生產國。

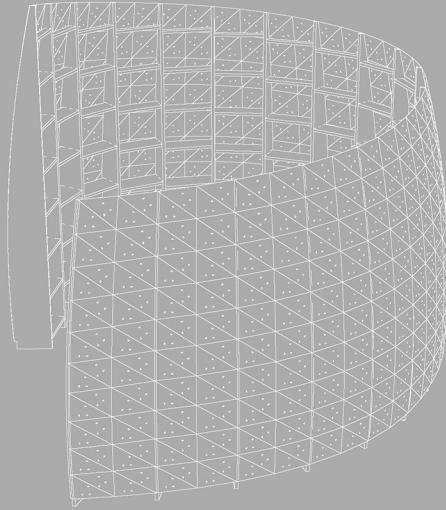
In tropical areas, and Indonesia has the largest amount of rattan. Over 600 thousand tons of rattan can be harvested in a year. Rotan, China, is located in the low-altitude area of China and Taiwan.

RATTAN

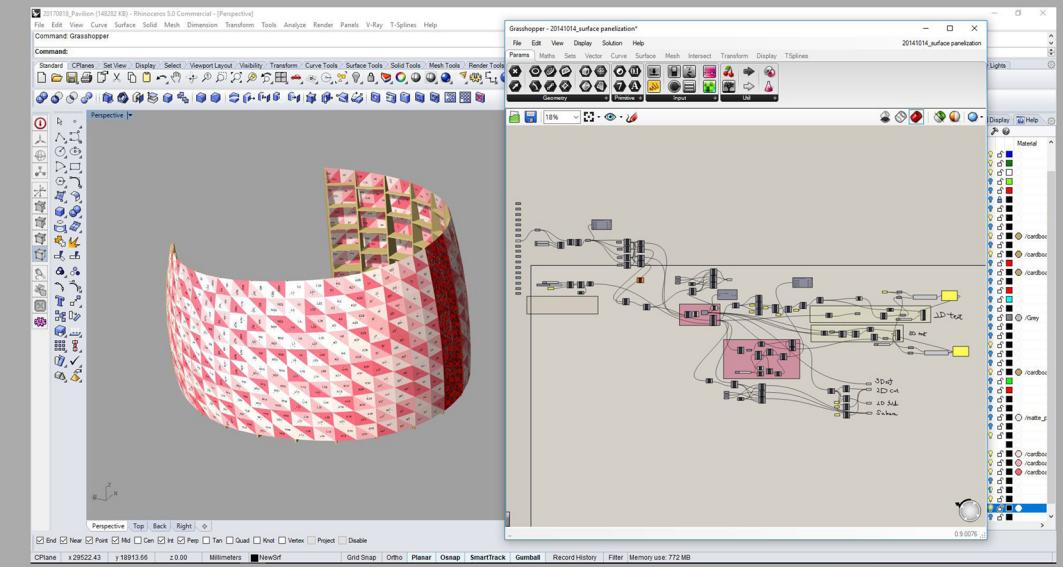
日本是世界上最大的天然藤製品出口國。日本每年出口價值超過 20 億美元。

Japan is the world's largest natural rattan export country. Its annual export value exceeds 2 billion US dollars.

8. NATURAL MATERIAL



Spiral Pavilion is a semi-open space made of cardboard with beautiful curves and stools, where it becomes a place to brainstorm and interact with each other. The skin of the pavilion was divided algorithmically into different sizes, then cut into triangular pieces. After assembling, cardboard has turned into a stronger structure. Within it, hundreds of cherry blossom petals represent the creative flow and let the sparkle of lights into the space.



Computer Interface of Spiral Pavilion

Spiral Pavilion is designed with a generative approach to create parameterized surfaces into triangulated surfaces, which are specifically shaped and labeled through parametric modeling software. All the pieces are sent to be cut with a cardboard CNC machine, which comes with cutting, pressing, and labeling.

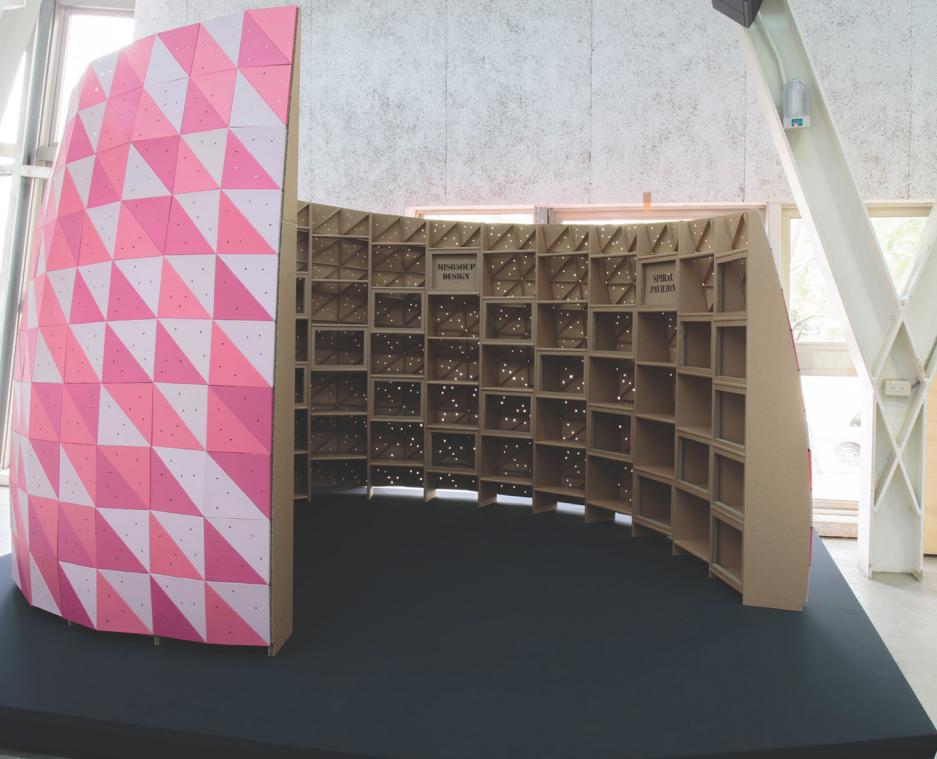


MISOSOUP
DESIGN

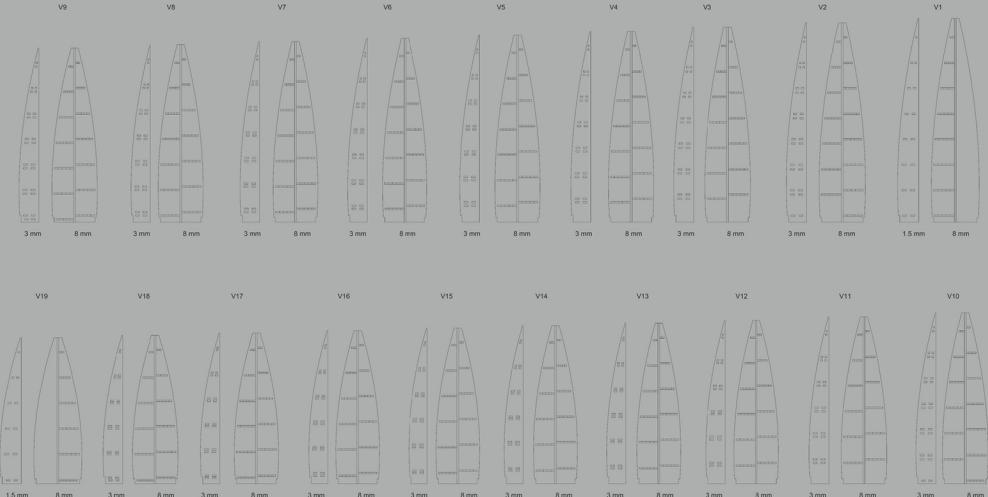
SPIRAL
PAVILION



The most challenging point of constructing Spiral Pavilion is the accuracy of a digital file, and by hand construction. Each part of the pavilion is labeled by CNC machine, which can also cut and press for folding lines. Since cardboard material is not necessarily rigid material to create enough structural strength, the design for parts joint and details needed to pay a lot of attention.



Vertical Parts



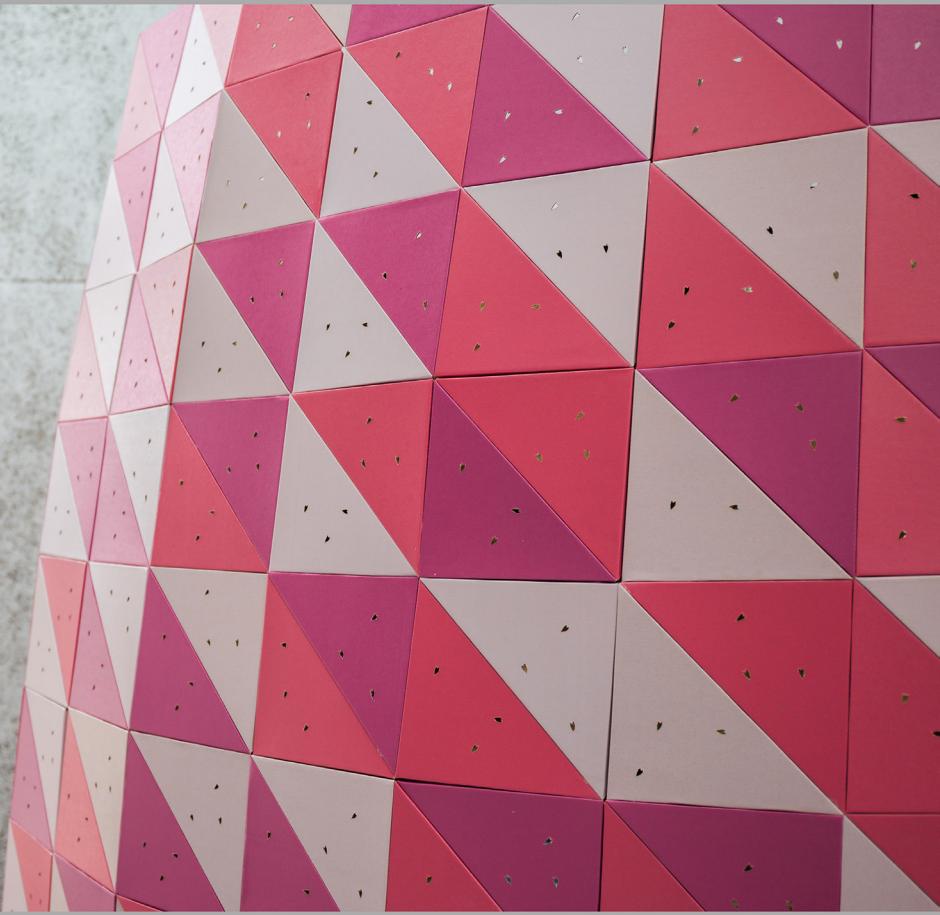
Assembly Drawing of Spiral Pavilion



A woman with long dark hair, seen from the back, stands in front of a large-scale architectural model or installation. The model consists of several vertical panels made of a light-colored material with a diamond-shaped perforated pattern. A central panel features the text "SPIRAL PAVILION" in a bold, sans-serif font. The background shows a modern building with large windows and a curved concrete structure.

SPIRAL
PAVILION





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PAVILION



紙築空間	Spiral Pavilion <p>Spiral Pavilion is a semi-open space made of cardboard with beautiful curves and stools, where it becomes a place to brainstorm and interact with each other. The skin of the pavilion was divided algorithmically into different sizes, then cut into triangular pieces. After assembling, cardboard has turned into a stronger structure. Within it, hundreds of cherry blossom petals represent the creative flow and let the sparkle of lights into the space.</p>
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