TWO WORLDS COLLIDE

PROJECT 5

MINAMISANRIKU
SUN SUN SHOPPING
VILLAGE
JAPAN

This series looks at how five creative architects are combining the physical with the digital to design some of the world's most beautiful buildings

Architects: Kuma Kengo and Associates (KKAA)

Summary: Based in Tokyo and Paris, Kengo Kuma and Associates is known for its large-scale timber structures inspired by Japanese architecture, construction techniques and styles. A Kengo Kuma building is humble, holistic and often informed by nature. While known for his work across Japan, Kuma completed the V&A in Dundee, Scotland, in September 2018 and is also highly active in the French architecture scene.

Website: www.kkaa.co.jp

Project Location

Minamisanriku, Miyagi, Japan

Minamisanriku Sun Sun Shopping Village

The Sun Sun Shopping Village in Minamisanriku was a project born out of catastrophe. Back in 2011 a tsunami destroyed nearly 110,000 buildings and damaged twice that number along the Pacific coast of Japan. The mammoth task of replacing and redesigning these structures to restore these shattered communities has utilized both the latest digital technology and traditional Japanese craftmanship.

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>> “We wanted to pursue a way where we could incorporate the sea safely into our master plan. So, we raised the ground and when it was stabilized embarked on the retail complex,” said chief of design, Toshiko Meijo.

He explained how they drew inspiration from the town’s history of low-rise buildings, its fishing industry and the way shop owners displayed goods at their entrances. The aim was to keep it intimate – with the feeling of a private home – onto which tenants could imprint their own identity. >>


Toshiki Meijo, chief of design

Q&A

How did you blend the physical and digital aspects of the design process?
When we developed the master plan and the shopping complex we first made a model of the entire site. The mountains are very close to the site, so we had to do tons of printouts, cut them out and then assemble them together by hand. And after that, we worked out the volume of the buildings and adjusted the physical model this way and that. At the same time, we created data with 3D modeling. For visual confirmation, 3D is vastly superior. So, we created our layout using both the physical models and 3D modeling technology.

Do you see digital technology becoming more prevalent in your working processes?
These days, clients are giving us tighter construction schedules. And presentations are also accelerated. This hampers our time to make physical models. They take time to make. So as 3D printers advance physical models may increasingly become a rarity.

Has any single piece of technology helped your process?
Our new (2D) printer has a scanner function, so we can check the design, scan it and send it to clients or contractors onsite. This was not a function of the previous [printer]. To share an A1 size document, we had to scan it in A3 and send it on to clients piecemeal. Now we can do this all in one go. This is incredibly convenient.

KKAA successfully created a contemporary structure, which blends seamlessly into the historical and visual landscape of the city, by combining new technologies with established skills to improve workflows between the studio, contractors and the client.

“In early meetings with clients, we worked out ideas and simple designs using modeling on our computers. Clients tell us the 3D renderings make it easy for them to follow and visualize designs.”

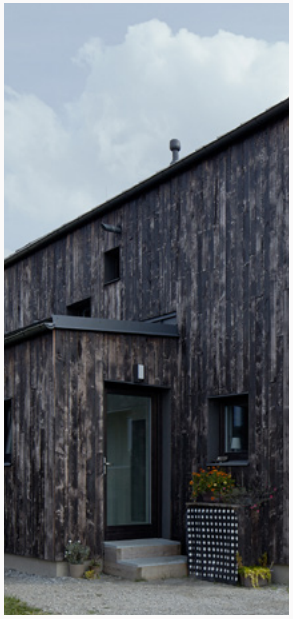
He added: “We use digital technologies a lot. But that said, when have meetings or are working on layouts we are doing a lot of sketching and writing by hand.” ■

“THE PLAN HAS BEEN A SUCCESS IN ATTRACTING TOURISTS AND REVITALIZING THE COMMUNITY… SPIRITUALLY AND ECONOMICALLY”

TWO WORLDS COLLIDE

PROJECT 1

CARBON HOUSE



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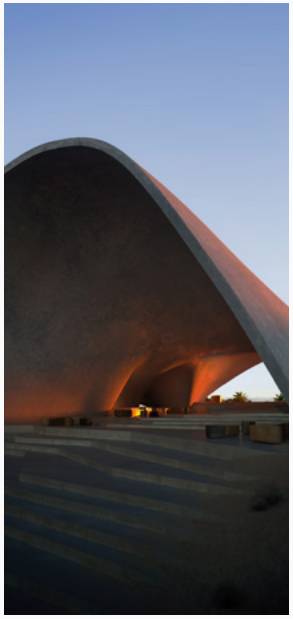
PROJECT 2

JORDANIAN GOLF CLUB



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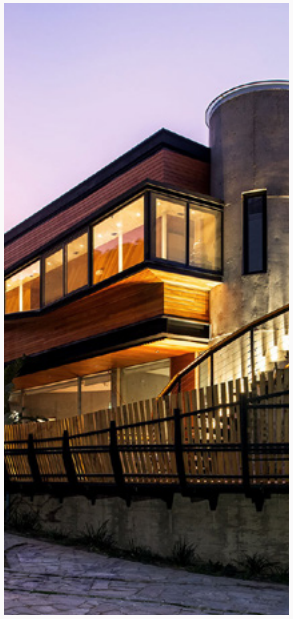
PROJECT 3

CHILEAN HOUSE



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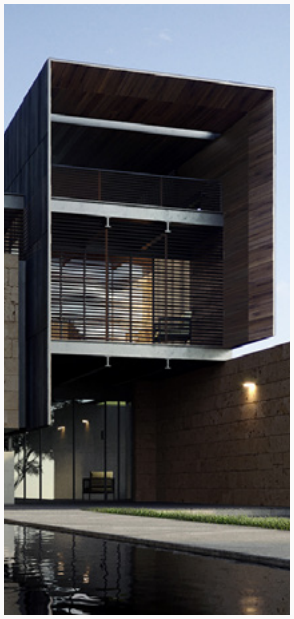
PROJECT 4

UKRAINIAN HOUSE



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