

# An Informal Icon

Living up to the suggestiveness of its name, the Loop of Wisdom embodies a timeless architectural concept. Powerhouse Company's design for a technology museum and reception center for a new neighborhood in Chengdu, China, is much more than an exuberant landmark. In addition to its obvious aesthetic appeal and cultural program, the fluid structure incorporates a spectacular public space – an undulating rooftop trail. This addition makes the Loop of Wisdom an accessible icon, rather than a remote beacon. It invites people to explore it and make it part of their regular walking or jogging routine.

Designed as a continuous ring, the loop's form is archetypal and universal; organic and geometric; enigmatic yet instantly recognizable. While the client initially wanted a temporary building, they were so impressed by the quality of the design, its delicate relationship with the landscape and its elegant lines, that they decided it must become a permanent fixture. The Loop of Wisdom's design transformed the idea for an ephemeral structure into a vision of a long-lived and inherently sustainable one.

**'While spectacular museums and reception centers are quite common in China, we wanted to create an icon that people can actually explore and use.'**

– **Nanne de Ru** Founder at Powerhouse Company

## **Put a ring on it**

The client, chip manufacturer and real estate specialist Uni-Hiku, asked Powerhouse Company to design the museum and reception center as part of its new development, Unis Chip City, in the vibrant metropolis of Chengdu. The new buildings would also function as a technology education center as well as an information center for the new city development.

During the site visit, the architects noticed the natural undulation in the terrain, a very subtle and soft hill. Normally in Chinese development these natural hills are leveled. Powerhouse Company decided instead to use the topography as the

basis for a unique design that would bring an organic softness to the urban environment. By shaping a circular path that follows the topography, the two separate programmatic entities are combined in one single structure. As the path rises up to make space for the program, it becomes a roof offering stunning views over the new development. The new building becomes a path and architecture at the same time, while allowing nature to continue around, under and within the form of the structure.

The Loop of Wisdom's flowing, organic form echoes the mountain ring circling its location on the Chengdu Plain. Embedded into the landscape, the building is accessible and public, a place for people to walk, run or simply admire the views. The Möbius-like form alludes to human ingenuity and the high-tech credentials of the Unis Group, as does the high quality of the building and the cutting-edge technology used to design and build it.

**'We wanted to work with the landscape rather than ignore it, so we used it to create an elegant, soft form. The building is extremely contextual, even though it is the first building to emerge in this new neighborhood of Chengdu. Its design is complementary to the surrounding natural landscape and its gentle form invites people to come and explore the context and the surroundings.'**

– **Stijn Kemper** Partner at Powerhouse Company

#### **The red road**

The rooftop walkway measures 698 meters around, rising 25 meters from its ground level access to offer spectacular views of the surrounding greenery and distant mountains. Its surface is rubber asphalt – the material used for athletics tracks – making the path suitable for runners as well as walkers. Red was chosen for the color for the roof because of the striking contrast it makes with the lush green of the landscape.

Above the track, the rooftop surface is composed of custom aluminium tiles. 15,218 of these, each with its own unique profile and numeric code, form a seamless skin for the serpentine shape. The LED lights that illuminate the building at night and functional elements including gutters and handrails are all carefully concealed from sight, resulting in the streamlined profile that enhances the loop's elegant simplicity and flowing lines.

Beneath the red roof, the exhibition spaces have a warm, natural atmosphere, created by wooden ceilings and open views of the surrounding landscape. The facades are structurally glazed to a height of 13 meters with glass reinforcement fins. This transparency blurs the boundary between indoors and outdoors, again enhancing the connection with nature.

**‘As a runner myself, I am particularly proud of the health and wellness aspect of the Loop of Wisdom. It currently provides a space for people to exercise outdoors and one day in the future it will house an athletics circuit for a future school, in addition to the uphill track.’**

– **Niels Baljet** Project Architect at Powerhouse Company

#### **A bold new landmark**

Located in the Tianfu New District of Chengdu in Sichuan, Unis Chip City is one of several developments springing up along the Tianfu Avenue. Situated next to this major artery, the Loop of Wisdom commands attention with its flowing form and vibrant red color. At night, LED lighting transforms it into a glowing sculpture. As the first completed building in the new development, it acts as a symbolic landmark for the future community and as a magnet for attracting future residents.

In addition to designing the Loop of Wisdom, Powerhouse Company acted as a consultant for the development, which includes residential buildings, offices, shopping malls and schools. The architects also designed other elements of the plan, including mixed-use offices that are currently under construction.

**‘With its huge visual appeal, the Loop of Wisdom has become an immediate social media success. Not least because, thanks to its form, it looks different from every angle and on every selfie.’**

– **Rui Wang** Project Architect at Powerhouse Company

#### **The fast track to the future**

The entire Loop of Wisdom building, including the interior design and landscape design, was built with true Chinese rapidity: It took under a year to complete from design to construction. The design itself went from sketch to blueprint in a matter of days, thanks to the use of advanced parametric drafting software that was linked to the architects’ BIM model. The six-hour time difference between Powerhouse Company’s head office in Rotterdam and the site in China allowed for efficient communication, with both parties touching base at the start and end of their respective days.

Eventually, a new school will be built next to the site of the Loop of Wisdom. The building will enter its second phase of life as a library and sports center, complete with an Olympic-sized running track, maintaining its focal role in the community. This built-in longevity makes the building inherently sustainable.

‘The Loop of Wisdom shows how landscape can influence a building, and how parametric design can be used to achieve simplicity and elegance within a very complex structure. What’s more, our design is unique in shaping an iconic building so that it can be easily repurposed in the future.’

– **Stijn Kemper** Partner at Powerhouse Company

**About Powerhouse Company**

Powerhouse Company is an award-winning architecture office based in Rotterdam, the Netherlands. Founded in 2005, it has grown into a multidisciplinary office of around 100 professionals, with international studios in Beijing, Oslo and Munich. Prizes include the Dutch Design Award, the Maaskant Prize and the AM/NAI Award.

**Note for editors**

For more information, images and interview requests, please contact [pr@powerhouse-company.com](mailto:pr@powerhouse-company.com)

## Key info

<b>Status</b>	Built
<b>Timeline</b>	2019 – 2020
<b>Client</b>	Uni-Hiku
<b>GFA buildings</b>	5 000 m <sup>2</sup>
<b>GFA roof</b>	9 250 m <sup>2</sup>
<b>City</b>	Chengdu
<b>Country</b>	China
<b>Program</b>	Cultural, Public Space, Hospitality
<b>Budget</b>	Confidential

## Collaborators

<b>Co-architect</b>	<u><a href="#">Chengdu JZFZ Architectural Design Co.Ltd.</a></u>
<b>Landscape architect</b>	<u><a href="#">AECOM, Wisto</a></u>
<b>Interior architect</b>	<u><a href="#">CCD, Xenario</a></u>
<b>Urban planner</b>	<u><a href="#">Woods Bagot</a></u>
<b>MEP consultant</b>	<u><a href="#">Chengdu JZFZ Architectural Design Co.Ltd.</a></u>
<b>Structural engineer</b>	<u><a href="#">Chengdu JZFZ Architectural Design Co.Ltd.</a></u>
<b>Facade engineer</b>	<u><a href="#">Chengdu JZFZ Architectural Design Co.Ltd.</a></u>
<b>Lighting advisor</b>	<u><a href="#">Minka</a></u>
<b>Contractor</b>	<u><a href="#">CSCEC, Kelida</a></u>
<b>Photography</b>	<u><a href="#">Jonathan Leijonhufvud Architectural Photography</a></u>
<b>Visualizations</b>	<u><a href="#">Mir., ATCHAIN</a></u>

## Project team

<b>Partner in charge</b>	Stijn Kemper Nanne de Ru
<b>Project lead</b>	Niels Baljet
<b>Project team</b>	Rui Wang Albert Takashi Richters Maarten Diederix Meagan Kerr Remko van der Vorm Daan Masmeijer Michiel Bosch Niek Koning Stavros Voskaris Filip Galić Severino Iritano Davide del Sante Reto Egli Penny Uni Dries Brøns Caroline Desplan Eli Keijser

Gert Ververs  
Giovanni Andrea Coni  
Rafael Zarza Garcíá  
Yanni Huang  
Kimi Fei