

# BRICK

## 22 Outstanding International Brick Architecture





## Jingdezhen Imperial Kiln Museum



Zhu Pei

## BRICK

22 Grand Prize Winner

Located in Inland China on the Chang River, the city of Jingdezhen has been an important porcelain manufacturing center for over 1,700 years. The Imperial Kiln Museum was built right next to the Imperial Kiln ruins from the Ming Dynasty and is dedicated to the porcelain history of the city.

“The local tradition of reusing old kiln bricks mixed with new ones is inherited by the museum.”

Eight parabolic brick vaults form the museum building, which has two ground-level and five underground exhibition halls. The cigar shape of the vaults, which all have a slightly different height, length and curvature, is derived from the traditional shape of the kilns. Half of the vaults have glazed ends, the other half open ones. Slightly twisted against each other, the barrel vaults are all arranged side by side on the property in a north-south direction. This connects them to the street grid of the city, but also ensures natural ventilation of the museum in the hot summer

months when the cool north wind blows through the open vaults. Five sunken courtyards inside the building also provide a cooling chimney effect.

The entrance to the museum leads between two shallow water basins into a large, vaulted foyer. On the left is a smaller volume with an auditorium, on the right are two featuring a café and tearoom. Offices and supplies are also housed in their own “cigar.” Behind the foyer are three exhibition halls with stairs leading to the basement. Further exhibition halls, but also the courtyards, each with its own design theme (gold, wood, water, fire and earth—materials that are needed in the manufacture of porcelain) are also situated there.

The courtyards also serve to direct daylight into the basement. On the upper floor, light falls through the open ends of the vaults, as well as through horizontal slits of light above the floor and slits at the points of contact between the volumes. There are also cylindrical skylights that resemble the smoke holes in kilns. One of the vaults was cut open in the middle to integrate several kiln ruins that were first discovered during construction. Depots and technical rooms are accommodated in a second basement.

ARCHITECT/S  
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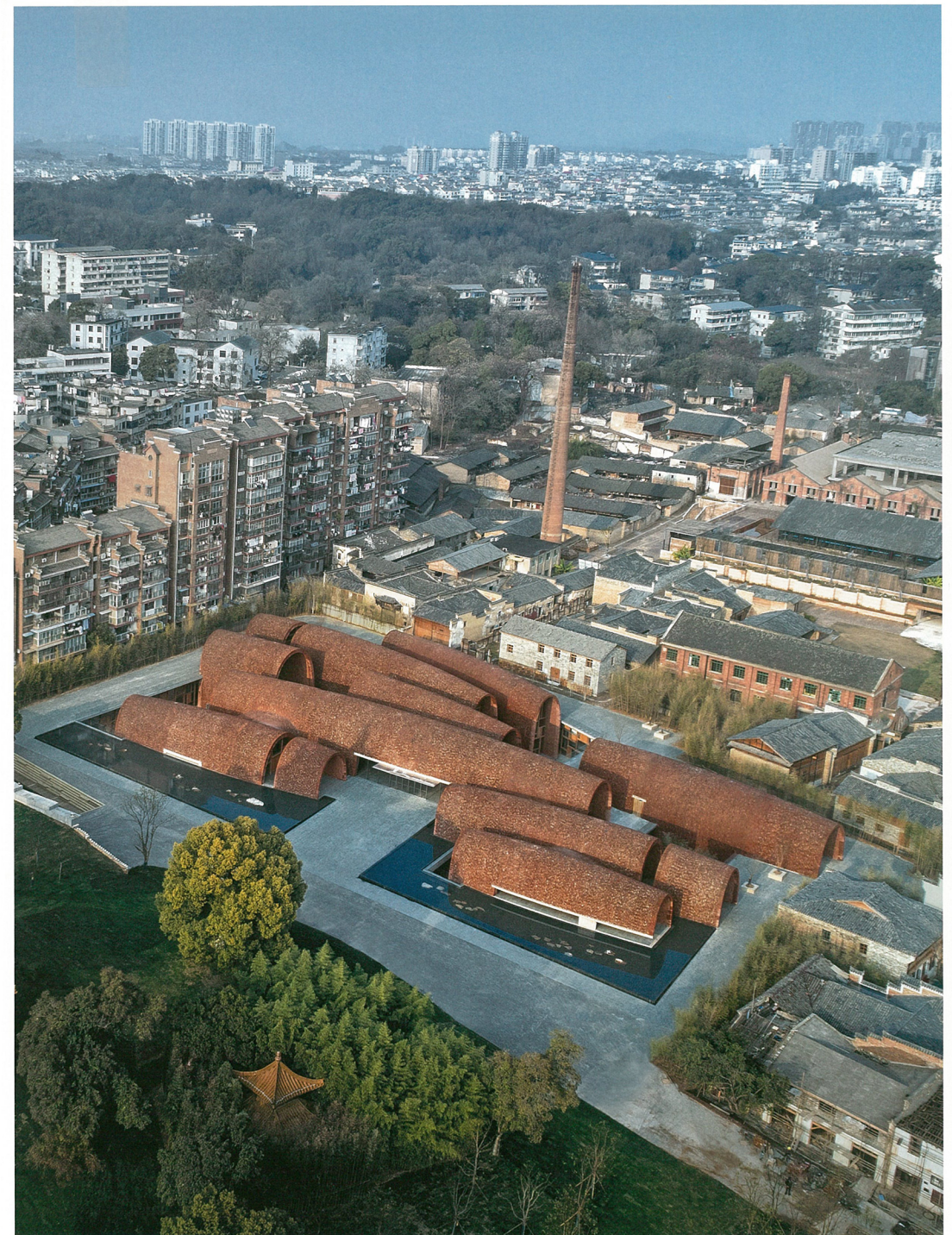
LOCATION  
Jingdezhen/Jiangxi  
Province, China

BUILDING PURPOSE  
Museum

CONSTRUCTION PERIOD  
2016–2020

BRICK TYPE  
Facing bricks

The construction of the museum also makes reference to the kiln tradition: The vaults consist of double-shell brick walls built in the traditional way without scaffolding and then poured out with concrete. The 2.8 million bricks used are a mix of new and old ones left over from the demolished kilns, because to ensure that the porcelain kilns retain their thermal properties, they are torn down and rebuilt every two to three years. The resulting demolition bricks have always been reused in Jingdezhen and can be found in the façades of many residential houses and other structures—and now in the Imperial Kiln Museum as well. This means that not only the design and function, but even the construction of the museum pay homage to the porcelain history of the city of Jingdezhen. [ab]





## Jury Statement

"The Imperial Kiln Museum brings to the forefront the reinterpretation of the traditional kilns which are local tradition and local history in China. As the architects work with re-used kiln bricks, they simultaneously honor the production and the material. The structure of the vaults is very specific. It is a repetition of eight volumes that differ in scale and size and are intrinsically connected together in both directions vertically and horizontally. They perform like the last formwork of the whole structure which evokes a

unique atmosphere in terms of light and wind. A very complex program ranges from an auditorium to exhibition spaces, a library and a café. The project incorporates everything that makes up the public space, and also redefines the approach to the ming-dinasty's tradition."



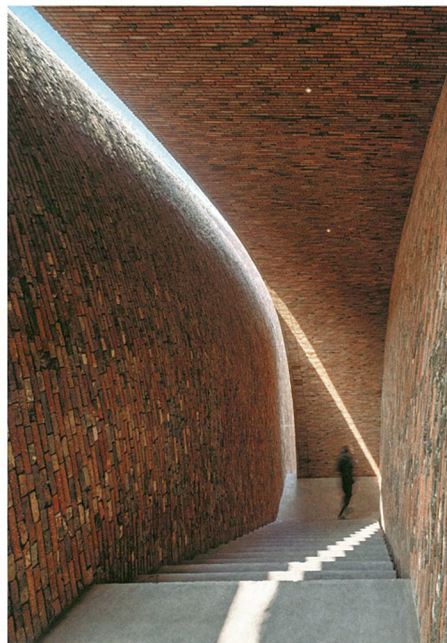
Open and closed vaults







Foyer

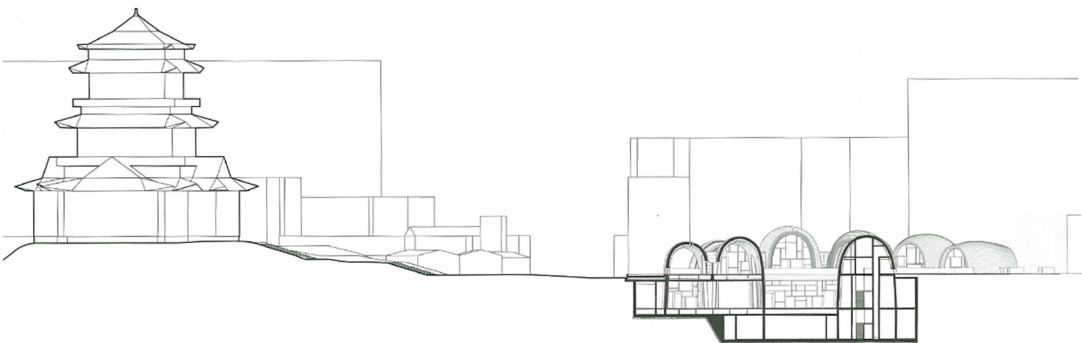
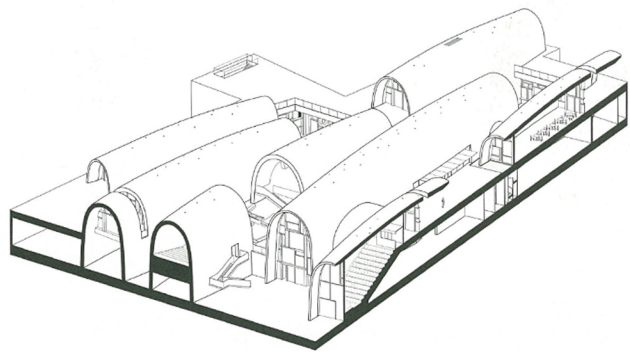


Vault, brick and light

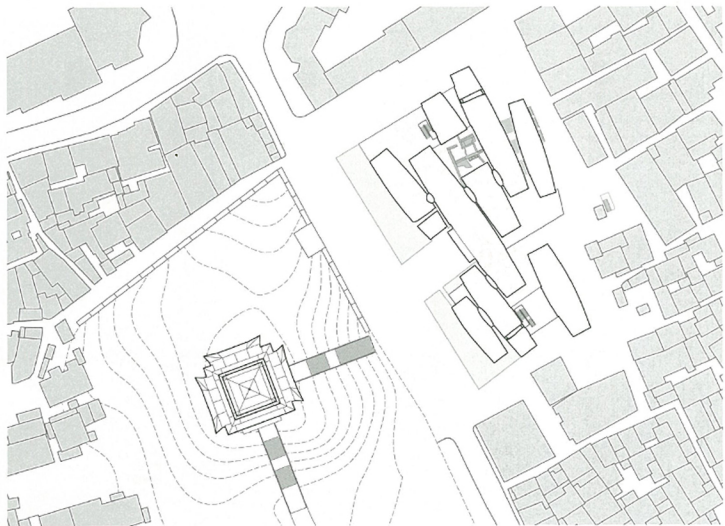


Sharing  
public spaces





Cross section



Site plan



Auditorium



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INTERNATIONAL MAGAZINE FOR BRICK ARCHITECTURE

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**SPECIAL EDITION**  
**BRICK AWARD 22**

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he vault is illuminated by  
ots on the sides and points  
f light on the ceiling, cre-  
ting a unique atmosphere.  
y using reclaimed bricks,  
ie architects pay tribute to  
ie building material and its  
story.

**BRICK**  
**22** Grand Prize  
Winner

**SHARING PUBLIC SPACES**

## A TRIBUTE TO TRADITION

The city of Jingdezhen in China has a long history of porcelain production. The Imperial Kiln Museum focuses on the reinterpretation of traditional kilns, harking back to a local tradition and the history of China.



The entrance to the museum lies between two shallow pools of water. The buildings differ in size and scale. Some are open at the ends, others are closed.



The eight cigar-shaped vaults are reminiscent of the traditional shape of porcelain kilns and vary in height, length and curvature.

### FACTS & FIGURES

**Project name**  
Jingdezhen Imperial Kiln Museum,  
Jingdezhen/Jiangxi, China

**Architects**  
Studio Zhu Pei;  
Architectural Design &  
Research Institute  
of Tsinghua University  
Beijing/China

**Client**  
Jingdezhen Municipal Bureau  
of Culture, Radio, Television,  
Press Publication and Tourism,  
Jingdezhen Ceramic Culture  
Tourism Group

**Product used**  
Facing bricks

**Year of completion**  
2020

**E**ight parabolic brick vaults form the Imperial Kiln Museum. It is dedicated to the porcelain history of the site and is located next to the ruins of the Ming Dynasty imperial kiln. Designed by Studio Zhu Pei, the cigar-shaped buildings vary in height, length and curvature, emulating the traditional shape of porcelain kilns.

**OPEN YET CLOSED** The barrel-shaped buildings are arranged side by side in a slightly higgledy-piggledy cluster with a north-south orientation. This ties them to the city's street layout while providing natural ventilation for the museum during the hot summer months. The building ensemble consists of two ground-level and five underground exhibition halls. Walking from Imperial Kiln Relic Park through the woods and over a bridge between two shallow pools of water, you reach the museum's foyer. Behind it are more exhibition halls and courtyards, each with a separate theme: gold, wood, water, fire and earth – all the materials needed for porcelain production. Other vaults contain the museum offices, an auditorium, a café and a tea room.

**LIGHT-FLOODED VAULTS** Daylight is directed through the courtyards into the basement levels. On the upper floors, light falls through the glazed or open ends of the buildings, through horizontal light slots above the floors and through skylights in the ceilings that resemble typical kiln smoke holes. When furnace ruins were discovered during construction, one of the vaults was cut open in the middle to integrate the historical sites. The masonry construction is also based on traditional kiln-building methods: as in ancient times, the vaults were constructed from double-shell brick walls without using scaffolding and then filled with concrete. A total of 2.8 million bricks were used – a mixture of new and reclaimed bricks that were left over from the demolition of old kilns. This is because porcelain kilns are demolished and rebuilt every two to three years to preserve their thermal properties. This system of reuse has a long tradition in Jingdezhen. Bricks from demolition sites are found in many buildings in the city and now also in the Imperial Kiln Museum. The recycling concept, careful handling of the site's heritage and the complex spatial design combine to make this project spectacular. It offers everything required of a public space and was not only awarded the prize in the Sharing public spaces category, but also the Grand Prize of the Brick Award 22. 🏆





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**Wienerberger**