you are in: WAN / Interiors / Interiors / Wuxi Grand Theatre Main Auditorium



CONTACT | AWARDS | EVENTS | SUBMIT A STORY | JOBS | ABOUT | ADVERTISE





Home

Projects
Museums
Residential
Hotels
Restaurant & Bar
Retail
Commercial

Products
Furniture
Accessories
Lighting
Outdoor
Fixtures

Exhibits

Public

Editorial
Profile
Snapshot
Event reviews
Focus On
The Inside Word

Subscribe

READ THE INTERIORS **BLOG**



a monthly round-up of the world's best interiors and design stories

ARCHIVE

2011 >

2010 >

2013 > March February January 2012 > WUXI GRAND THEATRE BAMBOO AUDITORIUM









The Chinese bamboo "wood" is generally an ideal material for the opera/concert hall interior both acoustically and atmospherically as it echoes the beauty of a wooden instrument. Bamboo is a sustainable material with a truly Chinese character which has generally been neglected and underestimated by architects and designers in China. One of the reasons for this might be that for centuries it was regarded as a "poor man's timber" and therefore not suitable for representative public spaces.

PES-Architects believe in reviving the aesthetical qualities of bamboo, as in many ways, it is the material of the future. Computer-based design and fabrication tools can help to reconnect to and re-invent traditional Chinese wood craftsmanship. The strand-woven bamboo type proved to be the ideal material choice for the fabrication and installation process. When crushing the bamboo fibres and pressing them into blocks under high pressure, the bamboo loses its natural shape and becomes an entirely new material. This provided also the chance to add an organic fire retardant agent into the product. The complex geometry and manufacturing process of the bamboo blocks were resolved using modern digital technology. A complex 3D computer model and latest CNC cutting technology were used to create the final blocks, which are all 100 mm high and on average about 80 mm thick. In total 16.000 bamboo blocks for the auditorium interior we made, each of which are unique and different in shape. These blocks were assembled with a 1mm tolerance using a substructure made of stainless steel rods. The "banded" pattern of the bamboo stripes results from an acoustical optimization of the surfaces to create the correct balance between direct sound reflections back to the audience and general diffusion to tune the room for the desired exercited process.



PES-Architects Ltd. www.pesark.com

MORE PROJECTS BY THIS DESIGNER

Wuxi Grand Theatre Public Interiors

