



## Dow Performance Silicones

# DOWSIL™ Silicone Sealants Help Create an Architectural Gem in China



Case Study: Shanghai Oriental Arts Center



The Shanghai Oriental Arts Center glows beautifully at night.

### Project

100% silicone sealants from Dow were used in the development of a complex, laminated glass curtain wall façade for the Shanghai Oriental Arts Center.

China's Shanghai Oriental Arts Center, designed by renowned architect Paul Andreu, is a cultural and architectural marvel. It covers more than 40,000 square meters and houses an entrance hall, performance hall, concert hall, exhibition hall and opera hall. When viewed from above, the Oriental Arts Center resembles a butterfly orchid in bloom with five petals.

The architectural intricacies of the Oriental Arts Center, home to the Shanghai Symphony Orchestra, are just as fascinating and complex as the music played on the inside. One of the most challenging architectural elements of the Oriental Arts Center relates to the building's unique façade – a complicated spider fixing system with laminated glass.

One of the challenges is that the sealant can delaminate the laminated glass when it comes into contact with the polyvinyl butyral (PVB) interlayer. DOWSIL™ 791 Silicone Weatherproofing Sealant has been proven to have limited impact for PVB delamination after internal lab evaluations.

### City and Country

Shanghai, China

### Product\*

- DOWSIL™ 791 Silicone Weatherproofing Sealant

### Key Participants

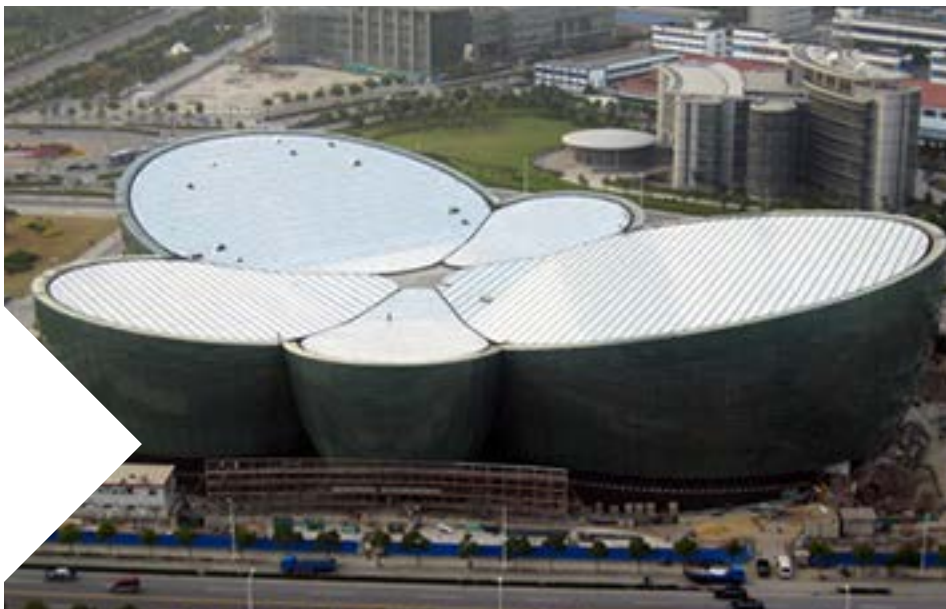
- Paul Andreu, Architect (Paris, France)
- Shanghai Yuanda Curtain Wall Engineering Co., Ltd (Shanghai, China)
- Dow (Midland, Michigan)

\*Prior to February 2018, products listed were branded as Dow Corning.

## An Experienced Partner for an Architectural Challenge

To assemble the laminated glass curtain wall façade successfully, the Shanghai municipal government needed to enlist a trusted partner with the experience necessary to tackle this architectural challenge. The municipal government turned to Dow for the Oriental Arts Center because of its proven technical expertise and experience with challenging curtain wall projects throughout the world, such as the famous Shanghai Grand National Theatre and the Shanghai Urban Planning Exhibition Hall.





The Shanghai Oriental Arts Center resembles the petals of a butterfly orchid in bloom.

## Bringing Together Function and Aesthetics

In addition to solving the technical problems of the building, Dow also recommended the use of DOWSIL™ 791 Silicone Weatherproofing Sealant because its black color matches the building's glass, ensuring the aesthetic quality and bringing the designer's idea and inspiration to life. Dow's expertise and silicone sealants, along with world-class architects, helped build Shanghai's first true concert hall and architectural gem.

## For More Information

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Dow has sales offices, manufacturing sites, and science and technology laboratories throughout China. Telephone numbers of locations near you are available at [consumer.dow.com/ContactUs](http://consumer.dow.com/ContactUs).

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