

## **ARCHITECTURAL HIGHLIGHTS**

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### **ROTUNDA DOME**

The Rotunda Dome is the National Museum's most iconic architectural feature. Originally built as the former Raffles Library and Museum in 1887, the elegant neo-Palladian styled building had been expanded in 1906, 1914 and in 1916. The recent redevelopment of the Museum is the most extensive and complete rebuilding and conservation project in the building's history. In compliance to strict conservation guidelines laid out by the Urban Redevelopment Authority (URA), the entire building has been restored to its former glory, not only in terms of aesthetic beauty but also in the way the building was originally constructed.

### **STAINED GLASS RESTORATION**

All 50 pieces of stained glass from the old dome were carefully restored over more than six months from late 2004 to mid-2005. The Victorian glass patterns were carefully inspected on site, and their condition assessed by a professional stained glass artist in Singapore. All 50 pieces were removed and delivered to the artist's workshop for restoration. The reinforcement system, most of the joints and lead work also had to be rectified.

As the stained glass pieces are curved in shape, timber moulds following the profile were constructed for the restoration process. Timber boxes were specially made for these delicate 1.82-metre-long stained glass for delivery to the workshop. Individual glass and lead profiles were recorded and damaged portions tagged. All damaged pieces were removed and replaced with new ones. The artist adopted professional soldering techniques to restore the original decorative lead solders. A new reinforcement system was also added to the glass frames to prevent sagging.

Upon completion, the stained glass pieces were cleaned and buffed with a special polishing compound to bring out the original colour and shine of the beautiful Victorian flower and square patterns. The final effect is stunning. On a clear day, the sunlight filtering through the restored glass throws a ring of coloured lights on the floor of the Rotunda.

### **THE GLASS PASSAGE**

The National Museum building was gazetted as Singapore's 30<sup>th</sup> National Monument on 14 February 1992. The building is placed under the protection of the Preservation of Monuments Board. The Glass Passage is the only modern intrusion allowed by the Urban Redevelopment Authority to the former Raffles Library and Museum building.

Built entirely of glass, the Glass Passage allows visitors to have a clear view of the elegant Palladian motifs and the fish-scaled zinc tiles on the external façade of the Rotunda Dome. This 'intrusion' has been designed to blend into the old neo-Palladian architecture.

The Glass Passage rises almost 11 metres (four storeys) from the ground level and is one of the world's largest outdoor self-supporting glass structures. While visually simple, the engineering behind this structure is extremely complex. Engineers from four different countries took more than a year to design this structure. Optical glass is used to enhance visual transparency.

### **GLASS ROTUNDA**

Designed as a modern interpretation of the old Rotunda Dome by architect, Mok Wei Wei the Glass Rotunda is the signature feature of the museum's new extension. Standing at 16 metres high (five storeys) and 24 metres wide, the Glass Rotunda consists of a smaller steel mesh drum encapsulated by a larger glass façade drum. The Glass Rotunda serves as the main entry to the Singapore History Gallery. 360 degrees of projected images will surround visitors when they are within the interior of the smaller drum.