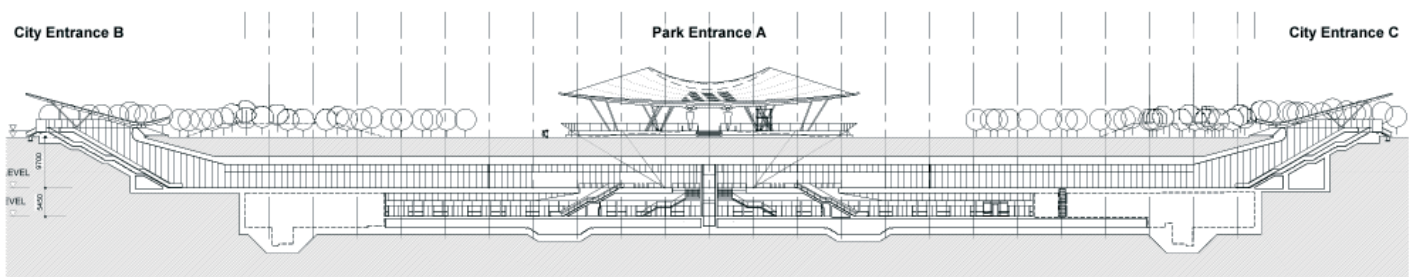


R9 Station



The design of the canopy draws natural light underground and creates a meeting area for people entering and exiting the station below.



Place/Date
Kaohsiung, Taiwan 2003-2007

Client
Kaohsiung Rapid Transit Corporation

Area
14,300 m²

Architect
Rogers Stirk Harbour + Partners

Co-Architect
Resource Engineering Service, Inc.

Structural Engineer
Structured Environment

Service Engineer
Resource Engineering Service, Inc.

Contractors
Far Eastern Construction Co. Ltd.
Pan Asia Corporation
Iwata Chizaki Inc.



Rogers Stirk Harbour + Partners was commissioned in 2003 to design R9 - Station 9 on the new 'Red' line of Kaohsiung's underground system. This station will serve Kaohsiung's popular Central Park and an adjacent shopping district.

The design of R9 seeks to draw the landscaping down from the park into the station through the main entrance. A sloped, green bank helps to lead people down to concourse level, some 11 metres below ground level. Two sets of escalators - plus linear staircases on either side - allow people to move between the concourse level and the park level. The up/down escalators are divided by a cascading water feature which helps to animate the approach to the underground concourse.

A large aluminium canopy oversails the entire below ground concourse, protecting this area from strong sunlight and rainfall. Aluminium was chosen as the canopy

material due to its lightness, durability and resistance to corrosion.

Early on in the design process, the use of a suspended roof was considered; however, the final design is a curved, stressed-skin, monocoque roof, with the shape of the canopy being a concave trapezoid. Across the canopy's top surface is a large number of glazed openings filled with frosted glass. On the underside, these openings are perforated to ensure that natural light can reach the concourse underneath, while - at the same time - helping to dissipate the glare of the sun. The canopy is approximately 50m by 50m, weighs 220 metric tonnes and sits on four yellow steel 'trees'.

The manufacturing process - drawing on developments in ship construction and undertaken in a local shipyard - allowed the canopy to be fabricated in 13 separate segments, some of which were then partially assembled before transporting them to site.

The various components of the canopy were then assembled and welded together in Central Park, next to the site, before being lifted into place using four cranes.

In addition to the main entrance of R9 station, RSHP has designed two sub-entrances on the opposite side of Chung-Shan Road. These have their own distinctive aluminium canopies supported on smaller yellow steel trees.

RSHP has specified the station interior finishes. Most of the interior walls are covered by pre-fabricated mosaic panels, while the ceiling comprises perforated aluminium panels backed by sound absorbent fabric.