
Hybrid Tower Façade

Shenzhen, China 2012 - 2017

In architecture, a façade is probably the most visible element of a building's design and has the largest impact on the overall performance of the building. Hybrid Tower with its height of 80m has a high performance façade designed to respond to the program, the orientation and the building geometry. Apart from the crown and the lobby, Hybrid Tower is mainly composed of two façade types - for the office and the car park respectively. These are creating the solid parking block and transparent curvaceous office building.

The office façade is a unitized system consisting of anodized aluminium profiles, a structural glazing of a laminated IGU with a low-E coating and spandrel area with a stainless steel finish. The floor to ceiling full-height glazing optimizes natural daylight use, reduces energy consumption by minimizing the use of artificial lighting and offers unobstructed views to the city. Triple low-e coating and frit print reduce solar heat gain substantially. The silver color ipachrome frit print in combination with internal sun blinds, which are integrated into the ceiling, minimize glare inside the office. Aesthetically, the frit print gradually densifies reaching the top of each unit, blending into the spandrel area. Automatic, electrically controlled openable windows provide natural ventilation, optimizing performance and minimizing environmental impact over the lifecycle of the building. These parallel outward openable windows are fully integrated into the mullion profiles, avoiding need for additional frame, thus making them invisible from the inside and outside. The bespoke separation wall adapter caps the mullion following its profile and by an adjustable rotation point, negotiates the angle between the curved façade and the inner grid onto which the partition wall is aligned.

The car park façade is proposed with a perforated metal panel behind the glass layer, lending a monolithic appearance. The perforation however, accentuates the transparency at night, revealing the car park structure and its function. The west side of the car park façade is further shaded by fibreglass fins, which function as fixed horizontal sun louvers while unifying the upper and lower part of the façade and distinguishing the west façade from the three others.

Area: 12 300 sqm.
Type: Office
Client: Kehuitong Co., Ltd.
Status: Under construction

