

Taiyuan Landmark Tower, PRC



Overlooking the renowned Fenhe River in the capital city of Taiyuan in Shanxi Province, the 50-storey tall Taiyuan Landmark office tower is twisted 22 degrees from the top to the bottom of the building, which resembles the solar path from East to West. The façades of this tower incorporates multiple systems of sustainable technology, including integrated photovoltaic panels, vertical axis wind turbines, natural ventilation, daylight illumination, solar screening mechanisms, and green roofs. The energy-generating systems will supplement the power resources of this 350,000 square-meter multi-functional building.

Construction is now underway for this 200-meter tall landmark office building with vertical gardens spanning on every three levels. This complex also accommodates a 400-room Intercontinental Hotel which utilizes sustainable energy and conservation strategy. The two 100-meter tall exclusive apartments with private elevators incorporate passive energy and cross-ventilation techniques. Furthermore, the tower has the capacity for seven levels of shopping and retail facilities which include luxury brand name stores, eight full-size and VIP cinemas, public recreation amenities, and roof-top garden restaurants that provide stunning panoramic city views.

The goal of combined use of technology to achieve functional efficiency becomes artfully integrated into the overall planning and expression of this highly sophisticated building. The public spaces are organized within a seven-level atrium with fifteen meters in width. The atrium brings in natural light which penetrates down to the garden at the lower concourse level. The circulation weaves through the plan from East to West that assimilates the tower cores and, at the same time, maximizes the visitors' sense of space and volume internally.

The main building façades are in the form of arcs and fins to reduce wind loads on the tower and to direct wind away from pedestrians on the roof garden and on street levels. The perforated screens on the façade help the building to breathe by channelling air through interior and exterior spaces.

Mr. Joseph Loh brings in seventeen years of office tower design and retail planning experience to head a joint international consulting team of architects, planners, and engineers, including YWA, ATWL, and Tonji University Architectural Design and Research Institute. LOH Architects Associates Inc. is based in Toronto and consults on the planning and design of projects globally.