

PARKVIEW SQUARE

Parkview Square comprises a 24 storey office tower presiding over a 21 storey podium, 1 level of basement carpark facilities and an underground pedestrian tunnel linking the building to the adjacent MRT station.

To fulfill the need for a building with a flexible floor span, a 100% column free concept for the floor plate was adopted. Two rows of columns were located at the edge of the building and the floor was supported by a series of 26m long steel plate girders. The columns were composite tubular steel columns to facilitate connection of girders on site. M&E services were coordinated and fully integrated to pass through



(instead of beneath) the structure, thus providing a 3.0m clear ceiling without having to increase the floor to floor height, leading to savings in cost associated with cladding and vertical elements. The plate girders used also resulted in lower fabrication cost and more flexibility in accommodating the building services along the entire span.



For the typical floor, the structural system adopted comprised a steel framed construction with beams spanning the full 26m span in one direction and secondary beams at the transverse direction. The floor was made up of 130mm thick Bondeck composite deck. This composite steel-concrete form system was an efficient system where the steel decking acted as a formwork and also served as slab reinforcement to the concrete in the composite slab.

Efficiency of the floor system was further enhanced by connecting the metal decking to beams and trusses by shear connectors, thus making two elements adopt the composite role – slab and beam. The main benefit of this structural system was the speed of construction. Since the system did not require propping,

a great deal of time and cost has been reduced in the execution of the work. Formwork was greatly reduced hence resulting in less construction debris and more working space at the site.

For the second storey entrance concourse, a mega truss transfer system was adopted to achieve the column free high volume grand space. Each of the pair of mega trusses was made up of a series of fabricated box girders supported by two mega columns each.

