Project name The Summit

Location Stubbs Road, Hong Kong

Publication **Building Journal** March 2003



The Summit, Stubbs Road

A peak of by Tim Youngs UXUTY

The completion of The Summit continues the trend towards super-high rise design in Hong Kong's residential market, shaping its tower block in a sculptural metal- and glass-clad form.



site plan



he Summit is built on the steeply sloping 41C Stubbs Road site once used to house a swimming pool and changing room for Highcliff — then housing quarters for senior civil servants — on the site behind. When the Highcliff site was offered for auction, the government decided that the slope was developable too, and offered it for sale separately.



Developer Hang Lung Properties Ltd purchased the 41C site at auction and enlisted Dennis Lau & Ng Chun Man Architects & Engineers (HK) Ltd as project architect for the development. The designers were also project architects for the adjacent Highcliff redevelopment, affording a rare chance for two separate private developments to be perfectly coordinated with each other.

In the original tender, the option of building two towers on the tight residential site was considered. The plan was dismissed, however, after considering that the outcome would not be optimum — development to reach the allowable GFA would place a large mass on the site,







whereas a single, taller tower would result in better use of space. The architects also felt obliged not to spoil views from Highcliff and the existing towers behind the site, and consequently arranged both towers so as not to compromise each others' views while using a slender scheme that would not create a wall of development.

An elegant butterfly-shaped floor plan was adopted for The Summit. Not only an innovative means to expand views from units with a gently curved facade, the building form is more sculptural and interesting on the prominent site.

The tower is clad in screw-on metal panel cladding and curtain wall, as the building's height would otherwise present the risk of debonding tiles. At a time when pink, earth and peach colours were popular in architectural cladding for housing developments, the architect anticipated the trend towards office buildingstyle design features in residential projects. A

greenish hue was decided on for the facade to make the building less intrusive against nearby hillsides and to differentiate from, yet also complement, the blue shades used on the Highliff project next door.

One of the earliest challenges during the project came with implementing the foundation works. Due to the very steep slope on the site, and the banning of hand-dug caissons in the mid-1990s, bored piles were specified as support.

Building bored piles on such a steep site required the construction of a large steel platform to accommodate the heavy piling machines. Construction of this platform was itself a major engineering task, taking four months to build and a further nine months to get approved before foundation works could commence. The system significantly slowed the development and increased costs, prompting Dennis Lau to initiate a campaign to allow the use of hand-dug caissons in selected locations, citing experience with The Summit as an example.

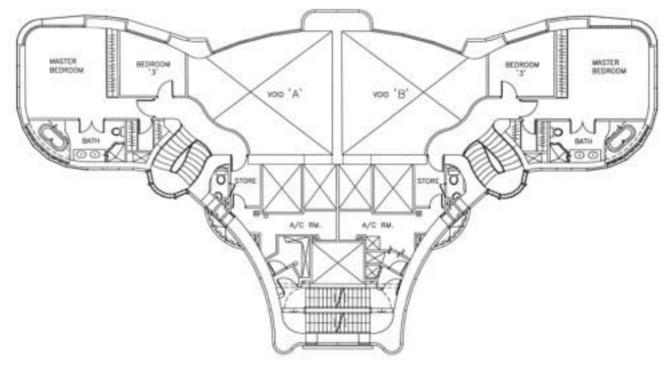
Once the foundations were in place, construction of The Summit proceeded with climbing formwork. The developer had decided on 3,000 sq ft as a target floor area for each apartment in the tower, and further specified that these must all be duplex units. Arranged with two duplexes on each level, this plan presented the tremendous challenge of designing and building a tall structure with a narrow floor plate. A further design issue presented itself with double-height ceilings at the living rooms, effectively placing regular large openings in the structure.

The roof of the building features a damper system, similar to the one applied in the Highcliff development, to counter the effects of strong winds on the building. Taking cues from damper systems in place in large ships, The Summit's rooftop damper system comprises a series of compartmentalised water tanks that prompt specific flows of water when the building sways. With the system in place, building movements that may take up to eight seconds to complete can now finish in roughly three seconds — too brief to be noticed by residents.

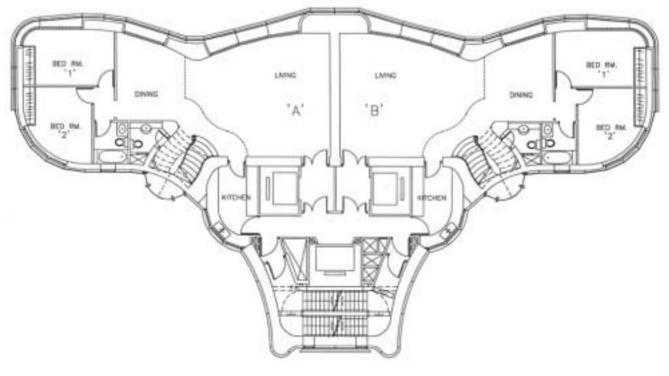
Entry to The Summit's main lobby is from a terrace overlooking the unobscured Happy Valley view. Inside the entry hall, residents enter elevators that take them to private lift lobbies at each apartment's front door. The novel arrangement is managed with a card-operated







upper duplex floor



lower duplex floor





system, with one elevator serving all unit As and the other serving unit Bs. A larger service lift with a similar interior finish is provided behind these elevators, installed for transporting furnishings and other bulky items. In addition to access to the private lift lobbies, all units have doors opening to the service lift lobbies too.

Residents' facilities in The Summit, such as an indoor swimming pool, are housed within the podium structure and all feature sweeping views. At the architect's suggestion, the open space on top of the podium is kept simple as a lawn — an unusual feature in Hong Kong developments but a natural solution in freeing up space for residents.

AP City Ltd/Hang Lung Project Management Ltd developer

Dennis Lau & Ng Chun Man Architects & Engineers (HK) Ltd architect

Hong Kong Construction (Holdings) Ltd main contractor

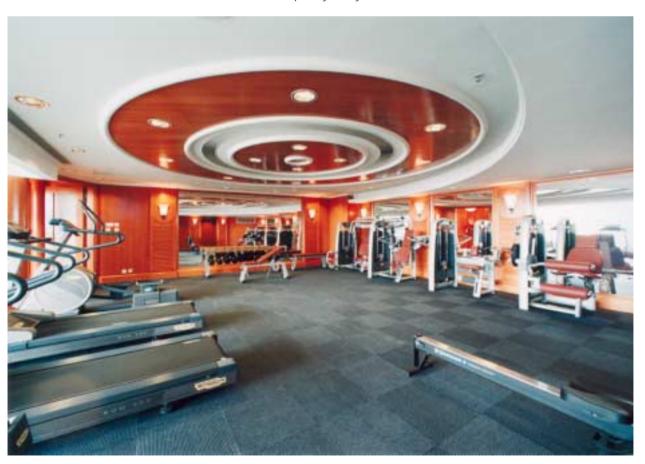
Tysan Contractors (HK) Ltd foundation contractor



Maunsell Consultants Asia Ltd structural engineer

Associated Consulting Engineers m&e engineer

Davis Langdon & Seah (HK) Ltd quantity surveyor



Intelligent multimedia facilities at The Summit

The Summit's 52 duplexes and two double duplexes benefit from the latest amenities and intelligent facilities for a superb level of living environment. Cable and connectivity solutions provider Krone Communications was chosen to supply its Category 5e structured cabling solution for the multimedia facilities.

On completion of the network by Pacific Century CyberWorks, Krone's cabling solutions were installed to integrate and support all the voice, data and multimedia traffic throughout the deluxe building. The optical fibre backbone of The Summit was built with Krone's Cat 5e structured cabling, including 53,456 m of copper cable, 327 m of fibre cable, 1,600 disconnection modules and 800 data outlets.

Responding to the requirements of the increasingly competitive luxury rental market, Hang Lung Properties realised the need to raise the quality of The Summit's multimedia facilities, such as Internet broadband access, telephone and TV systems, beyond current standards.

Hang Lung Properties Executive Director Terry Ng said Krone's cabling products set the industry standard for high-end networking solutions. "As a premier property developer in Hong Kong, we sought Krone's expertise and the proven functionality of their products to provide the most advanced intelligent buildings in the industry," Mr Ng said. "Krone provides us with an infrastructure that can support applications for residential use today, but also assure the building provides the high bandwidth requirement for the applications of tomorrow."

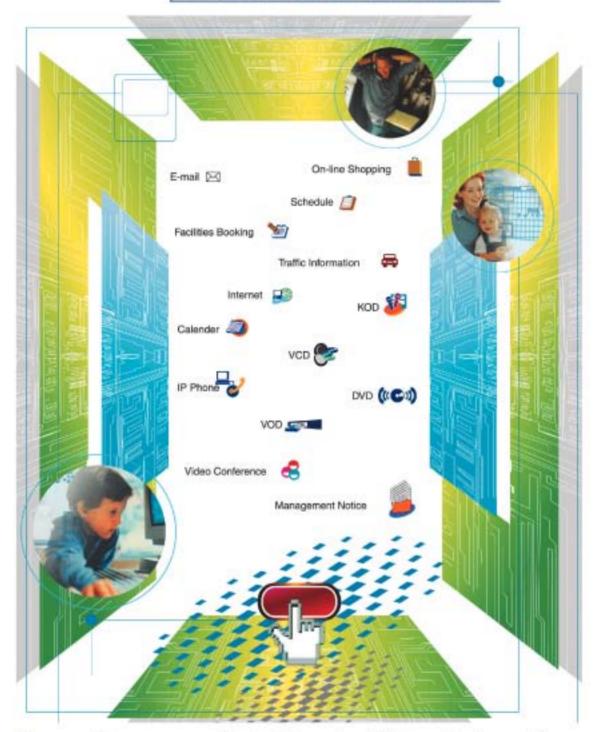
Krone's comprehensive end-to-end copper and fibre solutions eliminate the process of mixing and matching components for building a structured cabling system. All Krone components in the structured cabling system have been tested carefully to ensure their performance meets Cat 5e standards.

Based on Krone's ISO- and EIA/TIA-certificated cabling technologies, The Summit's backbone network is a flexible and scalable platform on which components can later be added, changed and removed easily without any technical conflicts.

Krone Communications General Manager of Asia Pacific Group Terry Lee said the company, as a leading provider of cabling solutions, is pleased to partner with Hang Lung Properties and contribute to the development of communications for Hong Kong. "This project raises the bar for other developers when they plan their next intelligent building for commercial and residential use."



C-Home for 網絡家居自動化 Next Generation



Opens up future avenues of entertainment and information in your home

KRONE provides the essential physical layer of cabling that runs through the building, integrating and supporting all the voice, data and multimedia traffic requirements.

PremisNETTM
Your Networks, Our Strength!
您的網絡·我的承諾



13 FL., Tesbury Centre, 28 Queen's Road East, Wanchai, Hong Kong. Tel: (852) 2865 4888 Fax: (852) 2861 1444 http://www.krone.com.hk