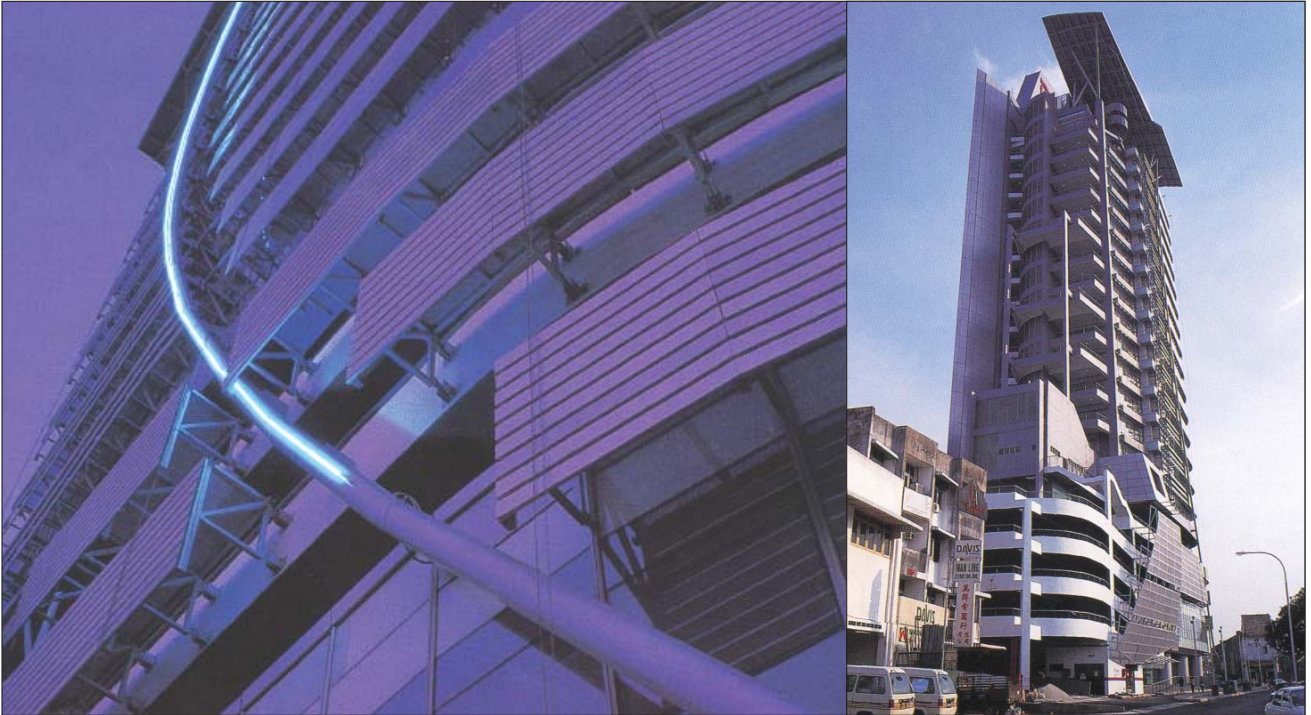


# BATTLE McCARTHY ©

Consulting Engineers & Landscape Architects



**PROJECT:**

Menara UMNO Tower, Malaysia

**CLIENT:**

UMNO

**ARCHITECTS:**

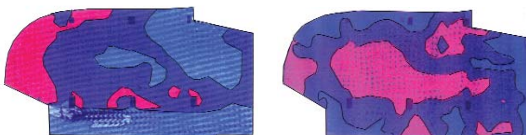
T.R. Hamzah & Yeang

**BM SERVICES:**

Sustainable Energy, Ecology, Structure Schematics and Environmental Design for a Headquarters office development in the centre of George Town, Penang in Malaysia. The office consists of an open plan daylit building with external shading of the cores to protect the offices from the low evening sun. The building has been designed so it can be naturally ventilated.

**VALUE:**

£8million (approx)



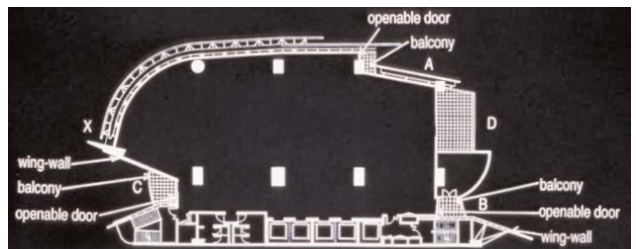
Internal temperature distribution and air speed vectors at 1.2m height.

London UK Office  
 T: +44 (0)20 7440 8282  
 F: +44 (0)20 7440 8292  
 E: admin@battlemccarthy.com  
 www.battlemccarthy.com

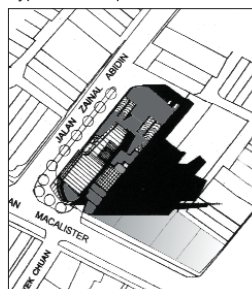


Metal shading devices fit onto the structure on the west facade. These make afternoon work in the offices tolerable.

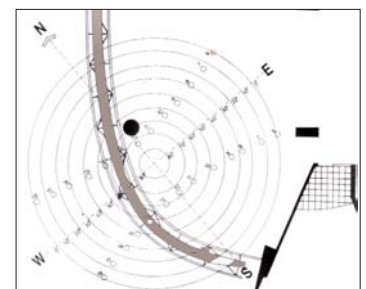
The tower's wing walls are combined with variable transitional zones as ventilators and channel prevailing winds into the building.



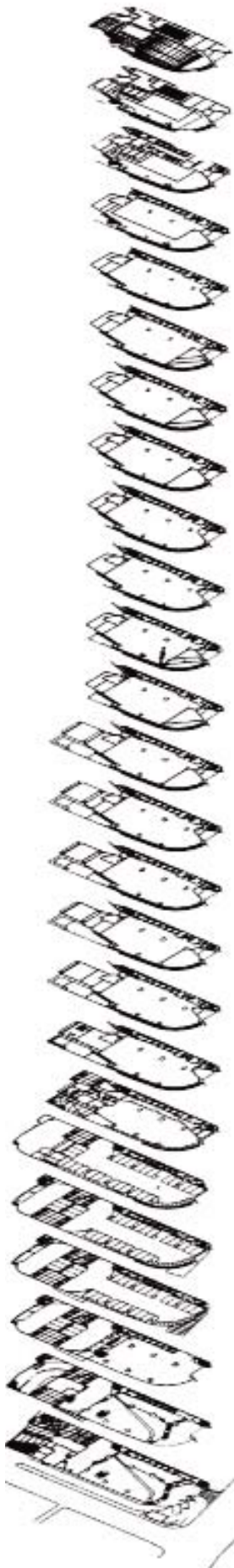
Typical office plan



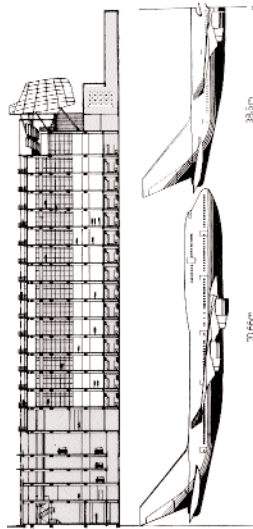
Site Location



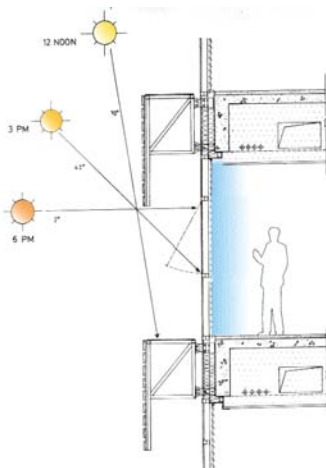
Solar responsive Facade



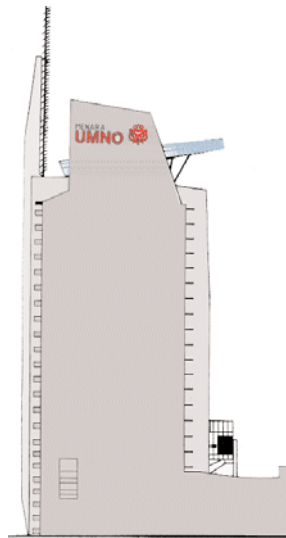
Exploded Floor Plans



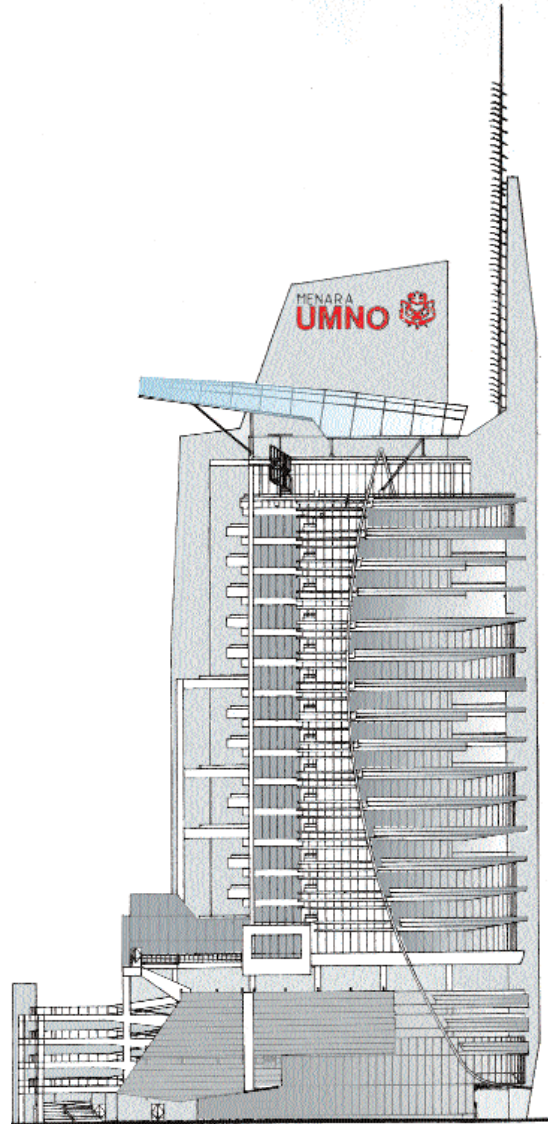
Section NW-SE



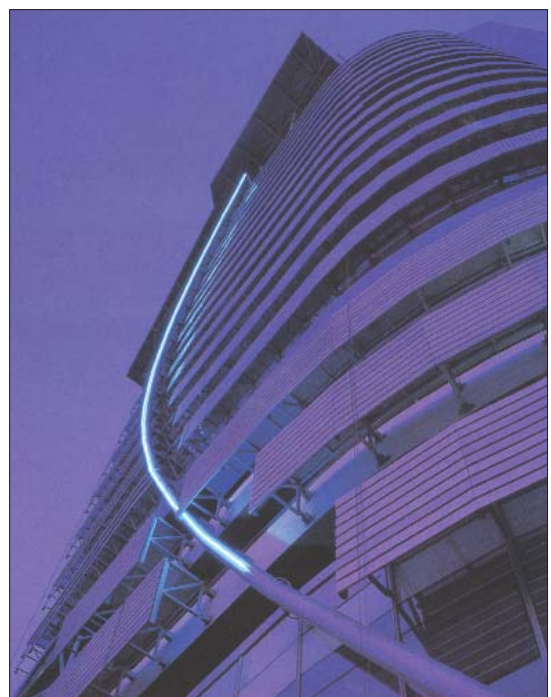
Sun Shading



South - East Elevation



North West Elevation



UMNO Tower