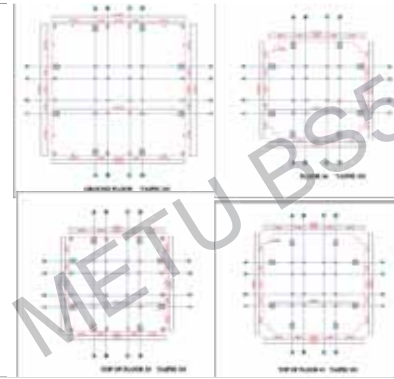


**TAIPEI 101**



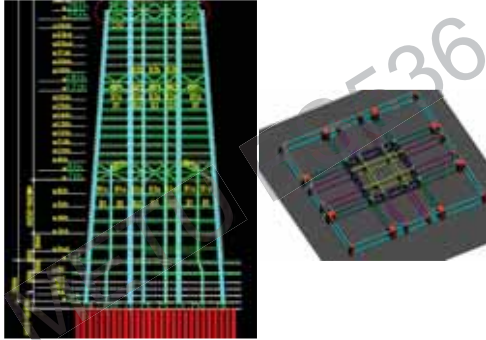
- Country – City : Taiwan - Taipei
- Building Function : office
- Structural Material : composite
- Start of Construction : 1999
- Completion : 2004
- Height : 508 m
- Tallest Building in the World : 2004 - 2010
- Elevators : 61
- Floors Above Ground : 101
- Floors Below Ground : 5
- Global Ranking : 2nd tallest building in the world
- Owner : Taipei Financial Center Corporation
- Design Architect : C.Y.Lee & Partners
- Structural Engineers : Thornton Tomasetti, Evergreen Engineering
- Structural System : Outriggered Frame System Composite

CTBUH Website

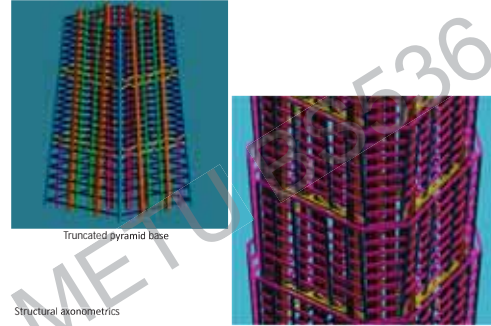


Frame Elevations  
Self: Shieh Chang, Jong, Structural design of composite super-columns for the Taipei 101 tower, 2003

Structural Axonometric  
Drawn by Serhat Özsoy

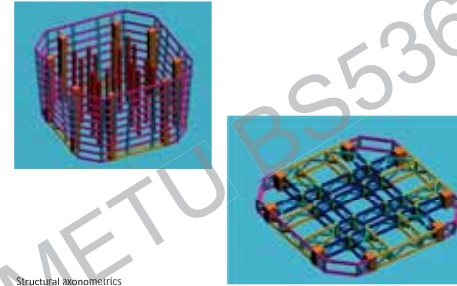


Truncated pyramid base - section



Structural axonometrics

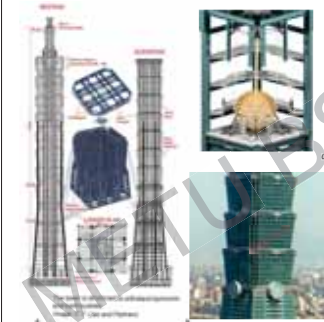
Drawn by Serhat Özsoy



Structural axonometrics

Mechanical Floor

Drawn by Serhat Özsoy



Taipei 101\_sklarSmith

- PENDULUM**
- 660 tones
  - 88<sup>th</sup> – 92<sup>nd</sup> floors
  - 41 layered steel plate
  - Height of the plate 125 mm
  - 5,5 m diameter sphere
  - Golden painting
  - World's largest tuned mass damper
- Conference (ICC 2007) held on September 19-20, 2007

- SAW TOOTH**
- 'sawtooth' treatment above Floor 25 for wind vortex reduction.
  - Two 2.5 m re-entrant corners at each building corner

**MEGA COLUMNS**

- 10000psi (68.95MPa) High performance concrete have been filled into steel columns from basement 5 to floor 62
- Mega Column dimensions vary from max 2400mm x 3000mm to min 1800mm x 2200mm throughout the height of the structure.

**BEAMS - REDUCED BEAM SECTION / DOGBONE**

- Using reduced beam section or flange trim details forces yielding to occur within the beam and away from the welded beam – column joint, improving ductility.

CTBUH 2004 October 10-13, Seoul, Korea

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