

Subject: Advance Services

Topic: Sky Lobby

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# SKY LOBBY

A **sky lobby** is an intermediate interchange floor where people can change from an express elevator that stops only at the sky

When designing very tall (supertall) buildings, supplying enough elevators is a problem –

Travellers wanting to reach a specific higher floor

To stop at a very large number of other floors on the way up to let other passengers off and on

This increases travel time, and indirectly requires many more elevator

Thus reducing effective floor space on each floor for *all* levels.

Early uses of the sky lobby include the original Twin Towers of the World Trade Center and 875 North Michigan Avenue in Chicag

- Supertall buildings will have anywhere from 1-4 sky lobbies spaced throughout the building.
  - Large express elevators run between the ground floor and a specific sky lobby, bypassing all other floors.
  - Once passengers arrive at the sky lobby, they board a 'local' elevator which serves a specific set of floors around the sky lobby.
- If you're still a little confused, here's an example. Imagine now you're standing in the lobby of the **Burj Khalifa – the tallest building** in the world

You need to get to the 55th floor, so you board one of three double deck shuttle elevators.

This high speed elevator takes you up to the closest sky lobby, which in this case is on the 43rd floor, bypassing all other floors

Upon arrival, you board an elevator which takes you to your exact floor.

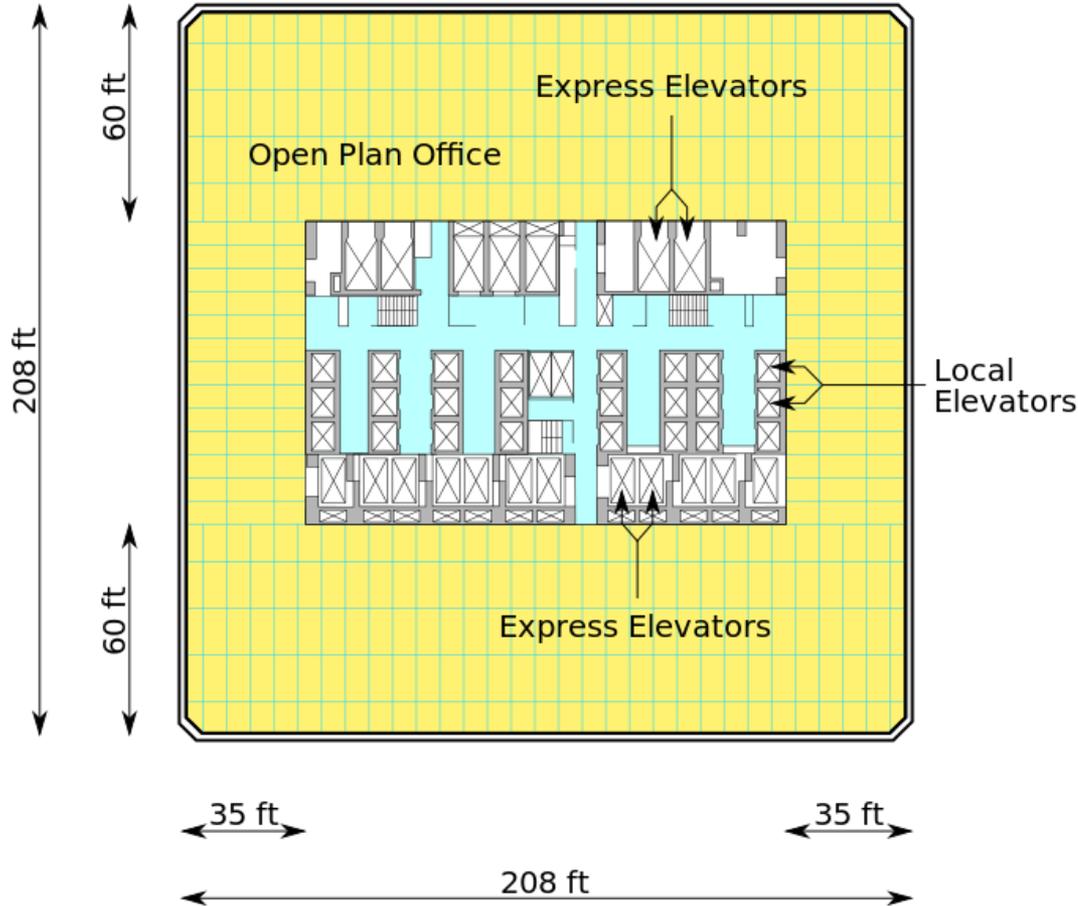
Without this system, you'd need to stay aboard an elevator as it climbs all 42 floors, stopping intermittently to disgorge passengers.

It's easy to see why this system is necessary.



- **The World Trade Center**
- Chicago's famous John Hancock Center was the first building to introduce the sky lobby system in 1968 – but another, even more famous construction project would soon follow.
- Architect Minoru Yamasaki knew that the gargantuan World Trade Center towers would be nearly impossible to navigate using a standard approach to elevators. Along with his team of engineers, he turned to the sky lobby system to solve the problem.

# System Design Concept



Underground Car Park  
(total capacity 2000)

