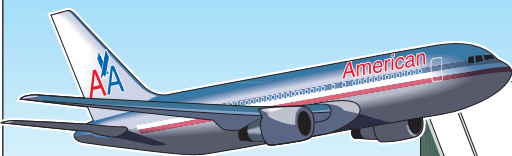


Completed in 1973, the twin towers were designed to withstand the impact of a Boeing 707 – much smaller than the 767s that smashed through the New York landmark, killing untold numbers of people

**World Trade Centre**  
Tower One: 1,368ft  
Tower Two: 1,362ft  
110 storeys high  
20,000 people employed by  
430 companies  
from 26 countries



**Aircraft:** Hijacked shortly after take-off, reached targets with full load of fuel – compromising structural integrity of buildings

*The impact of a laden aircraft, even at high speed, is less than the force imposed on a skyscraper by normal high winds*

**“Tube” skyscraper**  
**Inner core:**

Carries vertical load of buildings. Each tower 208ft square with column-free interior between outer walls and 79-ft x 139-ft core

**Outer hull:** Vertical steel girders joined by perimeter beams at each floor, forming lightweight structure able to brace against horizontal forces

*Steel floor structure stiffens wall without transferring forces to core*

*14in box section girders, 39in apart*

**Elevator shafts:**

Buildings divided into three vertical zones. Total of 104 express and local elevators

**Foundations:** Concrete piles extended 70ft below ground and 3ft into Manhattan bedrock

**Initial impacts taken by outer hull. Delayed explosions of atomised fuel destroyed structural core**

Sources:  
Reuters,  
Engineering  
News Record,  
Great Buildings  
of the World