



An iconic Chicago landmark, famous to visitors around the world, Willis Tower (formerly Sears tower) established a global standard in high-rise design and construction. Sears Tower held the distinction of tallest building in the world from 1972 - 1996.

# Willis Tower

## PROJECT SUMMARY

Building Description	108 floor, black aluminum façade, steel-framed structure comprised of 9 bundled rectangular modules “tubes”.
Official Building Name	Willis Tower
Previous Names	Sears Tower (until 2009)
Location	233 South Wacker Drive, Chicago, Illinois
Construction Start	1970
Completion	1973   Two broadcast antennas attached to structure early 1980’s.
History	Tallest Building in the world 1974 - 1996 Upon completion, the Sears Tower set the standard for future super tall high-rise design and construction.
Construction	\$150 - \$175 million   2,000 construction workers

## LEADERSHIP | PROJECT TEAM | DESIGN | CONSTRUCTION

Chicago Mayor	Richard J. Daley
Architect	Skidmore, Owings & Merrill LLP
Structural Engineering	Fazlur Rahman Khan
MEP Design	Jaros, Baum & Bolles
Primary Contractor	Morse Diesel International
Elevators	Westinghouse   Modernized by Schindler Group
Current Use	Primary - Office   Observation   Communication

# Willis Tower

## BUILDING DESIGN, CONSTRUCTION & AMENITIES SUMMARY

Size	4.5 Million GSF   3.8 Million RSF
Height	1,730 Feet   527 Meters (Antenna Tip) 1,450 Feet   442 (Architectural - Roof) 1,354 Feet   413 Meters (Occupied - Observatory Deck)
Antenna Height	East Antenna 290'-7"   West Antenna 294'-5"
Number of Floors	108 Above Ground   3 Below Ground
Occupancy	12,000 office workers   25,000 daily visitors
Design	<p>The steel-framed structure is formed from 9 bundled rectangular modules "tubes", each 75 feet wide, with no columns between the core and the perimeter. Two of the modules are 50 floors high, two are 66 floors, three are 90 floors, and two are 108 floors.</p> <p>The Sears Tower was the first building to use the bundled tube structure design. This innovative design was structurally efficient and proved influential in future high-rise construction.</p>
Observatory	"Skydeck" opened in to public 1974. After a multi-million \$ renovation, including four glass viewing platforms, "The Ledge", suspended from the 103rd floor, opened in 2009.
Structural Steel	76,000 tons
Façade	Twenty-eight acres of black anodized aluminum panels and approximately 16,100 bronze-tinted windows.
Elevators	104 Elevators   High-speed (1,200 feet per minute) gearless traction 16 double-decker (stacked) express elevators take passengers from the first two floors to transition sky lobbies at floors 33/34 and 66/67.
Amenities	Metropolitan Club - dining facilities & fitness center - floors 66 & 67 Banking services - lobby level Hair salon & manicurist - lower level U.S. Post Office on site

## Willis Tower

### NOTABLE FACTS

- ◇ World's tallest building from 1974 - 1996 surpassed by Petronas Towers in Kuala Lumpur, Malaysia.
- ◇ Until 2009, the building name was the Sears Tower. Sears Roebuck & Company occupying the lower half portion of the tower until 1988.
- ◇ Innovative, bundled, tubular design proved influential in future high-rise construction. The design concept was reportedly inspired by an advertisement for a package of cigarettes.
- ◇ The two antennas on the roof give the tower one of the highest "tip heights" of any skyscraper in the world. The antennas broadcast radio and television from the rooftop and are lighted in different colors for holidays and charitable events.
- ◇ "Skydeck Observatory" located on the 103rd floor. The elevators to Skydeck are among the world's fastest at 1,600 feet per minute. Attendance exceeds 1 million visitors annually.
- ◇ Average 6" sway from center at top of building
- ◇ The building's lobby contains the moving sculpture "The Universe".
- ◇ "SkyRise Chicago" - the world's tallest indoor stair climbing event held annually to benefit the Rehabilitation Institute of Chicago (RIC)
- ◇ The building's façade has been climbed twice (1981 and 1999).
- ◇ Centrally located near Blue, Brown, Orange, Pink, Purple & Red - L Train lines.

## Willis Tower | formerly Sears Tower



### “Modular Design” Structure

#### Rectangular-Shaped Modules “Tubes”

- ⇒ 75 Feet Wide
- ⇒ Total Quantity (9)
- ⇒ 50 Floors High (2)
- ⇒ 66 Floors High (2)
- ⇒ 90 Floors High (3)
- ⇒ 108 Floors High (2)

104 Elevators

16,100 Windows

1,500 Miles of Electrical Wiring

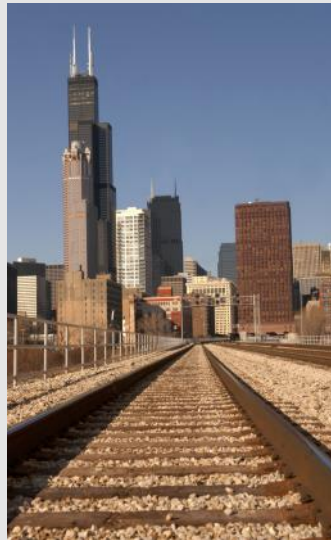
80 Miles of Elevator Cable

25 Miles Plumbing

145,000 Light Fixtures











View looking south along the Chicago River in The Loop - Chicago's Central Business District. The Willis Tower appears in the top left portion of the photo.