

# Space Needle Fun Facts



## The Structure

- \* Top of the Space Needle - Aircraft Warning Beacon: 605 feet
- \* Observation Deck: 520 feet
- \* Revolving SkyCity Restaurant: 500 feet
- \* SkyLine Banquet Facility: 100 feet
- \* Pavilion entrance and SpaceBase Retail Shop: ground level
- \* Bottom of foundation: 30 feet below ground
- \* The Space Needle was built on a 120' x 120' lot formerly owned by the city of Seattle, which was sold to investors for \$75,000 in 1961, just one year before the opening of the World's Fair.
- \* There are 848 steps from the bottom of the basement to the top of the Observation Deck.
- \* During the construction of the Space Needle, it took 467 cement trucks less than 12 hours to fill the foundation hole (30 feet deep and 120 feet across); this was the largest continuous concrete pour ever attempted in the West.
- \* When the Space Needle was built in 1962 it was the tallest building west of the Mississippi River.
- \* The foundation weighs 5,850 tons and there are 250 tons of reinforcing steel alone (i.e., rebar) in the foundation. The Needle structure weighs 3,700 tons.
- \* The center of gravity for the Space Needle is 5 feet above the ground.
- \* The Space Needle is fastened to its foundation with 72 bolts, each 30 feet in length.
- \* The Space Needle sways approximately 1 inch for every 10 mph of wind. It was built to withstand a wind velocity of 200 miles per hour, doubling the 1962 building code requirements. When winds around the Needle reach high speeds, 35 mph or higher, the elevators are designed to reduce their traveling speed to 5 mph for safety reasons. During the 1993 Inaugural Day storm, wind gusts reached 90 mph and the top house was closed for an hour and a half.
- \* On a hot day the Space Needle expands about one inch.
- \* There are 25 lightning rods (24 actual rods plus the tower) on the roof of the Needle to withstand lightning strikes.
- \* Diameter of the halo is 138 feet.
- \* Diameter of the SkyCity Restaurant is 94.5 feet.
- \* The Space Needle had the second revolving restaurant in the world. The first one was in the Ala Moana shopping mall in Hawaii (now closed). There are now hundreds of turntables throughout the world.
- \* The entire Space Needle saucer does not rotate, only a 14-foot ring next to the windows rotates on the SkyCity restaurant level.
- \* The restaurant turntable revolves on a track and wheel system that weighs roughly 125 tons, borrowed from railroad technology. All it takes to make the turntable revolve is a 1½ horsepower motor (originally it was a 1 hp motor).
- \* The 100 foot, or SkyLine, level was built in 1982.
- \* The original name of the Space Needle was "The Space Cage." The original name of the restaurant was "Eye of the Needle."
- \* From the time of its construction, the Space Needle has always had a light atop the structure. The most recent version is the Legacy Light, first illuminated on New Year's Eve 1999/2000.
- \* The Space Needle was built in 1962 for a mere \$4.5 million dollars. In 2000, the Space Needle completed a \$20 million revitalization. The project included construction of the Pavilion Level, SpaceBase retail store, SkyCity restaurant, Deck overhaul, exterior lighting additions, installation of the Legacy Light, exterior painting and more.
- \* On April 21, 1999, the Space Needle's 37th birthday, the City's Landmarks Preservation Board named it an official City of Seattle Landmark. In its Report on Designation, the Landmarks Preservation Board wrote, "The Space Needle marks a point in history of the City of Seattle and represents American aspirations towards technological prowess. [It] embodies in its form and construction the era's belief in commerce, technology and progress."

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## The Elevators

- ✦ The Space Needle elevators weigh 14,000 pounds each with a capacity of 4,500 pounds. The counter-weight weighs 40 percent more than the elevator fully loaded. Each elevator carries 25 people.
- ✦ Each elevator has seven cables total, even though one cable is strong enough to hold the entire weight of the elevator. The cables are changed annually.
- ✦ Space Needle elevators are equipped with a governor brake that would lock the elevator on the tracks in case all seven cables broke.
- ✦ Two of the Space Needle elevators are high speed and can travel at a rate of 10 mph, or 800 feet per minute. Actual travel time from the ground level to the top-house is 43 seconds. Under high wind conditions these high-speed passenger elevators are slowed to 5 mph. The third elevator, primarily used for freight but occasionally used to carry passengers, only travels at 5 mph, or 400 feet per minute.
- ✦ The last elevator arrived the day before the 1962 World's Fair opened.
- ✦ All three elevators were replaced in 1993, at a cost of \$1.5 million total.

## The People

- ✦ The five principals who organized the "Pentagram Corporation" to build the Space Needle were financier Bagley Wright, contractor Howard S. Wright, architect John Graham, financier Ned Skinner, and timber magnate Norton Clapp. In 1977 Bagley Wright, Skinner and Clapp sold their interests to Howard S. Wright. The Pentagram Corporation has since become the Space Needle LLC.
- ✦ Architect John Graham, of John Graham and Co., produced the final saucer design of the Needle. John was the designer of the nation's first shopping mall, Seattle's Northgate Mall. Credit for the architecture and design also goes to John's partner Victor Steinbrueck, UW engineering professor Al Miller, artist Earle Duff, designer John Ridley, and design partner Nate Wilkinson.
- ✦ The first Space Needle Manager, Hoge Sullivan, had acrophobia, a fear of heights.
- ✦ In 1966 11-year-old Bill Gates, now Microsoft chairman and co-founder, won a dinner at the Space Needle restaurant offered by his pastor. Gates had to memorize chapters 5, 6 and 7 of the Gospel of Matthew, better known as the Sermon on the Mount, and he recited the sermon flawlessly.
- ✦ Many celebrities have visited the Space Needle; they include Kelsey Grammer and all the cast of Cheers, Elvis Presley, Mike Myers, Demi Moore, Melanie Griffith, John Travolta, Vanna White, Michael Douglas, Tim Robbins, Claudia Schiffer, Scott Bakula, Paul Reiser, numerous professional athletes, several world-famous musicians and numerous world leaders and dignitaries.
- ✦ During the World's Fair nearly 20,000 people a day went up in the elevators. The 20,000 mark was never quite attained, however, missing by fewer than 50 one day. The Space Needle hosted over 2.3 million visitors during the Fair.
- ✦ The Space Needle annually hosts more than 1 million visitors, making it the #1 tourist attraction in the Northwest.

## The Best

- ✦ SkyCity Restaurant was named the 2009 Restaurant of the Year by the Washington Wine Commission.
- ✦ AOL Cityguide named SkyCity restaurant the "Best Restaurant with a View" in 2006 and 2007.
- ✦ SkyCity Restaurant was named "Best View" by Where Magazine's Visitors Choice Dining Awards.
- ✦ The Space Needle was named the "Best Place to Get Engaged" by the Seattle Weekly."
- ✦ The Space Needle's SpaceBase gift shop was voted one of the best places to shop for Northwest souvenirs by Seattle Magazine.
- ✦ The readers of Seattle Magazine voted the Space Needle as the "Best Place to Have a Party" for their 2004 "The Best" issue.

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## The Unexpected

- ✦ Plans to build a stork's nest atop the Needle were canceled when it was learned that storks could not live in Seattle's climate and would migrate to warmer climates.
- ✦ The city of Fife, Washington, offered \$1 million to move the Space Needle to its downtown.
- ✦ The Committee Hoping for Extra-Terrestrial Encounters to Save the Earth (CHEESE) claims to have plans from the 1962 World's Fair that show the Space Needle was constructed to send transmissions to advanced beings in other solar systems.
- ✦ During the fair, private planes that flew near the Needle were reported to the authorities only if they were so close their wing numbers could be read.
- ✦ There have been six parachute jumps from the Needle; two were unauthorized and the other four were part of a promotion.
- ✦ As an April Fool's joke a local television station aired a phony report that the Space Needle had fallen over. Emergency phone lines were swamped with calls. The Space Needle received more than 700 calls, even though there was a flashing alert during the entire report telling the audience that it was a joke. One Spokane man even jumped in his car and began driving to Seattle because his daughter worked at the Space Needle.
- ✦ The Space Needle moved 312 feet SW in June 1987. The move was only on paper, however. The National Oceanic and Atmospheric Administration (NOAA) began a 10-year project of re-mapping the earth by satellite. Major structures, such as the Space Needle, were used as landmarks.

## The Fun

- ✦ Since its inception in 1982, the Space Needle's annual New Year's Eve celebration has grown to be the West Coast's premier New Year's Eve event.
- ✦ In May 1996, the Space Needle welcomed the Olympic Torch Relay with a special fireworks show as it passed through Seattle on its way to Atlanta for the Summer Games.
- ✦ The Space Needle has saluted the success of Seattle's sports teams over the years by painting the white roof with logos and congratulatory messages. These paintings have included the logos of the University of Washington Huskies football team, the Seattle Mariners and the Seattle SuperSonics. In 1995, the Needle caught baseball fever and placed an oversized inflatable baseball on the railing surrounding the Observation Deck to celebrate the Mariners first-ever playoff appearance.
- ✦ In 1988 Tim Farnstahl and Mick McHugh divided up their \$16 million Seattle restaurant empire with a coin toss from the Space Needle.
- ✦ The Space Needle is approximately 1,320 Milky Way candy bars (605 feet) tall.
- ✦ During the Miss USA Pageant, Miss Washington, Stina McLynne, wore a Space Needle-shaped hat during the costume portion of the pageant.
- ✦ There were more than 200 copyrights for souvenir items during the World's Fair of which many have become collectibles.
- ✦ One of the best sellers during the fair was a Needle-shaped gold charm with a light in it, selling for about \$75 in 1962. Another was a 9-inch high chrome lighter in the shape of the Needle.