**Washington Monument**

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*This article is about the monument in Washington, D.C.. For other monuments dedicated to George Washington, see* [*List of monuments dedicated to George Washington*](http://en.wikipedia.org/wiki/List_of_monuments_dedicated_to_George_Washington)*.*

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| **Washington Monument** |
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| **Location** | Washington, D.C. |
| **Coordinates** | [38°53′22.08377″N 77°2′6.86378″W﻿ / ﻿38.8894677139°N 77.0352399389°W﻿ / 38.8894677139; -77.0352399389](http://toolserver.org/~geohack/geohack.php?pagename=Washington_Monument&params=38_53_22.08377_N_77_2_6.86378_W_region:US-DC_type:landmark)[Coordinates](http://en.wikipedia.org/wiki/Geographic_coordinate_system): [38°53′22.08377″N 77°2′6.86378″W﻿ / ﻿38.8894677139°N 77.0352399389°W﻿ / 38.8894677139; -77.0352399389](http://toolserver.org/~geohack/geohack.php?pagename=Washington_Monument&params=38_53_22.08377_N_77_2_6.86378_W_region:US-DC_type:landmark) |
| **Area** | 106.01 acres (42.90 ha) |
| **Visitation** | 467,550 (in 2005) |
| **Governing body** | [National Park Service](http://en.wikipedia.org/wiki/National_Park_Service) |
| Location of Washington Monument in United States Washington, D.C. central |

The **Washington Monument** is an [obelisk](http://en.wikipedia.org/wiki/Obelisk) on the [National Mall](http://en.wikipedia.org/wiki/National_Mall) in [Washington, D.C.](http://en.wikipedia.org/wiki/Washington%2C_D.C.), built to commemorate [George Washington](http://en.wikipedia.org/wiki/George_Washington), commander-in-chief of the [Continental Army](http://en.wikipedia.org/wiki/Continental_Army) and the first American president.

The monument, made of [marble](http://en.wikipedia.org/wiki/Marble), [granite](http://en.wikipedia.org/wiki/Granite), and [bluestone gneiss](http://en.wikipedia.org/wiki/Gneiss), is both the world's tallest stone structure and the world's tallest obelisk, standing 555 feet 5~~+~~1⁄8 inches (169.294 m). Taller monumental columns exist, but they are neither all stone nor true obelisks.

Construction of the monument began in 1848, but was halted from 1854 to 1877, and finally completed in 1884. The hiatus in construction happened because of co-option by the [Know Nothing](http://en.wikipedia.org/wiki/Know_Nothing) party, a lack of funds, and the intervention of the [American Civil War](http://en.wikipedia.org/wiki/American_Civil_War). A difference in shading of the marble, visible approximately 150 feet (46 m) or 27% up, shows where construction was halted. Its original design was by [Robert Mills](http://en.wikipedia.org/wiki/Robert_Mills_%28architect%29), an architect of the 1840s, but his design was modified significantly when construction resumed. The [cornerstone](http://en.wikipedia.org/wiki/Cornerstone) was laid on July 4, 1848; the [capstone](http://en.wikipedia.org/wiki/Coping_%28architecture%29) was set on December 6, 1884, and the completed monument was dedicated on February 21, 1885. It officially opened October 9, 1888. Upon completion, it became the world's [tallest structure](http://en.wikipedia.org/wiki/World%27s_tallest_structures), a title previously held by the [Cologne Cathedral](http://en.wikipedia.org/wiki/Cologne_Cathedral). The monument held this designation until 1889, when the [Eiffel Tower](http://en.wikipedia.org/wiki/Eiffel_Tower) was completed in Paris, France.

The monument stands due east of the [Reflecting Pool](http://en.wikipedia.org/wiki/Lincoln_Memorial_Reflecting_Pool) and the [Lincoln Memorial](http://en.wikipedia.org/wiki/Lincoln_Memorial). The monument was damaged during the [Virginia earthquake of August 23, 2011](http://en.wikipedia.org/wiki/2011_Virginia_earthquake) and [Hurricane Irene](http://en.wikipedia.org/wiki/Hurricane_Irene) in the same year; it remains closed to the public while the structure is assessed and repaired. The National Park Service estimates the monument will be closed until 2014. Difficulties in repair include complexities such as the time needed to erect scaffolding.

**History of the monument**

**Rationale**

Hailed as the father of his country, and the leader who was "first in war, first in peace, and first in the hearts of his countrymen", [George Washington](http://en.wikipedia.org/wiki/George_Washington) (1732–1799) was the dominant military and political leader of the new United States of America from 1775 to 1798. Even his erstwhile enemy King George III called him "the greatest character of the age".

At his death in 1799 he left a critical legacy: he exemplified the core ideals of the American Revolution and the new nation: [republican virtue and devotion to civic duty.](http://en.wikipedia.org/wiki/Republicanism_in_the_United_States) Washington was the unchallenged public icon of American military and civic patriotism. He was also identified with the [Federalist Party](http://en.wikipedia.org/wiki/Federalist_Party) that lost control of the national government in 1800 to the Jeffersonian Republicans, who were reluctant to celebrate the hero of the opposition party.

**Proposals for a memorial**

Starting with victory in the Revolution, there were many proposals to build a monument to Washington. After his death, Congress authorized a suitable memorial in the national capital, but the decision was reversed when the Democratic-Republican Party (Jeffersonian Republicans) took control of Congress in 1801. The Republicans were dismayed that Washington had become the symbol of the Federalist Party; furthermore the values of Republicanism seemed hostile to the idea of building monuments to powerful men. They also blocked his image on coins or the celebration of his birthday. Further political squabbling, along with the North-South division on the Civil War, blocked the completion of the Washington Monument until the late 19th century. By that time, Washington had the image of a national hero who could be celebrated by both North and South, and memorials to him were no longer controversial.

As early as 1783, the [Continental Congress](http://en.wikipedia.org/wiki/Continental_Congress) had resolved "That an equestrian statue of George Washington be erected at the place where the residence of Congress shall be established." The proposal called for engraving on the statue which explained it had been erected "in honor of George Washington, the illustrious [Commander-in-Chief](http://en.wikipedia.org/wiki/Commander-in-Chief) of the Armies of the United States of America during the war which vindicated and secured their liberty, sovereignty, and independence." Currently, there are two equestrian statues of President Washington in Washington, DC. One is located in [Washington Circle](http://en.wikipedia.org/wiki/Washington_Circle) at the intersection of the [Foggy Bottom](http://en.wikipedia.org/wiki/Foggy_Bottom) and [West End](http://en.wikipedia.org/wiki/West_End%2C_Washington%2C_D.C.) neighborhoods at the north end of the [George Washington University](http://en.wikipedia.org/wiki/George_Washington_University), and the other is in the gardens of the [National Cathedral](http://en.wikipedia.org/wiki/National_Cathedral).

Ten days after Washington's death, a Congressional committee recommended a different type of monument. [John Marshall](http://en.wikipedia.org/wiki/John_Marshall), a [Representative](http://en.wikipedia.org/wiki/United_States_Representative) from Virginia (who later became [Chief Justice](http://en.wikipedia.org/wiki/Chief_Justice_of_the_United_States) of the [Supreme Court](http://en.wikipedia.org/wiki/Supreme_Court_of_the_United_States)) proposed that a tomb be erected within the [Capitol](http://en.wikipedia.org/wiki/United_States_Capitol). But a lack of funds, disagreement over what type of memorial would best honor the country's first president, and the Washington family's reluctance to move his body prevented progress on any project.

**Design**

Sketch of the proposed Washington Monument by architect [Robert Mills](http://en.wikipedia.org/wiki/Robert_Mills_%28architect%29) circa 1836.

Progress towards a memorial finally began in 1832. That year, which marked the 100th anniversary of Washington's birth, a large group of concerned citizens formed the Washington National Monument Society. In 1836, after they had raised $28,000 in donations ($600,000 in 2010 US$), they announced a competition for the design of the memorial.

On September 23, 1835, the board of managers of the society described their expectations:

It is proposed that the contemplated monument shall be like him in whose honor it is to be constructed, unparalleled in the world, and commensurate with the gratitude, liberality, and patriotism of the people by whom it is to be erected ... [It] should blend stupendousness with elegance, and be of such magnitude and beauty as to be an object of pride to the American people, and of admiration to all who see it. Its material is intended to be wholly American, and to be of marble and granite brought from each state, that each state may participate in the glory of contributing material as well as in funds to its construction.

The society held a competition for designs in 1836. The winner, architect Robert Mills, was well qualified for the commission. The citizens of [Baltimore](http://en.wikipedia.org/wiki/Baltimore) had chosen him to build a monument to Washington, and he had designed a tall [Greek column](http://en.wikipedia.org/wiki/Classical_orders) surmounted by a statue of the President. Mills also knew the capital well, having just been chosen Architect of Public Buildings for Washington.

His design called for a tall [obelisk](http://en.wikipedia.org/wiki/Obelisk)—an upright, four-sided pillar that tapers as it rises—with a nearly flat top. He surrounded the obelisk with a circular [colonnade](http://en.wikipedia.org/wiki/Colonnade), the top of which would feature Washington standing in a chariot. Inside the colonnade would be statues of 30 prominent Revolutionary War heroes.

One part of Mills' elaborate design that was built was the doorway surmounted by an Egyptian-style [Winged sun](http://en.wikipedia.org/wiki/Winged_sun). It was removed when construction resumed after 1884. A photo can be seen in *The Egyptian Revival* by Richard G. Carrot.

Criticism of Mills' design and its estimated price tag of more than $1 million ($21,100,000 in 2010 US$) caused the society to hesitate. Its members decided to start building the obelisk, and to leave the question of the colonnade for later. They believed that if they used the $87,000 they had already collected to start work, the appearance of the monument would spur further donations that would allow them to complete the project.

**Construction**

Monument plans and timeline of construction.

The Washington Monument was originally intended to be located at the point at which a line running directly south from the center of the [White House](http://en.wikipedia.org/wiki/White_House) crossed a line running directly west from the center of the [Capitol](http://en.wikipedia.org/wiki/United_States_Capitol). [Pierre (Peter) Charles L'Enfant](http://en.wikipedia.org/wiki/Pierre_Charles_L%27Enfant)'s 1791 "Plan of the city intended for the permanent seat of t(he) government of the United States ..." designated this point as the location of the equestrian statue of George Washington that the Continental Congress had voted for in 1783. The ground at the intended location proved to be too unstable to support a structure as heavy as the planned obelisk; at that site, 390 feet (119 m) WNW from the Monument, there now stands a small monolith called the [Jefferson Pier](http://en.wikipedia.org/wiki/Jefferson_Pier).

Excavation for the foundation of the Monument began in early 1848. The cornerstone was laid as part of an elaborate [Fourth of July](http://en.wikipedia.org/wiki/Independence_Day_%28United_States%29) ceremony hosted by the [Freemasons](http://en.wikipedia.org/wiki/Freemasonry), an organization to which Washington belonged. Speeches that day showed the country continued to revere Washington. One celebrant noted, "No more Washingtons shall come in our time ... But his virtues are stamped on the heart of mankind. He who is great in the battlefield looks upward to the generalship of Washington. He who grows wise in counsel feels that he is imitating Washington. He who can resign power against the wishes of a people, has in his eye the bright example of Washington."

Construction continued until 1854, when donations ran out. The next year, Congress voted to appropriate $200,000 to continue the work, but rescinded before the money could be spent. This reversal came because of a new policy the society had adopted in 1849. It had agreed, after a request from some [Alabamians](http://en.wikipedia.org/wiki/Alabama), to encourage all states and territories to donate commemorative stones that could be fitted into the interior walls. Members of the society believed this practice would make citizens feel they had a part in building the monument, and it would cut costs by limiting the amount of stone that had to be bought. Blocks of [Maryland](http://en.wikipedia.org/wiki/Maryland) [marble](http://en.wikipedia.org/wiki/Marble), [granite](http://en.wikipedia.org/wiki/Granite) and [sandstone](http://en.wikipedia.org/wiki/Sandstone) steadily appeared at the site. [American Indian](http://en.wikipedia.org/wiki/Native_Americans_in_the_United_States) tribes, professional organizations, societies, businesses and foreign nations donated stones that were 4 feet by 2 feet by 12–18 inches (1.2 m by 0.6 m by 0.3 – 0.5 m). One stone was donated by the [Ryukyu Kingdom](http://en.wikipedia.org/wiki/Ryukyu_Kingdom) and brought back by Commodore [Matthew C. Perry](http://en.wikipedia.org/wiki/Matthew_C._Perry), but never arrived in Washington (it was replaced in 1989). Many of the stones donated for the monument carried inscriptions which did not commemorate George Washington. For example, one from the [Templars of Honor and Temperance](http://en.wikipedia.org/wiki/Templars_of_Honor_and_Temperance) stated "We will not buy, sell, or use as a beverage, any spiritous or malt liquors, Wine, Cider, or any other Alcoholic Liquor." It was just one commemorative stone that started the events that stopped the Congressional appropriation and ultimately construction altogether. In the early 1850s, [Pope Pius IX](http://en.wikipedia.org/wiki/Pope_Pius_IX) contributed a block of marble. In March 1854, members of the [anti-Catholic](http://en.wikipedia.org/wiki/Anti-Catholic), [nativist](http://en.wikipedia.org/wiki/Nativism_%28politics%29) American Party — better known as the "[Know-Nothings](http://en.wikipedia.org/wiki/Know-Nothings)"—stole the Pope's stone as a protest and supposedly threw it into the Potomac (it was replaced in 1982). Congress immediately rescinded its $200,000 contribution.

The partially completed monument, photographed by [Mathew Brady](http://en.wikipedia.org/wiki/Mathew_Brady); circa 1860.

The Know-Nothings retained control of the society until 1858, adding 13 courses of masonry to the monument, all of which were of such poor quality that they were later removed. Unable to collect enough money to finish work, they increasingly lost public support. The Know-Nothings eventually gave up and returned all records to the original society, but the stoppage in construction continued into, then after, the Civil War.

Interest in the monument grew after the Civil War. Engineers studied the foundation several times to determine if it was strong enough. In 1876, the [Centennial](http://en.wikipedia.org/wiki/United_States_Centennial) of the [Declaration of Independence](http://en.wikipedia.org/wiki/United_States_Declaration_of_Independence), Congress agreed to appropriate another $200,000 to resume construction. The monument, which had stood for nearly 20 years at less than one-third of its proposed height, now seemed ready for completion.

Before work could begin again, arguments about the most appropriate design resumed. Many people thought a simple obelisk, one without the colonnade, would be too bare. Architect Mills was reputed to have said omitting the colonnade would make the monument look like "a stalk of [asparagus](http://en.wikipedia.org/wiki/Asparagus)"; another critic said it offered "little ... to be proud of."

P.H. McLaughlin setting the aluminum apex

This attitude led people to submit alternative designs. Both the Washington National Monument Society and Congress held discussions about how the monument should be finished. The society considered five new designs, concluding that the one by [William Wetmore Story](http://en.wikipedia.org/wiki/William_Wetmore_Story) seemed "vastly superior in artistic taste and beauty." Congress deliberated over those five as well as Mills' original. While it was deciding, it ordered work on the obelisk to continue. Finally, the members of the society agreed to abandon the colonnade and alter the obelisk so it conformed to classical [Egyptian](http://en.wikipedia.org/wiki/Egypt) proportions.

Construction resumed in 1879 under the direction of Lieutenant Colonel [Thomas Lincoln Casey](http://en.wikipedia.org/wiki/Thomas_Lincoln_Casey) of the [U.S. Army Corps of Engineers](http://en.wikipedia.org/wiki/U.S._Army_Corps_of_Engineers). Casey redesigned the foundation, strengthening it so it could support a structure that ultimately weighed more than 40,000 tons. He then followed the society's orders and figured out what to do with the commemorative stones that had accumulated. Though many people ridiculed them, Casey managed to install most of the stones in the interior walls — one stone was found at the bottom of the elevator shaft in 1951. One difficulty that is visible to this day is that the builders were unable to find the same quarry stone used in the initial construction, and as a result, the bottom third of the monument is a slightly lighter shade than the rest of the construction.

The building of the monument proceeded quickly after Congress had provided sufficient funding. In four years, it was completed, with the 100 ounce (2.85 kg) aluminum apex/lightning-rod being put in place on December 6, 1884. The apex was the largest single piece of aluminum cast at the time, when aluminum commanded a price comparable to silver. Two years later, the [Hall–Héroult process](http://en.wikipedia.org/wiki/Hall%E2%80%93H%C3%A9roult_process) made aluminum easier to produce and the price of aluminum plummeted, making the once-valuable apex nearly worthless, though it still provided a lustrous, non-rusting apex that served as the original lightning rod. The monument opened to the public on October 9, 1888.

**Dedication**

The Monument was dedicated on February 21, 1885. Over 800 people attended to hear speeches by Ohio Senator [John Sherman](http://en.wikipedia.org/wiki/John_Sherman_%28politician%29), [William Wilson Corcoran](http://en.wikipedia.org/wiki/William_Wilson_Corcoran) (of the [Washington National Monument Society](http://en.wikipedia.org/w/index.php?title=Washington_National_Monument_Society&action=edit&redlink=1)), [Thomas Lincoln Casey](http://en.wikipedia.org/wiki/Thomas_Lincoln_Casey) of the [Army Corps of Engineers](http://en.wikipedia.org/wiki/United_States_Army_Corps_of_Engineers) and US President [Chester Arthur](http://en.wikipedia.org/wiki/Chester_Arthur). After the speeches General [William Tecumseh Sherman](http://en.wikipedia.org/wiki/William_Tecumseh_Sherman) led a procession, which included the dignitaries and the crowd, to the east main entrance of the [Capitol building](http://en.wikipedia.org/wiki/United_States_Capitol), where President Arthur received passing troops. Then, in the House Chamber, the president, his Cabinet, diplomats and others listened to Representative [John Davis Long](http://en.wikipedia.org/wiki/John_Davis_Long) read a speech given 37 years earlier at the laying of the cornerstone. A final speech was given by Virginia governor [John W. Daniel](http://en.wikipedia.org/wiki/John_W._Daniel).

**Later history**

Diagram of the Principal High Buildings of the Old World, 1884. The Washington Monument is the tallest structure represented.

At the time of its completion, it was the tallest building in the world, and it remains the tallest stone structure in the world. It is the tallest building in Washington, D.C.. The [Heights of Buildings Act of 1910](http://en.wikipedia.org/wiki/Heights_of_Buildings_Act_of_1910) restricts new building heights to no more than 20 feet (6.1 m) greater than the width of the adjacent street. This monument is vastly taller than the obelisks around the capitals of Europe and in [Egypt](http://en.wikipedia.org/wiki/Egypt) and [Ethiopia](http://en.wikipedia.org/wiki/Ethiopia), but ordinary antique obelisks were quarried as a monolithic block of stone, and were therefore seldom taller than approximately 100 feet (30 m).

The Washington Monument attracted enormous crowds before it officially opened. During the six months that followed its dedication, 10,041 people climbed the 897 steps and 50 landings to the top. After the [elevator](http://en.wikipedia.org/wiki/Elevator) that had been used to raise building materials was altered to carry passengers, the number of visitors grew rapidly. As early as 1888, an average of 55,000 people per month went to the top, and today the Washington Monument has more than 800,000 visitors each year. As with all historic areas administered by the [National Park Service](http://en.wikipedia.org/wiki/National_Park_Service), the national memorial was listed on the [National Register of Historic Places](http://en.wikipedia.org/wiki/National_Register_of_Historic_Places) on October 15, 1966. The stairs are no longer accessible to the general public due to safety issues and vandalism of the interior commemorative stones.

In the early 1900s unsightly material started oozing out between the outer stones of the first construction period below the 150-foot mark. Tourists referred to this as "geological tuberculosis". This was caused by the weathering of the cement and rubble filler between the outer and inner walls. As the lower section of the monument was exposed to cold and hot and damp and dry weather conditions, the material dissolved and worked its way through the cracks between the stones of the outer wall, solidifying as it dripped down their outer surface.

The monument undergoing restoration in 1999.

In the early 1930s a steel framework was erected surrounding the entire monument to clean it by sandblasting. A few local residents were allowed to ride a cage elevator to the top of the shaft and climb a caged ladder up the side of the pyramidion to a platform surrounding the apex to touch it. Earlier 1900 plans to build sunken gardens near the monument with trees and other foliage were never implemented.

For ten hours in December 1982, the Washington Monument was "held hostage" by a [nuclear arms](http://en.wikipedia.org/wiki/Nuclear_arms) protester, [Norman Mayer](http://en.wikipedia.org/wiki/Norman_Mayer), claiming to have explosives in a van he drove to the monument's base. Eight tourists trapped in the monument at the time the standoff began were set free, and the incident ended with [U.S. Park Police](http://en.wikipedia.org/wiki/U.S._Park_Police) opening fire on Mayer, killing him. The monument was undamaged in the incident, and it was discovered later that Mayer did not have explosives.

The monument underwent an extensive restoration project between 1998 and 2001. During this time it was completely covered in scaffolding designed by the American architect [Michael Graves](http://en.wikipedia.org/wiki/Michael_Graves) (who was also responsible for the interior changes). The project included cleaning, repairing and [repointing](http://en.wikipedia.org/wiki/Repointing) the monument's exterior and interior stonework. The stone in public accessible interior spaces was encased in glass to prevent vandalism, while new windows with narrower frames were installed (to increase the viewing space). New exhibits celebrating the life of George Washington, and the monument's place in history, were also added. A temporary interactive visitors center, dubbed the "Discovery Channel Center" was also constructed during the project. The center provided a simulated ride to the top of the monument, and shared information with visitors during phases in which the monument was closed. The majority of the project's phases were completed by summer 2000, allowing the monument to reopen July 31, 2000. The monument temporarily closed again on December 4, 2000 to allow a new elevator cab to be installed, completing the final phase of the restoration project. The new cab included glass windows, allowing visitors to see some of the 193 commemorative stones embedded in the monument's walls. The installation of the cab took much longer than anticipated, and the monument did not reopen until February 22, 2002. The final cost of the restoration project was $10.5 million.

On September 7, 2004 the monument closed for a $15 million renovation, which included numerous security upgrades and new landscaping. The renovations were due partly to security concerns following the [September 11 attacks](http://en.wikipedia.org/wiki/September_11_attacks) and the start of the [War on Terror](http://en.wikipedia.org/wiki/War_on_Terror). The monument reopened April 1, 2005, while the surrounding grounds remained closed until the landscaping was finished later that summer.

**2011 Virginia earthquake damage**

Crack in a stone at the top of the monument after the [2011 Virginia earthquake](http://en.wikipedia.org/wiki/2011_Virginia_earthquake).

On August 23, 2011, the Washington Monument sustained damage during the [2011 Virginia earthquake](http://en.wikipedia.org/wiki/2011_Virginia_earthquake). A National Park Service spokesperson reported that inspectors discovered a crack near the top of the structure, and announced that the monument would be closed indefinitely. A block in the pyramidion also was partially dislodged, and pieces of stone, stone chips, mortar, and paint chips came free of the monument and "littered" the interior stairs and observation deck. The Park Service said it was bringing in two structural engineering firms ([Wiss, Janney, Elstner Associates, Inc.](http://en.wikipedia.org/wiki/Wiss%2C_Janney%2C_Elstner_Associates%2C_Inc.) and Tipping Mar Associates) with extensive experience in historic buildings and earthquake-damaged structures to assess the monument.

Officials said an examination of the monument's exterior revealed a "debris field" of mortar and pieces of stone around the base of the monument, and several "substantial" pieces of stone had fallen inside the memorial. A crack in the central stone of the west face of the pyramidion was 1 inch (2.5 cm) wide and 4 feet (1.2 m) long. Park Service inspectors also discovered that the elevator system had been damaged, and was operating only to the 250-foot (76 m) level, but was soon repaired.

On September 27, 2011, [Denali National Park](http://en.wikipedia.org/wiki/Denali_National_Park) ranger Brandon Latham arrived to assist four climbers belonging to a "difficult access" team from Wiss, Janney, Elstner Associates. The reason for the inspection was the park agency's suspicion that there were more cracks on the monument's upper section not visible from the inside. The agency said it filled the cracks which occurred on August 23. But after [Hurricane Irene](http://en.wikipedia.org/wiki/Hurricane_Irene_%282011%29) hit the D.C. area on August 27, water was discovered inside the memorial, leading the Park Service to suspect there was more undiscovered damage. The rappelers used radios to report what they found to engineering experts on the ground. Wiss, Janney, Elstner climber Dave Megerle took three hours to set up the rappelling equipment and set up a barrier around the monument's lightning rod system atop the pyramidion; it was the first time the hatch in the pyramidion had been open since 2000.

The external inspection of the monument was completed October 5, 2011. In addition to the four-foot long west crack, the inspection found several corner cracks and surface spalls (pieces of stone broken loose) at or near the top of the monument, and more loss of joint mortar lower down the monument. The full report was due November 2011. Bob Vogel, Superintendent of the National Mall and Memorial Parks, emphasized that the monument was not in danger of collapse. "It's structurally sound and not going anywhere", he told the national media at a press conference on September 26, 2011.

More than $200,000 was spent between August 24 and September 26 inspecting the structure. The National Park Service said that it would soon begin sealing the exterior cracks on the monument to protect it from rain and snow.

On July 9, 2012, The [National Park Service](http://en.wikipedia.org/wiki/National_Park_Service) announced that the monument could be closed for repairs until 2014. NPS said a portion of the plaza at the base of the monument will be removed and [scaffolding](http://en.wikipedia.org/wiki/Scaffolding) constructed around the exterior. In June 2013, lighting will be added to the scaffolding. Some stone pieces saved during the 2011 inspection will be refastened to the monument, while "dutchman patches" will be used in other places. Several of the stone lips which help hold the pyramidion's 2,000-pound (910 kg) exterior slabs in place were also damaged, so engineers will install metal brackets to more securely fasten them to the monument.

**Construction details**

Monument as viewed from Arlington, Virginia (SSW near the Pentagon/Crystal City)

Washington Monument as photographed from the [Jefferson Memorial](http://en.wikipedia.org/wiki/Jefferson_Memorial)

The completed monument stands 555 ft 5 1⁄8 in (169.294 m) tall, with the following construction materials and details:

* Phase One (1848 to 1858): To the 152-foot (46 m) level, under the direction of Superintendent William Daugherty.

Exterior: White marble from Texas, Maryland (adjacent to and east of north [I-83](http://en.wikipedia.org/wiki/Interstate_83) near the Warren Road exit in [Cockeysville](http://en.wikipedia.org/wiki/Cockeysville%2C_Maryland)).

* Phase Two (1878 to 1888): Work completed by the U.S. Army Corps of Engineers, commanded by Lt. Col. Thomas L. Casey.

Exterior: White marble, three courses or rows, from [Sheffield, Massachusetts](http://en.wikipedia.org/wiki/Sheffield%2C_Massachusetts).

Exterior: White marble from Beaver Dam Quarry (now Beaverdam Pond) near Cockeysville, Maryland.

* Structural: [marble](http://en.wikipedia.org/wiki/Marble) (0–555 feet (0–169 m)), [bluestone gneiss](http://en.wikipedia.org/wiki/Gneiss) (below 150 feet (46 m)), [granite](http://en.wikipedia.org/wiki/Granite) (150–450 feet (46–137 m)), concrete (below ground, unreinforced)
* Commemorative stones: [granite](http://en.wikipedia.org/wiki/Granite), [marble](http://en.wikipedia.org/wiki/Marble), [limestone](http://en.wikipedia.org/wiki/Limestone), [sandstone](http://en.wikipedia.org/wiki/Sandstone), [soapstone](http://en.wikipedia.org/wiki/Soapstone), [jade](http://en.wikipedia.org/wiki/Jade)
* Aluminum apex, at the time a rare metal as valuable as silver, was cast by [William Frishmuth](http://en.wikipedia.org/wiki/William_Frishmuth). Before the installation it was put on public display and stepped over by visitors who could say they had "stepped over the top of the Washington Monument".
* Cost of the monument during 1848–85: $1,187,710
Cost of the monument during 1848–88: $1,409,500

**Exterior structure**

* Total height of monument: 555 ft 5 1⁄8 in (169.294 m)
* Height from lobby to floor of observation level: 500 feet (152 m)
* Width at base of monument: 55 ft 1 1⁄2 in (16.802 m)
* Width at top of shaft: 34 ft 5 5⁄8 in (10.506 m)
* Thickness of monument walls at base: 15 feet (4.6 m)
* Thickness of monument walls at top of shaft: 18 inches (46 cm)
* Thickness of monument walls in pyramidion: 7 inches (18 cm)
* Total weight of monument (including foundation): 81,120 long tons (90,854 short tons; 82,422 tones)
* Total number of blocks in monument: 36,491

Includes all marble, granite and gneiss blocks, whether externally or internally visible or hidden from view within the wall or original foundation.

* Sway of monument in 30-mile-per-hour (48 km/h) wind: 0.125 inches (3.2 mm)

**Exterior inscriptions**

The four faces of the aluminum apex all bear inscriptionsin [cursive letters](http://en.wikipedia.org/wiki/Script_%28typefaces%29):

|  |  |  |  |
| --- | --- | --- | --- |
| **North face** | **West face** | **South face** | **East face** |
| Joint CommissionatSetting of CapstoneChester A. ArthurW. W. Corcoran, ChairmanM. E. BellEdward ClarkJohn NewtonAct of August 2, 1876 | Corner Stone Laid on Bed of FoundationJuly 4, 1848First Stone at Height of 152 feet laidAugust 7, 1880Capstone set December 6, 1884 | Chief Engineer and Architect,[Thos. Lincoln Casey](http://en.wikipedia.org/wiki/Thomas_Lincoln_Casey%2C_Sr.),Colonel, Corps of EngineersAssistants:[George W. Davis](http://en.wikipedia.org/wiki/George_W._Davis),Captain, 14th InfantryBernard R. Green,Civil EngineerMaster MechanicP. H. McLaughlin | [Laus Deo](http://en.wikipedia.org/wiki/Laus_Deo) |

Most of the inscriptions are covered by a copper band which supports eight lightning rods.

In October 2007, it was discovered that the display of a replica of the aluminum apex was positioned so that the Laus Deo (Latin for "praise be to God") inscription could not be seen and Laus Deo was omitted from the placard describing the apex. The National Park Service rectified the omission by creating a new display.

**Capstone**

* Marble capstone weight: 3,300 pounds (1.5 t)
* Capstone cuneiform keystone measures 5.16 feet (1.57 m) from base to the top
* Each side of the capstone base: 3 feet (0.91 m)
* Width of aluminum apex: 5.6 inches (14 cm) on each of its four sides
* Height of aluminum apex from its base: 8.9 inches (23 cm)
* Weight of aluminum apex on capstone: 100 ounces (2,800 g)

**Foundation**

* Depth: 36 ft 10 in (11.23 m)
* Weight: 36,912 long tons (41,341 short tons; 37,504 tones)

Includes earth and gneiss rubble above the concrete foundation that is within its 126.5-foot (38.6 m) square perimeter.

* Area: 16,002 square feet (1,486.6 m2)

**Interior**

The Deseret Stone is one of 193 commemorative stones inside the monument. The stone was donated in 1853 by the [Utah Territory](http://en.wikipedia.org/wiki/Utah_Territory), to represent the provisional [State of Deseret](http://en.wikipedia.org/wiki/State_of_Deseret).

* Number of commemorative stones in stairwell: 193
* Present elevator installed: 1998
* Present elevator cab installed: 2001
* Elevator travel time: 70 seconds
* Number of steps in stairwell: 897

**Interior inscriptions**

On the interior of the monument are 193 commemorative stones, donated by numerous governments and organizations from all over the world.

A stone at the 240-foot level of the monument is inscribed in [Welsh](http://en.wikipedia.org/wiki/Welsh_language): *Fy iaith, fy ngwlad, fy nghenedl Cymru – Cymru am byth* (My language, my land, my nation of Wales – Wales forever). The stone, imported from Wales, was donated by Welsh citizens of [New York](http://en.wikipedia.org/wiki/New_York). Two other stones presented by the Sunday Schools of the [Methodist Episcopal Church](http://en.wikipedia.org/wiki/Methodist_Episcopal) in New York and from the Sabbath School children of the Methodist Episcopal Church in [Philadelphia](http://en.wikipedia.org/wiki/Philadelphia), quote the Bible verses [Proverbs 10:7](http://en.wikipedia.org/wiki/Book_of_Proverbs), [Proverbs 22:6](http://en.wikipedia.org/wiki/Book_of_Proverbs), and [Luke 17:6](http://en.wikipedia.org/wiki/Book_of_Luke).

Another inscription, this one sent by the [Ottoman government](http://en.wikipedia.org/wiki/Ottoman_Empire), combines the works of two eminent [calligraphers](http://en.wikipedia.org/wiki/Islamic_calligraphy): an imperial *tughra* by Mustafa Rakım's student Haşim Efendi, and an inscription in *jalī ta'līq* script by Kadıasker Mustafa İzzet Efendi, the calligrapher who wrote the giant medallions at [Hagia Sophia](http://en.wikipedia.org/wiki/Hagia_Sophia) in [Istanbul](http://en.wikipedia.org/wiki/Istanbul).

**In popular culture**

**In media**

As a landmark of the U.S. capital, the Washington Monument has been featured in film and television depictions. The symbolic meaning of the shape is referenced in the novel [*The Lost Symbol*](http://en.wikipedia.org/wiki/The_Lost_Symbol) by [Dan Brown](http://en.wikipedia.org/wiki/Dan_Brown). The monument was also the subject of [Carl Sandburg](http://en.wikipedia.org/wiki/Carl_Sandburg)'s 1922 poem, "Washington by Night."

**In video games**

The Washington Monument appears in the video game, [*Fallout 3*](http://en.wikipedia.org/wiki/Fallout_3), where it is still standing, yet heavily damaged by the Chinese bombs dropped on Washington, D.C. and the surrounding areas. It is used by Three Dog to broadcast his radio station over the Capital Wasteland.

**Target for destruction**

The monument is a target for destruction in [sci-fi](http://en.wikipedia.org/wiki/Sci-fi_film)/[disaster films](http://en.wikipedia.org/wiki/Disaster_film), comics and video games. It is destroyed in sci-fi/disaster films such [*Earth vs. the Flying Saucers*](http://en.wikipedia.org/wiki/Earth_vs._the_Flying_Saucers) (by a saucer crashing), [*Mars Attacks!*](http://en.wikipedia.org/wiki/Mars_Attacks%21) (by invading [Martians](http://en.wikipedia.org/wiki/Martian)), [*2012*](http://en.wikipedia.org/wiki/2012_%28film%29) (by a [magnitude 9.4](http://en.wikipedia.org/wiki/Richter_magnitude_scale) [earthquake](http://en.wikipedia.org/wiki/Earthquake)) and by an airplane attack in the 2013 film "[Olympus Has Fallen](http://en.wikipedia.org/wiki/Olympus_Has_Fallen)'.

**See also**

|  |  |
| --- | --- |
|  | [***Washington, D.C. portal***](http://en.wikipedia.org/wiki/Portal%3AWashington%2C_D.C.) |

* [List of tallest freestanding structures in the world](http://en.wikipedia.org/wiki/List_of_tallest_freestanding_structures_in_the_world)
* [List of tallest towers in the world](http://en.wikipedia.org/wiki/List_of_tallest_towers_in_the_world)
* [Washington Monument Syndrome](http://en.wikipedia.org/wiki/Washington_Monument_Syndrome)
* [Yule Marble](http://en.wikipedia.org/wiki/Yule_Marble)

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