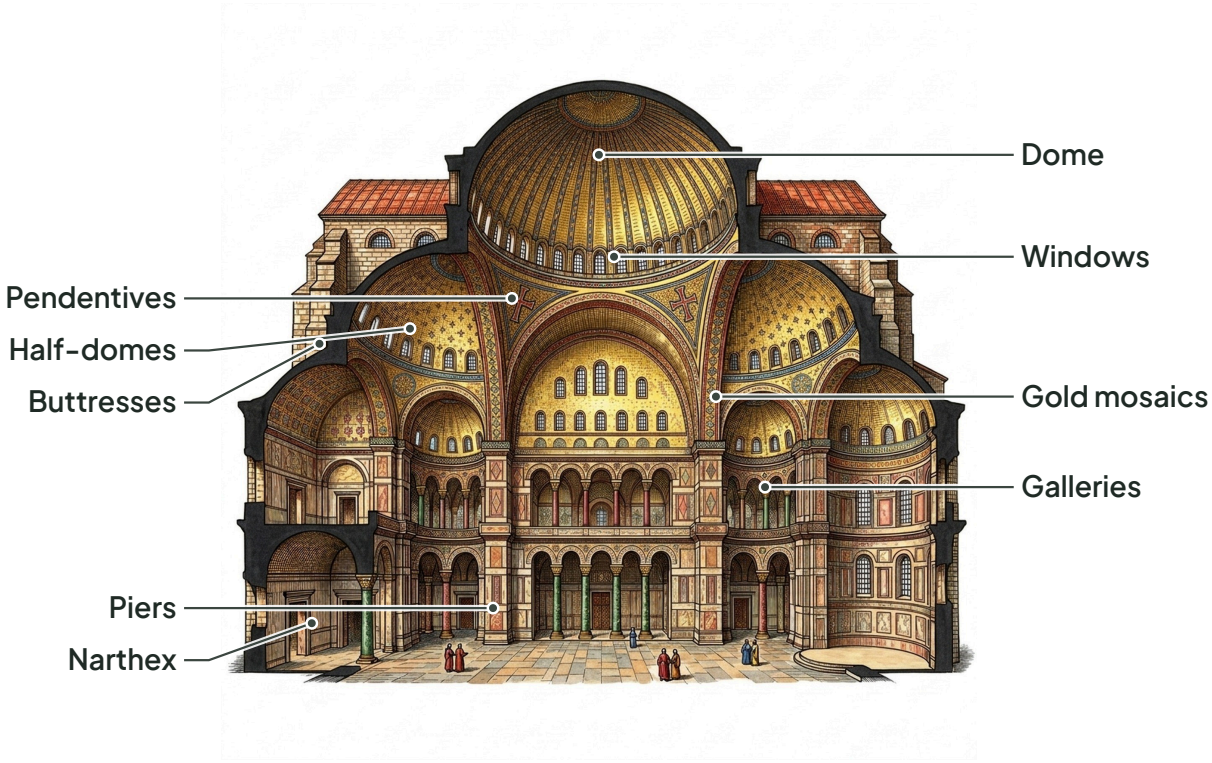
HOW THE HAGIA SOPHIA WAS BUILT

After the Nika riots of 532 burned the old church, Justinian had Hagia Sophia built in under six years, by 537. Anthemius of Tralles and Isidore of Miletus designed it. This cutaway shows the church cut in half, as it was in 562, after a higher dome replaced the first one. After 1453 the Ottomans made it a mosque and added minarets, tall thin towers, which are not shown here.



THE PARTS

Dome The great central dome, about 31 meters across and about 55 meters above the floor. The first dome fell after earthquakes in 558; this higher dome was finished in 562.

Windows A ring of 40 small arched windows at the base of the dome. Light pours through them, so the dome seems to float on a ring of light.

Pendentives Four curved triangles under the dome. They carry the round dome over the square space below and pass its weight down to the piers.

Half-domes Two great half-domes, one at the west and one at the east, with smaller half-domes around them. They help hold up the main dome and make the inside one huge open space.

Piers Four huge square pillars of stone at the corners of the square. Almost all the dome's weight comes down on them.

Buttresses Heavy walls on the outside that push against the piers, so the weight of the dome does not push them outward.

Galleries Upper floors over the side aisles, with rows of marble columns, where more worshippers stood and looked down into the church.

Narthex The long entrance hall across the west end. Worshippers passed through it before entering the main church.

Gold mosaics Ceilings covered with tiny pieces of gold glass. Justinian's mosaics showed crosses and patterns. Mosaics of Jesus, Mary and the saints were added after iconoclasm ended in 843.