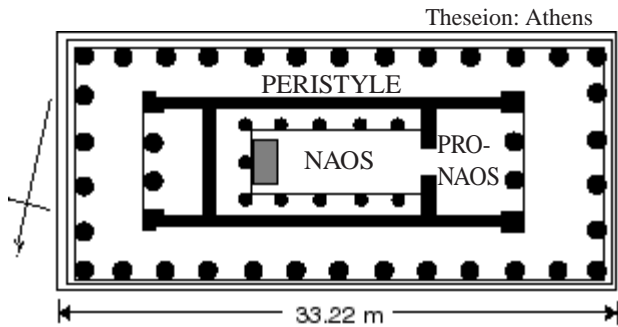


Temple Design

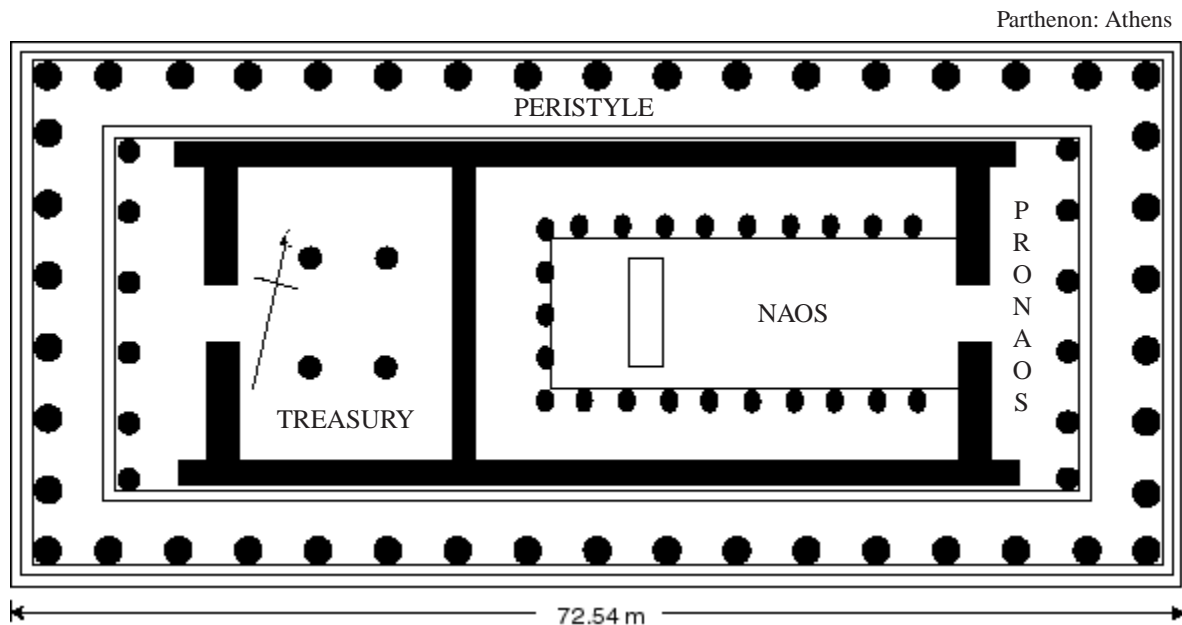
Built to honor the gods and goddesses, the earliest Greek temples were simple one-room wooden post and lintel structures, featuring tree trunk supports and flat roofs. Over the centuries, temple architecture became more elaborate, with distinct building styles reflecting the tastes and preferences of the various regions and city-states.



The basic plan featured a *naos* (inner room) and *pronaos* (columned porch), but as building skills improved and the size of temples expanded, most also featured a *peristyle* (a covered row of columns) surrounding the *naos* on four sides.

The Parthenon, built during the Golden Age of Pericles, and regarded as the most beautiful and famous of the Classical structures, was completed in 438 B.C. Dominating the temple grouping atop the Acropolis in Athens, this

huge temple's dimensions along the *stylobate* (the top step of the foundation) were nearly 70 meters long (228 feet) and 30 meters wide (101 feet). The *cella* (body of the building) was subdivided into a larger eastern *naos* (98' x 63') and a smaller western chamber called the treasury (44' x 63'). The center-piece of the *naos* was a 42 foot ivory and gold statue of Athena, fronted by a shallow reflecting pool.



The building's appearance of perfect proportions are the result of carefully calculated ratios (9:4) between the Parthenon's height and width, its length and width, and the ratio of distance between the columns equaling more than twice each column's diameter. Aware of the visual tricks our eyes play, designers of the ancient Parthenon used architectural refinements to make the building look straight and perfect by subtly curving the steps, pediments, and roof-lines, and designing bulging columns that leaned slightly inward.

Although the foundation of the temple was limestone, the Parthenon was constructed entirely from marble brought from nearby Mt. Pentelicon. Over the



centuries, chemical reactions to tiny iron particles within the marble caused the building to change color from a glistening white to a rich honey tone.

The Parthenon builders utilized many architectural elements familiar to other Greek temples, but Athena's temple stood alone in the quality of decorative detail. For example, Greek temples typically covered the wooden roof rafters with fired clay tiles. In contrast, the roof of the Parthenon was covered with light weight, thinly-sliced (only 3 centimeters thick), nearly translucent marble tiles. Along the roof-line, Parthenon builders removed the appearance of "fussiness" and clutter by positioning decorative antefixes (roof-line ornaments) between alternate rows of roof tiles, rather than the traditional placement at the end of each row of tiles. The columns were prominent features of Greek temples. Parthenon designers selected simple, unadorned Doric columns for the temple exterior and the naos, and four slender, graceful Ionic columns for the treasury room.



Sources: Fiona MacDonald and Mark Bergin, *Inside Story: A Greek Temple*, (Hertz: Simon and Schuster Young Books, 1992); and Susan Woodford, *The Parthenon* (Minneapolis: Lerner Publications Co, 1983).