



# *HISTORY & THEORY OF ARCHITECTURE*

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## Hagia Sophia

Manual drawing  
Explain through  
the sketch

Plan  
Section  
Elevation  
3D Perspective

## Pantheon , Rome

Manual drawing  
Explain through  
the sketch

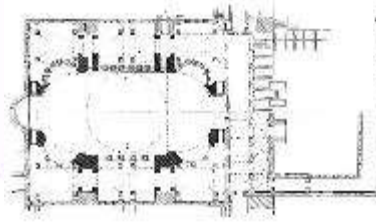
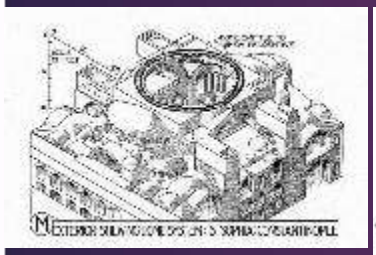
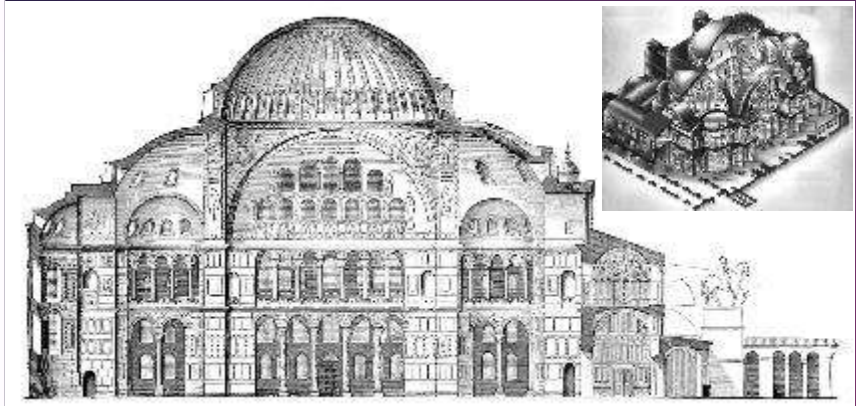
Plan  
Section  
Elevation  
3D Perspective

# The Eastern Empire

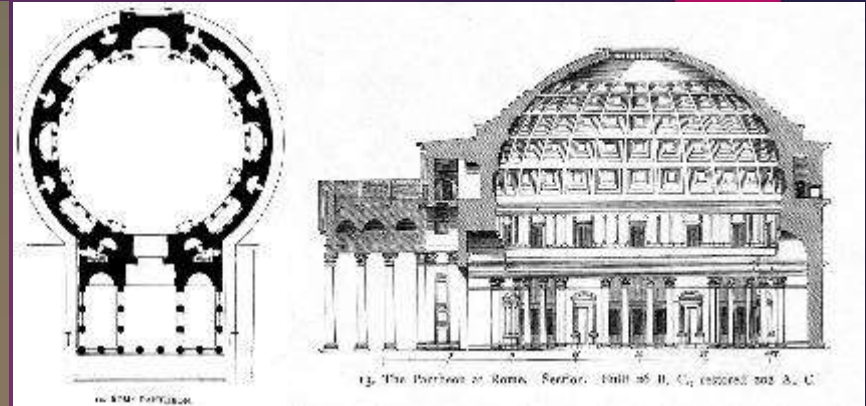
# Comparison

# The Western Empire

## Hagia Sophia Dome, Istanbul / Turkey



## The Pantheon Dome, Rome / Italy



## Hagia Sophia Dome, Istanbul / Turkey



The Hagia Sophia, the biggest church constructed by the East Roman Empire in Istanbul, has been constructed three times in the same location.

When it was first built, it was named Megale Ekklesia (Big Church); however, after the fifth century, it was referred to as the Hagia Sophia (Holy Wisdom).

## The Pantheon Dome, Rome / Italy



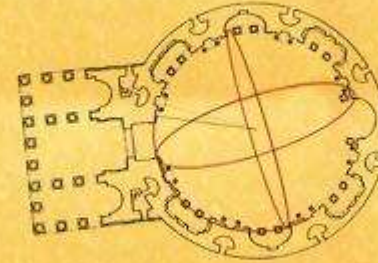
Michelangelo saw this wonder for the first time he said it looks more like the work of angels, not humans... The word Pantheon is a Greek adjective meaning "honor all Gods"

Hagia Sophia Dome, Istanbul / Turkey

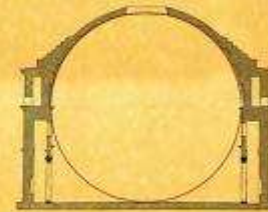


**DIAMETER**  
**31.87 m.**  
from North to South  
**30.87 m.**  
from East to West.

The Pantheon Dome, Rome / Italy



**HEIGHT**  
The dome that is over  
the central space is  
**55.60 m.**  
from ground level...



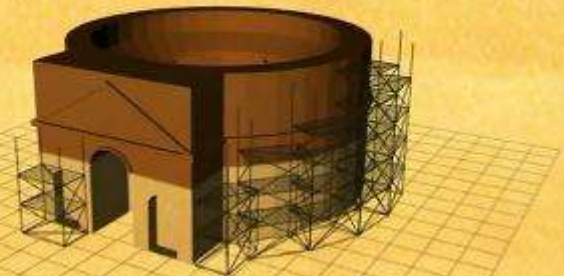
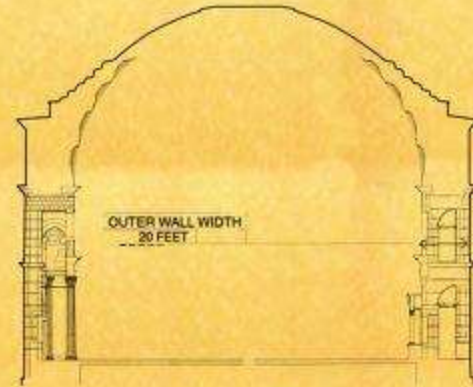
Hagia Sophia Dome, Istanbul / Turkey

The construction of Hagia Sophia started in 532 and finished in 537.

The architects are Anthemios and Isidoros the Elder...

The dome is supported by the arches between piers, called pendentives

The Pantheon Dome, Rome / Italy

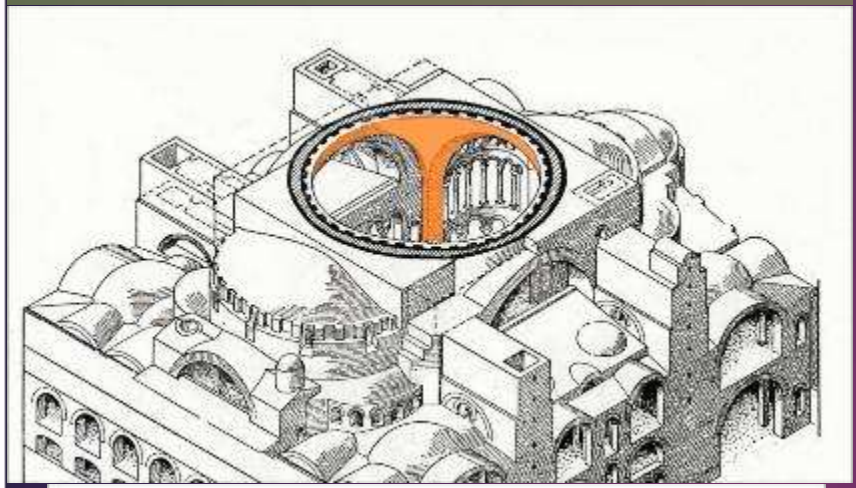


The Eastern Empire

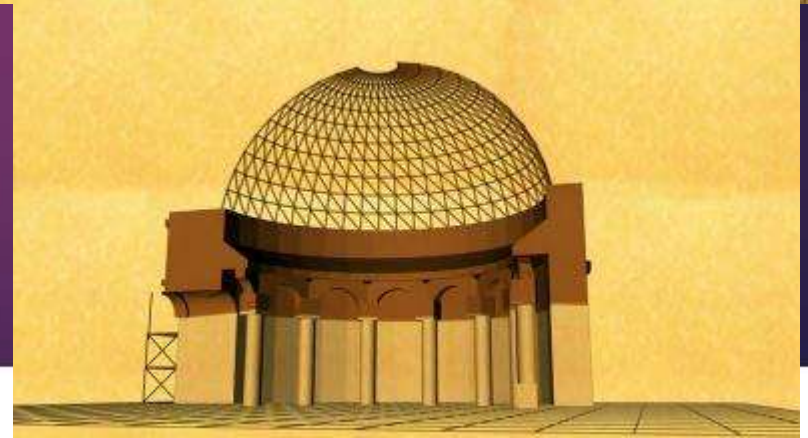
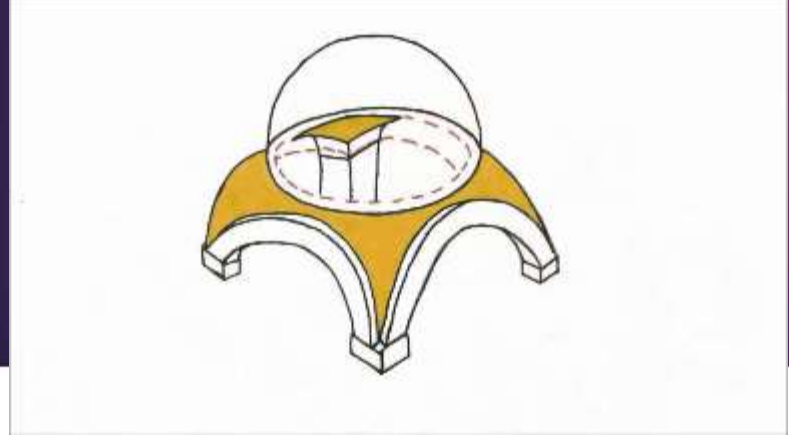
Comparison

The Western Empire

Hagia Sophia Dome, Istanbul / Turkey



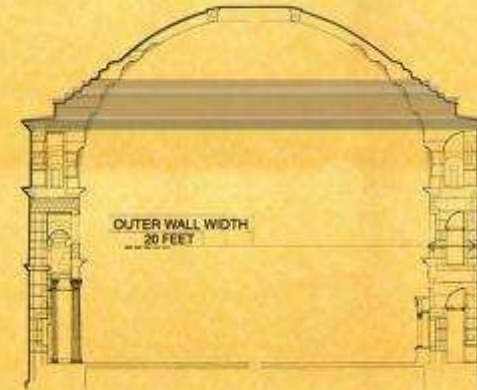
The Pantheon Dome, Rome / Italy



## Hagia Sophia Dome, Istanbul / Turkey

Domes replaced the square rooftops of typical Roman architecture, using pendentives to achieve this goal.

## The Pantheon Dome, Rome / Italy





## The Eastern Empire

## Comparison

## The Western Empire

### Hagia Sophia Dome, Istanbul / Turkey

In 557, after an earthquake, Dome of Hagia Sophia was destroyed.

Young Isidoros, built a granitic dome in four years.

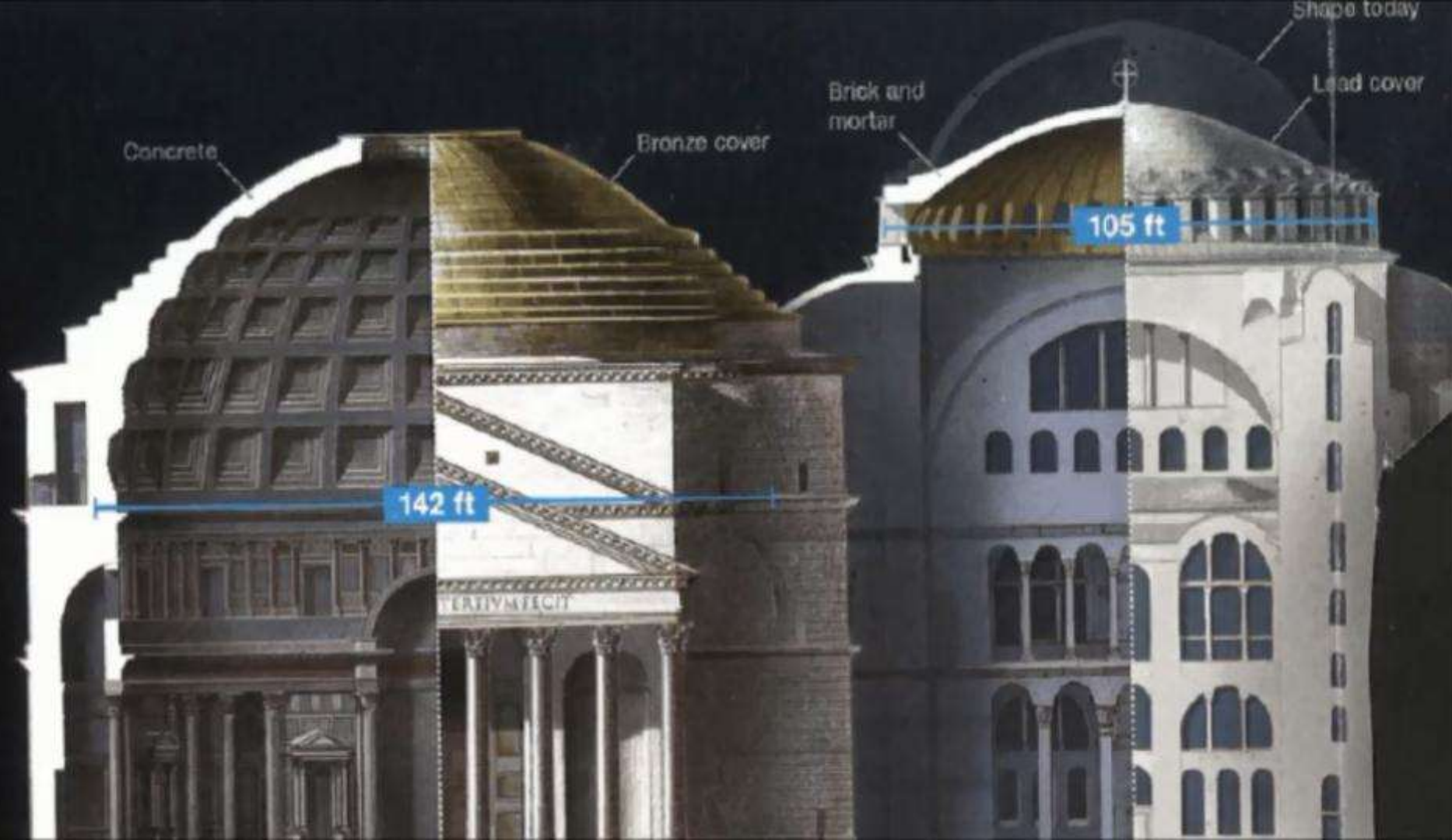
Original height 49 meters were increased to 55,6 meters...

Young Isodoros added 40 windows to new dome of Hagia Sophia...

Young Isodoros used volcanic raw material to produce solid bricks, much stronger but lighter...

### The Pantheon Dome, Rome / Italy





Pantheon, Rome, AD 130  
has diameter 142 ft (43 m)

&

Hagia Sophia, AD 537  
has diameter 105 ft (31,87 m)



THANK YOU

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