James Webb

INFRARED SPACE TELESCOPE

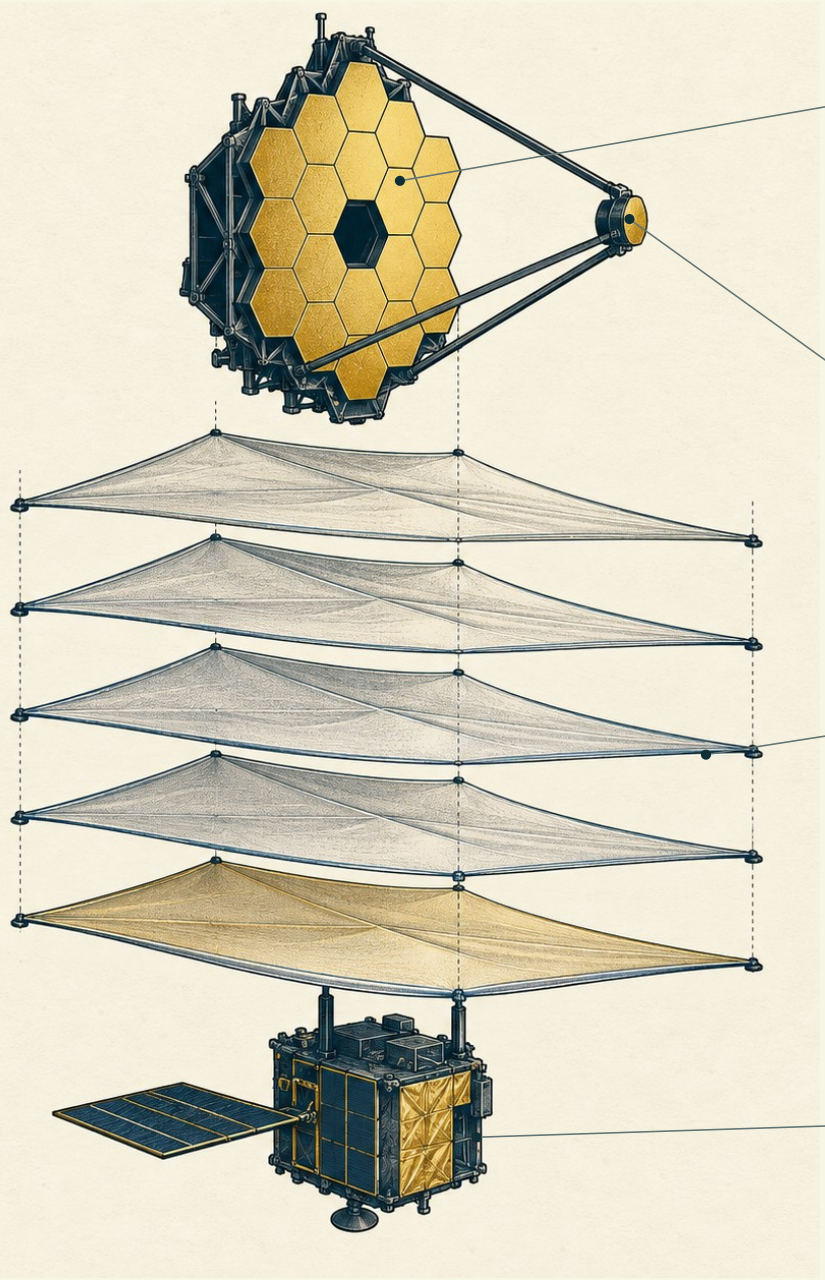
6.5 m
PRIMARY MIRROR SPAN

18
MIRROR SEGMENTS

5
SUNSHIELD LAYERS

FIG. 01 / EXPLODED CONCEPT STUDY

NOT TO SCALE



1 **Primary mirror**
Eighteen gold-coated segments act together as one collecting surface.

2 **Secondary mirror**
The small mirror on the support arms directs light back through the primary mirror.

3 **Sunshield**
Heat escapes between five membranes. Each layer is cooler toward the telescope.

4 **Spacecraft bus**
The warm side houses support systems. The solar array supplies electrical power.

INFRARED

The sunshield keeps the telescope on the cold side of the observatory.