

Psyche



The first-ever mission to study a metal-rich asteroid, Psyche (named after the asteroid) aims to help scientists learn more about the formation of rocky bodies in our solarsystem.

With a launch readiness date set for Thursday, Oct. 12, NASA's Psyche spacecraft will travel 2.2 billion miles from NASA's Kennedy SpaceCenter in Florida to a metal-rich asteroid in the far reaches of the mainasteroid belt between Mars and Jupiter. Trailing a blue glow from its thrusters and powered by a pair of massive solar arrays, the orbiter willuse its payload of science instruments to learn more about the asteroid 16 Psyche.

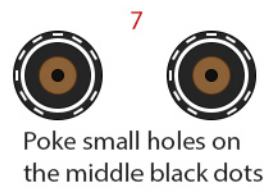
The spacecraft will use a very efficient propulsion system for the first time beyond the moon. Powered by Hall-effect thrusters, Psyche's solar electric propulsionsystem harnesses energy from large solar arrays to create electric andmagnetic fields. These, in turn, accelerate and expel charged atoms, orions, of a propellant called xenon (a neutral gas used in car headlightsand plasma TVs) at such high speed, it creates thrust. The ionized gas, will emit a sci-fi-like blue glow as it trails behind Psyche in space. Each of Psyche's four thrusters, which will operate one at a time, exert the same amount of force that you would feel holding three quarters in the palm of your hand. In the frictionless void of space, the spacecraft will slowly and continuously accelerate.

Scientists think asteroid Psyche, which is about 173 miles (280 kilometers) at its widest point, could be part or all of the iron-rich core of a planetesimal, a building block of a rocky planet. The asteroid also could also be something else. It could be the leftover piece of a completely different kind of iron-rich body that formed from metal-rich material somewhere in the solar system. Psyche may be able to show us how Earth's core and the cores of the other terrestrial planets came to be.

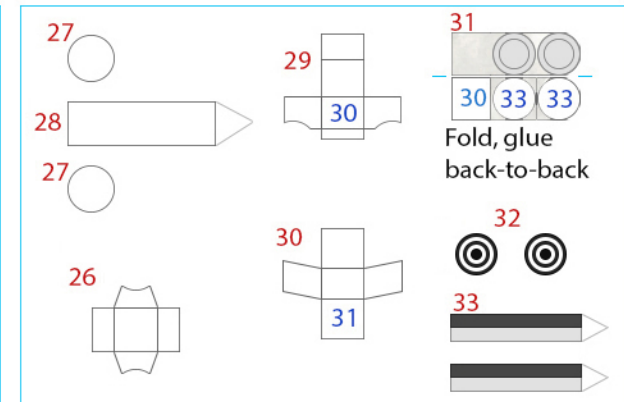
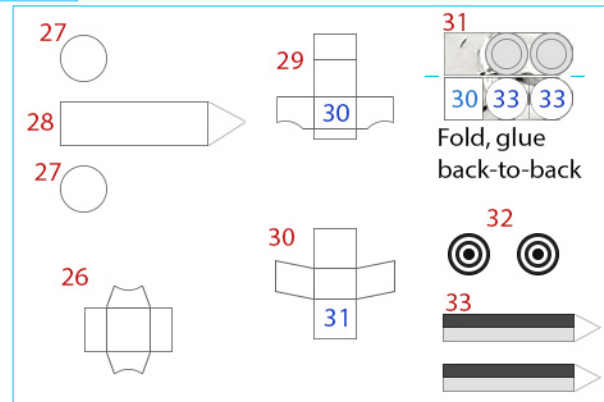
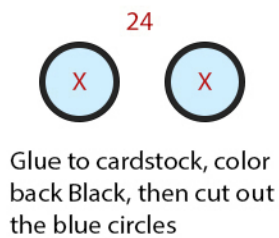
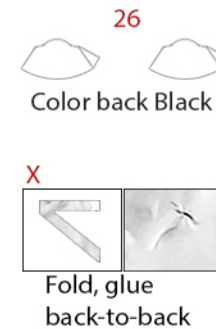
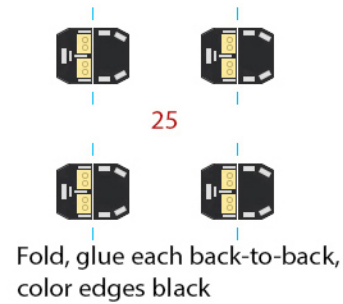
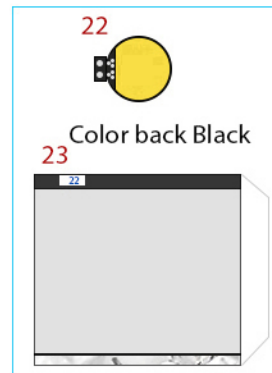
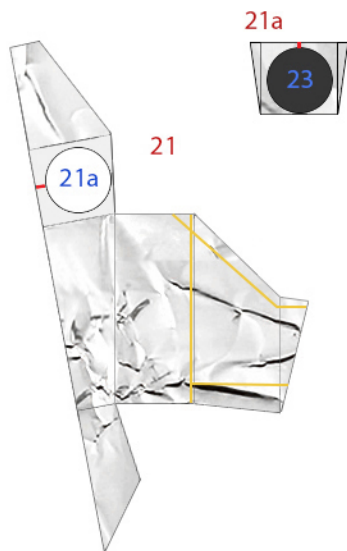
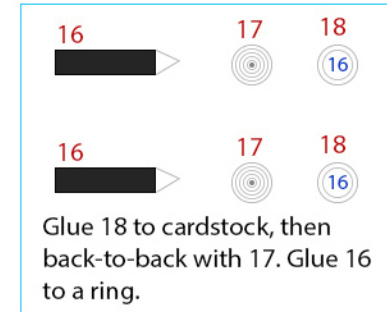
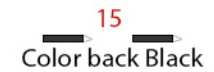
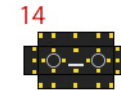
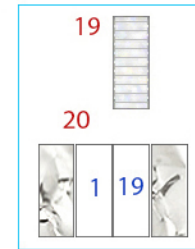
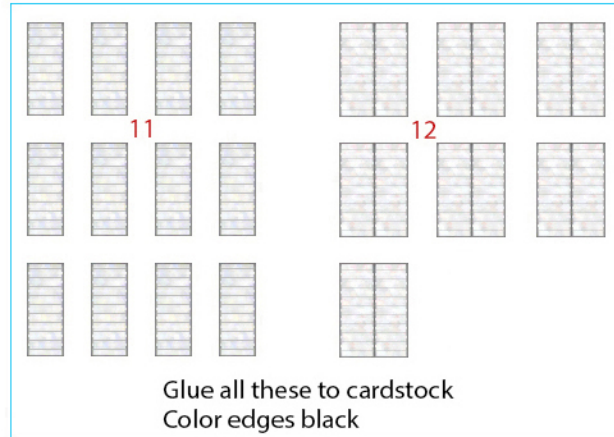
Psyche launched Oct. 13, 2023, at 10:19 a.m. EDT from Kennedy Space Center. Psyche lifted off from Launch Pad 39A aboard a SpaceX Falcon Heavy rocket.

By August 2029 the spacecraft will begin exploring the asteroid.

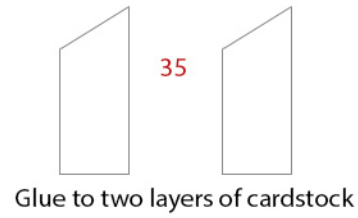
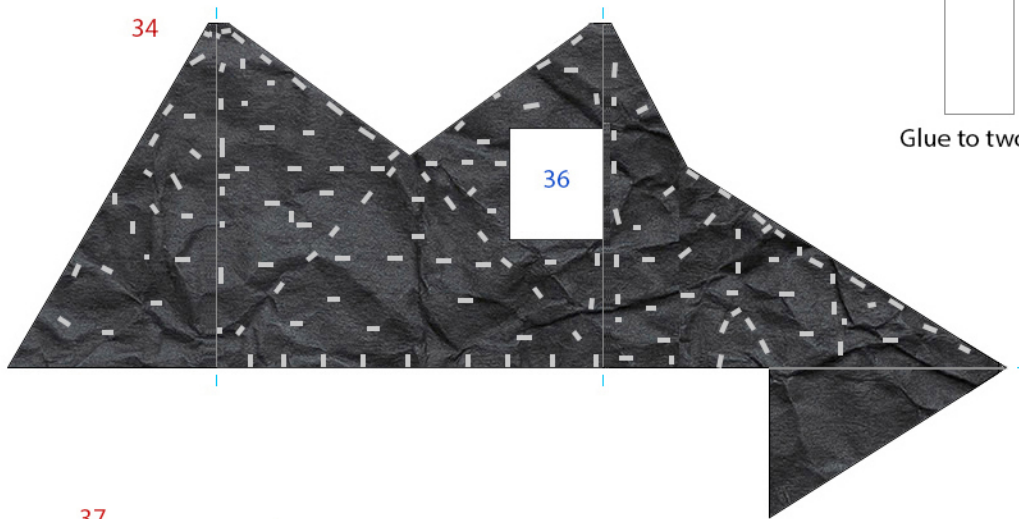




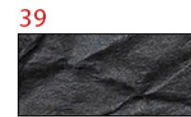
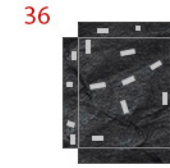
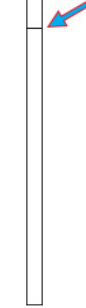
Psyche



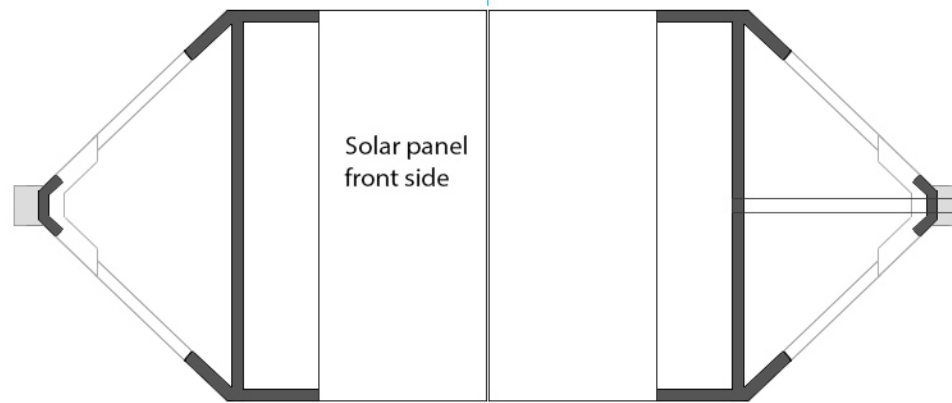
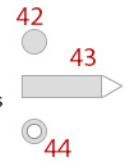
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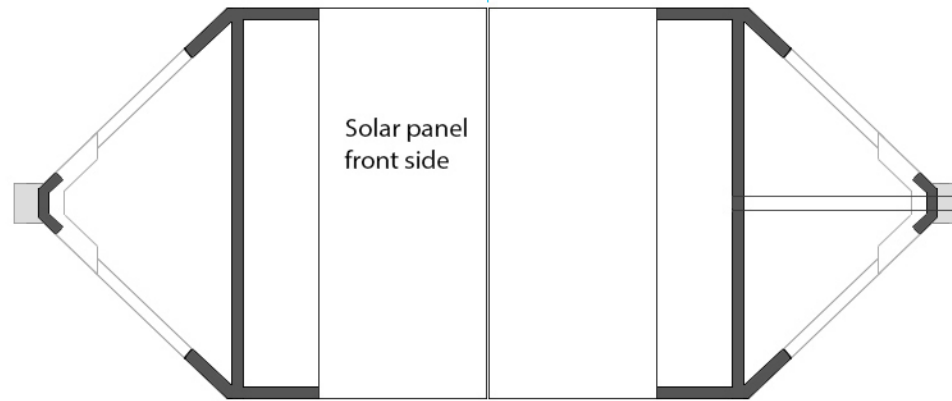
Cut two long tooth pics the same length as this example. Color the upper part above the line Black.



Glue to two layers of cardstock

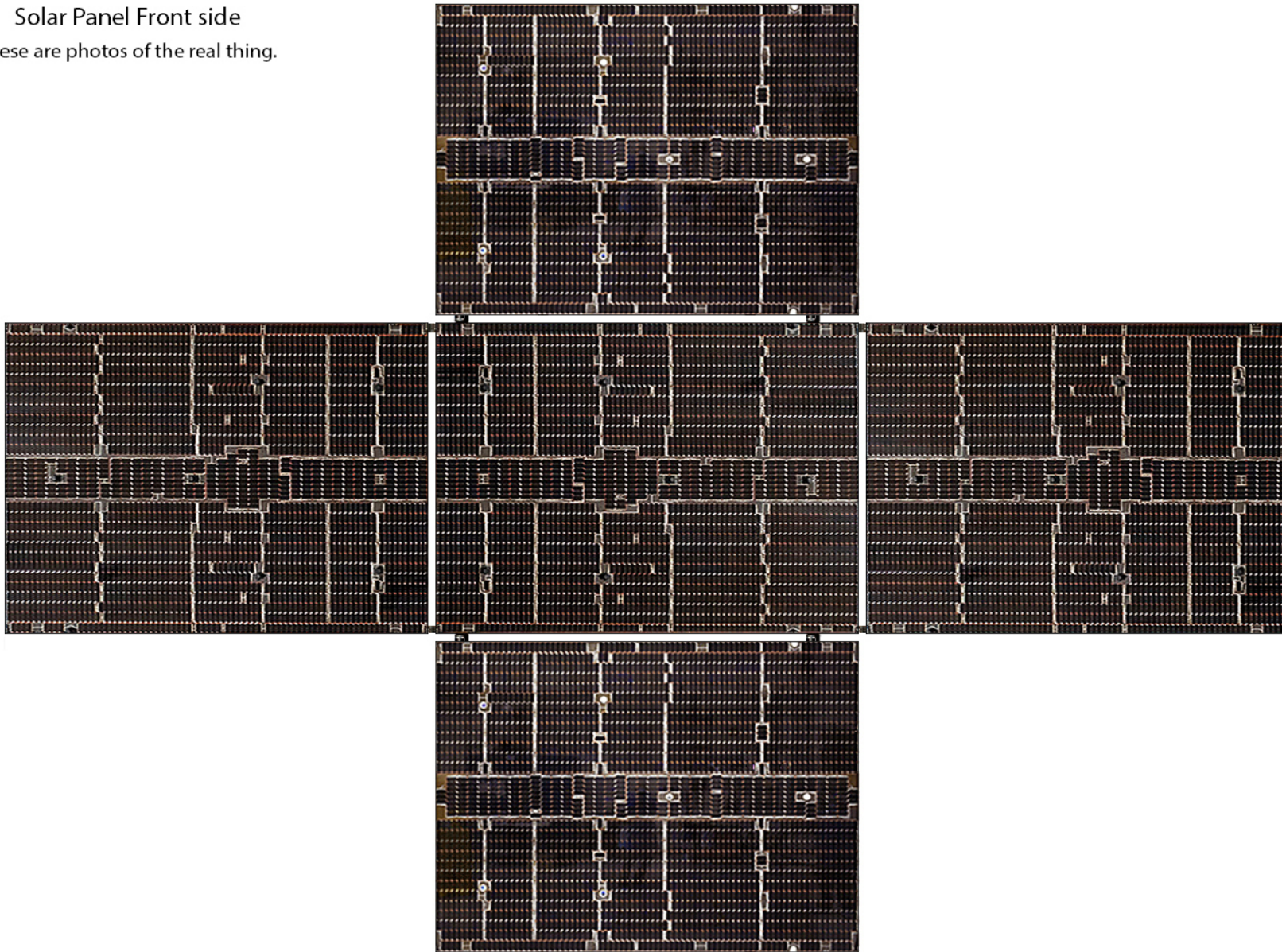


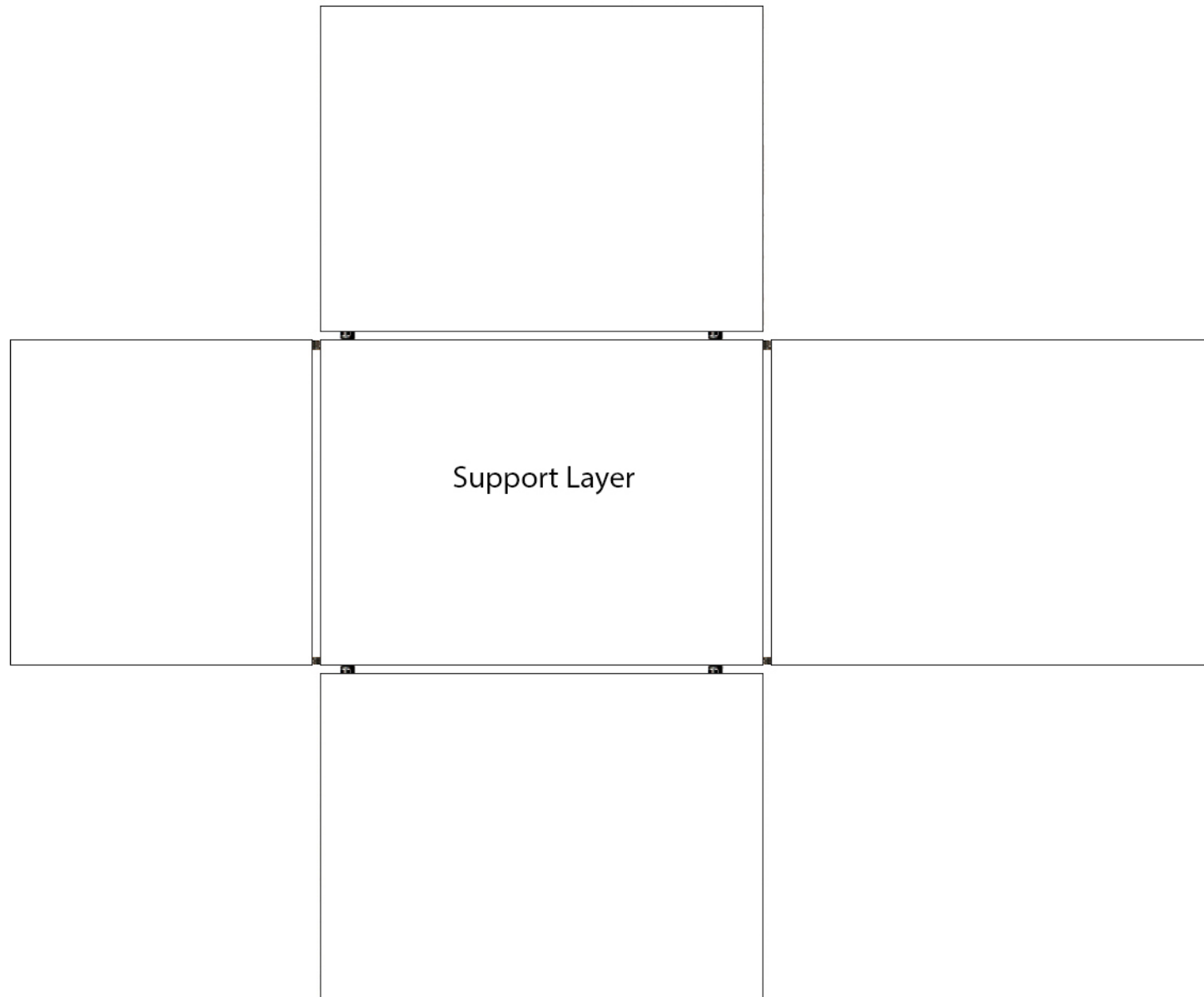
Fold, glue back-to-back



Due to the size and weight of the solar panels, a wire coat hanger wire is recommended for the solar panel support rod. Cut a piece at 12 inches (305 mm) long.

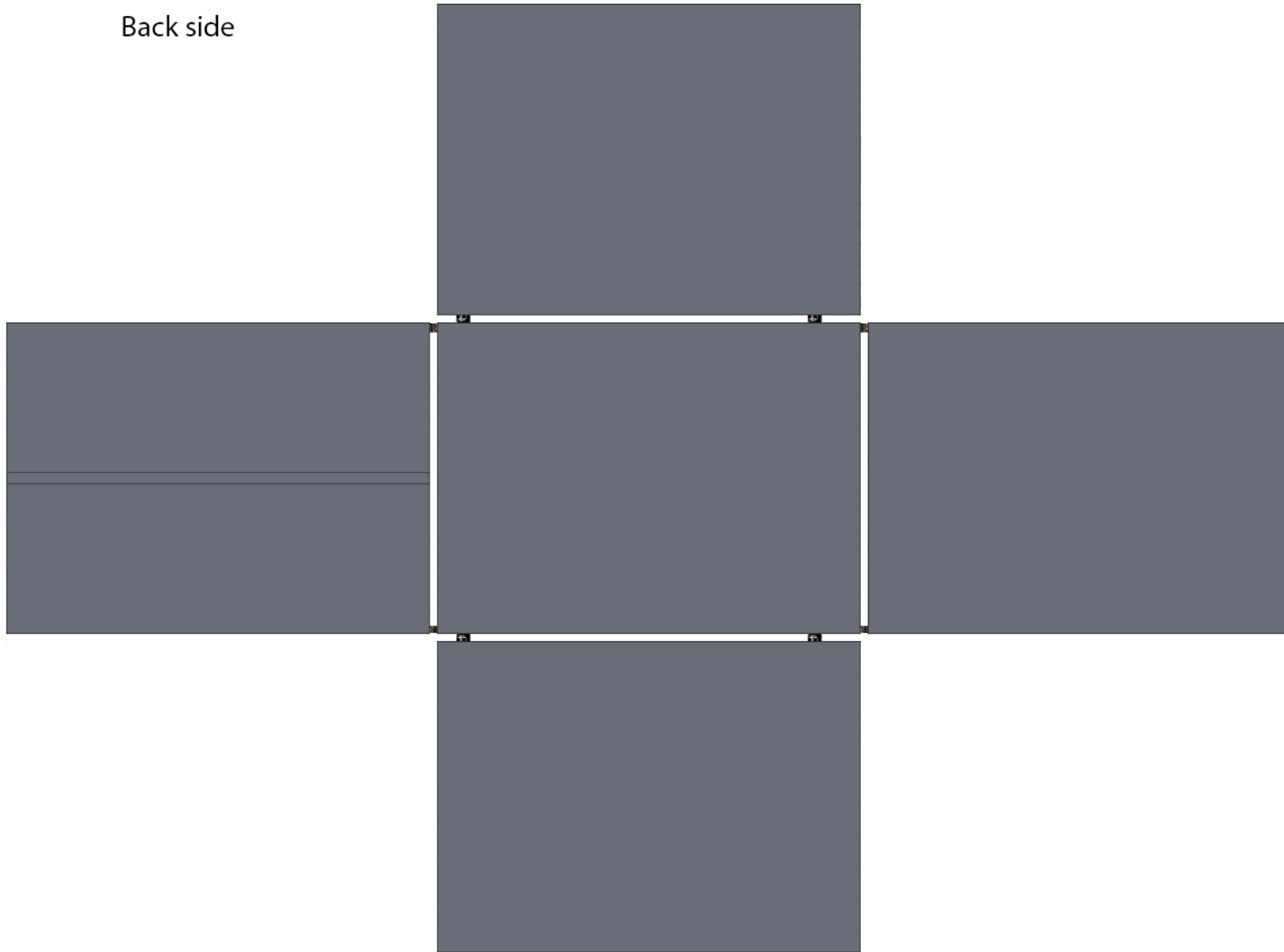
Solar Panel Front side
These are photos of the real thing.





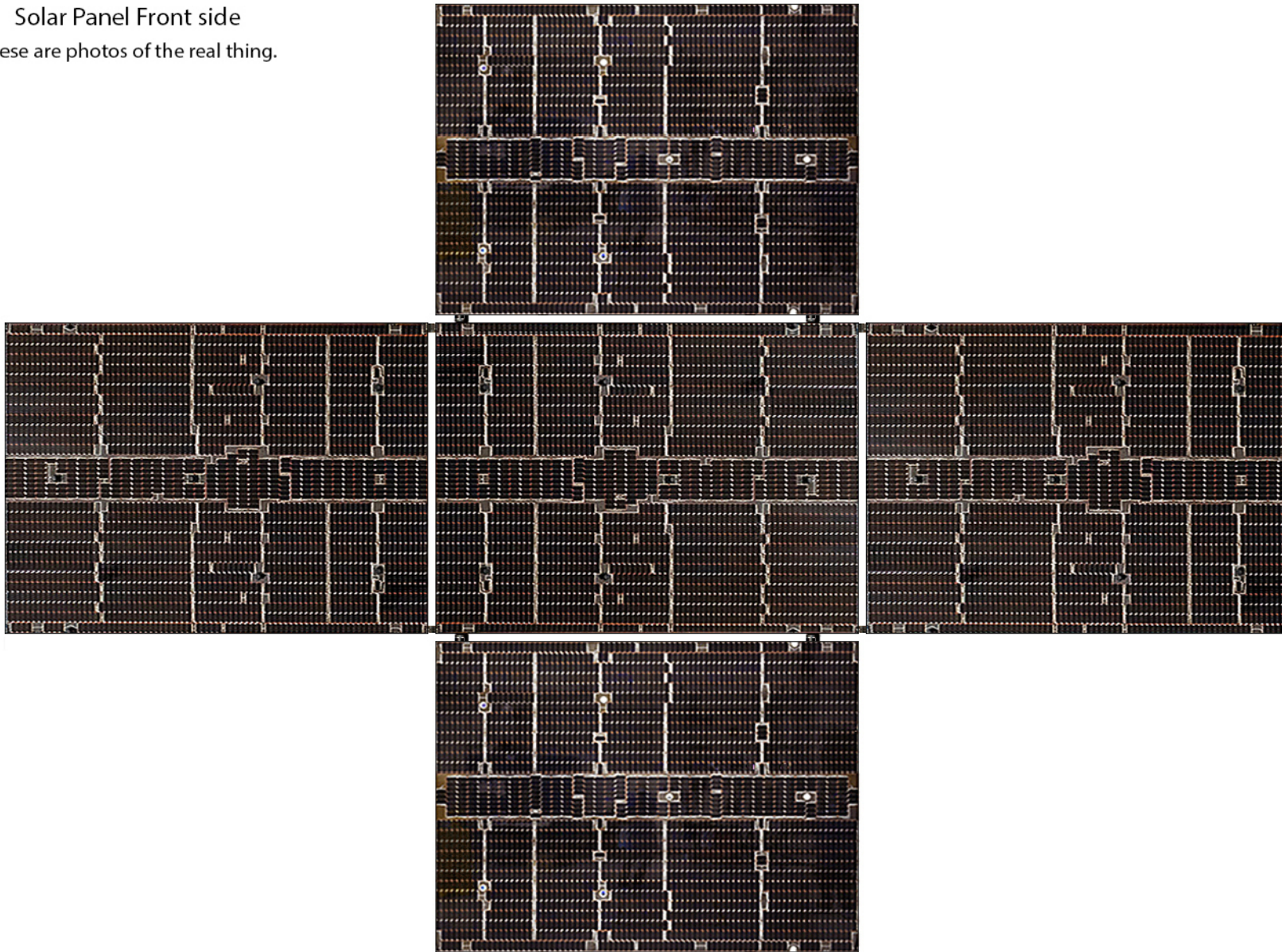
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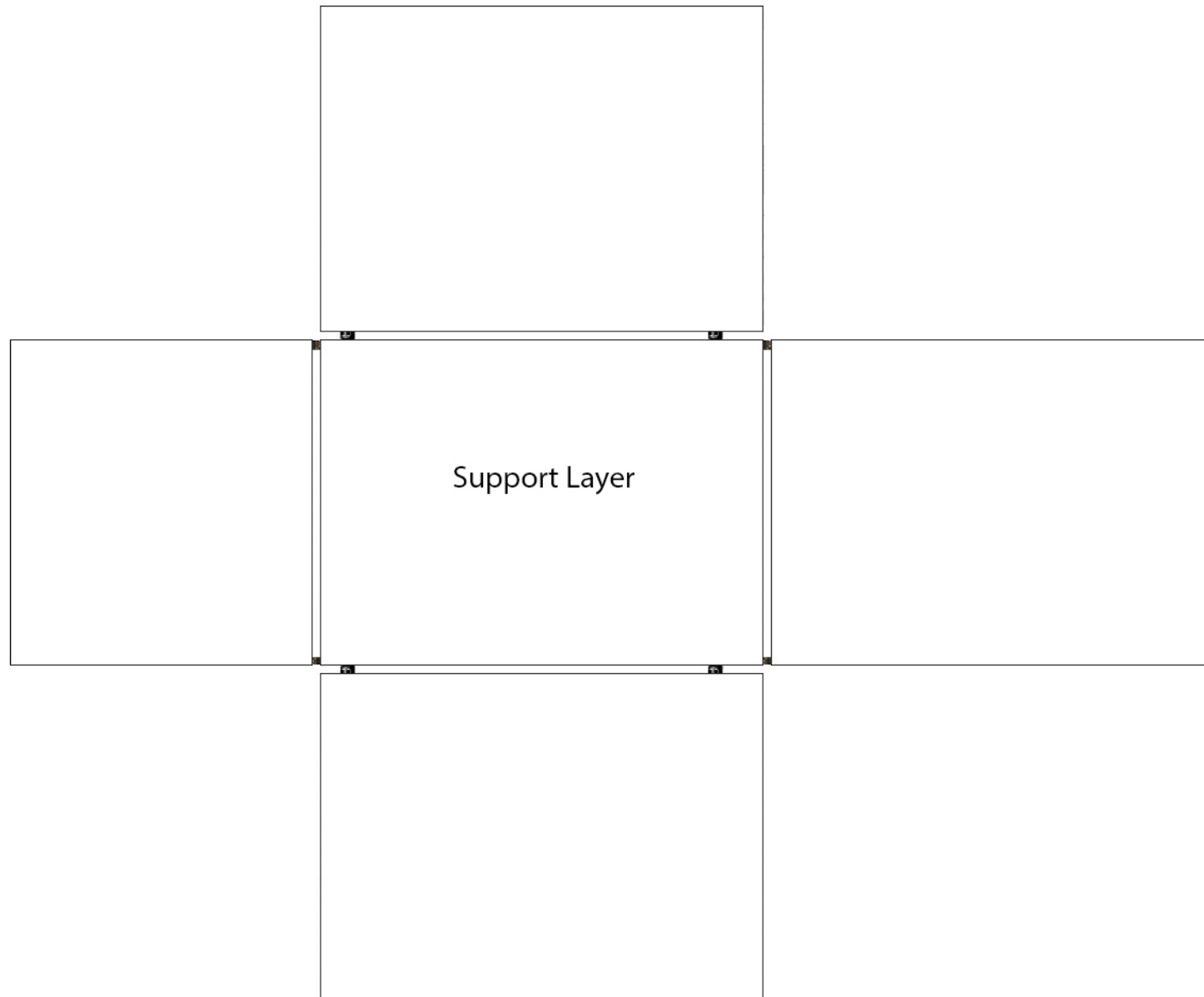
Back side



Solar Panel Front side

These are photos of the real thing.





Psyche

Back side

