On Saturday, Dec. 11, NASA's James Webb Space Telescope was secured on top of the Ariane 5 rocket that will launch it to space from Europe's Spaceport in French Guiana.
After its arrival in the final assembly building, Webb was slowly hoisted nearly 130 feet and then perfectly aligned on top of the Ariane 5, after which technicians bolted Webb’s launch vehicle adapter down to the rocket. This whole process was performed under strict safety and cleanliness policies, as it was one of the most delicate operations during the entire launch campaign for Webb. A custom 'shower curtain,' already installed between the two platforms where technicians worked to connect Webb to its launch vehicle, served as the walls of a clean room to keep the observatory dirt-free.

The next step ahead is to encapsulate Webb inside the Ariane 5's specially adapted fairing.

Webb will be the largest, most powerful telescope ever launched into space. As part of an international collaboration agreement, the European Space Agency (ESA) is providing the telescope's launch services using the Ariane 5 launch vehicle. Working with partners, ESA was responsible for the procurement of the launch services by Arianespace and for the development and qualification of Ariane 5 adaptations for the Webb mission.

Webb is an international partnership between NASA, ESA, and the Canadian Space Agency.

More information: webb.nasa.gov

Provided by NASA's Goddard Space Flight Center

Citation: Webb Telescope placed on top of Ariane 5 rocket (2021, December 15) retrieved 7 December 2023 from https://phys.org/news/2021-12-webb-telescope-ariane-rocket.html