

# NASA Johnson Space Center Human Health and Performance Laboratory



*Red Sandstone Exterior Cladding  
NASA JSC Human Health and Performance Laboratory*

## StonePly Supplies NASA Building

The new Deep Space Human Exploration center at NASA is clad in StonePly panels. Designed by NASA teams and HDR architects, the building features about 25,000 square feet of thin, light and strong panels of aluminum honeycomb faced with Red Sandstone, Buff Limestone and Black Granite. StonePly provided a strong, hurricane proof and attractive cladding for the new facility.

The new facility is home of research into humans in space for extended periods and part of the Deep Space Human Exploration Spacecraft Orion project, intended to take astronauts on months long missions to Mars, to asteroids and beyond.



## Engineering to NASA Standards

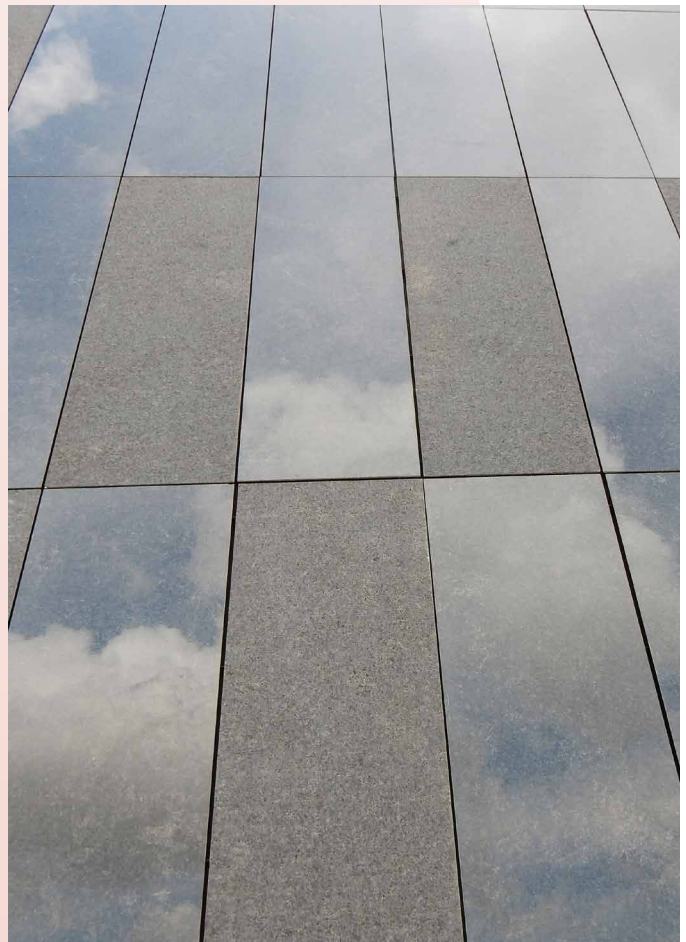
NASA is known for its saying “failure is not an option”. Systems are designed, tested and retested to ensure they can withstand the toughest of environments. The same rigorous attention to detail and quality control is applied to their construction projects as well. A cladding for the needed that was attractive, durable and beautiful. Working with the NASA teams and HDR Architects, StonePly engineered the panels and support system. The system is capable of withstanding wind speeds above a Category 5 Hurricane as well as withstanding windblown debris and large missile impacts. The subframe is aluminum and attached with aluminum Z-clips, which allowed for simple, secure and fast installation of the panels. The joints between the panels are open in a rain screen cladding system.

## Basics of the StonePly System at NASA

- Met or Exceeded NASA Testing Requirements
- Met or Exceeded NASA Engineering Requirements
- Aluminum Honeycomb Backing
- Hurricane Resistant Cladding
- Rainscreen System

## Stone Types for the Project

- Red Sandstone
- [Anhara Black Granite](#)
- [Texas Cream Limestone](#)





## **Aluminum Honeycomb in Space and on Earth**

Key parts of the StonePly technology are based on NASA research and development, including aluminum honeycomb and high strength epoxies. In the 60's and 70's, the United States Apollo Moon missions lead to revolutionary advances in science and technology across a range of industries. One of the advances was in aluminum honeycomb panels. Strong, stable and lightweight, the panels were used for the Apollo spacecraft that took men to the moon and back. Thanks to the success of aluminum honeycomb on Apollo, they have been a feature of all spacecraft since then.

StonePly pioneered the use of aluminum honeycomb in architecture, based in a large part on the NASA research for Apollo. By combining the strength of aluminum honeycomb with the durability of natural stone, StonePly creates strong, durable and lightweight panels. So when NASA needed a stone cladding that was durable, hurricane proof and lightweight, it made sense that NASA would turn to StonePly stone on aluminum honeycomb panels for it's new building.

### **The Results**

The building exterior features multiple stones and stone finishes. The client is satisfied and the project a success. "The building looks fantastic", said Brett Jones of Houston, "It's probably the best-looking building at NASA". StonePly is honored to have supplied the facade. "Working with NASA has been an especially rewarding experience, a chance to be able to help them build a research facility for their exploration," said Lyndon Stromberg of StonePly, "25 years ago, their research and technology made StonePly possible, so it's good to see the technology come full circle and be able to supply them with StonePly panels."

### **About NASA Johnson Space Center**

NASA Mission Control in Houston has been a vital part of every US spaceflight since the Gemini IV mission in 1965, the famous Apollo missions that took humans to the moon and back and the more than 110 space shuttle flights. Today, it leads the International Space Station operations and missions and is home of the Orion Multi-purpose crew vehicle.

