V-27 The Island Fire House is a LEED Silver sustainable building. Sustainable buildings can obtain LEED certification by earning credits in up to 9 categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality, Locations & Linkages, Awareness & Education, Innovation & Design, and Regional Priorities. Certification levels are based on credits earned: Basic: 40-49, Silver: 50-59, Gold: 60-79, Platinum: 80+. NASA strives for Silver.

"LEED stands for "Leadership in Energy and Environmental Design," and focuses on encouraging a more sustainable approach to the way buildings are designed, constructed and operated."

-Sean Grimsby

Sustainable Sites

This category aims to curtail pollution and soil erosion that can result from construction. It also addresses the building's direct environmental impact on the immediate area including air pollution and how building design moves rainwater or minimizes light or heat pollution.

V-27 earned **10/26** points for pollution prevention, alternate transportation (bicycle storage, changing rooms, van pool parking and parking capacity), site development (maximize open space), storm water design (quality control), open grid paving & light pollution reduction.

Water Efficiency

LEED promotes water conservation through the use of water metering, efficient bathroom and plumbing designs, drainage gardens and self-sufficient irrigation systems.

V-27 earned **8/10** points for water use reduction and water efficient landscaping.

Energy and Atmosphere

This category addresses building commissioning and energy performance of systems such as HVAC and lighting. Commissioning a building is the test and balancing of the main systems to assure optimum performance. The building must use 10 percent less energy than the USGBC baseline, and refrigeration systems cannot use chlorofluorocarbon (CFC) refrigerants. Extra points can be earned for renewable energy use.

V-27 earned **13/35** points for optimizing energy performance, enhanced commissioning and refrigerant management, measurement and verification.

Materials and Resources

Buildings designed to minimize material use, or use biodegradable or locally harvested renewable resources in their construction, and minimize landfill waste and promote recycling in their operation.

V-27 earned **5/14** points for storage and collection of recyclables, construction waste management, recycled content, and regional materials.

Indoor Environmental Quality

Indoor air quality includes ventilation, off-gassing of materials and thermal comfort. It also requires efficient lighting systems that are adequate for all necessary tasks.

V-27 earned **10/15** points for increased ventilation, IAQ management plan (during construction), use of low-emitting materials (adhesives, sealants, paints, coatings, and flooring systems), controllability and verification (lighting/ thermal comfort), and air monitoring.

Design Innovation & Regional Priority

Considers innovative sustainable solutions and region-specific environmental concerns.

V-27 earned **9/10** points for innovation in design (maximize open space, water reduction, green cleaning, integrated pest management), using a LEED accredited personnel, alternative transportation (parking), storm water design (quality), and water use reduction.

Total Points earned by **V-27** were **55** of **110.**