Environmental sustainability is critical in the design of the Live Work Complex, a 30,000 sf structure in the USVI. M. ORFÍLIÀS LABS. The design aims to achieve sustainable systems; solar form-based laboratory design and canopy structure. This is a response to the lack of reliable energy sources, high energy costs, and the need for sustainable living in the region.

To address these challenges, the Live Work Complex incorporates a Live Work complex with a focus on integrating renewable energy sources and water management systems. The complex features a series of solar panels that are designed to collect the sun's energy, harnessing the heat gain of the laboratory based on its form. A canopy design is employed to collect rainwater, creating outdoor microclimates through shading. The canopy structure is designed to be easily built and assembled, ensuring maintenance is kept easy and modular.

Additionally, the Live Work Complex includes a water management system that seeks to take advantage of transported water to the site by creating a heat exchange system. This system is designed to collect rainwater and pump it through the campus for all potable water needs. The water management system includes dual pumps, drinking water, and greywater storage. Rainwater is collected to a centralized location and pumped through the campus for all potable water needs. The system also includes UV light disinfection, carbon filters, and greywater storage.

Furthermore, the Live Work Complex includes a focus on sustainable building materials, such as bamboo, which is used for the outer skin of circulation spaces and an offset inner core of laboratory and office spaces. The design closely adheres to a shape that maximizes shading of the north and reduces heat gain.

The Live Work Complex is designed to be an educational platform, teaching lab, and classroom, with a focus on sustainability. It includes CNC furniture, which is designed to be against the grain, and a creative space for design projects. The complex also includes a bicycle parking area, a dock for boats, and a dining area for public use.

In conclusion, the Live Work Complex is a comprehensive project that integrates sustainable design principles with educational and practical applications, setting a new standard for environmentally conscious living and working.