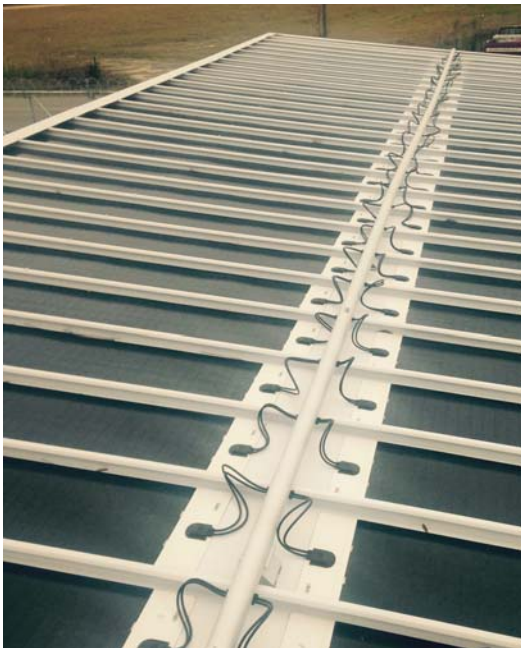
MiaSolé

CUSTOMER CASE STUDY

US Geological Survey Field Office: Carport

CUSTOMER SITUATION

As the Nation's largest water, earth, and biological science and civilian mapping agency, the U.S. Geological Survey (USGS) collects, monitors, analyzes, and provides scientific understanding about natural resource conditions, issues, and problems. In 2014, the USGS issued a bid for the design, build and lease of a new government facility for the U.S. Geological Survey - South Atlantic Water Science Center field office in Tifton, Georgia. Giddens Construction, a full-service construction business based in Smithfield, NC, took the opportunity to respond to the bid request. According to the terms, Giddens Construction would own the buildings on the site and provide a full-service lease that includes maintenance and power for the duration of the lease term. Allen Giddens, CEO, was concerned about the annual power increases in Georgia and wanted to include solar power generation in his bid to mitigate that risk. The USGS awards points to bidders that include methods for energy savings and renewable energy in their bids, so including solar modules in the design would improve Gidden Constructions chances of being awarded the contract. Giddens Construction also included other green technology such as R40 roof insulation, new air conditioning with variable air speed compressor and variable control, R30 wall insulation and LED and fluorescent lighting in their bid. Giddens Construction's bid was successful and they were awarded the contract to design, build and manage the new field office.



MIASOLÉ SOLUTION

MiaSolé FLEX modules were designated to be installed on the on site carport that would provide protection from sun and rain for the Geographic Survey's trucks and boats. The carport is a 25' x 75' single-slope structure built from galvanized structural steel to protect against rust. Three sides of the carport are partially enclosed to prevent wind from blowing rain into the survey's boats. The roof is a Kynar coated Snap-Loc standing seam metal roof system from MCBI with 16" panels and no striations, for better adhesion of the FLEX-02N solar modules.

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CUSTOMER CASE STUDY - USGS FIELD OFFICE

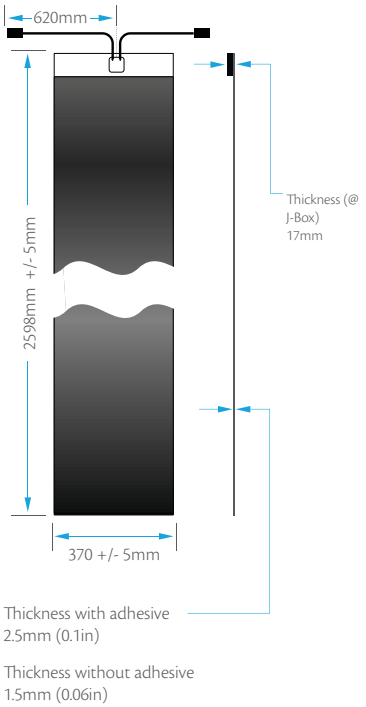
The lightweight MiaSolé FLEX-02W modules were the perfect solution for this facility. The rackless low-weight modules were applied directly onto the carport roof without having to install solar racking or add heavier structural steel to support glass modules and racks. MiaSolé FLEX modules adhere directly to the roof using peel-and-stick technology, providing ease-of-installation. In fact, it took two roofers new to installing MiaSolé modules only two days to install the 19.0 KW system. Because MiaSolé FLEX modules adhere directly to the roof, they are resistant to the high winds that sometimes blow across the area. In addition, the FLEX modules are aesthetically appealing as they blend into the carport roof and are virtually invisible from the ground.

RESULTS

MiaSolé FLEX-02 modules allow Giddens Construction to better predict the cost of electricity in the years to come by offsetting much of the building's consumption with photovoltaic power generation. Maintenance of the modules is easy, as the monthly yard service can clean any dust accumulation from the modules with a basic garden hose at held at ground level. This monthly maintenance will ensure maximum power generation from the modules.

Allen Giddens, CEO of Giddens Construction, is very enthusiastic about the use of MiaSolé FLEX modules on all of his future construction. The lightweight and flexible nature of the modules means he will not need to make any considerations for solar weight or racking in his designs, saving money on materials. As for the installation, as he says "it couldn't be easier". This ease of installation translates into lower labor costs, for even more savings.

THIN LIGHTWEIGHT PANEL



The thin, flexible and lightweight MiaSolé module adheres directly to the roof, providing excellent resistence to high wind and seismic events.

MiaSolé thin and lightweight FLEX modules blend into the roof surface, and are not visible at ground level.

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