

SIP MANUFACTURING PANELS

SIP MANUFACTURES THROUGHOUT NORTH AMERICA

NATIONWIDE

Structural engineering design of gravity and lateral elements for custom SIP manufacturing projects located across all North America.



CHALLENGE

One of the biggest challenges within the SIP industry is educating owners, developers, design consultants and jurisdictional authorities on what a SIP panel is. SIP products are a building component system used for walls and roofs. They are third party tested, structurally rated, highly energy efficient and meet codes while reducing overall construction labor costs within the field often tied to offsite construction, prefabrication, modular and green building. With the lack of education, comes the lack of specifying the SIP products.

SOLUTION

Our first step is to understand our client's product and develop systems and streamline processes and communication. We invested in thorough research on all client's products to fully understand how to gain maximum structural integrity. We coordinate with their third-party testing agencies and dive deep into their product data. We review span charts for both gravity loads related to roof live loads and lateral loads related to out-of-plane wind or seismic loads on the panels. Test results are given for in-plane panel loadings also as well as axial loads applied to the top of the panel. These allowable loads are all tested and provided within their final product data reports with acceptable factors of safety. The permitting requirements across North America often require that the final submitted plans to the authority having jurisdiction be stamped and signed by a licensed structural engineer. Our experience throughout North America brings the knowledge of what is needed and required in different jurisdictions. Through our research, familiarity and confidence within the SIP industry, we specify their product no matter where they are building so, they may maintain consistency of quality, production and turnaround times as well as a trusted relationship.

TEAM MEMBERS

BRIAN SIELAFF, M.S.C.E., S.E., P.E., P. ENG.
CEO

DOUG HARDIN, P.E.
Director of Engineering, Principal

TYLER MAIER, E.I.
Project Engineer

MICHAEL ALLISON, E.I.
Project Engineer

RUCHIN KHADKA, E.I.
Project Engineer

IAN MCCLURE, E.I.
Project Engineer

ANDREW BRION, E.I.
Project Engineer

SERVICES

STRUCTURAL SYSTEM EVALUATION
STRUCTURAL DESIGN & ANALYSIS
STRUCTURAL BIM/REVIT
VALUE ENGINEERING
CONSTRUCTION ADMINISTRATION