

# SIPs Take a New Design Studio to the Next Level



*By using SIPs, construction time was drastically reduced. The exterior walls were framed, sheathed and insulated in four days with four men.*

Based out of Phoenix, AZ, Ideation Design Group (IDG) is a creative design studio whose owners were looking for the long-term value of a super-insulated, high efficiency office building. Ideation's ownership was already well-aware of, and a proponent of Structural Insulated Panels (SIPs) and worked with Enercept to bring their vision for their new facilities to reality.

"The owners chose to build an all-SIP envelope and create a showplace that can also serve as an example for their clients as to what a highly efficient building can really accomplish," says Jon Wagar of Enercept. "While Ideation is open to building a wide variety of building types for their clients, they chose to use Enercept SIPs for their own business. That speaks volumes and really validates what we do! This building is a really cool and fun working environment. It's indicative of the kind of business Ideation is and of their company culture."

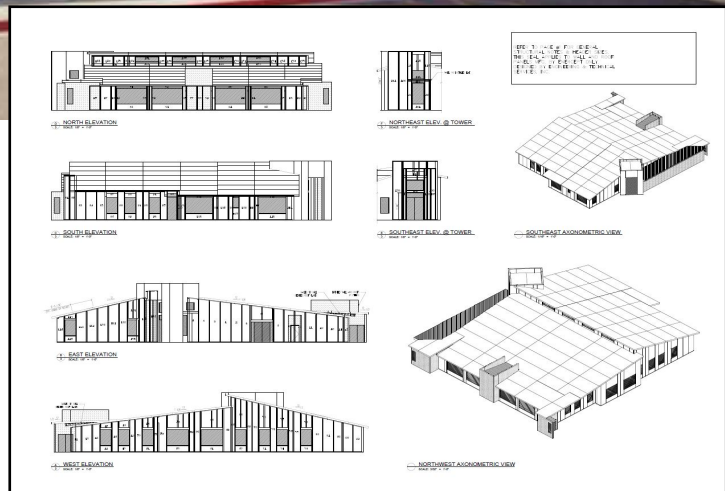
Aside from creating an incredibly tight envelope, the use of SIPs also

greatly reduced overall construction time on the project. The exterior walls were entirely framed, sheathed and insulated in only four days, with just a four-man crew and a forklift. Eight-inch thick SIP wall and roof panels with EPS (expanded polystyrene) foam cores and OSB (oriented strand board) skins were used on this project to achieve this superior performance.

The south-facing roof surface was designed to get the most from the sun with approximately 4,000 square feet of low-profile, surface mounted solar panels. In addition, 100 percent LED lighting was used in all fixtures and all appliances and fixtures are Energy

Star rated. All windows and doors are high-efficiency Solarban 90, Low-E Glass and the siding is OBC Projected Cork Stucco Alternative. The building was built to meet LEED Platinum Standard and the energy savings that have come from IDG's commitment to efficiency are remarkable.

"Our average bill should be about \$4,000 each month for a conventional building and AC system with no solar," says Carl Schaffer, Principal at Ideation Design Group. "But because of how we designed with SIPs, plus all of our other energy reducing elements and 163 kVA of solar, our bills have been zero to \$995 per month."



*Because of all its energy efficiency upgrades, the November 2016 electric utility bill was only \$168.00 for 142,330 cu. ft.*