

The MEPPI transformer plant serves as both a manufacturing facility and the company's North American nerve center.

MEPPI Transformer Plant, Memphis, Tenn.

Owner: Mitsubishi Electric Power Products Inc., Warrendale, Pa.

Architect/engineer/contractor: O'Neal Inc., Greenville, S.C.

Metal panel installer: SECO Architectural Systems, Inc., Snellville, Ga.



The facility showcases CENTRIA metal panels, including nearly 200,000 square feet of Versawall IMPs.

Power Producer

Metal panels provide a turnkey exterior solution with a contemporary aesthetic for a new high-voltage transformer plant.

BY HENRY BURKE

When Mitsubishi Electric Power Products decided to locate its new transformer factory in Memphis, Tenn., the company went big. In 2011, the Warrendale, Pa.-based subsidiary of Tokyo-based Mitsubishi announced it would build a \$200 million, 350,000-square-foot facility to serve as the headquarters of its heavy electrical equipment manufacturing in North America.

This world-class facility would need to be both industrial and commercial, with production and office space each included in the plan. It needed to support the manufacture of large power transformers for power plants and substations while also providing a functional and comfortable working environment for the front-office staff operating the company's North American nerve center.

To achieve all of this, Mitsubishi sought the help of O'Neal Inc., a large architectural, engineering, and construction (AEC) firm headquartered in Greenville, S.C. With the capacity to handle the design, engineering, and mechanical/electrical/plumbing (MEP) services on the project, O'Neal

stood out from its competition for this job.

"On this project, O'Neal wore all the hats," explains Joe Creighton, vice president of SECO Architectural Systems Inc., in Snellville, Ga. SECO is one of the Southeast's largest wall panel contractors and worked with O'Neal to furnish and install the extensive metal wall systems on the Mitsubishi project. "They filled the role of AEC. Oftentimes we deal only with the contractor, but on this job we dealt with all three."

Design was a top priority, and to achieve the crisp lines, sharp corners, and machined appearance called for in the facility's sleek exterior and interior design, O'Neal immediately looked to metal. The firm had worked with SECO in the past and had a high level of confidence in both the work the team does and in the metal product they utilize as one of the largest dealers for CENTRIA. So the choice to specify CENTRIA materials was an easy one for both SECO and O'Neal's architectural team.

According to Creighton, another reason O'Neal's team was comfortable with SECO was because they have their own field force, which allows them to self-perform their work. "We work closely with CENTRIA, so it was a natural fit to partner up with them to help engineer, detail, draw, and price the project. O'Neal knew what to expect from SECO's and CENTRIA's team long before the contracts were issued. From the start, they had a good idea where the dollars were and what the schedule entailed."

Nearly 400,000 square feet of CENTRIA panels were specified for the project, including almost 200,000 square feet of the company's Versawall* insulated metal panels (IMPs). The reliability of the product and the design and construction team's familiarity with its application and installation were invaluable on a project of this scope. "O'Neal could really worry about the rest of the project, knowing that the skin of the project, the enclosure of the project, was well handled by SECO and CENTRIA," Creighton says. "It ended up being a nice project for all involved."

That's not to say that it didn't require great effort from all parties. The teams at SECO and O'Neal spent about two years on the project and dealt with a tight timetable from the owner. "The schedule was challenging," Creighton admits. "Think about the time needed to install nearly half a million square feet of material. I wouldn't say meeting the schedule and the owner's demands were difficult, but it certainly was challenging, as we had to be multiple places at the same time with an equal amount of force. We're very proud of our field crews and site supervision. They met every challenge thrown at them."

Indeed, the team had to be out in force to ensure that all the necessary work was done in a relatively short amount of time. "There was a time when we probably had 30 guys on the job, putting up panels all over the place," Creighton recalls. "There was an exterior package, there was an interior package, and there was an architectural office component to the project. It was both a massive industrial project and high-end architectural project at the same time."

The new facility went into operation producing extra-high-voltage, shell-type power transformers in April 2013. "I know the owner is really happy with the project and so is O'Neal," Creighton says. "We had a really good owner in Mitsubishi and a really good customer in O'Neal. CENTRIA did everything they said they were going to do and we did everything we said we were going to do. I believe this was one of those great projects where early planning and ongoing proactive project management paid off in a big way."

Henry Burke lives in Chicago, where he writes about architecture and construction.





