

OVER 1-MILLION LIGHTWEIGHT BLOCK UTILIZED IN MISSOURI HOSPITAL

Over one million lightweight concrete block are being used to construct a new psychiatric hospital campus in Central Missouri. The concrete masonry units were manufactured by Midwest Block and Brick and utilize Arcosa Lightweight's Riverlite® produced in Erwinville, Louisiana.

he product is shipped by barge to three of Midwest's production facilities near St. Louis, Missouri. ARCOSA's Jeff Speck says the lightweight aggregate is perfect for the units being produced for this large scale project. "Lightweight aggregate is manufactured specifically for production of concrete masonry units," says Speck. "We grade the material to provide a consistent texture to the surface of the block so that when it's painted, it looks uniform across the face of the wall. You have much fewer of what I would call pockmarks or indentations where there was a gap in the grading of the aggregate."

When funds were allocated to replace the aging facility, designers originally considered building the secure structure out of modular, pre-cast concrete sections. But a coalition of concrete masonry experts worked together to demonstrate to the project's architects how concrete block could improve several aspects of the updated complex. "Quite honestly, masonry was just a really good fit for them," says Mark Wilhelms, Vice President of Architectural Sales for Midwest Block and Brick. "Their initial thought was that they would use pre-cast, but as they were trying to develop their design, masonry proved to be a better solution for them. Everything came together with the contractors, the suppliers and the technical design team. We just clicked and everything worked out really well early on in that project."

Wilhelms says the use of lightweight aggregate also benefits the masonry producer. "Lightweight is a good product for us especially in this case," says Wilhelms, "We're shipping product about 120 miles to the site. We're able to put more block on the truck and lower unit cost to the site."

Around 1.1 million units are being placed in the walls that make up the new state-of-the-art treatment center. "From a labor standpoint, lightweight block are just easier for masons to work with," says Wilhelms. "The units are lighter and when they do need to modify them, they're easier to cut. They are just a more user-friendly product all the way around."

Speck points to various mason productivity studies conducted over the years that have proven lightweight's benefits to masons and project owners. "Study after study has shown that the lighter the unit the more units a mason can place in a given period of time. On a project of this scope, the number of days required to construct all the masonry walls is reduced drastically by going to a lightweight block."

Speck notes that Midwest Block is one of the most innovative concrete

masonry manufacturers in the country. "They've been proponents of lightweight block for a very long time," says Speck. "They understand the value of lightweight block in the marketplace and how it helps keep concrete masonry competitive against other wall systems." The updated Fulton State Hospital campus is expected to open in the Summer of 2019.



