









Lifting and installation

# Low-Cost And High-Quality Prefabrication

OMNI LOUISVILLE

When Brasfield & Gorrie was hired to build the newest cultural icon in downtown Louisville, we knew from experience that using off-site prefabrication would help maximize the project's value while minimizing its cost; it was simply a matter of determining where prefabrication would best benefit this project. We identified the bathrooms as an area where prefabrication would save valuable time and money while satisfying the owner's requirement for an all-around luxury experience. We worked closely with Oldcastle SurePods to produce and install the high-end bathroom pods.

#### VDC/BIM

During the design phase, Brasfield & Gorrie and Oldcastle SurePods modeled the pods in Revit to determine each one's exact size, including its wrap and support pallet. Doing so allowed us to plan how the pods would be loaded onto each floor by determining the exact pathway that would accommodate the size. Using Revit's clash-detection feature also ensured that the pods fit into the existing structure without incident, and that the route the pods took upon delivery avoided interfering with other tasks taking place in the same location. Doing so streamlined installation and saved time by allowing surrounding tasks to continue unhindered.

### **CHALLENGES**

Brasfield & Gorrie knew the importance of planning how the pods would be staged and delivered. In particular, the pods had to be inserted into the structure before the exterior facade was installed and in a way that wouldn't obstruct interior rough-in. Having encountered challenges with pod placement before, we developed a plan of attack to make sure the pods were installed accurately, allowing rough-in to proceed guickly and further minimizing rework. This was crucial to maintaining the project timeline, as the construction team faced an aggressive project schedule with reduced manpower. Time that might have been lost to a lengthy installation or rework was better applied to continuing and completing other tasks, speeding the project along its timeline.

### BENEFITS

On a typical project, 80 percent of hotel guestroom punch list items are located in bathrooms; the Omni Louisville pods averaged less than 2 percent.

- The use of a smaller crew reduced the likelihood of injuries as well as the amount of on-site debris.
- Project teams carefully coordinated their tasks, resulting in an efficient load/unload process that took less than 10 minutes per pod.
- The project team took advantage of night hours to load pods into the building. This allowed greater ease of delivery to the site and meant tower cranes could be used for structural activities during the day.
- The combined efforts of the project and design teams streamlined construction, resulting in the project being completed a full month early.
- After being installed with great care, the pods satisfied the expected result with a higher quality of finish than that of field-built bathrooms.

## CONCLUSION

Brasfield & Gorrie uses prefabrication to provide our owners with low-cost, high-quality options that fit into their vision. We determine which components of your project are the most cost-effective to prefabricate, then execute the assembly, delivery, and installation of those components in a way that maximizes the cost and schedule benefits. Whether for patient headwalls at a remote hospital or luxury bathrooms at a \$270 million hotel, Brasfield & Gorrie has the prefabrication expertise to deliver the best result to meet your needs.