



Photos courtesy of Methodist University Hospital
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ARCHITECT

HKS, Inc.
Dallas, Texas

OWNER

Methodist Le Bonheur Healthcare
Cordova, Tennessee

GENERAL CONTRACTOR

Turner Construction Company
Memphis, Tennessee

CONTRACTOR/INSTALLER

Physical Security LLC
Bessemer, Alabama

ENGINEERING DESIGN

Bernhard
Memphis, Tennessee

KAWNEER PRODUCTS

2500 PG Wall® Curtain Wall System
2500 UT Unitwall® System
1600 Wall System®1 Curtain Wall
1600 Wall System®2 Curtain Wall
1600 Wall System®5 Curtain Wall (Screw Spline Type A)
350 Medium Stile Doors
Versoleil® SunShade – Outtrigger System for Curtain Wall
GLASSvent® Windows
Paint – UC109880 Permafluor™ Bone White and
UC51595XL PPG DURANAR® XL Medium Gray

Shorb Tower at Methodist University Hospital

MEMPHIS, TENNESSEE

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PROJECT PROFILE
HEALTHCARE

ELEVATING HEALTHCARE IN MEMPHIS

To improve patient care in Memphis and neighboring communities, Methodist University Hospital undertook a massive project by adding Shorb Tower, a state-of-the-art 450,000-square-foot patient tower, and renovating an additional 95,000 square feet. Defined by its innovative technologies and modern capabilities, the nine-story tower provided the necessary consolidation of departments and services for easy access and increased convenience for patients and families. Designed by HKS, Inc., the tower was constructed on top of an existing emergency department and is home to 18 operating rooms – three of which are dedicated to transplants – larger patient rooms, a café, a reflection room and two gardens, including a roof patio.

DESIGN HIGHLIGHTS

A dynamic glass façade on the tower gives the building a modernized aesthetic. The tower's main wall features varying shades of blue-tinted glass placed in a pattern across 40 feet, creating a jigsaw puzzle appearance. The building incorporates five different colors of spandrel glass and several types of clear glass. For optimal occupant comfort, enhanced views to the outdoors and increased thermal performance, Shorb Tower also features View Smart Windows, which include an electrically charged glass that can change from clear to tinted with the flip of a switch. Physical Security LLC and Kawneer worked closely to develop and deliver unitized and stick curtain wall systems to address the different glazed components as well as meet design and performance requirements.

CHALLENGES

- The expansion design required a vertical tower built above an existing structure. A tight timeline and compact construction site posed a challenge with fabrication and installation.
- Occupant comfort was of the utmost importance to the hospital as it impacts healing and productivity.
- View Smart Windows have an electrical component that needed to be incorporated into the façade systems.

SOLUTIONS

- By switching a majority of the project from stick-built curtain wall to pre-glaze systems featuring Kawneer's 2500 UT Unitwall® System, the team was able to address design requirements as well as the controllability of shop fabrication, which allowed for accelerated installation while minimizing disruption to the existing emergency department.
- In addition to the 2500 UT Unitwall® System, which delivers superior thermal performance, a range of Kawneer's curtain wall systems maximized natural light. View Smart Window glass and Versoleil® SunShades provided energy savings and reduced heat gain, while GLASSvent® Windows helped provide controllable natural ventilation and air circulation.
- To install the View Smart Windows, Physical Security and Kawneer worked closely with the general contractor and an electrical engineer to run wiring through the mullions in both the unitized and stick-built curtain wall systems.

In addressing the project on their website, Turner Construction Company noted, "The team utilized the Integrated Project Delivery method, in which each member of the project team, along with Methodist Leadership and facility end-users, worked together, collaboratively, from the beginning until completion. This method, paired with the use of 3D modeling and target-value design, saved the project time and resources, and ensured that creative design and construction methods were considered from day one."¹

Shorb Tower at Methodist University Hospital in Memphis is the embodiment of advanced patient care through technology and design, underscoring the hospital's commitment to elevating healthcare for patients and delivering advanced care for the next century.

¹"Methodist University Hospital Expansion," Methodist University Hospital Expansion | Turner Construction Company, accessed June 5, 2020, <https://www.turnerconstruction.com/experience/project/9AD9/methodist-university-hospital-expansion>.

