

Methodist Hospital

Roof Consulting, Repair/Replacement Design, and Davit System Design
Houston, Texas



CLIENT

The Methodist Hospital

CHALLENGE

Nine high-rise buildings were experiencing ongoing roof leakage. In many cases, the roofs had reached the point where maintenance/repair was no longer practical. The owner needed a comprehensive evaluation of the existing roof systems and a prioritized repair/replacement plan that could be implemented over a five-year period. The plan needed to incorporate the installation of permanent davits and dedicated roof anchorages for securing facade access equipment.



STRUCTURE

The Methodist Hospital occupies multiple buildings within the Texas Medical Center, one of the largest medical districts in the world. The existing roofing systems on nine high-rise buildings in the center included built-up asphalt, modified bitumen, and EPDM over cast-in-place concrete decks. The buildings varied in age from approximately twenty to sixty years.

SOLUTION

WJE inventoried and assessed the existing roofs to determine the roof types and the current condition of each individual system. Using this information, we worked with hospital staff to develop a prioritized five-year roofing master plan and the associated repair, replacement, and maintenance cost estimates. We also analyzed the existing roof structures and developed davit and dedicated roof anchorage systems for each building. Drawings and specifications were then prepared to address immediate needs. We provided observation services as this work was implemented, including field proof load testing on the newly installed davits and dedicated anchorages.

