

Arizona Best of 2005

Mercy Gilbert Medical Center

Steel Project



The 360,000-sq.-ft. four-story medical facility is situated on a 60-acre site and includes an emergency room, imaging center, operating rooms, an intensive care unit, patient beds, outpatient services, meeting facility and administration area. Also included are patient care facilities with departments that include post-partum and surgical areas, and a 10,547-sq.-ft. central plant.

The structural system includes elevated floors with structural concrete over a composite metal deck supported by composite steel beams and composite steel girders.

The roof includes a metal deck over steel joists and steel beams supported by steel girders and the vertical support system has steel columns. The lateral system includes steel-braced frames. However, two separate options were used when it was found that each was the most cost-effective for different portions of the building, through comparative analysis of different systems and strategies to ascertain the most efficient method.

"This was an extremely complex steel project," judges agreed.



Owner: Catholic Healthcare West

Architect: Moon Mayoras Architect

Steel Design & Build: eSteel Design-Build Group

Engineers: Chavez-Grievies Consulting Engineers; Dibble & Associates; Syska & Hennessy, Inc.

Steel Fabricator: AMFAB Inc.

Major Subcontractors: University Mechanical & Engineering Contractors, Inc.; Delta Diversified; Alliance Fire Protection; MKB Construction; Ricor Construction; Ace Asphalt; Progressive Roofing