

Legacy Stadium

Designed by Ryan Knox of Idibri and
Installed by Covenant Communications



Two years in the making, the Katy Independent School District's \$72-million Legacy Stadium serves more than 77,000 students from the suburban Houston district's eight high schools. The 12,000-seat, major-league caliber sports venue hosts football, soccer and lacrosse games, as well as marching band competitions, concerts and community events. Idibri senior consultant Ryan Knox considered centering sound to be the mega-stadium project's biggest challenge, and chose Fulcrum Acoustic loudspeakers as an integral part of his sound system solution.

Challenges

- Precise directional control was essential to keep sound from overlapping with the existing 9,800-seat Rhodes Stadium next door on the school's sports campus
- Extremely durable weather-resistant loudspeakers were required to combat Texas heat and extreme weather

Solution

"To keep sound within the bowl, I designed a distributed system with 18 weatherized Fulcrum GX1295-WR loudspeakers pole mounted at the top of the seating areas, and a half dozen more mounted through portals in the canopy above seating on one side of the field," explains Knox. "Nine Fulcrum AH96-WR coaxial horns were also pole mounted above the stands, with six more integrated in the press box canopy. The AH96's low frequency extension to below 80 Hz helped to simplify the system's design by eliminating the need for separate subwoofers."

Knox specified Fulcrum Acoustic's extremely durable, weather-resistant WR Series loudspeakers to withstand Texas' challenging environment. In an early test, Fulcrum's WR speakers weathered their first storm when all Legacy Stadium's Week 1 high school football games were postponed due to Hurricane Harvey.

HKS Architects brought Idibri to the project after collaborating with them on a number of other stadiums. HKS provided Legacy Stadium's sleek, contemporary design, and AV systems integrator Covenant Communications installed its high-coverage, distributed audio system.

Project Details

Location

Katy, Texas

Category

Sports (high school football stadium)

Project Type

12,000-seat outdoor stadium

Fulcrum Products

(24) GX1295-WR 12 inch Coaxial Loudspeakers, 90° x 45°

(15) AH96-WR High Efficiency Full-Range Coaxial Horns, 90° x 60°

Supporting Products

QSC CXD4.3Q-NA Network Amplifiers

QSC Q-SYS Core 110f Audio-Processing

JBL Ceiling and Monitor Speakers

Yamaha QL1 32-Channel Digital Mixer

