

# **Sports and Entertainment Venues**



## Sports and Entertainment Venues

The modern sports and entertainment venue is a complex building that demands a high level of engineering expertise. High-profile facilities typically require a column-free, clear-span roof of over 300 feet. Creative and experienced structural design is a prerequisite for an economical, easily built superstructure. And since these types of structures are more susceptible to water infiltration due to the complexity of integrated moving parts, a building envelope commissioning review of movable roof and wall systems during the design process is paramount to achieving a functional and operationally efficient building enclosure system.

#### **Structural Engineering**

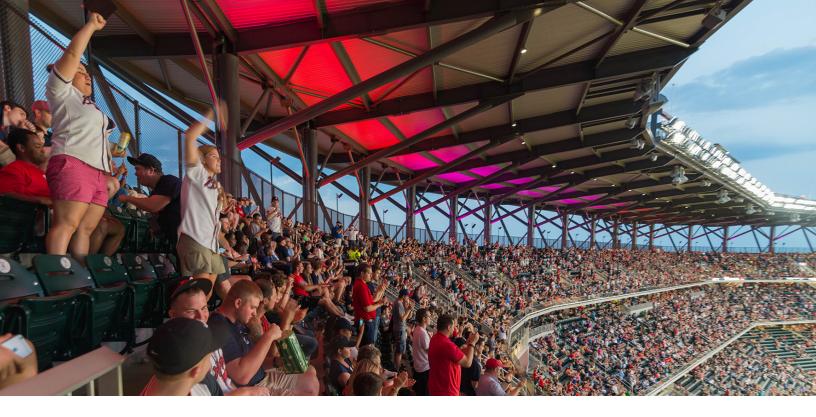
Stadiums stand in the public eye like public cathedrals that must serve as a memorable backdrop for sporting events, conventions, and concerts. Walter P Moore provides a comprehensive set of structural engineering services to support the design, construction, and improvement of sports and entertainment venues. We work with the world's leading architects, developers, owners, and builders to deliver structures that have been recognized as among the world's best. As engineering leaders throughout each project phase, we guide the structural development process toward the most appropriate solutions.

- → New Building Design
- → Building Expansions
- → Adaptive Reuse

#### **Facade Engineering**

No other building system has more impact on the overall look, character, and performance of a building than its façade. Meet the need for a well-informed and objective facade advisory, Walter P Moore. We offer a world-class team of technical experts who understand every aspect of facade engineering. Leveraging our expertise in structural engineering and building enclosure, our facade engineering team supports architects and designers with best-in-class advice on the design, detailing, and procurement of today's modern facade systems.

- → Facade System Conceptualization/Optimization
- → Integrated Design of Facade and Structure
- → BIM Modeling of Complex Facades



#### **Enclosure Diagnostics**

Driven by increased demand for indoor comfort, quality, and energy conservation, today's enclosure systems are becoming more sophisticated, intelligent, and integral within the overall building design. Walter P Moore uses building performance modeling software to evaluate sports and entertainment venue designs, compare the energy and performance of alternates, and provide design suggestions to improve performance.

- → Third-Party Design Review
- → Roofing and Waterproofing Consulting
- → Building Enclosure Commissioning
- → Thermodynamic Modeling (Energy, Thermal, Condensation)
- Building Physics Modeling
  (Solar, Daylighting, Shading, Glare Analysis)

#### Assessments/Maintenance

The best way to ensure a long-life for your billion-dollar venue is to maintain it. Walter P Moore has extensive knowledge of sports and entertainment structure life-cycles, including a vast knowledge base of deterioration mechanisms that negatively impact a venue's value. Our diagnostic experts address sources of distresses and provide you with both short- and long-term outlooks for repairs and maintenance. This proactive strategy can result in improved functionality, superior customer service, reduced operating expenses, and increased revenue.

- → Facility Condition Assessments
- → Structural Assessments
- → Challenging Access Services



### Who We Are

Walter P Moore is an international company of engineers, architects, innovators, and creative people who solve some of the world's most complex structural and infrastructure challenges. Providing structural, diagnostics, civil, traffic, parking, transportation, enclosure, and construction engineering services, we design solutions that are cost- and resource-efficient, forward-thinking, and help support and shape communities worldwide. Founded in 1931 and headquartered in Houston, Texas, Walter P Moore's 600+ professionals work across 20 U.S. offices and five international locations.