

What It Takes to Build and Inspect a Football Stadium – Beyond 100 Yards

On game day, it's all about what happens across 100 yards of turf. But long before kickoff, work is taking place throughout the stadium, from the ground beneath the field to the structure surrounding it.

A football stadium brings together large seating areas, expansive playing fields, and complex structural and architectural elements. Work can begin before construction with geotechnical engineering and continue through construction materials testing, special inspections, building enclosure services, and other work as the stadium takes shape. Intertek-PSI's work with sports facilities can span pre-construction, construction, operations, and maintenance.

Testing and inspection can extend from foundations, concrete, and structural steel to roofing and waterproofing systems, fire protection systems, and, eventually, the playing surface itself.

Before There Is a Field

Geotechnical engineering can begin well before construction, providing information about soil and subsurface conditions used in foundation design and construction.

"Building a football stadium involves testing and inspection from the ground below the field to the structure, building systems, and playing surface."

As work moves into earthwork and foundations, testing and inspection can include soils, concrete, and other construction materials. As the structure takes shape, structural steel, reinforcing steel, masonry, roofing and other materials may also require testing or inspection.

Intertek-PSI's construction materials testing capabilities include soils and foundations, concrete, structural components, metals, pavements, masonry, roofing and specialty testing. For a football stadium, that work can span the site, from the field and seating areas to surrounding structures and facilities.

Up Through the Stadium

Construction materials are only part of the work. Stadium projects can also involve testing, inspection, and consulting for building systems throughout the facility.

Intertek's sports facility services can include building systems consulting for acoustics, fire, AV, roofing systems and enclosures, as well as building enclosure commissioning, mock-up and field testing.

Roofing and waterproofing, fire protection, enclosures, and other systems can require work at different points during construction.

Intertek at Football Facilities

Intertek-PSI teams have worked on football stadiums and related facilities, with projects ranging from major stadium renovations to team training facilities.

- Hard Rock Stadium | Miami Gardens, Florida: During a major modernization, Intertek-PSI's Miami team provided construction materials testing and special inspections associated with applied fireproofing, penetration firestopping, waterproofing, roofing membranes, traffic coatings, water repellents, joint sealants, and expansion control systems.
- Camping World Stadium | Orlando, Florida: Intertek-PSI's Orlando team provided testing and inspection services as part of the stadium's modernization, including work on the existing facility as it underwent updates and new construction.
- Miami Dolphins Training Facility | Miami Gardens, Florida: Intertek-PSI provided construction materials testing and special inspection services during construction of the facility, which includes a full-size indoor practice field, two full-size outdoor practice fields, an athletic facility and a field house.
- Raymond James Stadium | Tampa, Florida: Raymond James Stadium is among the major sports facility projects supported by Intertek-PSI's Tampa team.

And Then There Are the 100 Yards

The playing surface brings its own testing requirements. Athletic turf is subjected to repeated player movement, traffic, weather and regular use throughout a season.

Depending on the surface and its intended application, testing can evaluate traction, impact response, surface hardness, wear, drainage and weathering. Surface materials, system components and installation can also influence how the turf performs over time.

Testing the playing surface adds another part to the work taking place across a football facility

A Lot Happens Before Kickoff

Fans aren't thinking about subsurface conditions, concrete testing, structural steel inspections, waterproofing or turf performance when they take their seats. They're there for the game.

But before that first kickoff, testing, inspection and engineering work has taken place across many parts of the facility.

The game is played across 100 yards. The work behind those 100 yards extends throughout the stadium.

Click here to learn more about Intertek's services for sports facilities and stadiums.

Click here to learn more about Intertek's sports surfaces testing and certification.

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1.800.WORLDLAB

icenter@intertek.com

intertek.com/building

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