ASTM International (originally known as the American Society for Testing and Materials) is one of the largest voluntary standards development organizations in the world. It has become a trusted source for technical standards for materials, products, systems and services, and it guides design, manufacturing and trade in the global economy.

The US based Sports Turf Managers Association (STMA), with the support of its charitable foundation, SAFE, has compiled the ASTM standards recommended for athletic field facilities into this convenient, at-a-glance collection. STMA’s goal is to provide its members with information to help them produce safe, playable surfaces to maximize the performance of the field and protect athletes. These standards address important safety issues as well as testing and proper construction of athletic field surfaces.

**The STMA Collection of ASTM Standards for Athletic Fields**

**STANDARD TEST METHODS FOR ATHLETIC FIELD ROOTZONES**

**Particle Size Analysis and Sand Shape Grading of Golf Course Putting Green and Sports Field Rootzone Mixes**

This test method outlines laboratory procedures for analyzing the sands used in sand-based rootzones. These techniques allow individuals to determine not only sand, silt, and clay content, but the percentages of each sand fraction (i.e. coarse sand, medium sand, fine sand, etc.). 

*Designation: F1632-03*

**Organic Matter Content of Putting Green and Sports Turf Rootzone Mixes**

This test method outlines laboratory procedures for determining the amount of organic matter in a sports turf rootzone mix.

*Designation: F1647-02a*

**Saturated Hydraulic Conductivity, Water Retention, Porosity and Bulk Density of Putting Green and Sports Turf Rootzones**

This test method outlines laboratory procedures for determining the physical properties of soils used to construct sports turf rootzones.

*Designation: F1815-06*
STANDARD GUIDES FOR ATHLETIC FIELD CONSTRUCTION AND MAINTENANCE

Quality Control Procedures During the Construction of Natural Playing Surfaces
This proposed standard outlines proper practices to be used in the sampling and quality control testing of rootzone materials used during the construction process. The standard covers gravel, sand, organic amendments, and finish-blended rootzone mixes. Designation: WK490

Construction of High Performance Sand-Based Rootzones for Sports Fields
This standard is to athletic fields what the USGA specifications are to golf course putting greens. The standard outlines techniques that are appropriate for the construction of sand-based sports turf rootzones. The standard provides guidance for the selection of materials including soil, sand, gravel, and peat, as well as an overview of appropriate design and construction practices. Designation: F2396-04

Construction of Skinned Areas on Baseball and Softball Fields
This standard covers techniques for constructing and maintaining skinned areas on baseball and softball fields. The standard provides guidance for selecting suitable construction materials (soil, sand, etc.). Construction techniques are outlined along with minimum maintenance procedures, such as scarification, irrigation, and the use of conditioners. Designation: F2107-07

Construction and Maintenance of Warning Track Areas on Sports Fields
This standard covers techniques for constructing and maintaining warning track areas on sports fields. The standard provides guidance for selecting suitable construction materials, as well as a list of suitable construction and maintenance techniques like edging, dragging, and rolling. Synthetic warning tracks are not covered in this standard. Designation: F2270-04

Construction and Maintenance of Grass Tennis Courts
This standard outlines techniques that are appropriate for the construction and maintenance of grass tennis courts. The standard provides guidance for the selection of soil materials and turfgrass species to be used. Designation: F1953-99(2003)

Maintaining Cool Season Turfgrasses on Athletic Fields
This standard outlines the minimum requirements for maintaining cool-season turfgrass athletic fields. Practices covered include mowing, fertilization, irrigation, core cultivation, and pest management. Designation: F2060-00(2005)

Maintaining Warm Season Turfgrasses on Athletic Fields
This standard outlines the minimum requirements for maintain-
ing warm-season turfgrass athletic fields. Practices covered include mowing, fertilization, irrigation, core cultivation, winter overseeding, and pest management. *Designation: F2269-03*

**STANDARD TEST METHOD FOR PLAYING SURFACES**
*Measuring Shock-Attenuation Characteristics of Natural Playing Surface Systems Using Lightweight Portable Apparatus*
This test method outlines procedures for measuring the hardness of athletic field playing surfaces with devices like the Clegg Soil Impact Tester. *Designation: F1702-96(2002)e1*

**STANDARD GUIDES FOR SOCCER GOALS**
*Safety and Performance Specifications for Soccer Goals*
This standard outlines safety and performance requirements for soccer goals. Properties such as strength, stability, and weight are discussed. *Designation: F2056-00*

*Safer Use of Movable Soccer Goals*
This standard discusses how to install, use, and store soccer goals of various sizes. *Designation: F1938-98(2004)*

**STANDARD GUIDES FOR FENCES**
*Fences on Ballfields and Other Sports Facilities*
This standard outlines minimum safety requirements for various types of fences used on sports fields. Appropriate installation practices are discussed as well. *Designation: F2000-06*

*Construction of Chain-Link Tennis Court Fence*
This standard covers proper techniques for constructing chain-link fencing around tennis courts. Various types of chain-link fabric and framework materials are discussed, in addition to appropriate installation procedures. *Designation: F969-07*

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**Purchasing ASTM Standards**
To purchase the ASTM standards, please visit the ASTM website (www.astm.org). By clicking on “Standards” in the left hand column, you can then enter the designation code listed above to view a summary and purchase the standard guides.