

**Best Practices in Flooring**  
» Athletic Facility Design

## Specifying Sports Flooring for Design and Function

The balancing act between an ergonomically designed athletic facility and one with eye-catching style is something architects know well. The goal is to produce spaces that simultaneously serve a purpose, yet showcase architectural art.

Courts in high-end gymnasiums and arenas are the perfect examples of the need to think about both functionality and aesthetics. Not only should the floor meet certain performance attributes to support competitive play, it is also the shining centerpiece of the room with various style options that make the space unique.

So, where should you start the process of meeting client expectations and choosing the right materials? Here are four important considerations for sports floor specification:

### Define the Floor's Purpose

A comprehensive understanding of how a sports floor will be used is required to guide decision-making. This consideration includes athletic and non-athletic activities and informs decisions regarding both functionality and style.

Certain performance attributes are ideal for specific sports or even practice versus competition. Additionally, when it comes to sports floor design,

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athletic directors, coaches and physical education instructors tend to express differing opinions concerning which game lines are painted on the finished product.

Facilities, such as arenas, will call for a portable sports floor system that assembles and breaks down easily while still providing the necessary performance requirements with a strong subfloor system designed.

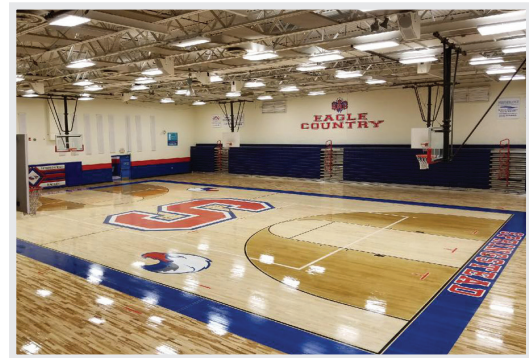
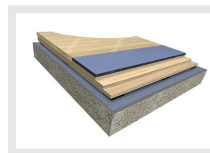
Facilities with multipurpose gyms, where the space is used for sports, as well as assemblies and food service, could benefit from a durable synthetic sports floor option.

For athletic facility owners looking to maximize open spaces, maple sports courts can be combined with urethane pads and pour sports flooring along the perimeter to create an area for exercise equipment or an indoor track.



### MAXIMIZE SPACES

To maximize open spaces, urethane pad and pour sports flooring along the perimeter create an area for exercise equipment or an indoor track.



### PRODUCT PERFORMANCE

First grade, second grade and third grade maple refer to the natural color variations in the hardwood, with third grade having the most color variation.



### Determine Athletes' Needs

The level of athlete and ages of the intended users are also crucial considerations for specification. Athletes competing at the college or professional level will have higher performance expectations than physical education instructors. Yet, your clients shouldn't skimp on features such as shock absorption and uniformity as these factors are important for the comfort and safety of young athletes, too.

For hardwood sports floors, the performance standards to reference are ASTM F2772, Maple Flooring Manufacturers Association's Performance and Uniformity Rating (MRMA PUR) standards, EN-14904 and DIN 18032 Part 2. These standards test characteristics such as shock absorption, vertical and area deflection, surface friction, and more. A reliable sports floor manufacturer can answer all your questions on testing and certification.

### Find Versatile Design Options

A high-end facility could have elaborate design requests, and schools of all sizes will want to add personality to their gyms. In addition to paint, the maple grade you choose to use in a hardwood sports floor system will impact appearance. Maple grades are aesthetic and have no impact on performance. First grade, second grade, and third grade maple refer to the natural color variations in the hardwood, with third grade having the most color variation. First grade maple is often specified for high-end projects as the lighter color makes game lines more visible.

Pad and pour synthetic sports floor systems offer various color combinations. Artwork and other

finishing touches are easy to add and can be resurfaced and repainted if designs are modernized.

### Consider Life and Longevity

From installation to eventual removal, the client will want to know what they can expect from a sports floor system.

Hardwood maple courts can last between 65 to 85 years if properly maintained. The facility owner will want to monitor the indoor environment to sustain proper temperature and humidity levels. A hardwood court also requires daily dust-mopping and a screen and recoat yearly.

Pad and pour polyurethane sports floor systems have a life cycle of 15 to 30 years; they can be resurfaced and require normal daily maintenance. Non-porous pad and pour synthetic floors are seamless, providing a more hygienic solution and easy cleanup.

When considering the health of building occupants, indoor air quality (IAQ) should be on top of your list. When you see the FloorScore seal, you'll know that the product has undergone rigorous testing to ensure the floor does not emit potentially harmful volatile organic compounds (VOCs) and pollutants.

Sports flooring is just one of many pieces to contemplate as you specify building materials and work with clients toward project completion. It's also a decision that has lasting impacts on the end users' comfort, safety and health. Take these specifications seriously, and work with partners who will identify the right solutions.