

Indoor Hardwood Sport Surfacing – More To It than Meets the Eye.

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Many people around the world marvel at the beauty of a new hardwood sports floor, but few realize how much knowledge and engineering are required to provide visual beauty, to deliver performance and safety for the athletes, and to give the owner a long lasting quality surface. The type of hardwood, its color and grade, proper sanding, painting of game lines, borders, logos, and finishing all contribute towards the visual beauty. Performance and safety are achieved through a myriad of subfloor construction methods and an endless supply of cushioning options. Life cycle or longevity of the floor can exceed the life of a building providing the interior of the building has proper environmental controls and simple maintenance recommendations are followed. The species or type of hardwood can also affect the longevity as well as the performance and aesthetics.

What type of hardwood and why?

When it comes to hardwood sport surfaces, the preferred surface all over the world is hard maple. In the USA, the finest northern hard maple grows north of the 38th parallel where the longer growing season produces tight-grained, hard white maple boards. Most of the maple flooring for indoor sport surfaces in the U.S. comes from mills that are members of the Maple Flooring Manufacturers Association (MFMA) who has established stringent quality assurance requirements. In fact, most NBA, WNBA, ABA, and NCAA teams play on maple floors produced by members of the MFMA. Other softer wood species that can be used are beech, birch, white oak, red oak and ash.

Of the species mentioned, maple is the hardest wood with the tightest grain structure and lightest appearance. These characteristics are desirable for a number of reasons. Maple's tight grain and light appearance provide a stunning look when sealed, painted and finished. The lighter characteristics give superb light reflection and easy game line recognition, and the hard dense surface is durable and long lasting. Although, the installation time for building the floor, sanding and finishing on site may take more time than prefinished engineered wood flooring or synthetic flooring, the lining, logos and graphics can be customized to your specifications.

Performance and safety.

A book could be written about the many different designs of sports floor subfloor systems. There are categories of sport floors that can be described as floating floors, fixed resilient floors, fixed floors and portable floors. All have a place and a purpose for achieving levels of performance and athlete safety.

There are hundreds, if not thousands, of design options, and your research of reputable sport floor companies is important. Some common accepted ways for measuring the performance of a sports floor system would be to look at standards and test numbers such as EN 14904, ASTM shock absorption and ball bounce tests, and DIN 18032 Part 2--all tested and certified by independent testing laboratories. Other important considerations are FIBA Certification, World Squash Accreditation (WSF) and MFMA Certified.

Return on Investment.

The life cycle cost of a sport floor system can vary greatly based on the integrity of the construction and materials used, the facility's commitment to maintaining the building's environment (in terms of humidity and temperature controls) and the manufacturer's recommended maintenance procedures. The MFMA (www.maplefloor.org) offers a large library of pertinent information that can help you better understand hardwood (maple) characteristics and establish proper maintenance procedures. Floor owners should also follow the advice of their installing contractors and the manufacturers of the products they select.

Sustainability.

Today, it seems everyone claims to be "green" and good stewards of the environment. If it is important that you buy environmentally friendly and sustainable products, do your homework. Sustainability claims can be confusing. Maple from MFMA mills is a renewable resource that comes from well managed forests. In fact, the timber stands in the USA have more maple trees now than any time since records were kept. That's an amazing testimony to sustainable forest management when you consider that U.S. mills have been producing maple flooring steadily for over 100 years.

The "carbon footprint" of the company that produces your floor is another important and measurable way to verify a company's commitment to sustainability.

Action Floor Systems' SCORES criteria (which stands for sustainable construction of renewable engineered surfaces) is another method for documenting sustainability initiatives. Other ways to measure and verify sustainability would be to compare a company's claims with the principles described in the World Resource Institute's Greenhouse Gas Protocol, ISO 14064-1:2006 methodology and GHG Protocol standards.

Conclusion.

Beauty, performance, player well-being and longevity are all achievable when choosing a sports floor, and you should not settle for less. Do your research and follow the advice of experts that have gained your confidence with straight talk and common sense. The result will be a beautiful and functional hardwood sports floor that will generate praise and compliments from athletes, coaches, fans, facility managers and your entire community.

Tom Abendroth is president of Action Floor Systems, LLC, a company that specializes in high-performance sports floors constructed of hard maple timber grown exclusively in northern Wisconsin and Upper Michigan. Action Floor Systems manufactures a wide variety of hardwood sports floor systems to accommodate any application. Action headquarters and wood floor manufacturing plant are in Mercer, Wisconsin. For more information, visit www.actionfloors.com or contact Action Floor Systems LLC, 4781 North U.S. Highway 51, Mercer, WI 54547-9708 USA, 800.746.3512, Fax: 715.476.3585, e-mail: info@actionfloors.com

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