



State-of-the-Art Sports Floor for Columbia University Fencing

Fencing, practiced for thousands of years as a form of military training, evolved into a beloved sport around the 15th century. For over a millennium, few trailblazing innovations to the playing surface have occurred, until now.

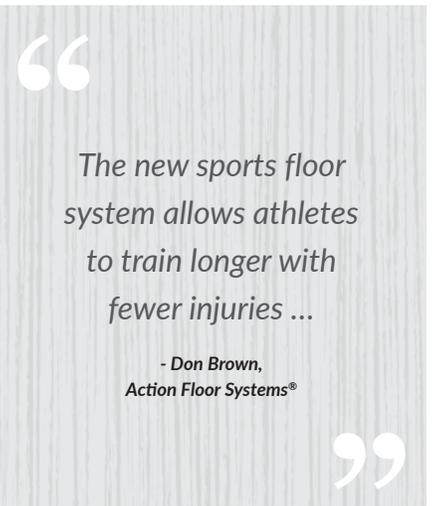
The Challenge

Olympic and competitive fencers have been crying out for years over the unforgiving properties of traditional fencing floors. Fencing strips are typically placed on top of hard flooring such as concrete or marble, increasing the likelihood of injuries to the lower back, knees, and hips. That's why Radical Fencing stepped in and invented a better portable sports floor for fencing. It provides beneficial shock absorption that protects athletes and allows teams to take the floor with them if practice spaces change. What makes it truly game-changing, however, is how the design conceals wires and cables that are necessary for the sport but cumbersome to replace and are an obvious safety hazard.

Radical Fencing is a creator of fencing products, from fencing gear to components and, most recently, their portable resilient floating floor system. And, Action Floor Systems is proud to help pioneer the first floating fencing floor at Columbia University alongside the innovators and owner at Radical Fencing.

The Columbia Lions fencing team first discovered and tested the modular floor design during the 2015 Ivy League Championships. After Radical Fencing brought in one of its strips for testing, Columbia Lions Head Coach Michael Aufrichtig liked what he saw and began to plan for its large-scale implementation thereafter.

Radical Fencing needed a manufacturer that could carry out the construction. They knew Action Floors would be a solid resource and collaborator due to our experience with sports floor systems and portable designs.



CASE STUDY: Columbia University



The Process

The need for a sports floor with shock absorption was one of the primary motivators driving this innovation. “When you look at older generations of fencers, including Olympic athletes, many are out of the sport because of knee, hip, and ankle problems,” Radical Fencing Owner Phillippe Bennett shares. “Those are problems that have evolved over the course of their playing career – many years of playing on hard surfaces.”

To address the issue, Action Floors suggested a system designed for resilience, combining a custom Action NitroPanel® system with top-of-the-line subflooring. “The new sports floor system allows athletes to train longer with fewer injuries due to the careful engineering of shock absorbing properties and supportive padding,” says Action Floors Technical Director Don Brown.

In addition to shock absorbency, the new floor has a flush surface and no exposed cabling or wiring. All conductive metal fencing panels are positioned even with the surrounding wood non-fencing surface, with wires and cables positioned underneath the floor system.

All these features were unheard of in the fencing world until now. Normally the wires and cables, required for scoring systems, typically move with the fencer and are positioned along the top of the surface. Plus, the metal fencing strip is normally positioned on top of the non-fencing floor, requiring athletes to step up and down off the fencing strip to avoid tripping over the wires and cables. Since installation at Columbia University over a year ago, the fencing team has not had a broken wire.

In addition to safety concerns, the team needed a portable floor since they leased the space. With a customized Action NitroPanel® portable sports floor system, the flooring can be installed or taken down at any time.

The Results

Before the renovation, the fencing room included eight strips, none of which were Olympic size. Now, the room has nine total strips, six of which are regulation length, and all of which are regulation width.

As for the collaboration between Radical Fencing and Action Floors, Bennett praises the partnership. “Action Floors has been there with us from the beginning, and we appreciate the fact that they’re an American company,” shared Bennett.

Action Floors was honored to work alongside the innovators at Radical Fencing on this project, and the fencing team at Columbia University is beyond pleased with their new fencing surface.

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”

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