

DANCE FLOORS VS SPORTS FLOORS

It is a common assumption that a well-designed sports floor will suit the needs of dancers, but there are two intrinsic differences: the construction of the **sprung subfloor** and **the performance surface**.

THE SPRUNG SUBFLOOR

Along with some shock absorption, most indoor sports require a high degree of energy return and a requirement for adequate ball bounce. Evidently, dancers have scant interest in ball bounce, but they are vitally focused in a different way on a combination of shock absorption and energy return. There are no hard and fast rules, but it is clear that female dancers tend towards shock absorption – without any ‘sponginess’ – whereas the men appreciate a dance floor with more “spring” for their often more energetic choreography. Indoor sports people can tolerate a stiffer floor as they usually have cushioned footwear – a luxury barred to dancers.



THE PERFORMANCE SURFACE

Here the main criterion for dancers is slip-resistance, disconcertingly dubbed “traction” by many in the dance community. Although sports people share the abhorrence of the risk of slipping and falling, they again are generally protected by their footwear from floors that might be considered a slip hazard for dancers, for example some hard-lacquered wood floors. Lower limb problems such as tendinitis, ‘shin splints’, knee pain and ankle strain can all be attributed to incorrectly specified sprung floors and can take several weeks of physical therapy and recovery time to correct.

A WORD ABOUT WOOD FINISHES

Historically the choice was between a wooden floor and linoleum, until the advent of purpose developed vinyl floors during the 1970s. Although it may be tempting to opt for a wood floor for purely aesthetic reasons, or a commercial grade vinyl for reasons of cost, today there are many options specifically designed for dance. A well-installed hardwood sprung floor, properly finished and maintained, does look attractive, and specifically for ballroom dance is a desirable option.

Softwood floors are rarely an option because even with a lacquered surface they are too readily susceptible to damage, gouging and splintering.

With correct preparation and sealing, softwood floors can indeed provide a very acceptable subfloor on which to install a Harlequin dance surface. As a practical and commercial measure, Harlequin sprung floors are normally finished with FG plywood or MDF prior to the application of a Harlequin dance floor surface.

Unfinished pine floors are still in use in some traditional Russian dance schools, notably the famous Vaganova Academy in St. Petersburg, but as finances allow, Harlequin dance floors are progressively being installed to cover them.

SEMI-SPRUNG OR SPRUNG?

The desire for a floor with “give” was accelerated by the fashion in ballroom dancing before and after the Second World War. These floors often used coil or leaf springs and, as genuinely sprung floors were far too bouncy for ballet or contemporary artistic dance, the need to provide semi-sprung floors – particularly for ballet – led to considerable modifications.

In the last fifty years metal springs have largely given way to resilient blocks or pads made of rubbers or polymers. With modern floor construction methods the “trampoline” effect of the early sprung floors has been suppressed and these modern floors for both sports and dance are generally referred to as semi-sprung. Nevertheless, the distinction has been forgotten and for convenience we loosely refer to both types of floor as sprung floors.

POINT & AREA ELASTICITY

These terms are defined in the German standard DIN 18032 Part II, relating to sports surfaces. A point-elastic floor shows deflection or “give” only at the point of contact and an area-elastic floor flexes over a wider area. The specification limits the spread of this deflection to avoid disturbance to neighboring sports performers. It has been noted by dancers that some of the criteria of DIN 18032 are somewhat irrelevant to them.