

## Information Sheet

### Benefits of Sprung Synthetic Finishes Over Sprung Timber Finishes

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#### Introduction

Typically in the past the usual finish for a sports floor was solid timber.

With advances in technology and material science the sports market has seen a move towards engineered timber and a range of synthetic surfaces.

DYNAMIK offer a full range of sports floor finishes including timber, sport linoleum, sport vinyl, seamless polyurethane and sport rubber and therefore have no bias to any one particular sports floor finish. What we have seen however is an ever increasing trend towards synthetic surfaces, laid over our Komfort Plus and Flexi-Beam Plus sports floor systems, and we expect this to continue.

We explain the rationale in further detail below.

#### Sports Performance and Synthetic Surfaces

You should be aware that there is absolutely no compromise in sports performance between a sprung sports floor finished in timber or a synthetic surface such as Sports Linoleum.

You should also note that sprung sports systems such as our Komfort Plus or Flexi-Beam Plus when finished with a synthetic surface still incorporate the performance benefits of timber in their sub-construction.

It is also interesting to note that the majority of European countries install synthetic surfaces such as solid linoleum or vinyl onto a sprung wooden undercarriage in most of their sports facilities.

If you watch top level sporting events including the Olympics you will find most sports are played on a sprung synthetic surface – the exception is Basketball where in Elite Basketball Arenas a timber finish is required to meet FIBA 1 playing standards. We work very closely with Basketball England and are their official flooring supplier accordingly, we have installed timber surfaces to a number of their sporting arenas where the primary focus is Basketball.

#### Multi-sport – Multi-use

Sport specific sports halls are rare in an increasingly competitive market. A typical sports hall must now combine sport usage and community use together with a range of non-sporting activities.

Sport usage can range from badminton to basketball or spin class to trampoline use. This range of sporting activities imposes high demands on a sports floor. It must perform for the badminton player but must be able to resist damage from trampolines and spinning bikes which are moved across the floor.

Community use can involve local social functions whereby the floor needs to cope with spillages and stiletto heels.

The hall may then be used by the school for a range of non-sporting activities, such as dining, exams, parent teacher evenings or prom nights to name but a few. A synthetic finish has the ability to deal with these non-sporting usage whilst still providing the required sports performance.

The need to protect the sport finish with carpet tiles or alternative surface protection is purely optional with a sprung synthetic surface whereas this is not the case with a sprung timber surface – floor protection must be used in order to protect the timber from indentation and scratches as well as maintaining its warranty.

#### Life Cycle Costs

In terms of life cycle costs there is a significant additional cost in maintaining a sprung timber floor compared to a sprung synthetic floor.

We estimate that over a 25 year period for an engineered timber board this can be in the range of £75 to £100/m<sup>2</sup> and for a solid timber board in the range of £125 to £150/m<sup>2</sup>.

The above covers both periodic re-lacquers and the required full sanding and sealing which is a requirement of all companies client warranty obligations. The above maintenance is not required with a sprung synthetic floor finish applied to the DYNAMIK Komfort Plus or Flexi-Beam Plus sprung systems.

## Underfloor Heating

Underfloor heating causes more movement in the floor system due to the proximity of the heat source. Given the increased dimensional stability engineered hardwood systems are better suited for underfloor heating.

## Sports Performance

Solid timber floors only offer elasticity from the sub construction as the surface boards are very ridged, with a DYNAMIK engineered hardwood floor both the surface and the sub construction combine to give high levels of performance and comfort.

## Life Cycle Costs

A DYNAMIK engineered hardwood floor will benefit from much lower costs in terms of day to day maintenance given the absence of washer gaps and a less frequent need for a sand and reseed due to the factory applied UV-cured lacquer.

The cost of maintaining a typical 600m<sup>2</sup> solid timber floor to the manufacturer's instructions is in the region of £72,000 over a 25 year period, the cost for a comparable engineered hardwood floor is significantly less, being in the region of £44,000.

## Conclusion

Wood floors have evolved such that if your preference is for a hardwood finish then a DYNAMIK engineered Oak hardwood floor should be the obvious choice – superior sports performance and lower life cycle costs come as standard.



Over 16,000m<sup>2</sup> of seamless engineered hardwood sports flooring, in Oak, has been installed at the American Sports Centre in Anaheim, California, making it the largest sports hall in the world.

*\*Product specifications may be subject to change without notice, please contact DYNAMIK for the latest product information*