

SQUASH COURT FLOORING

Solid vs Engineered
Squash Court Floors



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ENGINEERED VS SOLID HARDWOOD SQUASH COURT FLOORS

Risk of delamination if engineered boards are used unsealed.
(The majority of UK squash clubs prefer unsealed courts)

ENGINEERED FLOORS



ENGINEERED SQUASH FLOOR

- Failed unsealed engineered floor showing delamination of top layer. Product cannot work with normal squash court humidity levels
- Manufacturer will only guarantee the floor if it is lacquered. Most players prefer unsealed floors for superior grip and safety



ENGINEERED BOARD CONSTRUCTION

- Reduced longevity and strength
- Limited to two sandings; approx. one quarter of the life span of a solid hardwood squash court floor
- Less strength than solid board, further reduced by sanding

SOLID HARDWOOD SQUASH COURTS FLOORS



22MM SOLID HARDWOOD SQUASH FLOORING

- Superior strength and impact resistance
- Long lifespan. Can be sanded between eight and ten times
- Solid wood- no layers that can de laminate
- Guaranteed for use unsealed



JUNCKERS 22MM SYLVASQUASH UNSEALED SOLID BEECH FLOORING

- WSF and squash England approved
- Installed by Junckers Approved Contractors

INSTABILITY OF ENGINEERED FLOORS- CONFIRMED BY THE MANUFACTURER!

Manufacturers of engineered squash court floors stipulate that the floor must be lacquered otherwise they will not guarantee it due to risk of delamination and splitting. This is because unsealed engineered floors cannot tolerate the normal humidity levels in a squash court. There is direct evidence that these floors are prone to delamination because of their inherent instability. Squash players at all levels generally prefer courts to be unsealed for their superior grip and safety.

THE MYTH SURROUNDING THE STABILITY OF ENGINEERED WOOD FLOORBOARDS

Surprisingly engineered floor manufacturers rely upon the myth that their floors are more stable than solid hardwood floors. This has arisen because of the perceived similarity to plywood- which is generally accepted as being a stable material. **However engineered floors are not like plywood** and so do not behave in the same way.

Plywood is made from layers of similar types of wood that are of the same thickness. This makes a stable sheet material because every layer behaves the same. An engineered board is made from different types of wood, in layers of different thicknesses. These layers behave differently and do not stabilise one another. Therefore an engineered floor will not have the same stability as plywood. Bonding a 3mm or 6mm layer of hardwood to the top of a piece of plywood – as some manufacturers do, does not work! The result is that the boards are prone to splitting and delamination. Engineered floors were developed solely to make a cheaper floor, but manufacturers will use creative sales arguments to distract customers from the reduction in quality.

Look at how a piece of plywood is made up, and compare it with a typical engineered floorboard...



Plywood; made from layers of the same thickness using similar types of wood to produce a stable material.



Typical Engineered floorboard; different types of timber with different movement characteristics in layers of different thicknesses. Board cannot be considered stable compared with plywood.

LACQUERED VS UNSEALED SQUASH FLOORS- PLAYER PREFERENCES AND SAFETY

Almost every squash court floor in the UK will be unsealed because of the slip resistance and safety this provides. Unsealed squash court floors are the first recommendation of the squash regulatory bodies; England Squash and the World Squash Federation.

STRENGTH

Junckers Solid Beech SylvaSquash flooring has greater strength and impact resistance than engineered floors- verified by independent testing. A Junckers SylvaSquash floor is stronger after two sandings than an engineered floor that has never been sanded, see table on next page.



PROOF POINT

Test results for breaking load and loss of stiffness for solid and engineered floor boards.

| MAXIMUM LOAD CAPACITY USING A 25MM WIDE STEEL BAR | | |
|---|---------------------------|-------------------------------|
| | 22mm Junckers solid Beech | 23mm x 139mm Engineered Board |
| Unsanded | 25.75kN | 16.6kN |
| 1 sanding | 22.89kN | 14.97kN |
| 2 sandings | 19.36kN | 13.58kN |

Results show significantly higher strength of the 22mm Junckers solid board compared with engineered.

| LOSS IN STIFFNESS | | |
|-------------------|---------------------------|-------------------------------|
| | 22mm Junckers solid Beech | 23mm x 139mm Engineered Board |
| Unsanded | | |
| 1 Sanding | -2% | -23% |
| 2 Sandings | -15% | -30% |

Some loss of stiffness is expected when a wooden floor is sanded. The loss of stiffness with the engineered board is dramatic. This raises a question for clients if an engineered sports floor will meet the ball bounce, deflection and shock absorption criteria under EN 14904 if it has been sanded. **Source: Independently tested by Exova/ TRADA**



LIFE CYCLE COSTS AND THE ENVIRONMENT

The annual cost of owning and maintaining an engineered squash court floor is more than double the cost of a Junckers solid beech SylvaSquash floor.

| SQUASH COURT FLOORING COST COMPARISON FOR 20 YEAR PERIOD | | | |
|--|------------|--|-----------------------------|
| Junckers SylvaSquash Solid Beech | | Number of times floor sanded, lined and sealed | Total cost for 20 year term |
| Installation cost | £ 5,600.00 | Installed once within 20 year period | £ 5,600.00 |
| Cost of sanding and line marking | £250.00 | Carried out every 3 years | 6.70 £1,675.00 |
| Sub Total | | | £7,275.00 |
| Annual cost of Junckers floor | | | £363.75 |

| Engineered Wood Squash Court Floor | | Number of times floor sanded, lined and sealed in lifetime | Total cost for 20 year term |
|---|------------|--|-----------------------------|
| Installation cost | £ 5,200.00 | Installed every 9 years | £ 11,440.00 |
| Cost of sanding, sealing and line marking | £600.00 | Carried out every 3 years | 6.70 £4,020.00 |
| Sub Total | | | £15,460.00 |
| Annual cost of Engineered floor | | | £773.00 |

A Junckers solid hardwood floor will last approximately four times longer than an engineered one and this makes a solid hardwood floor one of the longest lasting and most durable low life cycle cost floors available.

The cost of sanding is higher for an engineered floor because it needs to be treated with two coats of lacquer; something that is not necessary with a solid hardwood floor. By choosing a floor that lasts longer you are reducing the energy and raw materials needed for manufacture of replacement floors.

A Junckers SylvaSquash floor is made from carbon neutral fully sustainable FSC® and PEFC™ certified timber. As the floorboards are made from relatively large sections of wood, compared with an engineered product, Junckers floorboards contain fewer components and require significantly less glue for manufacture.



The mark of responsible forestry

Ask Junckers for FSC® certified products



JUNCKERS WARRANTY AND APPROVED CONTRACTORS

Junckers Approved Contractors will offer you a solid Beech SylvaSquash floor 22mm thick. By choosing Junckers 22mm solid Beech SylvaSquash floor you will have a Squash England and World Squash Federation approved floor that can be sanded between eight and ten times during its life and is guaranteed for use as an unsealed floor for its entire lifetime.

Some of the larger squash court package providers offer engineered wood floors but they may not always make this clear, so it is wise to check the specification you are being offered. Many of these suppliers are based in Mainland Europe but will supply through agents in the UK.



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