

The Right Squash Court for the Right Use - A Strategic Guide

Selecting the right squash court involves far more than aesthetics—it requires a comprehensive and informed approach that considers playing characteristics, safety, durability, acoustic performance, and operational practicality. Most importantly, squash courts are the single most critical factor in determining the long-term success of any squash facility—whether in terms of player satisfaction, operational viability, or return on investment.

Squash court walls serve a much greater purpose than merely defining the playing area. They influence the soundscape, the pace of play, the feel of the ball, and the long-term structural and performance quality of the facility. As a result, the type and specification of squash courts have a direct and measurable impact on their suitability for different use cases.

Key Insights

- **There is no one-size-fits-all solution.** The playing characteristics and performance quality of squash courts vary greatly depending on their construction and materials.
- **Choosing the wrong court can jeopardize the entire facility's business model.** For instance, installing a glass show court in a beginner-focused club is like driving a Ferrari in city traffic—impressive, but ultimately inefficient and unsuitable.
- **Design and construction must align with the facility's goals, user profiles, and operating concept.** This includes considerations for training, competition, recreational use, or events.
- **Demount ability is not exclusive to glass courts.** Many modern sand-filled systems are also demountable. If your facility leases its space or might relocate, evaluating mobile court systems early is essential.
- **Court type must be selected during the design development phase.** Different court types require specific substructures, wall spacing, and ventilation that affect overall building plans.
- **Current World Squash Federation (WSF) court specifications** define only minimum technical standards and omit critical factors such as acoustic behaviour, ball dynamics, and long-term durability.
- **Independent expert involvement is vital.** Informed decisions and early expert consultation can prevent expensive errors in design, procurement, and execution.

Key Considerations for Squash Court Selection

Court Type

	Details
Indoor	Ensures consistent playing conditions, controlled climate, and compatibility with most wall and floor types. This is the traditional and recommended setting for squash training, competition, and recreational play.
Outdoor	Demands advanced materials that withstand weather extremes, with additional engineering for sun, wind, and structural exposure. Best suited for public or promotional use, not for performance-level play.
Demountable	Includes glass show courts and sand-filled modular systems. Designed for mobility—ideal for events, leased spaces, or evolving venue concepts. Demountable glass courts are the pinnacle of the sport. As a temporary installations suitable for outdoor.

Wall Material

	Details
Sand-Filled	Most widely used modern wall type. Delivers strong acoustic dampening, uniform bounce, and high durability with minimal maintenance. Ideal for all player levels and suitable for both fixed and mobile installations.
Panel	Economical, low-maintenance alternative. Bounce is consistent, with little variation across the wall. Acoustic performance tends to be louder indoors. Attention is required in areas with high humidity levels.
Plaster	Traditional material now rarely used in new constructions due to labour-intensive installation and maintenance. Excellent acoustics and rebound, but fragile and not suitable for demountable solutions.
Glass	Provides high visibility and enhances the spectator's experience. The bounce characteristics differ noticeably due to the structural flexibility of the glass panels. It reflects and amplifies noise more than any other wall type.

Flooring

	Details
EN 14904 Compliance	Mandatory for safety and performance - ensures regulated grip, shock absorption, and ball behaviour.
Surface Texture	Must be coarse-sanded (max 50 grit) and sealed with squash-specific oils—never varnished. This combination ensures slip resistance and long-term performance.
Levelling Systems	Use substructures with integrated levelling to compensate for slab irregularities and ensure flawless playing surface.
Installation Timing	Floors should only be installed once temperature and humidity are stabilized within the building to prevent expansion or buckling.

Glass Walls

	Details
Safety Glass	12 mm tempered glass ensures compliance with impact and safety standards. Critical for both player protection and structural durability.
Fin-supported	Best for courts with viewing galleries. Requires additional depth behind the back wall to accommodate the supporting fins.
Frame-supported	More compact installation. Often used in clubs with limited space. Allows optional extensions above standard height for noise and heat control.
Maintenance	Annual inspection of mounting points, door alignment, and fixation anchors is essential to uphold safety and prevent failure under play load.

Climate Control

	Details
Temperature	Ideal range is 17–19°C. Court temperature directly influences ball bounce and player endurance.
Ventilation	Minimum of 4 full air exchanges per hour required to manage humidity and prevent condensation. Essential for wooden floor integrity.
HVAC Installation	Equipment must be recessed, impact-resistant, and located outside the playable area. Airflow must not disrupt play.

Lighting

	Details
Illumination Level	Maintain 500 lux evenly across the entire court. Avoid shadows and glare.
Lamp Type	Use high-efficiency LED fixtures for longevity and brightness. Must be impact-resistant and installed outside the playing zone.
Fixture Safety	Lighting must be protected by grills or recessed into the ceiling structure to prevent breakage.
Local Sourcing	Use regionally available systems to ensure quick maintenance and reduce downtime.

Sustainability

Aspect	Details
Material Certification	Prioritize FSC-certified woods and low-VOC coatings. Contributes to certifications like LEED or BREEAM.
Energy Efficiency	Optimize HVAC and lighting systems for long-term cost and environmental savings.
Adaptability	Design court layout and infrastructure to allow future retrofitting or upgrades (e.g., to LED, different wall types, or ventilation enhancements).

Conclusion

A squash court is not just a box with four walls and a floor. It is a precision-built athletic environment that must reflect the purpose and priorities of the facility in which it operates.

Selecting the right court type, materials, and systems ensures the facility delivers an optimal playing experience, minimizes long-term maintenance costs, and supports the strategic goals of the organization. Mistakes at this level can cause not just operational inefficiencies, but also significant financial and reputational damage.

By adhering to proven planning principles and involving qualified experts from the start, facility managers, architects, and investors can create squash courts that are future-proof, user-centric, and commercially successful. Whether for grassroots engagement or elite competition—getting the court right is the foundation of success.

SFN has published a series of detailed posts on different squash court categories, available at: www.squashfacilities.com/bestpractices/categories/courts