

SUB-BASE CONCRETE RECOMMENDATIONS

The following concrete recommendations are for informational purposes. OnCourt is not responsible for concrete design specifications or installation. Specific requirements for concrete design and installation should be confirmed by a local Professional Engineer and/or Licensed Contractor.

- Minimum thickness of 100 mm, a 150 x 150 mm turndownwith a continuous rebar may be used where slab will abut walls or pavements.
- Reinforcement Options: Welded Wire Fabric placed at 1/3 the depth of the concrete; continuous rebar at perimeter of slab min. 50 mm concrete cover for rebar.
- Medium broom finish.
- 4,000 PSI / 30Mpa at 28 days.
- 6 mm tooled radius edge or chamfered edge.
- Slope: 0.5%Min./1% Max.
- Flatness tolerance 5mm within any 3m radius.

- Control joints may be either tooled in "wet" concrete or sawcut within 18 hours of placement.
- Expansion joints shall be used to separate new concrete whenever it abuts new or existing concrete from curbs, walls and any other rigid pavements/ structures.
- Expansion joints shall be filled with pre-moulded joint filler, min. requirement ASTM D-175.
- All joints shall be sealed with a sealant resistant to both oil and fuel.
- Subgrade: Min. 150mm compacted subgrade 98% of max. density.



Joint Spacing:	
Slab Depth	Max Joint Spacing
100 mm	3000 mm
125 mm	3500 mm
150 mm	4500 mm



ALTERNATIVE SUB-STRUCTURES

In certain cases, concrete may not be the preferred or feasible option. Alternatives like asphalt or large-format paving slabs can be used, provided they meet key performance requirements. The most critical specification for any surface is flatness tolerance—the surface must be level within 5 mm over any 3-metre radius to ensure proper court performance and player safety.

Asphalt should be laid in two layers (base and finish) and fully compacted, while paving slabs must be laid on a stable, compacted base with joints tight and level to minimize movement. Although these alternatives may offer quicker installation or cost savings, long-term durability and court integrity should be carefully considered.