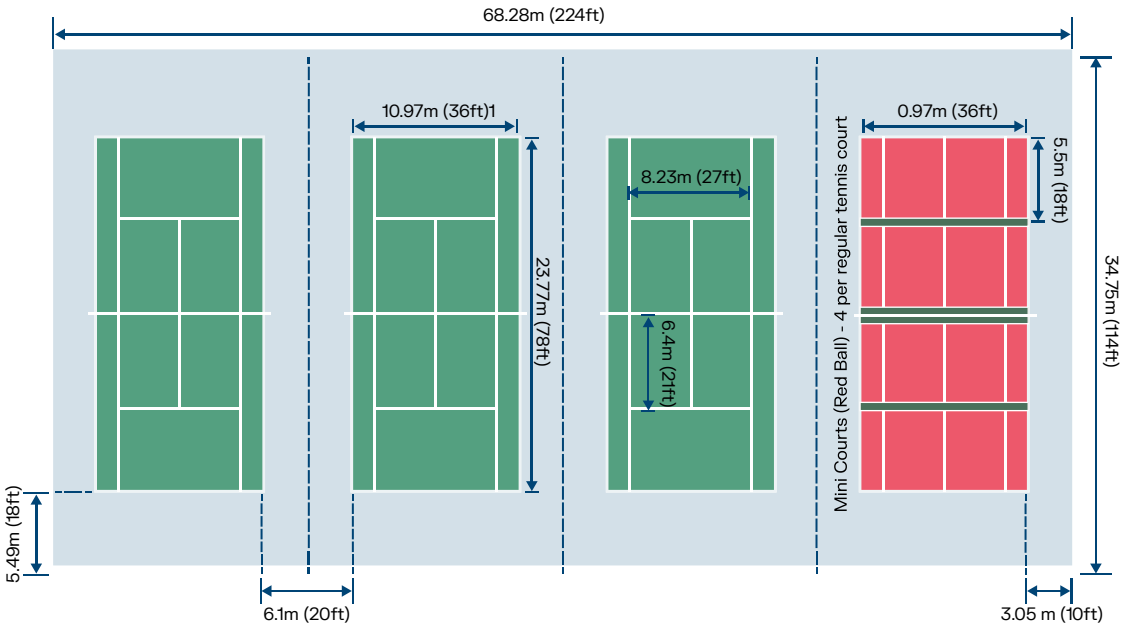
RESOURCE K

Tennis Court Design Standards

COURT LAYOUT AND DESIGN CONSIDERATIONS

Provided below is the typical layout for a four-court tennis facility. The dimensions used to generate the diagram below are based on the International Tennis Federation's recommended measurements for a recreational tennis facility. It is not unusual for recreational tennis facilities in Canada to leave a smaller amount of space between two courts to save additional land. The diagram also provides internationally accepted tennis court dimensions (36x78ft) and dimensions for mini courts (18x36ft) which are used to teach beginner tennis players.



When building a tennis facility, the following items need to be taken into consideration:

Tennis Court Surfaces	Hard (acrylic), clay, Har-Tru, concrete, asphalt
Indoor Lighting	LED, metal halide, high pressure sodium
Equipment	Nets, nets posts, court dividers, back-stop curtains
Considerations for a Seasonal Covered Court Facility	**Orientation of Tennis Courts:** to ensure the sun is never directly in the eyes of a tennis player, tennis courts for outdoor use must be constructed with a north-south orientation
	Fencing: to contain the ball within the playing area and provide security for players
	Outdoor Lights: Metal halide, high-pressure sodium, fluorescent, and tungsten halogen

DESIGN AND CONSTRUCTION MODELS

Winter tennis requires a covered and heated playing area, which can be a temporary structure installed over outdoor public tennis courts or a permanent building to accommodate courts. There are a number of benefits and drawbacks of both building options. A brief comparative summary of both facility options is presented in the following table.

COMPARISON OF PERMANENT AND AIR SUPPORTED TENNIS CENTERS		
Consideration	**Permanent Structure***	**Air Supported Structure**
Capital Cost	A permanent building is the more expensive option to construct with capital costs dependent on facility size, design specifications and construction quality	An air-supported structure is the least expensive alternative with capital costs dependent on facility size, single or dual liner, type of lighting and equipment selection
Operating Cost	Staff and utility costs represent the most significant operating expenses over a permanent building's 12-month operating season	Utility costs are relatively more expensive per hour of facility use, however, facility operating costs apply to a shorter year-round court season (5-6 months)
Seasonal Implications	These are popular winter venues, but are difficult to program and challenging to encourage utilization in the summer months	Offers flexibility as the courts can be covered in the winter and be converted to outdoor courts in the summer
Life Cycle	Similar to other types of community recreation buildings, the life of a year-round tennis court facility would likely be between 25 to 35 years	The dome fabric has a life expectancy of 15 to 20 years – depending on UV protection and the operator's inflation and take down procedures
Consumer Opinions	Patrons generally enjoy the environment and the program flexibility of a permanent tennis court facility	Consumers like the ability to play outdoors in the summertime. Some suggest that the air quality and temperature in a dome is superior to a traditional year-round court environment
Operating Considerations	Requires aggressive programming to keep occupied during the non-peak summer season	Often cannot be used as a "general gathering place" due to code issues, thereby limiting certain program alternatives

**Permanent structures can be built using various materials such as steel, brick, concrete etc.*