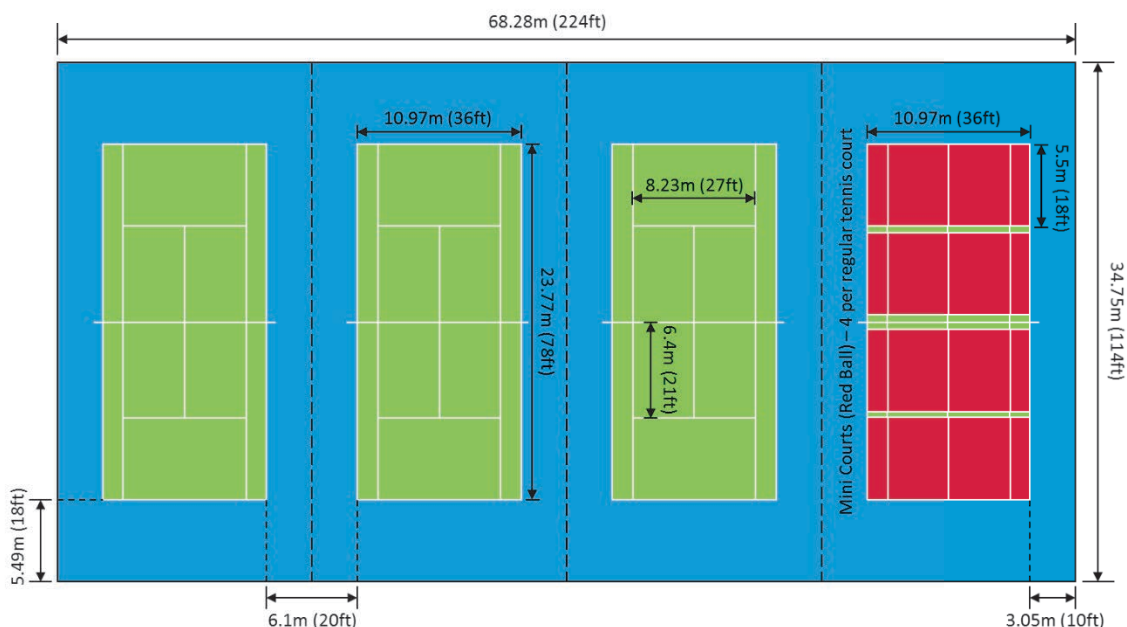


RESOURCE K

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, net 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 drawback 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 covered court season – 5-6 months |
| Seasonal Implications | These are popular winter venues but 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 covered court tennis facility would likely be between 25 to 35 years | The bubble 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 permanent tennis court facility | Consumers like the ability to play outdoors in the summertime Some suggest that the air quality and temperature in a bubble is superior to a traditional covered 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.