



## Section 1.04 PERIPHERAL EQUIPMENT

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### TENNIS NETS

A regulation doubles tennis net is 42' long by 31/4' high. A regulation singles net is 33' long and 31/4' high. Both sizes use a 1 3/4" mesh.

Netting in current use is almost totally synthetic twine. The "treated" cottons and hemp of former times have given way to nylon and polyethylene. Nylons still require dyes and "weather treating". Twines are twisted or braided and breaking strengths of approximately 150 or 285lbs. test respectively. Black is the traditional colour, although dark green is also available.

The traditional headband of a tennis net is white and made of heavy-duty, rot-mildew resistant material. For longer wear many manufacturers are coating the headband with various materials, usually vinyl. Plastic or reinforced plastic headbands are also in use but tend to wear more quickly under severe climate or usage conditions.

Headbands are fitted with headline cables. The vast majority of cables today are made of galvanized steel and are plastic coated to reduce wear to the inside of the headband fabric. Cables are normally 5' longer than the net (i.e., a 42' net has 47' cable). The cables are fitted with end loops at each end. Cable strength should be measured by "test" or "breaking strain" rather than by thickness. A steel cable today will withstand approximately a 2,000 to 3,600 lbs. test.

Among the distinguishing features of better quality nets are side and bottom protective tapes on the net edging; heavy-duty or double headbands; stitching and steel headline loop clips; and wood or fibreglass dowels inserted at the end of the net body.

The best way to obtain a suitable net is to compare in detail the specifications of various nets (headband type and weight, steel cable coating and breaking strength, netting type and the breaking strain, other features). In general, the small additional cost of a proper net installation will more than make up for the inconvenience resulting from a net failure.

In areas where there are freeze thaw cycles, nets should be removed from the net posts before any freezing takes place. When water goes down a crack next to a net post and freezes the net cable it tends to pull the posts in as the frost lifts the post foundation.

### NET POSTS AND TIGHTENING DEVICE

Net posts are commonly manufactured of steel or aluminum pipe with a 2 7/8" or 3" O.D. round or square cross-section weighing not less than 5.79 lbs. per lineal foot. The Rules of Tennis specify that the height of the net shall be three feet six inches (3'6") at the net post and the **centre** of the posts three feet (3') from the outer edge of the sideline. The posts shall be a maximum of



six inches(6") in diameter (or square). Posts should be forty-two feet (42') apart centre-to-centre for a singles court. Posts are often set into sleeves which extend three feet(3') into a concrete footing. The footing should be a minimum of 24" in diameter (or square) by 42" deep. Foundations for net posts shall be flush with the surface of the court.

While it is not strictly in conformance with the Rules of Tennis, it is not uncommon for net posts to be 42 feet apart in the clear in order to accommodate nets which are 42 feet long. Net posts should not extend more than one inch(1") above the net cable to avoid possible interference with balls hit from outside the sidelines.

Net posts must be equipped with a tightening device, preferably within the post itself or having minimum projection outside the post, to prevent a potential hazard to the player. Where net posts have protruding handles, the net cable can be adjusted so that the handle extends downward, parallel with the net post, while the net is at the proper height. Caution: Lever-type net tightening devices are no longer being manufactured. Due to a number of injuries resulting from such tighteners, replacement with a reel or ratchet-type net tightener (with removable handle) is recommended.

## **MAINTENANCE EQUIPMENT**

All courts require maintenance and thus specialized equipment. Obviously porous surfaces such as har-tru or clay require substantially more maintenance and equipment than non-porous surfaces (hard).

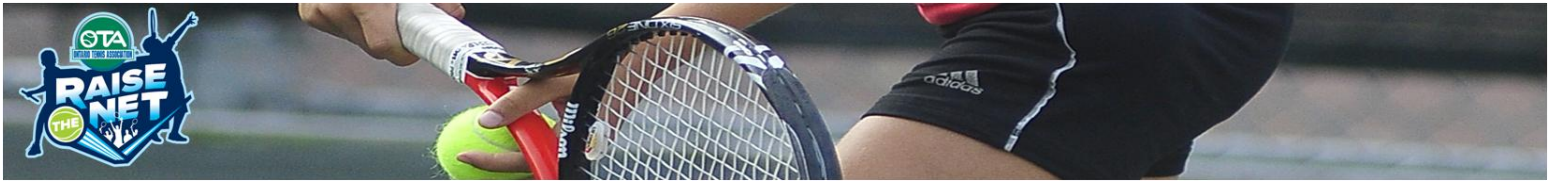
**Porous Surfaces** generally require the following pieces of equipment.

**Rollers** - frequent rolling keeps the surface intact and the court level. Either 400 to 600 pound hand rollers or 1000 pound motor driven rollers should be used.

**Drag Brushes** - courts should be dragged before rolling or whenever the playing surface has been scuffed up. Good drag brushes have two handles and a brush which is six feet wide.

**Brooms** - two types of brooms are frequently needed. An 18" hard bristle push broom for smoothing areas which have already been rolled and a conventional household broom for sweeping lines. Dedicated line sweepers can also be obtained for the latter purpose.

**Non-Porous** courts also require some maintenance although these needs are very much reduced. For most community clubs this equipment is limited to court drying equipment (such as a rol-dri) and soft bristle push brooms to occasionally clean accumulated dirt and debris off the playing surface.



## **PRACTICE BOARDS**

Long a standard at tennis clubs, practice boards serve a number of functions and we would recommend that any club which can accommodate it should consider installing one.

Practice Boards are typically made of concrete blocks, wood or fibreglass. At one extreme, concrete is the most expensive to install but also the most durable and the least noisy. At the other extreme, wood is the least expensive to install but also the least durable and most noisy. Fibreglass has characteristics of expense, durability and noise which are between those of concrete and wood.

We would recommend that backboards be 10' - 12' high and 24' wide. The club should consider installing screen at the sides and top to minimize the chasing of stray balls.

Finally, if the backboard is being installed on a regular tennis court we would recommend that it be placed on the side and not the end. This will minimize balls bouncing off the backboard and onto the court of play when the court is being used for a regular game.