

Basketball Goals & Sporting Equipment

## Volleyball Court Dimensions

### PLAYING AREA

The playing court measures 59' x 29'.6".

### CENTER LINE

The axis of the center line divides the court into two team courts measuring 29'.6" x 29'.6" each.

### LINES

All lines on the court are 2" wide.

### BOUNDARY LINES

The boundary lines are as follows: Two sidelines and two end lines mark the playing court. All boundary lines are drawn inside the dimensions of the playing area.

### ATTACK LINES

Attack lines are drawn in each team court so that the edge of the attack line farthest from the center line is 9'.10" from the axis of the center line. Extensions of the attack lines outside the court shall be marked with five 6" lines spaced 8" apart to a total length of 70" (national competition).

### AREA AROUND THE AREA (FREE ZONE)

The free zone surrounds the court with a recommended 6'.6" wide area.

### CEILING HEIGHT

The playing area should be free from any obstructions to a height of 23' from the playing surface.

Source of Information: USA Volleyball Rule Book

1.1.1, 1.1.2, 1.3.1, 1.3.2, 1.3.3, 1.3.4

### TEMPORARY VOLLEYBALL COURTS

Temporary courts are very easily set up using a portable outdoor grass court. A portable court will just need dead-man anchors, like 2 foot long 2x4's, well buried (use a shovel) and another piece of wood to keep the poles from sinking into the sand. The information is not intended for use as architectural and/or engineering drawings or calculations. Your basic needs are:

2,600 cubic feet of #57 gravel 10.25/ton (110 ton)

5,200 cubic feet of sand (washed) 7.85/ton (205 ton)

2 rolls of 250' perforated drainage pipe, four - 3 meter PVC sections and connectors

Ideally the court should be situated with the net running east-west, so the morning and evening sun is not facing directly into the eyes of one team. The dirt dug out of the earth should be piled up around the court in a horseshoe fashion, leaving one of the four court sides open for proper drainage. This earth pile can be made into an incline that allows for elevated spectator viewing, even piling only one or two sides.



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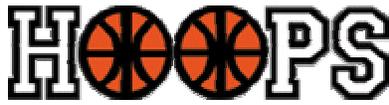
Drainage of the court under the sand must be considered, both by grading the earth properly and even installing a surface below the sand to promote drainage. Installing leaching pipe on the standard leach slant (14 degrees), is strongly recommended for a good permanent court. Perforated drainage pipe can be laid in a serpentine fashion (see court diagram) with one end capped and the other leading to the drainage ditch/point. The drainage point should lead away from the court at the lowest point, taking care to be aware of the natural surrounding slope so you do not trap water with your inclined viewing sides.

The court should be excavated to a meter depth, plus create the afore-mentioned drainage ditch. Place a first layer of about 30 cm of #57 gravel (or similar) over the drainage pipe. Then place a porous cover such as plastic landscaping mesh or some other artificial, small-hole mesh, over the gravel to prevent the sand from washing through. Soil with good drainage and no rocks can have the sand laid down without mesh or leaching pipes.

If you're serious about making a good court, you've got to invest in good sand. Taking sand from beaches is illegal, so one group found a city street where the sand was blowing on and helped them clean up weekly until they accumulated enough. Others have found river sand of excellent court quality. A mid-west program trucked in sand from a sand dune left by a prehistoric glacier. If you must buy sand, get washed masonry sand, or check the samples for beach-like feel. Do not use anything coarser or you will regret it, but also stay away from very fine grains, as they can compact into a type of mud when wet. What you want is the cleanest sand you can buy; check it out by throwing your choices and seeing how much is dirt and how much is sand. Some sand is very dirty and unsuitable for a court. (Dirty sand compacts after a couple good rains and makes for a solid jumping platform.) The minimum recommended depth is 50 cm. The sand boundary should be a minimum of 15 meters by 24 meters, so you will have a 3 meter sand perimeter around the actual court. For professional competition, there needs to be 4 m on the sides / 5 m behind the end-lines. The general area should be clear of any obstructions for 3-4 meters on all sides of the court. You should pad any item that would seem to be a hazard for hustling volleyball players who pursue the ball more often off the court, than on, given the nature of the game. The suggested boundary between the sand and surrounding surface should be soft, like rubber expansion joint material. Railroad ties and other wood containment boundaries increase the chance of injury should a diving player go all the way to the sand's edge.

Poles for standards can be either wood or pipe. The minimum metal pole thickness is 4" diameter schedule 40 galvanized steel pipe while 8 inch diameter round treated wood poles are also recommended. USA Volleyball does NOT recommend square poles, due to the corners. In all cases, padding the poles is strongly encouraged. Should the standard not have equal sides, the narrower side should be the net anchor side (facing the court). Standards should be 3 meters above the court's sand surface and imbedded a meter into the ground using a concrete footing, unless the soil is solid, in which case packing in and washing in the soil and letting it dry should suffice. These should be placed 1 meter from the boundary of the court; any less and there will not be room for the full net ( which is 10 meters wide) and adjusting cables.

Installing a water spigot near the court is encouraged, as the sand can become very hot, as can the players...both may need to be cooled off. Building a seat for the referee to sit in near the top of one standard is a nice touch, but outdoor play can be refereed just as well from below the net, on the sand.



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Boundary lines are made of 1/4" rope or 1-1.5 inch webbing and tied to the four corners with buried deadman anchors. No centerline is needed, but 4 meters extra beyond the 54 meters of total court lines will be needed for anchoring the corners. A small wood board buried at a 45 degree angle to the corner is fine, and can be installed just for play, if vandalism is a problem. The net should also be easily removed and stored in case of theft. Players would only need their own net to borrow the court as approximate lines can also just be dug into the sand by dragging a foot.

Net heights are 2.43 m (7' 11 5/8") for Men's and Coed play, and 2.24m (7' 4 1/4") for Women's and Reverse Coed. A 10 meter net with a cable top is preferred, but strong ropes, especially the Kevlar types that are as strong as steel, can also work fine. A winch (padded) and hardware, such as eyebolts, is needed to mount the net both top and bottom. The bottom need only be anchored by rope to the standard.

The 1996 USA Official Outdoor Rules are the basically same rules that will be used in the 1996 Olympics at Atlanta Beach in Georgia as beach volleyball is now a medal sport. The rulebook also includes the indoor, coed, and reverse coed rules, plus 2-3 and 4 person differences. A casebook is also available, valuable for tournament directors and facility owners. More info (and a step by step approach for building your court) is available in "Volleyball" magazine, August 1995

