

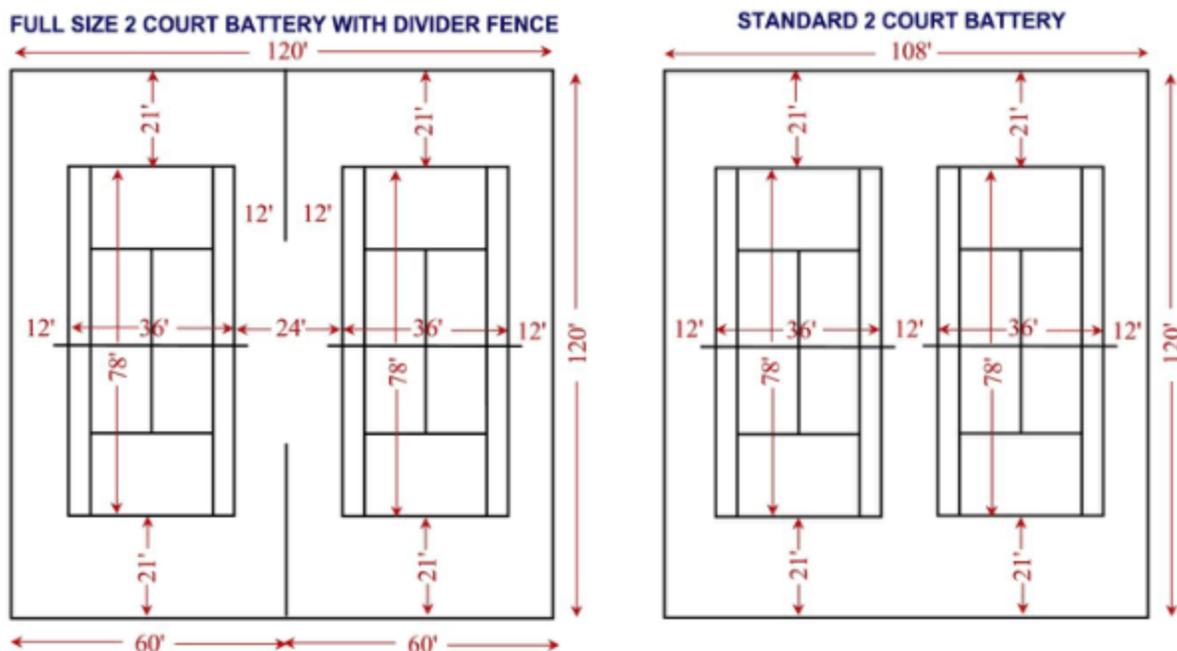
THE MOST IMPORTANT FIRST STEPS TO BUILDING A TENNIS COURT

Building a tennis court is not difficult. Just like any other project you take on, planning, preparation, and information are the keys to your success. This article will provide enough information to help you plan and prepare for the construction of a beautiful, structurally sound tennis court. Let's get started.

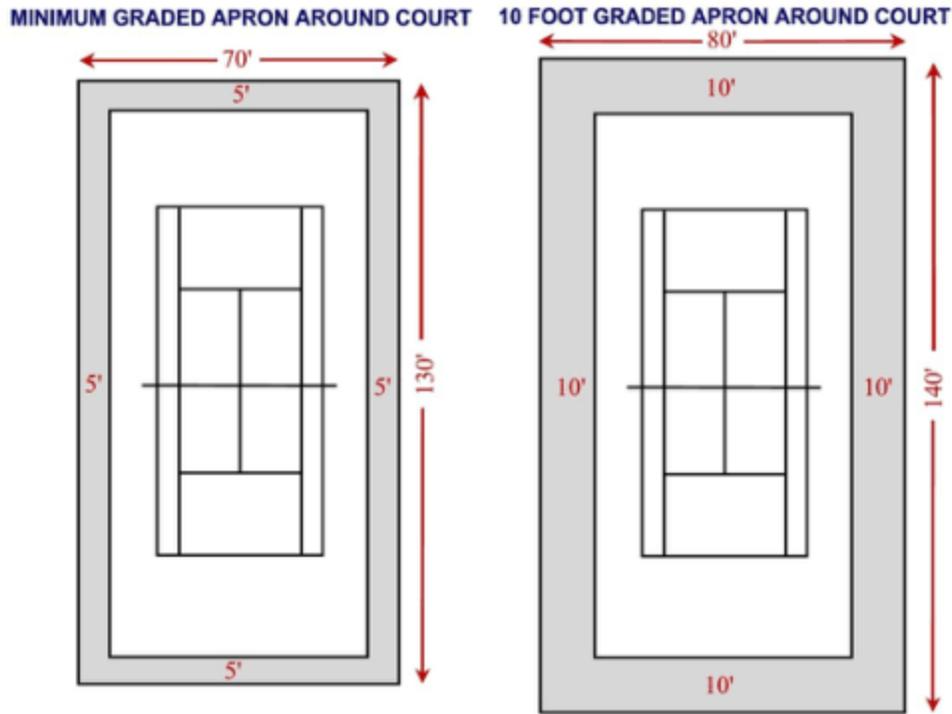
DO YOU HAVE ENOUGH ROOM FOR A COURT?

In many cases, where you place the court is not the issue. Unless you own five or more acres of land, your main concern is probably, do I have enough room for a tennis court? Here are a few facts for those who fall into this category:

- A full size, regulation tennis court is 60' wide by 120' long. The USTA (United States Tennis Association) says a recreational court can be as small as 52' x 110' and still accommodate quality play. Multiple courts sharing the same surface and fence should have 12 feet between each court and from the fence line or any other side obstruction, and 21 feet from the baseline to the back fence. For example, a regulation two court battery would measure, at least, 108' wide by 120' long. If you want fence between the two courts, the dimensions would be 120' wide by 120' long. See the diagrams below:



- Generally, you should plan for a minimum apron of 5 feet around the court perimeter, if the surrounding landscape is close to the same elevation as the tennis court. If the landscape changes dramatically (i.e. the side of a hill) you should plan for a minimum of 10 feet of consistent, relatively true, grade following the court sub-grade (the prepared ground for the court). See the diagrams below:

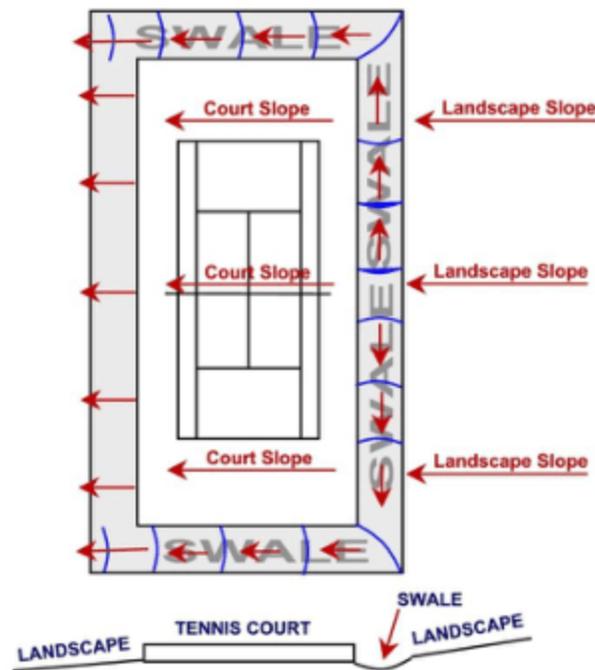


DRAINAGE CONSIDERATIONS

You should always plan drainage from the surrounding landscape to drain around and away from the court. This may require swales or retaining walls. The diagram below illustrates a simple grading plan. Notice how water is routed from the high side of the landscape, around the court, and then down the landscape beyond the court. You never want your drainage plan to allow water from the landscape to drain across the court surface.

A tennis court should slope 1 inch in every 10 feet. The optimal direction of the slope is from one side to the other. For instance, a regulation single court measures 60 feet wide. That means it should have 6 inches of fall from one side to the other. In many cases the topography around the court will not lend itself to a side to side slope and you will have to slope the court from end to end or corner to corner. The only slope that is not conducive to quality tennis is a court that is sloped in two directions. An example would be to have the peak of the slope at the net line with the court sloping toward the each of the back ends. I call this the rooftop slope and it should be avoided at all cost. The slope of a tennis court must be in one continuous plane. See the sketch of one slope and drainage plan in the next graphic.

TYPICAL GRADING PLAN AROUND TENNIS COURT

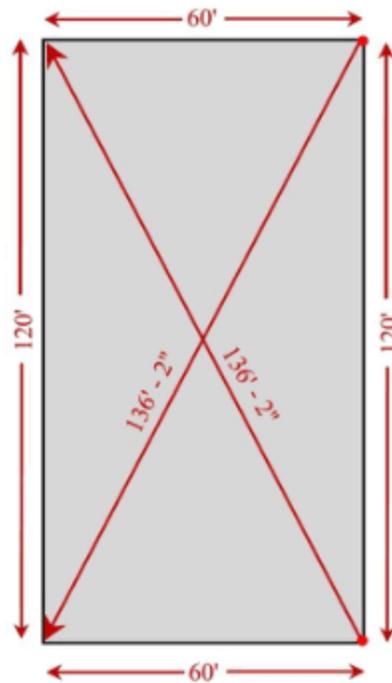


LAYOUT THE PROPOSED COURT AREA

Once you have a spot you believe will be big enough for your court, it's time to lay it out. You'll only need a few items to accomplish this: a 150' tape measure, a bundle of irrigation flags, a can of bright orange upside down spray paint, and a calculator with the square-root ($\sqrt{\quad}$) function. The first step is to pick a line which represents one edge of your court. It may be a side you want to run parallel to your house at a certain distance. It may just be a line you pick in the middle of a field that will orient your court properly to the sun. The USTA suggest optimal orientation for a tennis court is: true north/south for the upper two thirds of the US, and 15 – 25 degrees west of true north for the southern 1/3 of the country.

Whatever line you choose, use your tape measure to find the two ends and mark them with the irrigation flags. After the flags are set, find your square corners using the instructions in the diagram below. If your court dimensions are different than 60' x 120', you can determine the diagonal (long leg of the triangle) by using the Pythagorean Theorem. Now you know why a calculator was on the list. For those who are not math geniuses here's what you do: (1) multiply the length times itself and hit the M+ key, (2) multiply the width times itself and hit the M+ key again, (3) hit the MR key and then the $\sqrt{\quad}$ key, and Viola! The number on the screen is the diagonal for your court. This diagonal ensures your court layout is square. When the diagonals intersect with the respective length and width your court is square.

MEASUREMENTS FOR COURT LAYOUT



SHOULD I HIRE A LANDSCAPE ARCHITECT?

You are now at the point where a couple of major decisions have to be made. The first decision is whether or not to hire a landscape architect. If you live out in the country, as I do, and have lots of relatively flat land, you may not need one. If you live in a metropolitan area, or on less than 5 acres, you will need a civil engineer, general contractor, or landscape architect just to make sure you are in compliance with the local building and zoning laws and to pull the necessary permits. The landscape architect is the most versatile of the three. He will not only handle the permitting and drainage issues, but will also be able to incorporate your court into the surrounding landscape so that is aesthetically pleasing. They are experts in all aspects of outdoor design and construction.

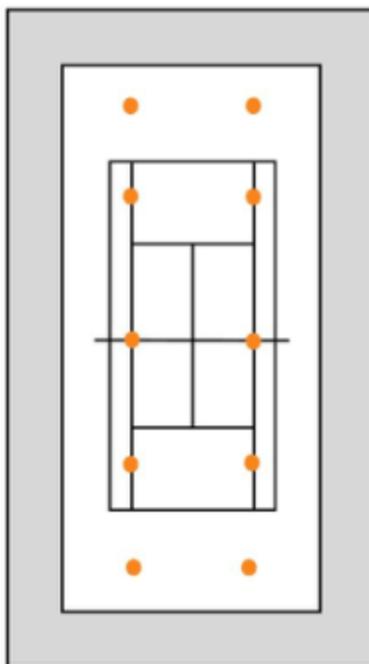
SHOULD I HAVE MY COURT SITE TESTED?

Once the location of your court has been finalized, you should consider hiring a geotechnical (soil) engineer. You will want them to perform hand-auger borings in at least 6 points, preferably 10, on the location you have chosen for the court. See the diagram below for boring locations. The borings test for: unstable soil, high ground water, buried organic debris (tree stumps, construction trash, etc...), and many other conditions which determine the suitability of the proposed construction site. Honestly, most people skip this step, and 95% of the time they don't notice any negative effect for years, if ever. For the 5% who skip this step and build on sites with serious problems, the repair costs are out of all proportion to the testing fees they saved. I have seen areas sink 3 inches deep by 30 feet in diameter, in one year, in the middle of a new court and have pulled out stumps, logs, carpet, lumber, and just about everything else. Conditions such as high ground water and unstable soils may not affect your court immediately, but will eventually manifest themselves as cracks, and/or settlement of the surface.

Your landscape architect will probably be able to recommend a good engineer, or you can check the yellow pages. Try to find, at least, three firms and compare prices. In Atlanta, prices vary between \$500.00 and \$1500.00 dollars for essentially the same services. The engineer will perform the hand-auger borings to a depth of 6' and provide a

report detailing the soil conditions every 12". His report will also describe any problem conditions and recommend corrective measures.

LOCATIONS FOR HAND-AUGER TESTING



HOW DO I PROCEED FROM HERE?

You are now ready to drive real stakes in the ground. If the planned court is anywhere close to your property line set-backs, easements or other restricted areas, hire a surveyor for this step. If your court encroaches on any of these restrictions, even a little, you may find yourself tearing it out and starting over. Once the stakes are set you can begin getting estimates from tennis court contractors who will provide a "turn-key" construction package or from individual specialty contractors if you decide to handle the project as your own general contractor. You may also want to build some or all of the court yourself. Whichever way you decide to move forward, if you have followed the steps we have outlined, your court project is starting on solid foundation (figuratively and literally). We offer detailed instructions on every aspect of court construction in our store. These instructions are provided free when you purchase related construction products from us. These instructions are invaluable whether you hire someone for the installation or you do it yourself. Someone once said, "Knowledge Is Power".

Thank you for taking the time to read our article. If you have any questions or would like more information, contact: Mark Montemayor, [REDACTED] or [REDACTED]