

COMPACTED BASE COURT SPECS

Compacted base courts are a viable alternative when access, impervious cover restrictions, cost, or in cases where a customer wants to be able to remove the court at a later date or just does not want concrete or asphalt in the backyard. It is also an option whereby the customers could do the work themselves. Here are some brief steps to the process and a few considerations.

1. The site should be graded in a similar manner as it would if you were putting down a permanent base ie vegetation removal, leveling with a slope of 1" per 16' for drainage, and compaction of the ground.
2. Once the court area has been rough graded it is best to contain the court with 6" x 6" x 8' landscape timbers from Home Depot, Lowes, or local lumberyard. Straight ones work best. The timbers are used just to create a border to contain the base materials to eliminate erosion of the base over time. 4" x 4" x 8' timbers can work but 6" x 6" work best. They can be set down by digging out 2-3" along a squared up stake and string line then placed in the dug out area.
3. It is best to secure the timbers by drilling holes 3 per 8' timber and driving 18' long 1/2 steel rebar stakes thru the pre-drilled holes. The stakes should be flush or slightly below the timber top grade. The holes drilled should be slightly smaller such as 3/8".
4. Timbers can be secured to each other using 4-6" framing plates from Lowes or Home Depot one on each side connecting the timbers together.
5. Leave one section or end open for bringing in base materials.
6. Bring in compactable base materials of compactable limestone, granite, or road base and place in 1" lifts level then compact with a vibrating plate compactor (rental store) or a small roller if you have access to site. Continue to add base material and compact to grade slightly above height of timbers. You can run a string line between timbers side to side to check on your grade to get it as close to level as you can. It is important to spend the time on this aspect because it will determine the quality of the court once finished. Whatever compactable material used and there are several and some that are local area specific you want to make certain that there is no stone larger than 1/4". There are also some sand type materials that are highly compactable and can be used on top layer. If the sub ground is wet or unstable you may consider placing an inch or two of larger stone 3/4" for stability and drainage. Often the final layer of stone around the edge of the frame will need to be compacted with a hand tamper (rental store)
7. Once the base is leveled, and compacted to grade you want to cover the base with a landscape fabric usually in rolls 4' to 6' wide (gray and allows water to seep thru if it sits or runs off if it rains) It can be found at Home Depot in garden department in rolls 4' x 50' for about 10-12 cents a sq ft. Larger wholesale landscape or material outlets may have it in larger widths. The material should be laid lengthwise and stapled to inside of form on ends and sides. It is placed starting along lowest grade then overlapping slightly and place on top lengthwise as you add rows so water runs off on top of the fabric when it drains. The fabric serves as a weed and moisture barrier and keeps the base material from coming up thru surface or surface from embedding into the base.

It is important to take the time to do a good job of squaring up your court measurements so the court is square and lay your forms to a string line grade. The surfacing is square so if the court is not square unsightly and unnecessary trimming will have to be done at the end. Getting the base properly compacted by doing it in 1" lifts will help insure a more level plane and solid base for your surface. The measurement of the surface should be calculated based on the dimensions of the product and accounts for expansion and contraction. Contact the company for exact court dimensions for your forming.

8. Once you start laying the fabric you can begin laying out the court surface. As you lay a couple of rows of fabric you can begin laying surface to avoid the wind blowing your fabric out of place.

9. It is best to place components (ie baskets, lights, and net posts) in a 2 x 2 or 3 x 3 ft concrete wing. Any fencing should be placed outside the form so you do not disturb the base, which would be the case in setting them inside the forms. The locations of the anchors for the basket, light, or net post also need to be calculated for best performance especially the hoop based on the model and overhang from the pole. Contact the company for recommendations on your basketball pole location.

10. If your court is on the side of a hill it is important to try and re-route any water runoff around the court and prevent it from going under your court causing erosion or soft areas over time. Drain tile around the high side of the court with some gravel can help eliminate this future maintenance concern.

11. There have been many compacted base courts built over the past 30 years. They can perform and play very well over time. If for some reason a low spot develops you can always take a section of the court out, cut the fabric and peel it back add some base material recompact with a hand tamper and reinstall the fabric and surface. This only takes a little time and not much in terms of material cost. The key again is taking the time to get it level and compacted good initially. You want to be sure to use good compactable materials on the final 2" of the court base.

12. Compacted base court materials are less expensive than concrete or asphalt. The labor is a little more involved if you take your time to do it right but if you are doing it yourself with some help from neighbors, family, or friends it can be cost effective.

It is not absolutely necessary to have a perimeter border. It just helps with aesthetics and containing base materials over time. There are compacted base courts customers have built without perimeter borders as a cost and time savings. If done this way you want to have your court grade flow uniformly with the surrounding landscape.