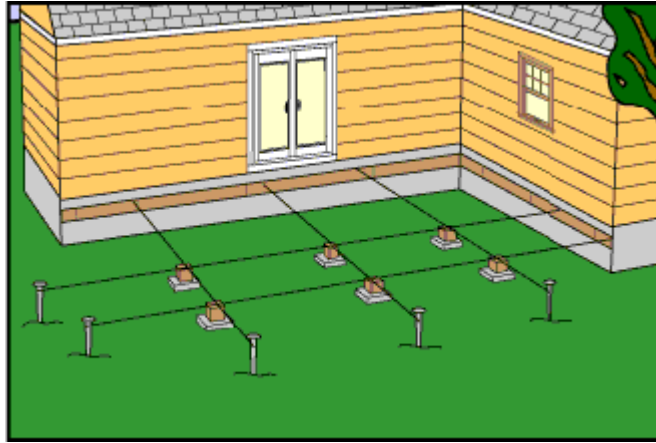


Deck Marking & Layout

OVERVIEW



Introduction

Marking and layout is the third step in building your deck. The layout is possibly the most important step after you have made the decision to proceed. The placement of the footings is critical to the location of the support posts, which will ultimately make your deck a safe and enjoyable place to enjoy the outdoors, and keep it from falling down!

Even though there is room for error in measuring the location of the footings, success comes from striving for accuracy--measure to the 1/8th of an inch. This layout is simple and can easily be completed by any level of DIYer. Mistakes can be corrected at a later part of the project if necessary. These mistakes however, will add time and money to your deck project if left uncorrected.

To set up for this task, gather your drawings, tape measure, marking tools, level, all of your equipment, and put them on a site worktable for easy reference and a place to find them. A paperweight of tools and other heavy objects will keep the plans in place if the wind begins to blow.

BEFORE YOU START...

SKILL LEVEL & TIME TO COMPLETE

Time to complete this project depends on the size of the deck and the level of help available, the times listed here are for two people on a 10'x 30' deck with the house defining two sides of the deck.

- Beginner - 3 hours
- Intermediate - 2 hours
- Advanced - 1 hour

 **CAUTION** Check for hidden utility lines before you start.

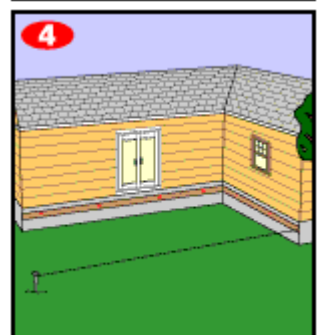
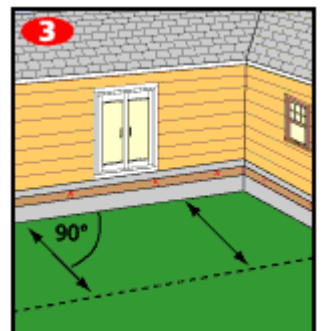
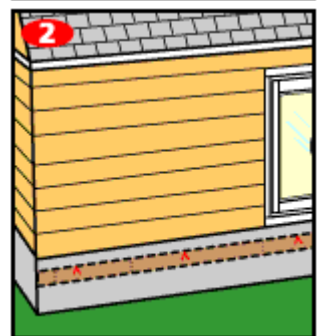
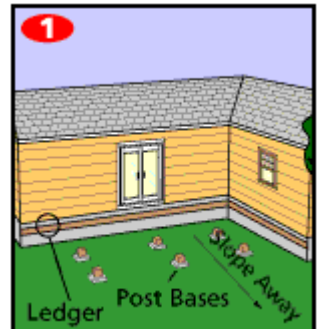
 **CAUTION** Check local code restrictions to be sure that you comply with their regulations on deck height off the ground and limitations on the amount of lot coverage allowed.

 **COMMON MISTAKE** Rushing the layout can cause the deck to be built out of "square" which will make the final placement of deck boards and hand railings extremely difficult at the end of the project.

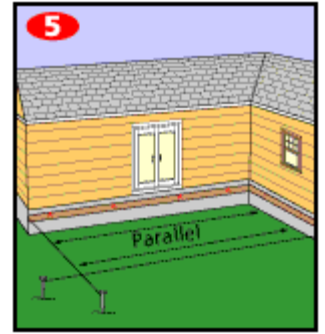
 **HELPFUL TIP** A helper who understands the overall design and layout process will be invaluable in holding the dummy end of the tape and helping to line up marking strings.

STEPS

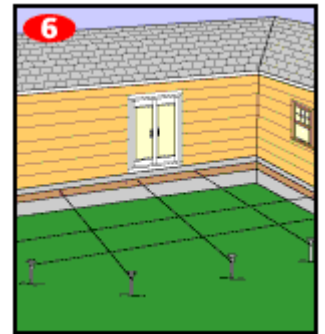
1. Your first measurements and marking indicate where your deck connects to the house. After the height of the deck is marked, move away from the house to locate the remaining deck supports. Your measurements should take into account that the deck is an outdoor extension of your indoor living space, and needs to slope away from the house to allow any water that collects on the deck to drain away from the house and the foundation of your home.
2. Begin by marking the top of the ledger, the structural deck support that will attach to your house, in several locations. Use your level to verify that the top of the ledger matches your structural drawing. Keep in mind that if your finished deck surface is 2x material, the top of the ledger will be $1\frac{1}{2}$ " below the finished height of the deck as most 2x decking material is actually $1\frac{1}{2}$ ". Repeat this step on all walls that join the deck. Note: The drainage slope on the deck will show on any adjacent deck wall markings.
3. Now we will mark the outside perimeter of the deck foundation where the deck will be supported from the ground as indicated on your construction drawing. To establish this line, take two equal measurements, in separate locations, from the longest parallel house wall as shown, and mark the location with the nylon line. These measurements should indicate the centerline of the post base. The string line(s) should be directly over the center of the post base. Be sure that you keep the measurements parallel to each other and perpendicular (square) to the wall.
4. The string line can be attached at the ledger location with a nail or screw at one end and tied around a stake driven into the ground at the other end. Be sure to drive the stake "outside" the deck perimeter so it can stay in place until the support posts are set. Be sure to keep the string line above the top of the ledger height if possible so the footings can be dug, the concrete can be poured, and the vertical support posts can be placed, without moving them.



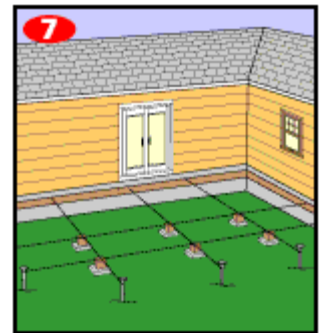
5. Measure the distance from any adjacent walls to locate adjacent sides of the deck (post base) and mark with nylon line the same way as in step 2. Remember to keep the measurements parallel.



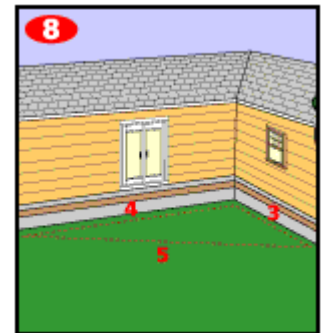
6. Layout any interior post bases using the same technique as the perimeter using two equal measurements and marking them with a string line.



7. The grid formed by the nylon line should be the same as the grid on your plans showing the structural members (girders) which will in turn support the joists, which support the finished deck boards. The intersection of the string lines indicates the center of the post bases.



8. Be sure to check your layout for square using the 3-4-5 right triangle method. Or you can check for square by measuring from opposite corners and comparing the dimensions, they should be equal: within 3/8 inch will be acceptable on this project. In the next tutorial we will be pouring concrete in the post bases and attaching the ledger board to the house.



SHOP LIST

Materials Needed

- 24" to 30" stakes. (Use 1x2 wood or metal stakes) Two stakes per corner
- 16d nails

Tools Needed

- 25' tape measure
- Carpenters pencil or a permanent marker

- 100' "reel" tape, or longer if the diagonal measurement is greater than 100'
- 500' of nylon line (this "string" comes in highly visible colors and is good for laying out piers and footings for any construction project)
- Hammer
- Water level, string level or some other tool to find level.