



## **REPAIRING EXTERIOR WOODEN STEPS**

We seldom pay the steps outside our houses any attention... until someone falls through a rotting landing or trips on an uneven tread. If you could view your house through the eyes of a stranger, however, you'd see that steps in bad repair can ruin the first impression given by your home, and take away from its attractiveness.

There are many different types of steps, and one type is not necessarily better than another. The style of your steps should relate to the type and style of your house. (Note that replacing existing steps with a different style or material may require approval by your city's Building Department; check with them about the appropriate procedures.) The advantage to masonry (brick or stone) steps is that the materials don't deteriorate; however, the mortar holding the bricks together can fall apart in time, leaving them without normal support. Wooden steps, on the other hand, are subject to rot. So, there is no perfect material from which to make steps. The best approach is to learn to recognize the problems common to each type, so you can correct them before you have to replace the entire steps.

Wooden steps, even though they weigh much less than brick steps, nevertheless need a foundation to support them. They can be supported by a concrete sidewalk or a concrete foundation poured for that purpose. (Check with your Building Department about the size of foundation required.) Even with a foundation, however, seasonal changes may cause problems with wooden steps. As the ground shifts with the freeze-and-thaw cycle, wooden steps tend to stay attached to the house, but – because they are lighter and ride on the top of the ground – they may twist. As a result, they may not remain straight and level. The treads may begin to hold standing water, rather than allowing it to run off, causing the boards to rot.

There are a couple of things to do to remedy this situation. First, if your wooden steps aren't straight or level, and if your steps rest on a concrete sidewalk or other solid footing, you can usually do some shimming underneath the base. Just add small wedges of wood, a little at a time, and keep checking with a level. You want to end up with treads that are straight across, but have a very slight downward slant to the next tread.

If you need to replace any part of your wooden steps, consider using outdoor treated wood. This wood is guaranteed for about thirty years against rotting, and the tree from which it comes makes for a stronger-than-average board. Use the board you are replacing as a pattern to cut your new piece. If you replace the treads before the water has a chance to get underneath them and rot the supporting framework, you can probably avoid having to replace the entire set of steps.

If you must replace a set of wooden steps that has deteriorated too far for repair, there are some things to keep in mind to ensure a long-lasting replacement – whether the steps are built by you or by a contractor. First, replacing your steps will generally be a permit job, and you will have to meet current code requirements. A concrete foundation will usually be required, to give your steps a solid footing, and any steps leading to a door that swings out will likely have to have a landing, to prevent falls. (If you don't presently have a landing, you may need to redesign the layout of your steps to incorporate one.)

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Second, make sure that you use outdoor treated wood. This type of wood can be left unpainted permanently or, if you prefer, can be painted after it weathers for a year.

Third, make sure the steps are constructed for maximum strength and longevity. If the span of your steps is more than three feet, install a center riser to provide support, and place a small gap between the boards making up the stair tread to allow water to run off. *(For how-to instructions, see separate handout on "Building Wooden Steps.")*

Checking the condition of your steps each year will allow you to keep them in good shape, and will ensure that they remain an attractive feature of your home.