



# Home Tips®



• CHRISTIAN BUILDING INSPECTORS, INC., 1003 STAR COURT, NORCROSS, GEORGIA 30093, (770) 925-8518 • JULY 1994 •

## Q & A

### What Makes Concrete Sweat?

*What makes our garage floor sweat only some of the time?*

First of all, you did not say under what conditions. I am assuming that the floor is not elevated above the surrounding yard and that it usually sweats either when the humidity is high or after a heavy rain.

Many garage slabs do not have a vapor barrier under them. This would stop any moisture from being drawn up through the concrete.

What could be taking place is hydrostatic pressure that forces the moisture up from the ground through the concrete by pressure. This would be very evident after a heavy rain. There is not very much you can do about it except ventilate the area so that it may dry as quickly as possible.

### Concrete Driveway Repair?

*What is the correct way to repair a damaged spot in a concrete driveway?*

You have not mentioned if the damage is surface spalling (the very top layer of the concrete coming loose) or a more extensive pothole.

Bob Shulde of Portland Cement Association tells us that in either case the correct preparation of the damaged area makes the difference in whether the repair will last or not.

If the hole is an inch deep or more, you need to chip out all of the loose and damaged concrete. Undercut the sides of the repair so the new concrete has a better chance to grip. Do this with a hammer and chisel or a hammer drill with a concrete chisel. Make sure you wear eye protection and keep spectators away. Vacuum out all of the loose dust. This is very important because any loose material left in the hole will prevent the new concrete from adhering to the old.

Wet the area patched. You do not want standing water in the hole, just enough to wet the surface and keep it wet until the concrete is poured. Mix your concrete according to the label directions and pour into the hole. Trowel it flush with the surface. Then cover the patch with plastic and keep it damp for at least three days, although a week will work better. Bagged, premixed concrete will work just fine for this kind of repair.

For surface spalling, prepare the area the same way, except do not undercut the sides. Use a premix concrete product that contains no aggregates, just sand and cement. Do not use mortar mix. Mix the concrete with water according to the label directions and trowel it into the damaged area. Now “scrub” the concrete with a stiff brush and trowel again. Scrubbing in the concrete will ensure good contact with the old concrete and make sure air pockets are eliminated. Do not trowel the concrete too much, just enough to get is smooth. Once it has firmed up slightly, run a broom lightly over the surface for a non-slip finish. Then keep it moist and covered as described earlier.

### Drilling Steel Doors?

*I've read articles on installing deadbolts on wood entry doors, but how do you install them on steel doors?*

You install the deadbolt in a metal door the same way you would on a wood door, except you will need a hole saw that will cut through steel. When you cut the hole for the deadbolt, use a lockset boring kit for an accurate hole. Rental centers offer lockset boring kits for around \$20 a day.

Steel doors have a wood frame under the metal around the perimeter of the door and a wood block where the deadbolt and latch should be installed. If the door didn't come with instructions for installing the deadbolt, ask the dealer you bought the door from for instructions.

### Testing Electrical Outlets?

*I've added some electrical outlets to my home. Is there any way I can test these outlets to see if they're properly wired and grounded?*

You can test your home's electrical outlets with a receptacle tester called a 3-way Circuit Analyzer, which costs around \$5.00 at home centers and hardware stores. You simply plug the tester into the outlet you want to test. The tester has a series of lights that indicates whether your ground is good and if your hot, neutral and ground wires are properly connected.

There is also a tester designed for Ground Fault Circuit Interrupters (GFCI) which operates the same way. This has an additional button that is used to test the outlet's circuit breaker. Unfortunately, these are a little more expensive and sell for around \$24.00 each.

It is always good to either check your work or have a licensed electrician check it for you.

