

The “Hole” Truth

The right tool and the right technique can help you make holes in concrete efficiently.

Making holes in concrete doesn't have to be hard work. But many contractors make it difficult by trying to make do with the tools they have. When you look at the time lost to using the wrong tool, the cost of that time could easily pay for the new tool or bits needed to speed the process.

That's the consensus of power tool manufacturers who deal with contractors' hole-making questions. Here's how they suggest you get to ... the hole truth.

Do you have the right tool?

We often see contractors trying to use a hammer drill to do a job that should be done by a rotary hammer.

Hammer drills are intended for making holes up to 1/2" in concrete block, brick, or small holes in poured foundations. Use them for small fasteners that need holes between 5/32" and 1/2" in diameter. If you are drilling many holes over 3/8", use a rotary hammer.

We see contractors burning up hammer drills and bits all of the time because they are using the wrong tool for the job. When it comes to poured concrete, your best bet is a rotary hammer. A hammer drill is too light of a tool for making any holes in poured concrete.

Hammer drills have a difficult time making holes in concrete because the hammer drill relies on high rotational speed and a lighter impact to chip away material. A rotary hammer uses pounding force to fracture the concrete. The rotation of the bit changes the orientation of the edges of the bit's carbide tips in the hole and augers dust out of the hole.

The difference between a hammer drill and a rotary hammer can be compared with drumming your fingers on a table vs. pounding your fist on a table. The hammer drill impacts the work with fast, lighter blows; while the rotary hammer used powerful, slower blows. Given that analogy, it's easy to understand why a rotary hammer is more effective.

While it's tempting to use a smaller tool for a slightly bigger concrete hole-making job, the tool experts recommend against it. Instead, select your tool so the job falls within the operating capacity of the tool, not near or just past the tool's maximum operating range.

Look at the optimum range a drill can operate, not the maximum hole it can drill, especially if you are drilling many holes. Also, consider concrete hardness. If the concrete has a high compressive strength, is older concrete, or has very hard aggregate, consider using a larger tool to make the hole.