Masonry Drill 6.5mm SDS **Mechanical Fixing**

High quality SDS 6.5mm Masonry drill bit for use with the Metal Hit Anchor mechanical fixings supplied by Permaflor.

High quality drill bits to go with the aluminium nail in fixings supplied when the pedestal height or sub floor requires them to be mechanically fixed to the sub floor.

The SDS bit was developed by Hilti and Bosch in 1975. The name comes from the German "Stecken – Drehen - Sichern" (Insert - Twist - Secure). In Germanspeaking countries the back-formation "Spannen durch System" (Clamping System) is used, though Bosch uses "Special Direct System" for international purposes.

SDS (Slotted Direct System) Drills are extremely powerful and used when extra power is required, for heavy duty jobs. They have three basic functions that allow normal drilling, hammer action and chiselling. Furthermore, SDS Drills can hold large diameter drill bits well passed the 13mm diameter limit of normal drills. Professionals tend to select this type of drill for major projects.

The SDS shank has the advantage of fitting into a simple spring-loaded chuck, so that bits are simply pushed into the chuck without tightening. This shank and chucks made for it are especially suited to hammer drilling with masonry drills in stone and concrete. The drill bit is not held solidly in the chuck, but can slide back and forth like a piston; it does not slip during rotation due to the non-circular shank cross-section, matching the chuck. The hammer of the drill acts to accelerate only the drill bit itself, and not the large mass of the chuck, which makes hammer drilling with an SDS shank drill bit much more productive than with other types of shank.

Rotational drive uses the sliding keyways that open to the end of the shank, which mate with keys in the chuck. The smaller indentations that do not open to the end are grasped by the chuck to prevent the drill bit falling out. The hammer of the drill hits the flat end of the shank. The shank must be lubricated with grease to allow it to slide in the chuck.

SDS Shank Advantages

- Better hammer drilling performance than rigidly gripped bits
- Drills with a "rotation-stop" mode can use chiselling bits
- One-handed quick chucking operation
- · Can only be held in an SDS chuck
- High torque transmission

















Permaflor is the manufacturing division of Bathgate Flooring





