

## DRY DIAMOND CORE DRILLING

Dry diamond cores from ARMEG offer the quickest, cleanest and most economical way to drill soft abrasive materials such as standard facing bricks and concrete building blocks. For optimum performance and perfect results use any rotary drill with a minimum drive power of 850 watts. The machine should also be capable of speeds up to 3000rpm and have variable speed control and slipping clutch.

#### Safety and Operation Guidelines ALWAYS

- Drill a pilot hole in the wall first with a 13mm masonry bit.
- Use a 850 watt (minimum) rotary drill with slipping clutch variable speed control.
- Locate the 12mm A taper guide rod down through the core and push fit the guide rod into the adaptor.
  - Make sure the chuck is tight.
  - Clear the debris at regular intervals, as a build-up of dust leads to inefficient drilling and result in overheating, extensive clutch wear and possible loss of segments.
  - Use the machine between 350 and 3000rpm. The harder material and larger the diameter of the core, the slower the rpm. The softer the material and for smaller diameter cores, the higher the rpm. Faster rotational speeds do not always mean better penetration.
    - Rotate core bit whenever entering or leaving the hole.
      - Keep the machine level.
      - Reduce pressure if the bit starts to vibrate.

#### **NEVER**

- Drill concrete
- Use hammer action when drilling with a diamond core.
- Force the core let it do the work. This prolongs life and reduces the chance of failure.
  - Make long, continuous drilling motions without clearing the debris.
    - Let excessive heat be generated at the drilling edge.

### **REMEMBER - IF DRILLING SDS MACHINES**

Whenever possible use a dedicated dry diamond core drilling machine. While SDS machines can be used, most rev at only 600rpm which means reduced drive power and slower drilling compared with dedicated dry core machines revving up to 3000rpm. Using SDS machines for dry diamond drilling increases the risk of product damage and exposure to hard arm vibration. Do not use SDS Plus adaptor with 107 and 127mm cores. These are beyond the capability of SDS Plus machines and adaptor and machine damage could occur. Broken adaptors that have been used in either of these two cores will not be warranted.

# **GUIDE TO SPEED SETTINGS**



- Speed may be adjusted to suit site conditions.
- Increasing drill speed (rpm) when drilling abrasive materials will prolong the core drills life.
- Decrease the drill speed to prevent overheating when drilling harder materials.
- Machine type and material are the controlling factors to life and speed of core. Ultimately machine and operator determine the overall performance.