Manhole cover sizing explained

All covers & frames are manufactured to clear opening sizes - put simply this is the size of the hole which the cover and frame is to span. The clear opening size of the cover is the inside frame dimension and consequently the cover & frame will then sit on the surrounding chamber.

It is vitally important to establish the clear opening of the chamber as a cover which is to small will have an un-supported frame and will fail. A cover which is to large in some instances will be ok, however if the cover has reinforcing to the underside of the lid (often the case on larger heavier units) this may clash with the chamber and will not fit correctly.

Many customers will measure the ‘visible’ or ‘lid’ size of the cover which is larger than the clear opening (hole size) often stating 650x550mm or 25”x18” (inches) these usually all have a 600x450mm clear opening dimension. Manhole covers must be larger than the clear opening (hole) to prevent them falling into the chamber.

Manhole cover seals explained

Covers & frames are available un-sealed, single sealed & double sealed. Un-sealed means that there is no seal - nearly always the case with heavy duty D400 iron products as they are double triangular and each lid only sits on the frame in three places. Slide-out products are also not sealed.

Single seal is often the standard although in many cases this is because of standard frame/cover designs rather than customer requirement. Single seal means single tongue and groove assembly. A single seal cover is airtight when the sealing groove is filled with grease. Double seal is quite simply a double tongue and groove or more effectively two rubber seals. This ‘double seal’ or double rubber seal design prevents odours escaping from the chamber when not under pressure. This design is required when foul drainage manholes are situated within buildings.