



'slide-out' door

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The 'slide-out' door gets its name from the way it slides out on tracks away from the structure, starting from the closed position where it blocks the doorway (see figure 1), to some position away from the structure (see figure 6). The distance that it moves away will depend on how long the tracks are – and these can be made to be any length. To unlock the door an 'opening tool' is inserted into an 'access tube', see **green arrow**, whereupon its pinion (see **orange arrow**) first passes through a matching keyhole or 'splines-plate' on the inside of the door, and then on to engage a rack-bar (see **blue arrow**). The pinion and companion spline plate are customizable in hundreds of possible combinations, and furthermore are easily changeable if the need arises. As the handle of the tool is rotated, the rack bar exits an anchor hole (see **red arrows**) in the floor, and now the door may be pulled out from the doorway by pulling on the handle (see figure 5). Figures 4 & 5 show the door just after it has moved away from the doorway. In figure 3 the rack-bar is in its down and locked position, while in figure 4 it is in its up and unlocked position. The door is stable against overturning by virtue of its two feet (see figure 6 and 7). The back wheels are attached externally (see fig 4), while the front wheels are housed inside sockets towards the front. In figure 7 the sockets are shown prior to fitting the wheels. It is evident that the front wheels are thus surrounded by concrete (which is heavily reinforced) and so substantially protected.

The slide out door has application where there is no room inside the structure to accommodate other types of doors such as an L door, Platform door, or Swivel door.

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Note that a variety of other door designs are also available, depending on the application – see www.concretedoorsand vaults.com. Further products in our range include various concrete lids (for valve chambers), and various vaults with slidable/liftable members (for protection of transformers, borehole installations, cathodic protection panels & bunkers, etc).

