

INSTRUCTIONS FOR INSTALLING UNDERFLOOR SAFES INTO CONCRETE

Important Notice

It is essential these instructions are read carefully and followed precisely, as failure to do so may affect your client's insurance rating.

General

The security of an underfloor safe is very dependent on being carefully installed and therefore every underfloor safe should be installed using a reinforcing kit.

Selection of Site

We recommend that wherever possible a site should be selected which restricts movement in the use of attacking equipment or tools. Advice on location of your safe can be obtained from your local Insurance Company Surveyor or Crime Prevention Officer.

Preparation of Safe and Reinforcement Material

1. Remove door from the safe. Place it in a plastic bag to prevent sand or cement getting into the lock or locking mechanism (ideally store away from the site).
2. If the door is kept on site, remove keys and keep them in a secure place.
3. Fill the safe and neck with crumpled newspaper to avoid sand and cement entering the inside during installation.
4. Replace metal cover.
5. If special Insurance Company approved flat-packing Reinforcement Kit is not being used, prepare the following:
 - a) A single horizontal layer of mild steel reinforcement (Weldmesh 50x50x4.75mm diameter Ref. No. 26 or similar) to cover the full size of the hole. This to be set 50mm below floor level.
 - b) Four vertical layers of mild steel reinforcement: each side of the safe body to be surrounded with a layer, placed 40-50mm away from the safe.

Floor Location

1. Situated in concrete or timber floors without voids.
2. Situated in concrete or timber floors with voids.

Floor Location 1.

1. Remove any existing floor covering to expose the concrete floor.
2. Decide how convenient access can be obtained to the safe when the floor covering is replaced.
3. Check thoroughly that no electrical cables, water pipes, drains, underfloor heating or any other underfloor services run through the chosen area.
4. For all models mark out an area NOT LESS than 685x610mm as floor level.
5. Break through the concrete and excavate to a depth equal to the total depth of the safe plus 75mm plus the thickness of any floor covering.

NO PORTION OF THE NECK MUST PROTRUDE ABOVE GROUND LEVEL WHEN THE INSTALLATION IS COMPLETE.

6. Undercut the side of the hole outwards to give a base size of 760x690mm approx.
7. Check if any existing damp-proof membrane has been disturbed and if so prepare a sheet of 250mu (1000gauge) polythene to replace it. This should cover the sides and bottom of the hole and overlap sufficiently with existing membrane to ensure adequate reinstatement. Even if no damp-proof membrane exists, in wet situations it is advisable to line the hole with a continuous sheet of heavy gauge polythene.

Floor Location 2

With a suspended concrete floor check that it is safe to break through the concrete.

Mark out the floor to the appropriate size of the safe (the box is a useful guide) plus the necessary thickness of concrete. Break out the concrete/timber floor and erect a timber shuttering enclosing a space adequate for the safe and thickness of concrete required - now refer to actual installation work.

ACTUAL INSTALLATION WORK

Preparation of Concrete

A high grade concrete is essential and this can only be achieved by using approved materials and careful workmanship. A suitable specification would be:

- a) Fresh Portland Cement: one part to: five parts Ballast (20mm all in). **IMPORTANT** water content must not exceed 6 gallons for every 50Kg of Portland Cement.
All materials to comply with the appropriate British Standard Specification. Dry-mix and Wet-mix all materials in accordance with standard practice. If the ballast contains moisture, then the amount of water specified above must be reduced. Check by making a slump test. Slump should not exceed 50mm.
- b) Suitable prepared dry mixes would be 'Marley Mix 124' or Ready-Mix 'DRY-PACK'.
A proprietary water resistant additive to be used with above mixtures in accordance with suppliers instructions.

INSTALLATION OF SAFE

1. If a damp-proof membrane is to be replaced, set the heavy gauge polythene carefully into the hole and reinstate with existing membrane. If in doubt on how to achieve this, seek professional advice.
2. Cover the bottom of the hole with 100mm of the concrete mix.
3. Place safe in centre of hole, without metal reinforcement and work down into the concrete until the top of the safe is at the correct distance below floor level.
DO NOT FORGET TO ALLOW FOR METAL COVER AND FLOOR COVERING.
4. Fit special insurance Company approved Reinforcement Kit.
5. If special flat-packed Reinforcement Kit is not being used, fit the vertical reinforcement material 35-50mm from the side of safe.
6. Check the safe is level.
7. Add the concrete in 100mm layers. Each layer to be well worked into the upper part of the layer below with a substantial stick.
8. Lay concrete to 15mm below floor level. Cut polythene sheet, if applicable. The last 15mm should be screeded with a mixture of sharp sand and cement.
9. It is important that the safe should not be used or disturbed for at least seven days after installation.
10. Should the floor covering, such as ceramic tiles be replaced or renewed, do not commence this work until seven days after installation and do not remove the newspaper and metal cover or fit door until all the work has been completed.
11. After the work has been completed, remove newspaper and metal cover and allow safe to ventilate for at least 24 hours before fitting door and using safe.

Model _____

Unit Installed to above
Specification by: _____

Signed _____

Print Name _____

Date _____