

# Universal recessed box for floor and wall mounting

## DATA SHEET AND INSTALLATION MANUAL (EN)

**VD 503** 



## **DESCRIPTION**

Alarmtech's universal recessed box for floor or wall mounting, VD503, can be used for installation of our seismic detector VD500 is required to discretely protect floors, walls or ceilings.

The VD503 is constructed in heavy duty steel with a mounting plate. The inner cover is made to create a flat surface for floor mounting, in level with the finished floor/wall. The aluminum lid is mainly used for wall mounting to hide any unevenness as the lid is slightly larger than the box.

- Opening contact is included in the box.
- The expander bolts are attached through the bottom of the box to the underlying surface to ensure that the detector can detect vibrations.
- The VD503 can withstand a load of approximately 1 ton.

#### APPLICATIONS.

The VD503 universal box is a steel construction to protect the VD500 seismic detector when it is installed in the floor, wall or ceiling in a protected area.

### INSTALLATION

1. Create a recessed area in the floor or wall with a base of 300 x 300mm and a depth of 80mm (see Fig.1).

(If a different dimension of the VD503 has been ordered, the area must be adjusted accordingly).

- 2. Place the VD503 in the recessed area
- 3. Use the 2 x Ø7mm holes, marked 11 and 12 on the mounting plate, to mark the drilling location for the 2 x M6 x 50mm steel expander bolts.
- 4. remove the VD503 from the recessed area and drill 2 x Ø10mm > 50mm deep holes.
- 5. Fit the expander bolts in the respective threaded rod and a nut in edge with the bolt and place the respective bolt in the holes. Use a spanner to tighten the nut against the expander bolt so that the wings of the expander bolt expand in the substrate and are locked in place, see fig. 2.
- 6. Fit another nut on the threaded rod at the appropriate height and then the VD503 box, so that the box is in flush with the finished floor or wall. Adjust as necessary. Fix the third nut on the threaded rod above the fixing plate to lock the box in height/depth. See fig. 2.
- 7. Insert the VP pipe into the two cable entries located on the sides of the VD503, where the rubber bushing prevents concrete and moisture from entering. See fig. 3.

**NOTE!** The fixing plate with the M6 threaded rods, nuts and expander bolts for the VD503 has two important functions, so it is important that everything is well tightened before casting:

- Ensures that the VD503 is flush with the finished floor/wall.
- Provides that signals between the floor/wall and the VD500 seismic detector are optimal.
- 8. fill concrete/mortar in the opening around the VD503 and allow to harden. See fig. 3.

## Other variants of recessed boxes for casting:

- VD501 casting for floor mounting, withstands the weight of 5 tons
- VD502 recessed for wall assembly using styrofoam blocks

## **Contens**

- 1 x floor box 150mm x 150mm x 50mm (h x w x d) mounted on metal back-plate 220mm x 90mm x 6mm (h x w x d).
- 1 x lid for floor box
- 1 x inner box 145mm x 145mm x 50mm
- 2 x M6 x 100mm threaded rod
- 6 x M6 nuts
- 2 x rubber grommets for 22mm Ø hole
- 2 x solid rubber grommets
- 2 x M6 x 50mm steel expansion plug
- 2 x M4 8mm screws

Fig.1

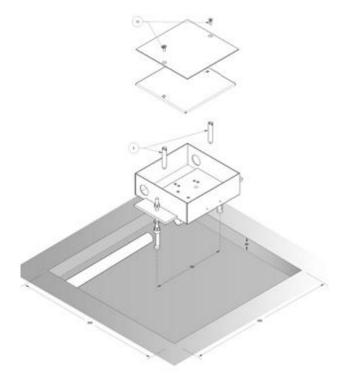


Fig.3

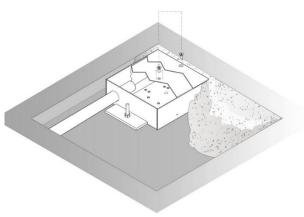


Fig. 4
Installing Seismic detector, please see VD500 manual

On the mounting plate of VD503 use No 3 and 4 for mounting VD500 seismic detector and M4 screws.

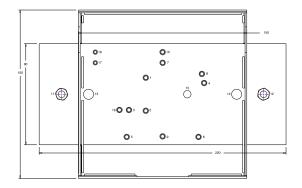


Fig.2

