

## **OPERATING MANUAL**

## **Crack Monitor Instruction & Records**

HM-634 • HM-635 • HM-637 • HM-638



HM-634



HM-635



HM-637

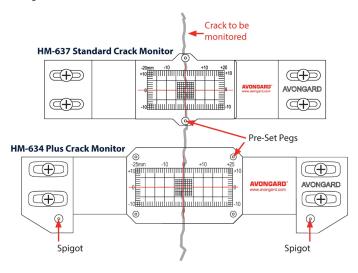


Rev: 06/2022

#### HM-637 Standard Crack Monitor HM-634 Plus Crack Monitor

The Gilson HM-637 Standard Crack Monitor enables you to monitor cracks up to +/-20mm and the HM-634 Plus Crack Monitor can monitor a crack up to +/-25mm. The instructions for use are the same for both of these products:

- 1 Fix over the crack using screws or a suitable adhesive (not supplied). The red vertical '0' line should sit directly over the crack and the Avongard logo and website address should be on the right-hand side of the crack.
- 2 Remove the pre-set pegs\*. This enables the Crack Monitor top and bottom plates to move as the crack opens (or closes) so the distance can be measured and recorded over time.
- 3 Use the crack monitoring record sheet to record the movement of the vertical / horizontal red lines at regular intervals over a number of weeks or months (this time period will vary depending on the building and circumstances).



### **Top Tip**

Using the calibrated measuring panel printed on the monitor will give you an accuracy of +/- 1mm (Standard & Plus). If you require additional accuracy, a set of digital callipers (available at globalgilson.com) will give you an accuracy of +/- 0.1mm and you use this to measure the distance between the two spigots (Plus only).

\*The HM-637 Standard Crack Monitor has two pegs and the HM-634 Plus Crack Monitor has four pegs. You should remove all pre-set pegs on your Gilson Crack Monitor, once it is fixed in position on the wall.

#### **HM-635 Corner Adapter** Instructions for use

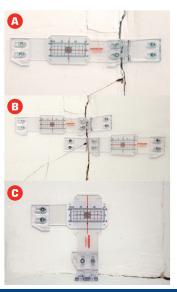
The HM-635 Corner Adapter can be used with the HM-637 Standard or HM-634 Plus monitors for measuring the movement of a crack when it is in a corner location. The corner adapter can be used for both internal and external corners.

- 1 Use the screws and nuts supplied to fix the Corner Adaptor to the Standard or Plus crack monitor. Ensure the screws are fixed from the back of the Monitor with the nuts on the front. Fix the Corner Adapter over the crack (A) using screws or a suitable adhesive (not supplied).
- 2 Remove all pre-set pegs, which enables the top and bottom plates of the Crack Monitor to move as the crack opens (or closes) so the distance can be measured over time.
- 3 Use the crack monitoring record to record the movement. One Corner Adapter is used to monitor 2D movement (A) and you can use two Corner Adapters with Crack Monitors to monitor 3D movement (B).



Top Tip

The components of the Corner Adapter can be reconfigured so that cracks at the junction of ceilings and walls or floors and walls can monitored (C).



#### **HM-638 Displacement Monitor** Instructions For Use

The HM-638 Displacement Monitor tracks the displacement (out of plane) and horizontal movement across the crack. It consists of three components: a base plate (not calibrated), a top plate (calibrated) and a graduated ruler. The ruler is not left on the gauge but is used to measure the relative movement in the two plates.

- 1 To fix the Displacement Monitor align the bottom plate parallel to the crack and fix into position with screws or a suitable adhesive (not supplied).
- 2 Align the top plate on the other side of the crack at 90° to the bottom plate and fix into position with screws or a suitable adhesive (not supplied).
- 3 To take readings slide the ruler into the slot of the top plate until it fits into the raised panel on the bottom plate. For displacement monitoring take a reading where the red scale on the ruler projects from the top plate and record on the monitoring sheet overleaf.



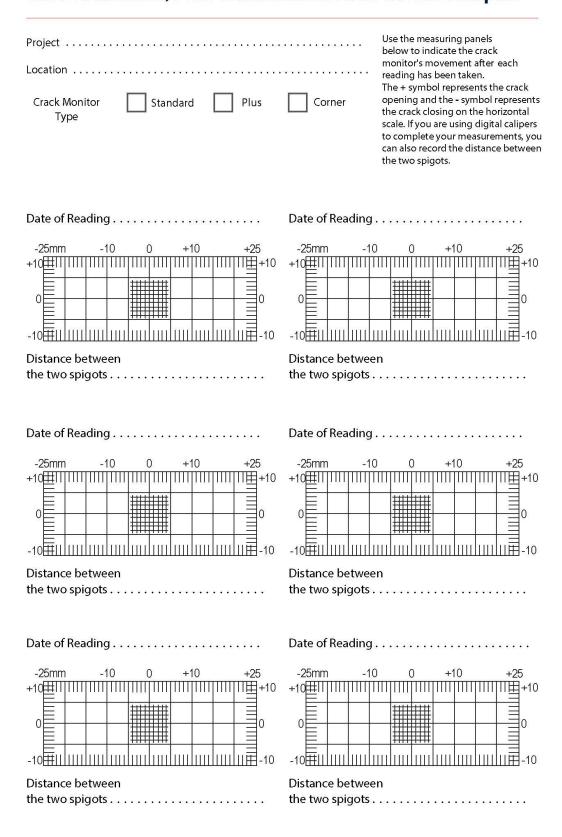




Top Tip

For horizontal monitoring, where the red line at the center of the ruler coincides with the black scale on the top plate, take a reading off the black scale.

# Crack Monitoring Record for the Gilson **Standard, Plus Crack Monitor** and **Corner Adapter**



To download additional copies of this Crack Monitoring Record sheet, please visit **globalgilson.com** 

## Crack Monitoring Record for the

## **Gilson Displacement Monitor**

Project		
Location	·	

Date of Reading	Displacement Movement (Red Scale on the Ruler)	Horizontal Movement (Black Scale on the Top Plate)	

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