CRACK MONITOR Installation Instructions

These Crack Monitors consist of two overlapping acrylic plates. One plate is white with a black millimeter grid, while the other is transparent with red crosshairs centered over the grid. Once the Crack Monitor is in position across a crack, the crosshairs shift vertically or horizontally on the grid if movement occurs, so that anyone can easily see and track crack movement.

Crack Monitors can be installed using either anchors and bolts / screws, quick-set epoxy adhesive, or a combination of both. If anchors and screws are used, the Crack Monitors can be taken down and reused, but we don’t recommend this method of installation in areas easily accessible by the general public.

When deciding whether to use anchors or epoxy you may want to take into consideration the type of surface (Example: brick, masonry, concrete), the location, and the risks involved in drilling holes for anchors or in removing some surface when epoxy adhered monitor is removed.

**Epoxy Adhesive**

1. Wire brush concrete/masonry surface to remove debris.
2. Use quick setting epoxy.
3. Apply epoxy to back of both monitor plates, following directions on epoxy package.
4. Press monitor in place across crack.
5. Make sure red crosshairs are centered on grid. Adjust if necessary.
6. Use appropriate tape to hold gauge in place until epoxy cures, 24 hours minimum.
7. After epoxy cures, cut clear tape and remove from front of monitor.
8. Note location of monitor on crack progress sheet.

**Anchors & Bolts/Screws**

1. Place Monitor over crack and mark position for anchors.
2. Drill holes for anchors.
3. Attach monitor with bolts or screws, be sure red crosshairs center on grid.
4. Cut tape and remove from monitor.
5. Note location of monitor on crack progress sheet.

**Recording Movement**

A Crack Progress Chart is included with each crack monitor to provide a record of crack movement. You may want to make a copy of the chart prior to use in case more readings are needed.

Check the gauge at regular intervals and copy the position of the cross hairs onto the grids on the chart. This record helps to establish a pattern of movement of the crack.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Flat</th>
<th>Corner</th>
<th>Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Acrylic plastic: hot-stamped crosshairs and grid.</td>
<td></td>
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<tr>
<td>Discrimination</td>
<td>0.5mm (estimated value)</td>
<td>1mm</td>
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<tr>
<td>Max. crack width movement</td>
<td>3/4&quot; (20mm) longitudinal</td>
<td>25mm longitudinal</td>
<td></td>
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<tr>
<td>Max. upward movement</td>
<td>3/8&quot; (10mm) transverse</td>
<td>25mm transverse</td>
<td></td>
</tr>
<tr>
<td>Coeff. of thermal expansion</td>
<td>3.80x10^-5in/in/°F, (6.84x10^-5mm/mm/°C)</td>
<td></td>
<td></td>
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<tr>
<td>Dimensions Plates: Grid:</td>
<td>32x102x3mm 40x20mm</td>
<td>32x102x3mm 40x20mm</td>
<td>64x115x3mm 50x50mm</td>
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