Natural Cork Area Isolator
Type Coresil ®

Coresil is an effective and widely approved anti vibration material designed primarily for large high load applications where isolation of medium to high frequency noise and vibration is required.

With these qualities Coresil has over many years established itself as the leading material for the isolation of printing presses including those producing household names such as “The Telegraph” and “The Sun”.

DESIGN FEATURES

- In the manufacture of Coresil specially selected high grade natural cork is trimmed and cut into strips which, after being arranged to take full advantage of the natural resilience of cork, are bonded together by an efficient adhesive to form a sheet.
- The sheets are made as standard at a thickness of 50 mm with 25 mm available. Sheets of other thickness can be made if required.
- The recommended maximum static load is 10750 kg/m$^2$ for the Standard grade Coresil and 38000 kg/m$^2$ for the High Density variant.
- The maximum static deflection is approximately 1.0 mm per 50 mm thickness (0.5 mm for 25 mm).

TYPICAL APPLICATIONS

- Printing Press Foundations.
- Concrete Foundation Blocks.
- High Speed Rotary Compressors.
- Jet Engine Test Beds.
In the interests of continual development, the Company reserves the right to make modifications to these details without notice.

**TYPE CORESIL NATURAL CORK AREA ISOLATOR**

Generally Coresil sheets are spread beneath concrete foundation blocks to result in a uniform deflection of 1 mm over the entire area. Resilient cork sheets may be supplied for use as infill between Coresil sheets.

Detailed installation instructions and layout drawings can be provided for each engineered installation.

**Figure 1** shows a concrete block isolated from a lower concrete raft by Coresil or high density cork sheets. The sides and ends of the block are isolated from the retaining wall of the surrounding pit by an air gap with covers located loosely in rebates at floor level. Alternatively light density resilient cork sheets with a flexible sealing compound at floor level may be used as shown in **Figure 1a**.

**Figure 2** shows a concrete base isolated by Coresil sheets. If required a concrete or steel angle curb is constructed around the base as shown in **Figure 2a**.

**Figure 3** shows a typical arrangement of area isolators beneath a concrete block for a machine. As is often the case, the loading is asymmetric and it is important to obtain equal static deflections and optimum loading on the Coresil. Therefore, the isolators cover only part of the area and are arranged so that their centre of area coincides with the centre of gravity of the machine and block combined. Light density resilient cork is used over the remainder of the area as an infill to support the concrete. To prevent percolation of the concrete when it is poured a polythene damp proof membrane is supplied to cover all the isolating material.

Installation can be carried out by our own installation team or by the contractor’s labour to our layout drawings and instructions.

### CORK MATERIALS

<table>
<thead>
<tr>
<th>REFERENCE</th>
<th>DIMENSIONS (L x W x T mm)</th>
<th>DENSITY (kg/m³)</th>
<th>MAXIMUM LOAD (kg) AT 1 mm DEFLECTION</th>
<th>MAXIMUM LOAD (kg) PER SHEET AT 1 mm DEFLECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORESIL STD</td>
<td>915 x 610 x 50</td>
<td>190 - 200</td>
<td>10750</td>
<td>6000</td>
</tr>
<tr>
<td>CORESIL HD</td>
<td>915 x 610 x 50</td>
<td>250 - 260</td>
<td>38000</td>
<td>21204</td>
</tr>
<tr>
<td>CORK HD</td>
<td>1000 x 500 x 50</td>
<td>180 - 200</td>
<td>10750</td>
<td>5375</td>
</tr>
<tr>
<td>RESILIENT CORK (LD)</td>
<td>1000 x 500 x 50</td>
<td>110 - 130</td>
<td>5000</td>
<td>2500</td>
</tr>
</tbody>
</table>

Please Note: Cork is a natural material and the quoted figures above are nominal and can be subject to variation. This product is not suitable for decorative purposes due to variations in colour and process discolouration.

For full installation instructions please refer to our data sheet DS031.

For more detailed information and technical assistance please contact our Technical Department.

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