## **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<sup>2</sup> for the Standard grade Coresil and 38000 kg/m<sup>2</sup> 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.

# **CHRISTIE Vibration & Shock Control**

#### 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.

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Figure 1a. Figure 1. Flexible sealing compound Flexible sealing compound Light density resilien Cork Sheets Air gap Coresil Area Isolators Figure 2. Figure 2a. Flexible sealing compound over light density resilient Cork material Concrete or Steel angle curb Coresil Area Isolators Figure 3. Coresil Area Isolators Centre of gravity of machine and concrete block and centre of area of Coresil Light density resilient -Cork infill material

CORK MATERIALS				
REFERENCE	DIMENSIONS L x W x T (mm)	DENSITY (kg/m³)	MAXIMUM LOAD (kg) PER m <sup>2</sup> AT 1 mm DEFLECTION	MAXIMUM LOAD (kg) PER SHEET AT 1 mm DEFLECTION
CORESIL STD	915 x 610 x 50	190 - 200	10750	6000
CORESIL HD	915 x 610 x 50	250 - 260	38000	21204
CORK HD	1000 x 500 x 50	180 - 200	10750	5375
RESILIENT CORK (LD)	1000 x 500 x 50	110 - 130	5000	2500

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.

In the interests of continual development, the Company reserves the right to make modifications to these details without notice.

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