TECHNICAL DATA SHEET
DS 030

NON CONTROLLED UNLESS STATED OTHERWISE

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TITLE. Installation Instructions for Studflex Vibration Isolation Mats.

Details of Isolators as Leaflet PL017

1. Generally the Studflex isolators are installed beneath concrete foundation blocks. They may also, in suitable cases, be fitted immediately beneath machinery without concrete foundation blocks and without positive location. Under asymmetric load conditions, two or more rubber compounds may be used to equalise static deflections.

2. Figure 1a shows a concrete block isolated from a lower concrete raft by Studflex Matting. The sides and ends of the block are isolated from retaining walls by an air gap. Where necessary, the air gap must be sealed as shown by figure 1a. Alternatively a resilient foam lining can be used as detailed in Figure 1b. A concrete base isolated by Studflex isolators is illustrated by figure 2a. If required a concrete or steel angle curb can be constructed around the isolated base as shown by figure 2b.

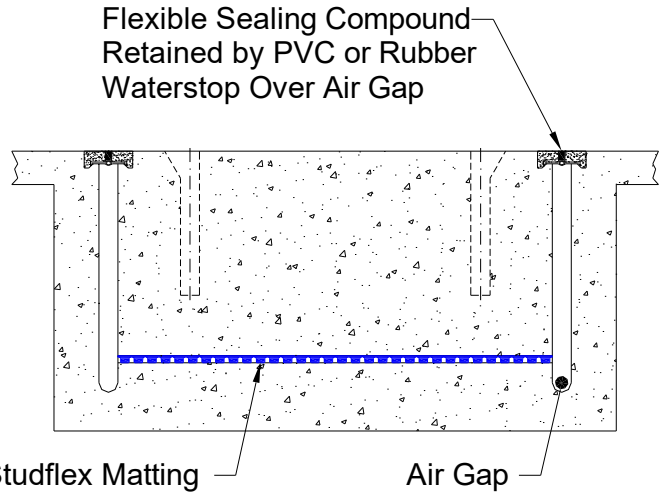

Figure 1a

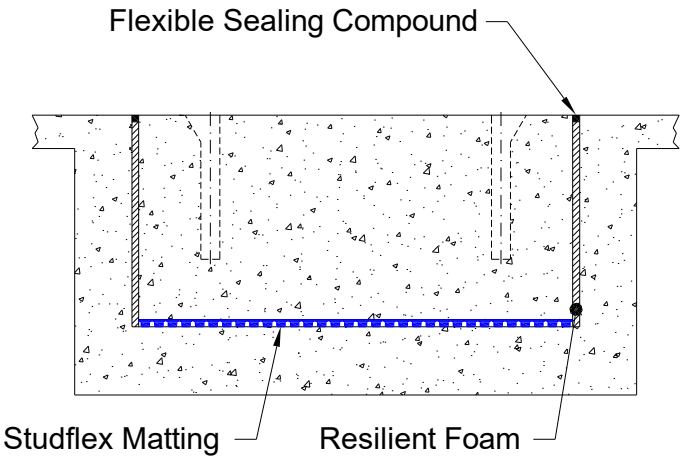

Figure 1b

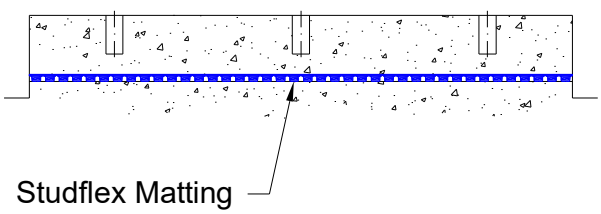

Figure 2a

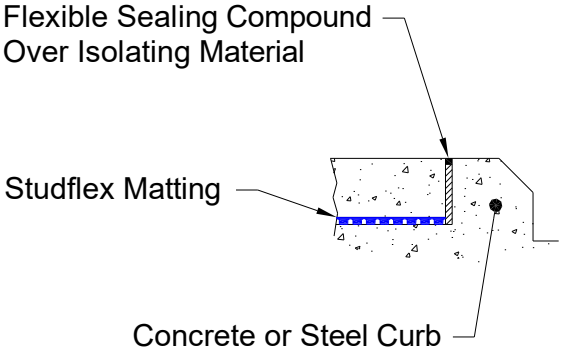

Figure 2b

3. Steel sheets are supplied to bridge over the exposed studs and/or any gaps between mats. Waterproof tape is provided for sealing all joints and seams before pouring concrete. See Figure 3.

   Installation of the Studflex Matting is easily carried out and fully detailed working drawings and laying instructions are provided by us.

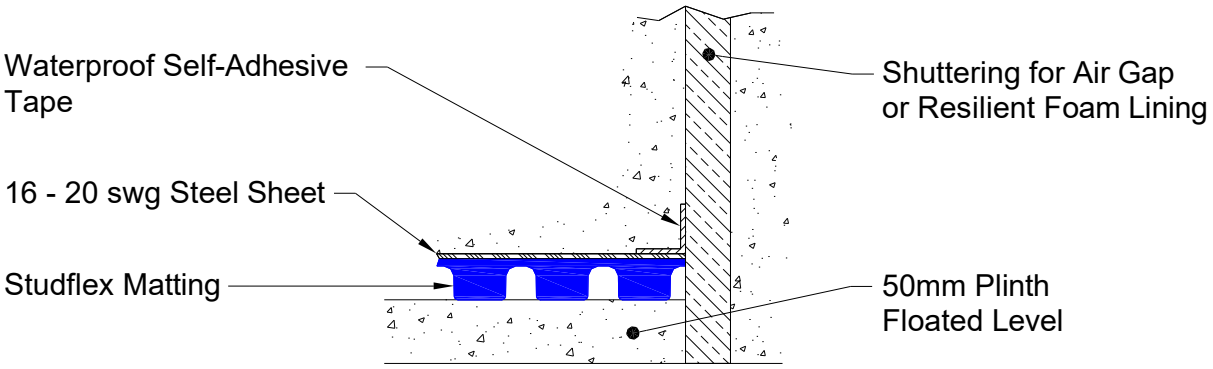

Figure 3

4. Typical installation procedure for Studflex isolators would be as follows:

   After the plinth or floor has been cast and floated level, the Studflex isolator mats are to be laid in the positions indicated on our layout drawing. Completely cover the isolator mats with 16-20 swg mild steel sheet(s). The shuttering for the block should now be built up around the plinths perimeter to the correct height required. The shuttering must fit closely to the steel sheet(s) and must be sealed using the waterproof self-adhesive tape. This is supplied to prevent percolation when pouring concrete and it is essential that an efficient seal be obtained. Once the concrete has cured, the shuttering around the block can be removed and equipment can be installed. Where possible the equipment centre of gravity should be positioned on the inertia block centre line to ensure an evenly distributed loading over the isolator mats. All connections to the isolated equipment must be flexible to ensure an effective isolation system.

5. The efficiency of an isolator system can be seriously impaired if the system is connected to rigid pipes, electrical conduits, ducts or shafts. It is essential that such external connections be as flexible as possible, not only to prevent transmission of vibration through the connections and allow the system of freedom of movement, but also to avoid possible failure of the connections.

6. It is important that no water or oil be allowed to contaminate area to be isolated during or after installation of Studflex isolators. Mineral oil will cause rubber to swell and deteriorate. Water may create a hydraulic lock within isolator layout reducing its efficiency.

Please contact our Applications Department at the address below, if you have any problems relating to installation or selection.

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