

Stravifloor Jackup

Installation Manual

Installation Tools and Components

- Stanley knife
- Ink marker
- Marking spray
- Pocket tape measure
- Cross line laser (optional)
- Impact wrench
- Screwdriver
- Adhesive spray and tape (if the perimeter isolation is done with a material different than the self-adhesive CDM Stravitec's Perimeter Strip)
- Adhesive tape
- Grease
- Manual cartridge gun (+ elastic sealant)
- Personal protective equipment

1 / Supporting Floor & System Components

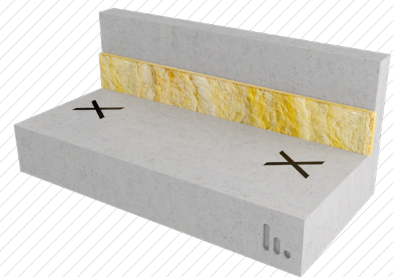
Prior to installation the area should be watertight and the supporting floor clean and dry. The flatness of the supporting floor should be a maximum of 1/8" (3 mm) over 10' (3 m) and 1/16" (1.5 mm) over 24" (60 cm) (according to ASTM E1155-14, ACI 302) to ensure a successful installation.

If the supporting floor is not completely flat and level use a fast drying, self levelling compound across the whole floor.

2 / Box Location & Perimeter Isolation

Using the installation plans supplied mark out the location of the center of each box across the whole floor.

All walls, columns and service penetrations through the floating floor should be isolated using strips of perimeter isolation. The height of this isolation should be the distance between the supporting floor and the finished level of the floating floor.

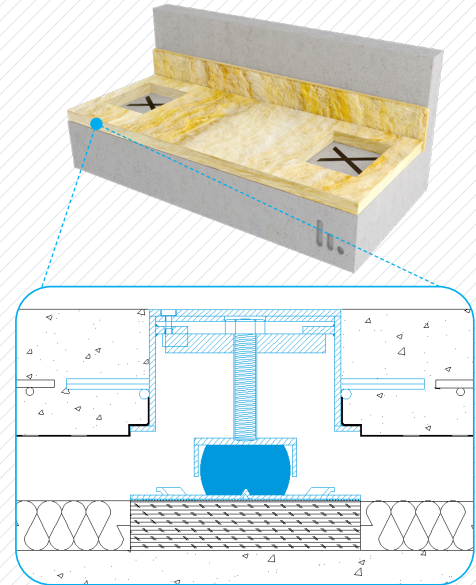


3 / Absorption Layer (optional)

Technical note: to avoid a standing wave in the air void (which may cause noise breakthrough at high frequencies) the use of a mineral wool absorption layer in between the boxes is recommended.

At the locations where the boxes will be installed make a cut out the size of the base plate in the mineral wool.

If mineral wool is specified for the system the height of the boxes should be adjusted (by the same thickness as the mineral wool) by mounting them onto a layer of Fibrecement or equivalent.

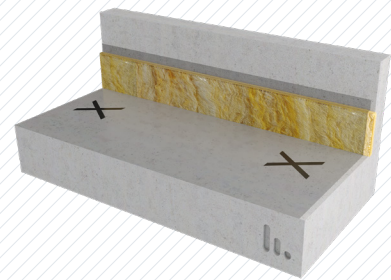


4 / Protection Layer

A protective layer of building grade polythene sheeting should be installed over the whole floor and continued up the wall to cover the perimeter isolation strip.

All overlaps should be a minimum of 4" (100 mm) and then sealed using a 2" (50 mm) (minimum) wide industrial grade self-adhesive tape.

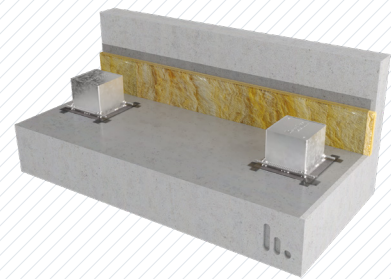
Ensure the polythene is fitted neatly into the corner areas of the floor to avoid any pocketing which could result in a reduction of slab thickness in these areas.



5 / Box Installation

Make a cut out in the polythene the size of the baseplate and tape the polythene securely to the baseplate ensuring there are no gaps where leakage could occur.

Place the boxes on their baseplates. The distance between the center of the box and the edge of the floor should be a maximum of 20" (500 mm) to limit the cantilever effect.



6 / Top Lid & Reinforcement Grid

Ensure the top lid of the box is tightly closed and sealed with silicone to prevent concrete leaking into the box.

Install the appropriate grade of reinforcement mesh (the grade will be predetermined by the project structural engineer) and tie the mesh to the protruding reinforcement bars on the boxes. If any accidental tears occur in the polythene layer they must be securely repaired using additional polythene sections and industrial grade self adhesive tape.

7 / Concrete Pour

Once you have ensured that all boxes are adequately closed and sealed the concrete can be poured to the required height.

Attention: be careful when pouring the concrete so none leaks into the boxes as this will damage the product and create an acoustical bridge.

8 / Floor Jack-Up

Jacking up can only occur when the concrete has cured to the required strength – 14 and 28 day concrete cube tests are recommended to determine this.

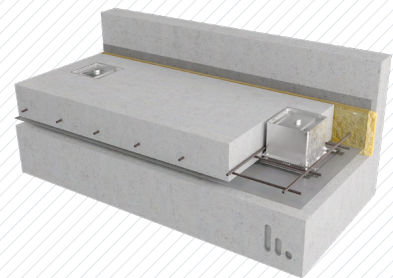
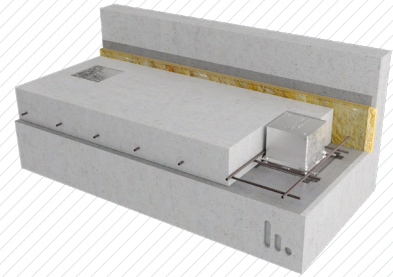
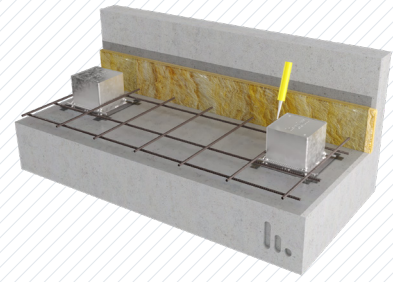
Open the top lid of the box and locate the isolators (elastomeric pad, spring(s) or a combination of the two – as indicated on the plan) on to the base plate. Position the bearing plate and adjustment plate on top of the isolator.

Always start the jacking up process in a corner position and gradually move line by line across the floor (zigzag pattern).

For more complex room geometries, CDM Stravitec should be consulted about the order of the jack-up boxes. This info will then be added to the shop drawings.

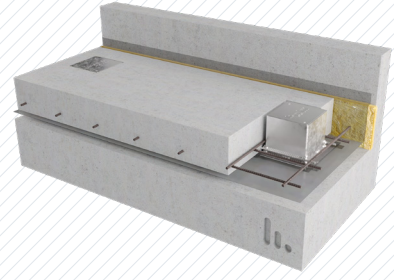
Apply a small amount of grease to the bolt inside the box and start jacking up the floor in phases – no more than two rotations at a time for each phase. If the required height is not reached in the first phase repeat the process again following the same sequence. Note that the minimum jack-up height is 0.2" (5 mm) for springs and 0.4" (10 mm) for elastomeric pads.

During the jacking up process ensure that no unnecessary loads are placed on the floor.



9 / Closing the Boxes

Once the floor has been jacked up, the box lids can be secured into place and the floor is now ready for use.



DISCLAIMER

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