

The installation and Maintenance of raised access floors

1) General

As well as the preconditions and instructions for installation below, the use and maintenance of raised access floors must be carried out according to certain rules.

Products therefore collaborate with partners selected in advance, using their know-how and experience to finish our projects in a successful way.

Products will reject any guarantee claim where the floor has been inexpertly installed, used or maintained.

2) Preconditions for installation

Following conditions must be carried out exactly to be successful in the installation of raised access floors:

a) to know how much tiles one needs per area, it is useful to make a drawing that shows all the areas with their measurements.

b) there should be a free path from an elevator and/or hoists to the area receiving the access floor material.

c) the minimum power available during installation is 110 – volt 20 amp.

d) the rooms need to be:

- completely cleared and tidy
- dry
- properly illuminated

e) the surface, whether concrete, tiles or any other material needs to:

- be cleaned and free of any screed or mortar residue
- be smooth and horizontal
- be dry
- have adequate load-bearing capacity

On no account raised floor pedestals can be installed on an existing soft or semi-soft floor coverings, such as carpet, PVC, linoleum, rubber, etc.

f) climatologic conditions: the tiles must be stored and installed in climatologic conditions which reflect the final conditions of use as closely as possible. In any event the following conditions need to be respected, during and after the installation, i.e. during the further life of the tiles:

- temperature: 20°C +- 5°C
- relative atmospheric humidity: 40 to 65%

To avoid problems caused by large tension in between the tiles, we advice to allow the tiles to acclimatise to the site for 1 week before starting the installation. The relative atmospheric humidity may, in no circumstances, exceed 70%.

g) any installation work under the raised floor can be executed in 2 ways:

- the installation of all the techniques takes place first and the installation of the raised access floor will be adapted at the present obstacles.
- the installation of the raised access floor takes place first, followed by the techniques. This will be executed by lifting the raised access floor and repositioning the raised floor after the technique application. Pay attention not to carry out work that may produce dust or leaves small particles. These might penetrate the joints between the tiles, causing cracking or squeaking noises as the floor moves. The tiles around the working area that aren't removed for installation must be covered.

h) Notify that no personnel other than experienced access floor installers should be allowed on the work floor.

3) **Installation instructions**

a) pre-treatment of the surface

The surface, which must be completely smooth, horizontal and dry, must be pre-treated as follows: (1) clean thoroughly with an industrial vacuum cleaner
(2) (optional) treatment with latex paint

This paint must be applied in 1 or 2 coats, according to the manufacturer's instructions, and must in any event be compatible to the adhesive used to fix the metal pedestals on the surface.

b) drawing out the floor grid

Prior to installation of the raised floor, the installer should mark out his gridlines on the surface in order to facilitate the installation of any pipework, channels etc. The contractors carrying out service and technical installations must respect this grid, so that no pipework or channels are installed on the exact location reserved for the pedestals of the raised floor.

c) determine the height of the pedestals

The use of lasers is necessary to determine the exact height of the sub floor. The laser will give a constant level line to use as a reference. One will notice that the height of the pedestals near doorsills, curbs,... needs to be changed.

d) uneven sub floors

Following steps need to be completed when the laser discovers certain asperities:

- ***in case of big asperities:***

you will need to adapt the height of the pedestal

- ***in case of small asperities:***

use small keys to move the pedestal to the correct height

e) setting out the floors

Initially a full row of tiles must be laid out. This row must be laid out without touching a wall.

The tiles must be installed as accurately as possible at the desired height. The remaining spaces against the walls will be filled once the middle section is complete.

f) the installation of pedestals and floor tiles

Once the floor is set out, the remaining tiles can be installed. The procedure is to place one new pedestal and one new tile each time, working out of the angle formed by the tiles already installed. The upper part of the pedestal is a star shaped pedestal head. After the final positioning, the position will be locked using a locking nut on the thread rod. The use of locking compound in the pedestal head will guarantee fixation. A synthetic disk with fixation edges will be attached to the pedestal head. The disk has a tree part subdivision for the following applications: subduction of vibrations, deduction of floating electricity and maintenance of the floors positioning.

The manner in which the raised floor is installed, will determine its later horizontal stability: the tiles may not display any open joints and must not move with respect to one another. The tiles must therefore join up neatly. It isn't necessary to knock the tiles into place. Once installed the tiles must be easily removed and replaced. (this will happen with the tile lifters below) Good control of climatologic conditions before, during and after the installation, will contribute to a perfect result.

Apply little aluminium plates on the upside of the gaskets or under the tile when the adaptation of the height of the tiles is necessary.

When the height of the floor overrates the 500 mm, the installer needs to use stringers to create more stability.

When large surfaces are installed, the installer should be aware of the locations of expansion joints in the building. He should be able to provide the requisite expansion joints in the raised floor, in liaison with the building authorities.

g) edge finishing

The edging tiles may be placed once the centre tiling is complete. Filler tiles are cut to size on site. The cut edges must be finished as follows:

- either treat with sealing paint
- either with edging strip, obtainable separately.
- either using aluminium tape

For the connection to the wall, a press-fit draught seal, which also functions as a flexible joint, is used. This seal may be attached to the wall or to the tiles, but must always be level with the tile surface. This joint may be hidden later with a skirting. The tiles must never be secured to the adjacent walls.

h) adjustment and locking of pedestals

The pedestals are subsequently locked at that height. This may be achieved in two ways:

- either apply locking compound between the adjusting nut and the threaded rod
- and/or lock the adjusting nut with the locknut provided.

4) The maintenance of raised floors

IMPORTANT: Water is one of the most dangerous enemies of the raised floor. The tiles may swell as a result of overuse of water on or under the floor. We provide the following instructions in order to prevent this;

General clean-up following installation

Larger particles should be removed and the floor should then be thoroughly vacuum cleaned. The vacuum cleaner brush must be suitable for the type of tile covering.

Normal maintenance

For carpet: vacuum cleaning

For other coverings (PVC, lino, HPL): Wipe clean thoroughly with a well wrung-out cloth with hot water and a normal amount of neutral detergent.

When required repeat the treatment after a few minutes.

Then dry the floor with a clean cloth.

Depending on the covering a polish may be applied in accordance with the manufacturer's instructions. This prevents rapid soiling and simplifies subsequent cleaning operations. Avoid products containing aggressive solvents or fragrances.

Removing spots

For carpet: smaller spots may be removed with the usual "dry foam" spotting agents. This must be done immediately.

For other coverings: The usual agents without aggressive solvents or fragrances are suitable, but care should continue to be exercised when using water.

General remarks for the user

Removing heavy objects on this floor, such as furniture machinery etc. may cause unacceptable point loading. To avoid this a wheeled trolley may be used, with the wheels running on planks.