Stravifloor Channel (Panelized) Installation Manual

Installation Tools and Components

- Stanley knife
- Ink marker
- Pocket tape measure
- Cross line laser (optional)
- Chalk line with gear ratio
- Leverage sheet metal snips
- Hand-held circular saw and/or jigsaw
- Battery powered screwdriver (+ screws) or nail gun
- Adhesive spray and tape (if the perimeter isolation is done with a material different than the self-adhesive CDM Stravitec's Perimeter Strip)
- Manual transpallet (optional)
- Personal protective equipment (PPE)

1 / Supporting Floor & System Components

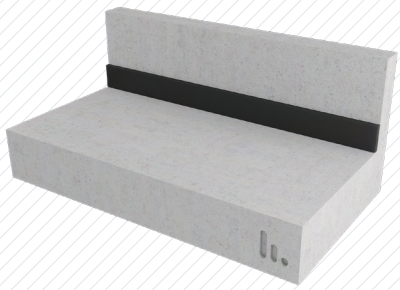
Check the supporting floor has a tolerance of 0.1% or 1 mm/m for gradient and a maximum of 2mm for smoothness.

Ensure that the installation area is watertight and the supporting floor is dry and clean prior to installation.

2 / Perimeter Isolation

All walls, columns and service penetrations through the floating floor should be isolated using Perimeter Strip self-adhesive backed isolation.

The height of this isolation should be the distance between the supporting floor and the finished level of the floating floor.



REUTENBEEK 9-11, 3090 OVERIJSE, BELGIUM
T +32 2 687 79 07 / F +32 2 687 35 52 / INFO@CDM-STRAVITEC.COM / WWW.CDM-STRAVITEC.COM

3 / Channel Installation

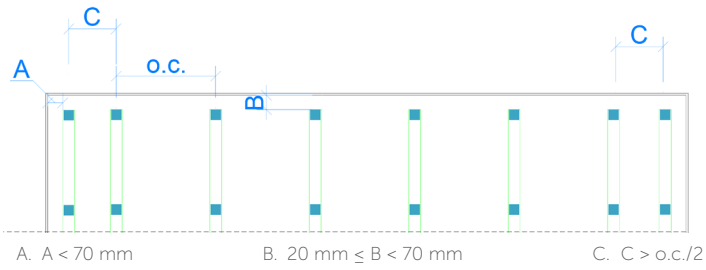
The steel channels can be loose laid without the use of mechanical fixings or adhesive.

To achieve a flat and level finished floating floor ensure that the steel channels are levelled using either plywood or metal spacers (shims) which should be placed directly under the CDM Stravitec elastomer pads to provide the required height.

Install the first steel channel parallel to the wall with a gap of ≤ 70 mm unless specified otherwise on the drawings provided.

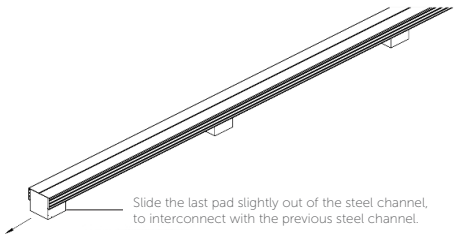
The distance between the steel channel end and the walls should be ≤ 20 mm to prevent the steel channel from puncturing the lateral isolation and making contact with the wall; thereby creating an acoustic bridge.

The distance between the first two steel channels closest to the wall must be the same at both ends of the room (see illustration below).

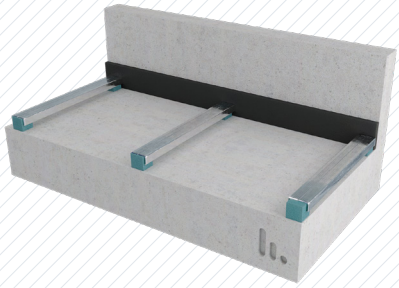


A. A < 70 mm B. 20 mm ≤ B < 70 mm C. C > o.c./2

! Connecting steel channels must always be supported by an elastomer pad to prevent deformation of unsupported steel channels under load. Isolated steel channels are delivered with an elastomer pad already inserted at the end of each steel channel. Slide the pad half out of the steel channel so that you can install the previous steel channel onto the protruding pad. Turn the very first steel channel with the fully supported end towards the wall. The other side will come to rest on the protruding pad of the next steel channel.



The use of a steel channel around the perimeter of the room is not necessary unless it is known that there will be significant loads in this area i.e. dumbbell racks or other heavy equipment.



Note – Overheight or Shim Configurations

When additional height is needed to level the system or create the required airspace, it is essential to select an appropriate material (e.g., wood, metal, or concrete) that meets project requirements - including resistance to moisture, mould, autochthonous parasites, or other harmful agents.

Overheight:
Use continuous, beam-like materials that can be mechanically fixed on top of the metal channels. The beam width must be equal to or greater than the channel width.

Shims:
Position shims beneath the bearings, ensuring they extend at least 25 mm (1 in) beyond the bearing footprint in both directions.

Guidelines:
Continuous overheight elements are generally the preferred and simpler solution unless numerous service crossings run perpendicular to the channels - in such cases, additional clearance below the channels is required to prevent acoustic bridges. Shims of varying thickness may also be used when the subfloor is highly uneven to achieve proper leveling.
In both cases, mechanical fixation may be required to ensure structural stability in taller setups. This can include fixation (by gluing) between shims and pads, or connecting beam-like overheight elements using cross beams, with spans defined according to project conditions.

4 / Absorption Layer

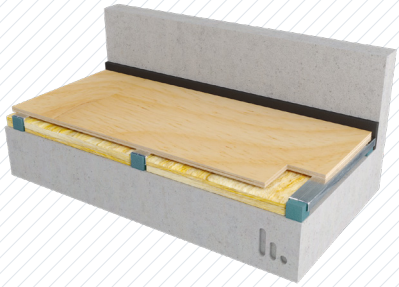
Ensure that the thickness of the mineral wool is a few mm thinner than the depth of the void – it is worth remembering that the void will decrease once the floor is in use and fully loaded.

Install the mineral wool in between the steel channels and note that it should never be installed under the steel channels.

5 / Board Layer 1

Install the first layer of board (plywood or OSB) perpendicular to the steel channels and mechanically fix the boards to the steel channels using a screw that is short enough to not make contact with the supporting floor underneath.

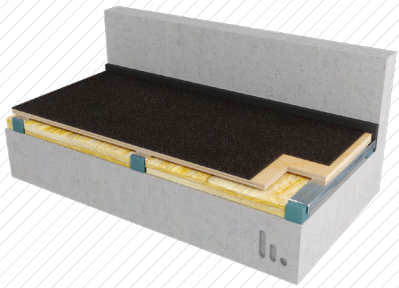
Take care to ensure that all board joints are located at the centre of a steel channel so that the joint is supported.



6 / Stravifloor Damping Layer (optional)

Loose lay the Damping Layer sheet over the first board layer without any overlaps and ensure the entire floor is covered.

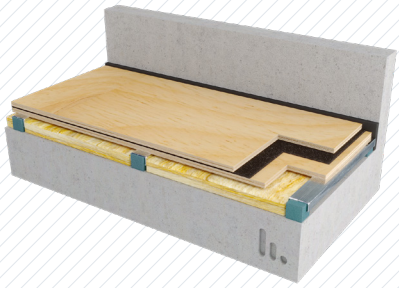
Stagger the Damping Layer sheets so that the joints are not located in the same place as the board joints underneath.



7 / Board Layer 2

The second board layer must be installed perpendicular to the first board layer.

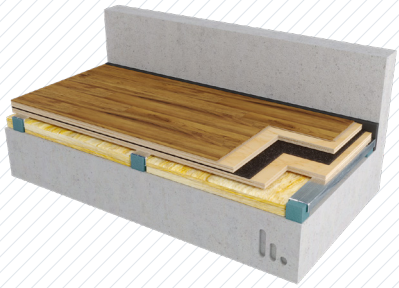
All layers must now be mechanically fixed together using screws which are short enough not to make contact with the supporting floor underneath. Use fixings at each corner (as a minimum) and two along the longest side (recommended).



8 / Floor Covering & Other Finishing Details

Install the final floor finish using the manufacturer's installation instructions.

Leave a small gap around the perimeter of the room to ensure that the final floor finish is not rigidly connected to the surrounding walls.



! If the Stravifloor Channel floating floor system is a different height to the surrounding structure an edge profile will be required. If a rigid edge profile is used ensure that the height of it is less than the height of the total floor system so that it does not make contact with the supporting floor. After deflection [(floor system height - edge profile height) > (deflection + creep)].

9 / Trim & Caulk Perimeter

Trim any excess of the Perimeter Strip to the finished floor height.

Seal with elastic caulking.