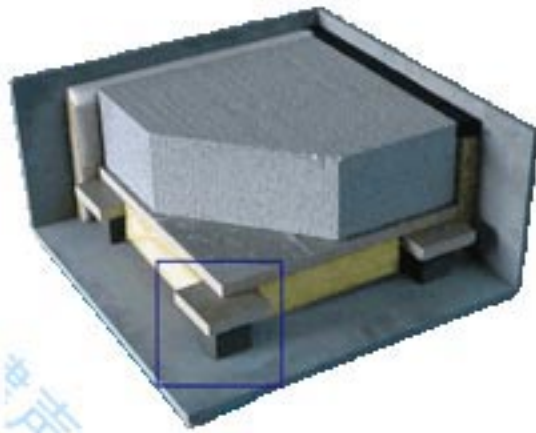
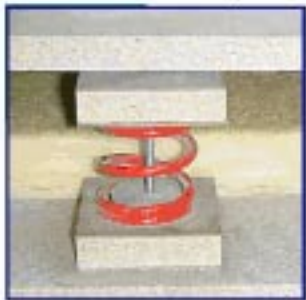


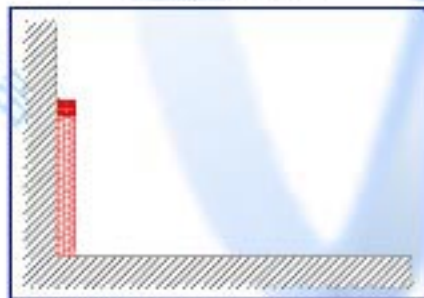
CDM



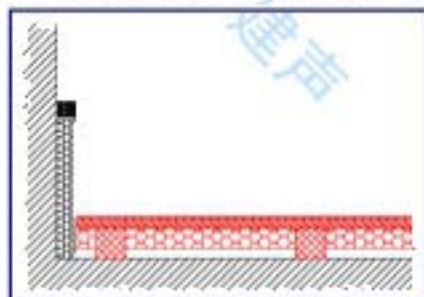
CDM-ISO-FLOAT build-up with springs or elastomer pads



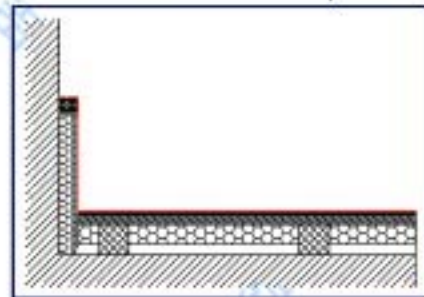
Installation



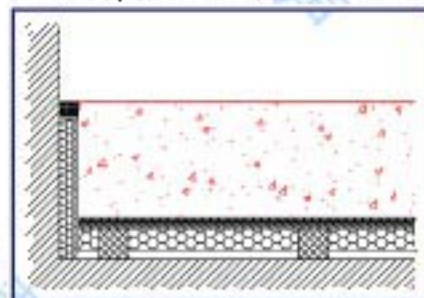
Lateral isolation



CDM-ISO-FLOAT panels



Waterproof membrane



Concrete slab + finishing



CDM-ISO-FLOAT

CDM-ISO-FLOAT is a pre-manufactured, ready-to-install system for concrete floating floors. The system consists of springs or elastomer pads glued to the underside of formwork panels along with mineral fibre sound absorption, lateral isolation and a waterproof polythene membrane.

Information required by CDM to carry out the design of the CDM-ISO-FLOAT system:
Imposed dead and live loads on the floor

Performance requirements, eg. natural frequency or sound insulation criteria

The advantages of the CDM-ISO-FLOAT system are as follows:

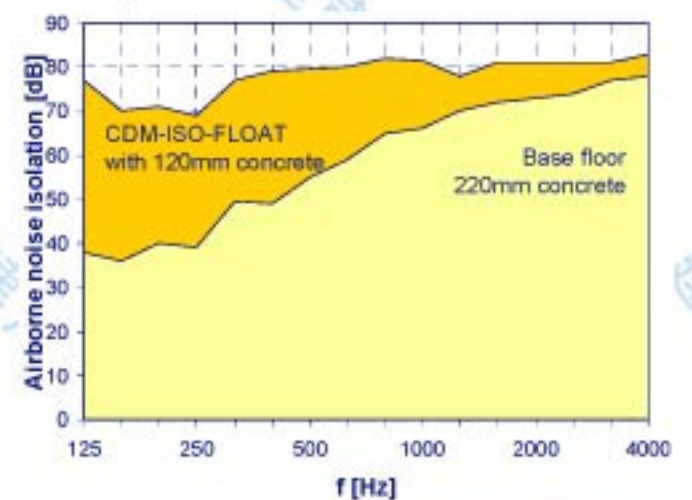
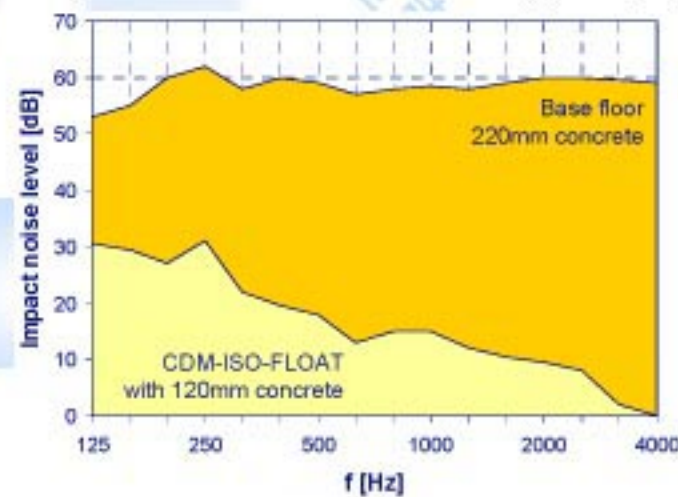
System comes with full design drawings and is extremely quick and easy to install

Optimises sound insulation

The air void beneath the floor can be varied to tune the system natural frequency

Available with CDM-ISO-CHR springs (3-5Hz) or CDM-ISO-CDM elastomer pads (6-15Hz)

Example: 120mm concrete floating floor, spring isolators, 220mm base concrete floor



Construction of the National Theatre in Budapest was started in September 2000. Functionally, the theatre is composed of three parts: there's a central circular area (with the house and studio stage), surrounded by the areas with spectator facilities, and the third structural part is the service wing built in a U-shape around the main stage. The total area of the building is 20.844 m² including the open-air stage.

CDM has delivered the system CDM-ISO-FLOAT for the big stage room (approx. 211,0m²) and the stock room (approx. 54,4m²) of the National Theatre. The CDM-ISO-FLOAT system consists of the following:

Formwork panel in high-quality fibercement board of 28mm thick, onto which elastic bearings in CDM-HR (microcellular composite material, based on natural rubber and small cork grains) are glued according to the static and dynamic loads to be taken up. Unloaded dimensions of these bearings = 60x60x60mm³. An overheight plate in fibercement with dim. 90x90x12mm³ is glued in-between the elastic bearing and the formwork plate, in order to create a higher acoustic void. In-between the bearings a layer of mineral wool is glued (40mm thick, density approx. 20kg/m³) to provide some absorption in the acoustic void. Lateral surfaces (columns, walls) have been treated with a rockwool-based package in order to create total decoupling of the suspended structure.

Acoustic measurements after completion of the building confirmed the high performance of the system

Installation on site

