

# Concerthall Bruges, BE



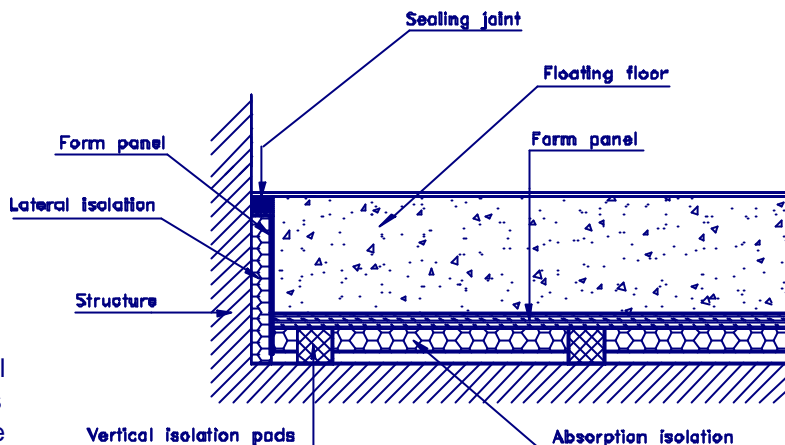
## Floating floor for Plant Room CDM-ISO-FLOAT



Architect	Robbrecht & Daem
Owner	City of Bruges
General Contractor	De Nul
Acoustic Consultant	Arup Acoustics (UK)
Stability Engineering	Studium
Floor Area	ca. 400m <sup>2</sup>

One of the main heating and ventilation plant rooms is located directly above the Chamber Hall in the lantern tower. The Acoustic Consultants specified that a high performance concrete floating floor was required to provide sufficient vibration isolation and sound insulation to ensure that the HVAC equipment could not be heard in the Chamber Hall.

In the completed Chamber Hall the noise from the HVAC equipment was not measurable above the background noise levels in the Chamber Hall



### The CDM -ISO-FLOAT system consists of:

- Main pad type: corkrubber (approx. 3 per m<sup>2</sup> for the floor load + extra under the machines)
- Formwork: 18mm fibre-cement board
- Absorption: mineral wool (40mm thick and 20kg/m<sup>3</sup> density)
- Lateral isolation: mineral wool (25mm thick and 45kg/m<sup>3</sup> density)
- Protection foil: transparent PVC
- Thickness of RC floating floor: 100mm



Pallet before leaving the factory



Installation of the panels



Installation of the PVC waterproof membrane

## CASE STUDY – CDM-ISO-FLOOR

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