



## Advantages

**Prevents deformation and lifting of floor (frost heave).**

**Elimination of freezing air.**

**High resistance to distributed and concentrated loads.**

**Ease of positioning due to lightness and simple linking of the modules.**

**Gas radon removal.**

**Effective ventilation in all directions.**

**Maximum free transit for the underground system in all directions.**

## Applications

Iglu'® is the most secure and economical constructive solution for installing ventilated cavities under both positive and negative cold rooms.

It guarantees that the temperature of the cavity remains above zero by removing the moisture present in the substrate. This prevents the freezing and deformation of the foundation sediments (the lean concrete/soil assembly) which pushes the laying surface upwards and causes the floor to crack (a process known as frost heave).

The use of Iglu'® for the construction of industrial flooring for cold rooms was established in the 2014 LGPCF (Guidelines for Industrial Flooring in Cold Rooms) by ENCOPER (National Association of Flooring and Cladding Manufacturers).

The text specifies the essential requirements necessary for the durability of all reinforced concrete slabs intended for industrial use in cold rooms. In particular, it addresses the essential requirements of mechanical resistance and stability for which there are no provisions in the more generic standard, UNI 11146.



# case history



In the case study presented here, it was necessary to create a negative cold room with an under-floor cavity that would allow good air circulation so as to prevent the moisture from forming condensation that would then turn into ice. The design that was developed for achieving this objective involved the use of Iglu® h 27 cm modules. Due to the domed shape and supporting feet of the modules, Iglu® guaranteed a higher capacity with respect to the design load, whether distributed or concentrated, and assured that the performance required of the industrial floor was achieved. Laid side by side, the Iglu® modules facilitated the formation of a cavity which enabled the efficient circulation of air. This circulation was augmented by the peripheral retaining wall in which openings to the exterior had been created. Once the Iglu® modules were positioned, the next steps were the installation of an electro-welded 200 x 200 mm mesh with a diameter of 6 and filling with concrete in order to construct the carrier substrate for the overlying layers and for the floor which would bear the design load.

This project confirms Iglu®'s great flexibility and variety of potential applications.

The client for this project, after considering various alternatives, recognised Iglu® as the most viable, economic, fast and secure way to provide support for a cold room, and this was confirmed by the final, state-of-the-art implementation.

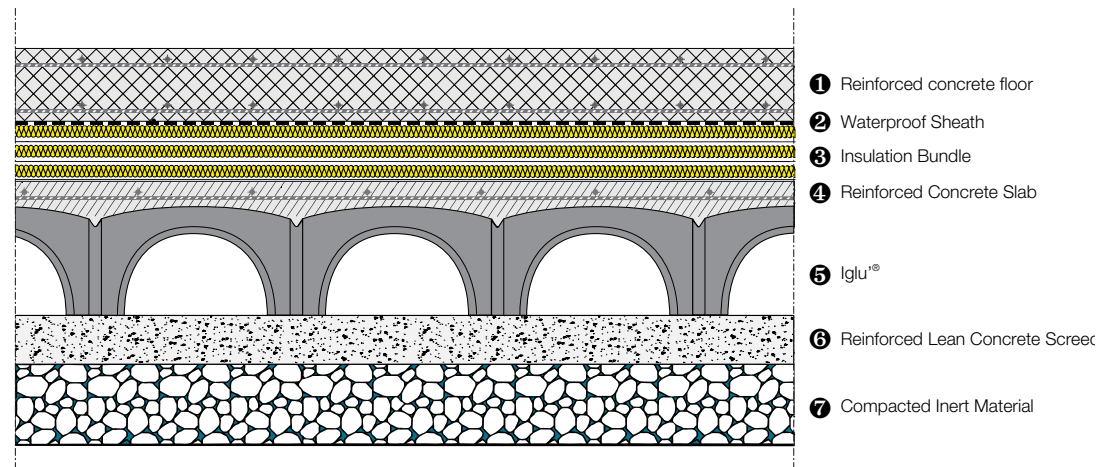
**Client:** Private

**Surface Area:** 3.600 m<sup>2</sup>

**Capacity:** 4.000 kg/m<sup>2</sup>

**Thickness:** 25 cm (10")

**Materials:** Iglu®





**Project site:** Italy





**Project site:** France



# reference



**Project site:** France





**Project site:** France



Certified Management System:  
ISO 14001:2004 - ISO 9001:2008 - BS OHSAS 18001:2007 - SA 8000:2014



Socio del  
GBC Italia

Via Serenissima, 30 - 31040 - Gorgo al Monticano (TV) - Italy  
info@daliform.com - export@dalifom.com - www.daliform.com - Tel. +39 0422 2083 - Fax +39 0422 800234