

Saint-Joseph Hospital Complex, Paris

A&E department protected from the noise of the Metro

Located in the Rue Losserand in Paris's 14th arrondissement, the Saint-Joseph Hospital complex stands out on account of its exceptional transport links. Metro line 13 that runs six metres beneath the street is just one of the numerous public transport links available.

The construction of a new A&E department at the hospital presented all the parties involved with a huge noise problem, precisely because of the existing infrastructure. Given how restricted space already is because of the densely built-up area, the planned extension could not be implemented anywhere but in the basement and on the ground floor directly adjacent to the traffic routes. This meant that there was no alternative in terms of technical planning than to design the staff rooms less than three metres from the Metro tunnel.

Concentrated decoupling with Regufoam®

A noise level of 40 dB(A) was detected during a vibro-acoustic investigation carried out by the acoustics office involved with the Metro going past. A proposal was put forward in conjunction with the Site Manager to provide vibration decoupling of the entire lower floor to reduce the noise level. The excellent performance of the material, ongoing monitoring of the works and the seamless co-ordination of all those involved on site meant that it was possible to reduce the noise level to 25 dB(A).

The vibration decoupling provided by the **Regufoam®** bearings resulted in the staff rooms being quiet, which the end customer would not have expected, based on his own admission, given the original adverse conditions. The noise attenuation achieved fully guarantees unrestricted use of the premises.

Project type

Concentrated foundation decoupling

Choice of material

Regufoam® vibration 680 plus

Storage space

76.5 m²

Parties involved

Architects: Soors et Stromboni,
Structural engineers: Impédance,
Societies: Cap Ingelec, Léon Grosse

