KRAIBURG PURASYS

Case Study

Jo&Joe Hotel, Paris, France

Vibration Isolation of a new concept hotel made in concrete and CLT

vibrafoam PURASYS | vibradyn PURASYS

1. Project

Products: PuraSys vibradyn
Characteristics: Vibration decoupling
Installation: 2018
City: Paris
Country: France
Construction: Beton & CLT
Date built: 2018
Architect: Jean-Paul Viguier et Associés
Project Owner: Accor
BET acoustics: Aïda ACoustique

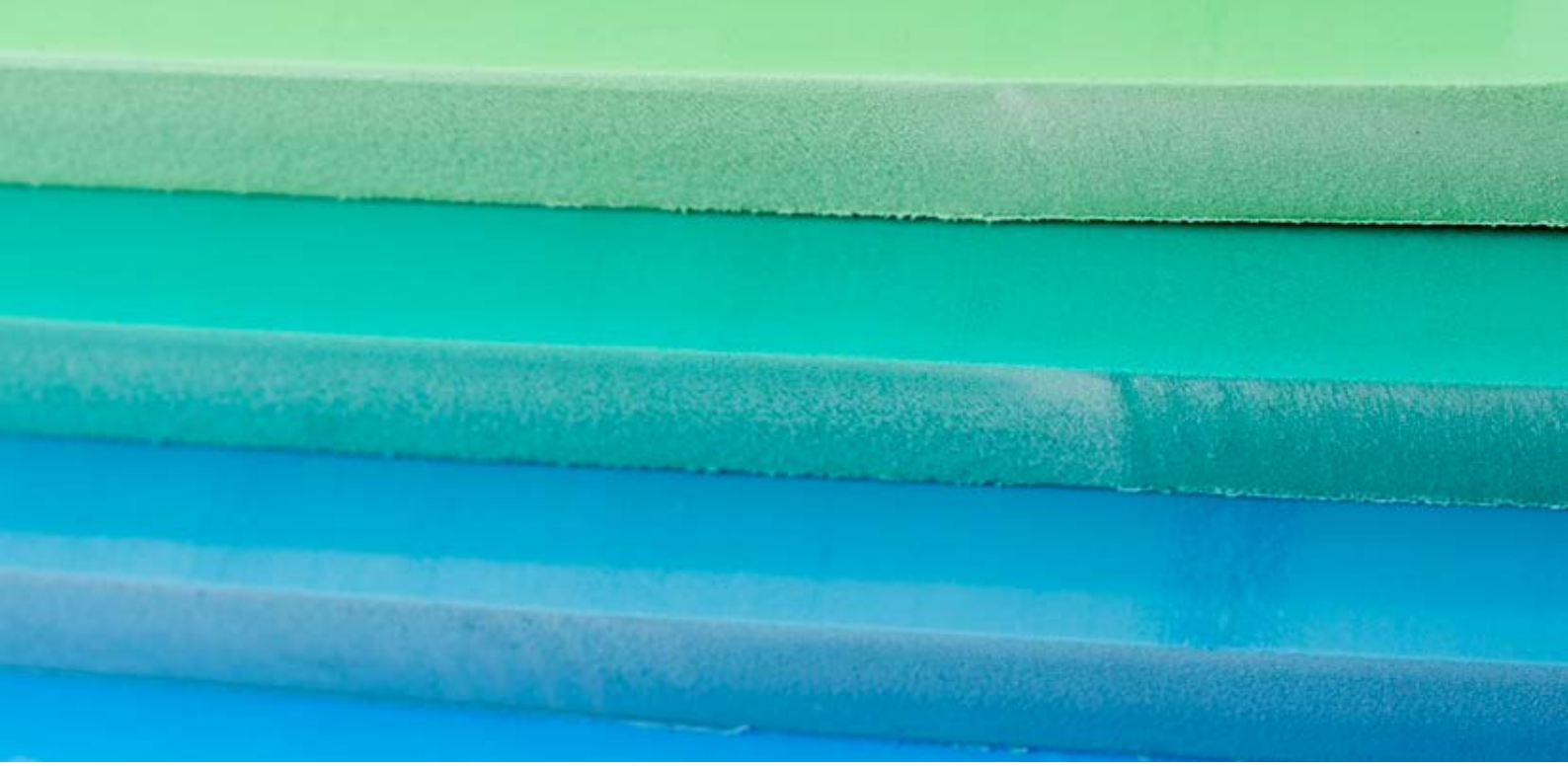
In Gentilly near Paris a new generation of Accor hotel is erecting right next to the Parisian ring road. The specialists for such complicated situations from Aïda Acoustique made a prognosis and came to the conclusion that the building must have a high-performance vibration isolation material to meet the legal limits of acoustic isolation and sound emissions.

Based on this research a PuraSys vibradyn strips installation was planned and installed. The whole building (R+7) and also the walls are in contact with the ground. Therefore, it was necessary to install different PuraSys vibradyn types for the different loads. This hotel stands on a surface of about 7000 m² spread over 9 levels, including a basement partially dedicated to parking. With 614 beds for 81 private or shared rooms, the open house multiplies the common areas, porosities indoor/outdoor through its green terraces and a bar, a restaurant and an indoor garden that are open to guests and visitors.

The U-shaped building encloses an indoor garden on one level with the ground floor. This free space is conceived as an extension of interior spaces by a language of materials: wood, steel, concrete, soft and fluid forms. A dozen fruit trees (apple, cherry, pear, loquat ...) mark the seasonality and strengthen this relationship in-out. With roofs in vegetalized parts and vegetable gardens and terraces planted with the R + 7, this hotel intends to be part of the strengthening of biodiversity with a micro food production.

The following aspects of the bearing have been special challenges:

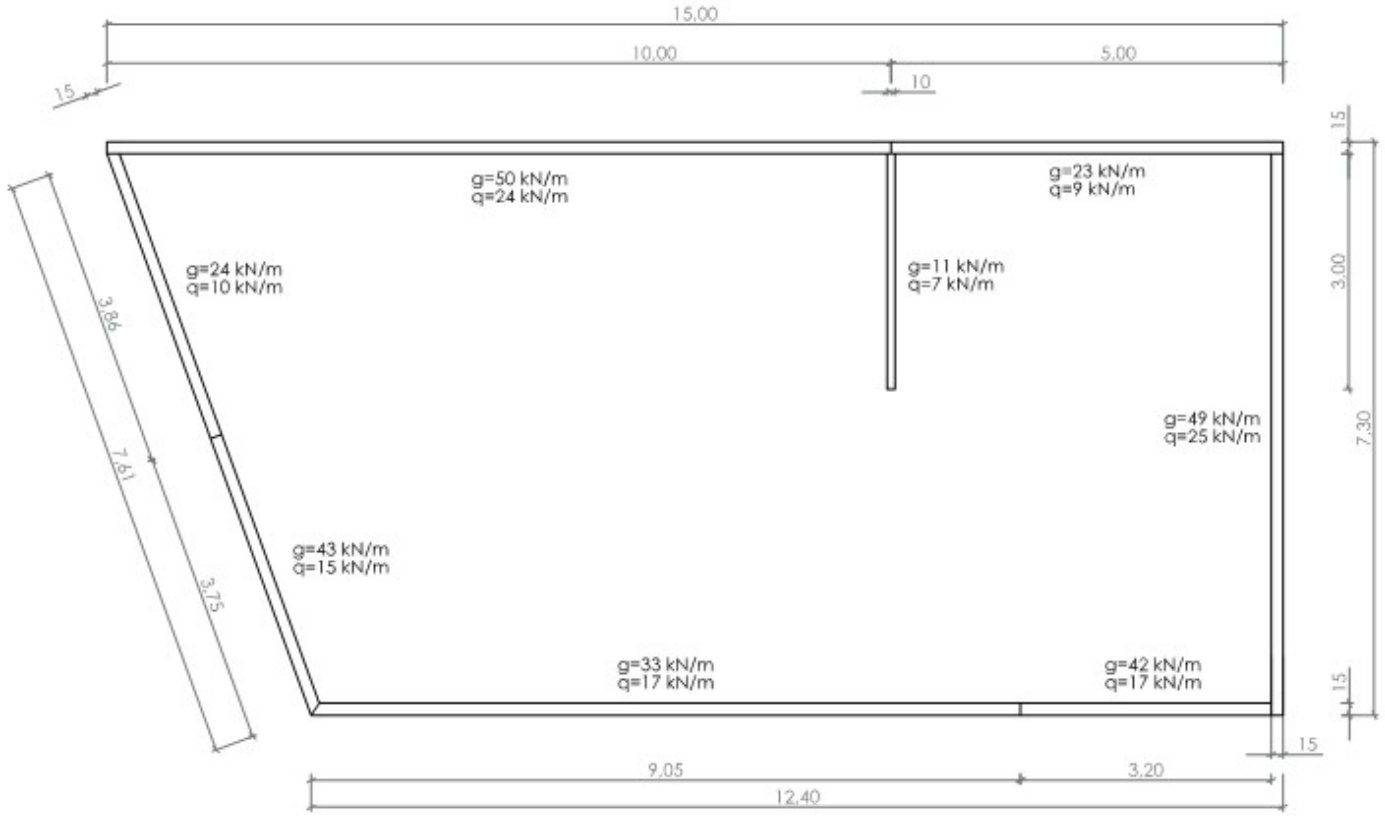
- Low natural frequency of the system: 15 Hz
- Complexe building geometry based on seven different levels. CLT (Cross Laminated Timber)
- PuraSys vibradyn elastic decoupling of joints between wall and ceiling
- DAMTEC wave 3D 17/8 under screed for lobby, restaurant...open spaces



2. Technical details

The delivery included 7 levels (7,000m² of area) of different PuraSys vibradyn strips types with a thickness from 12.5 to 22 mm. Besides technical support, the installation is also part of the whole service. Due to the complex building geometry with many diagonal areas and different installed PuraSys vibradyn types in different levels (some are located in groundwater), a particularly careful bearing was necessary. Furthermore the whole installation of acoustic isolation mats PuraSys vibradyn was attended by quality assurance measures.

Example of a load plan



KRAIBURG PURASYS

KRAIBURG PuraSys GmbH & Co. KG

Porschestraße 1 · D-49356 Diepholz
Fon +49 (0) 5441. 5954-0 · Fax +49 (0) 5441. 5954-24
info@kraiburg-purasys.com · www.purasys.com