References

Saclay Institute of Mining and Telecommunications



Uponor involvement

- 40 000 m2 de dalle active

Institute of Mines Telecoms Saclay

The higher education and research building for the Institut Mines-Télécom features an active floor system covering an area of 40,000 square meters. The energy-efficient building will house a wide range of activities specific to the Institut Mines-Télécom, including education, research, technology transfer, and innovation.

Project Facts:

Location Campus Paris-Saclay à Palaiseau (91), France	Completion 2018
Building Type Office	Product systems Multilayer Pipe Systems, Flexible Pipe Systems, Ground Energy
Address Institut Mines-Télécom 37-39 rue Dareau 75014 Paris	Project Type New building

Partners

Architecte : Grafton Architects

Maître d'oeuvre : Vigneu et Zilio

Installateur : ENGIE AXIMA

BE Fluides : Oteis

An energy-efficient building designed for scientific research

The Paris Saclay Public Development Agency (EPAPS) is responsible for developing the Ecole Polytechnique District ZAC, which aims to create a mixed-use neighborhood with a strong focus on scientific research. This ZAC is located east of the Saclay Plateau on the site of the existing Ecole Polytechnique campus.

The future facility will host a wide range of activities specific to the Institut Mines-Télécom: education, research, technology transfer, and innovation, as well as a dining area featuring an administrative and university restaurant and a cafeteria. (https://www.youtube.com/watch?v=_yyUuXpY5Us)

The Institut Mines Télécom block is located in the "central strip" of the École Polytechnique district; the central strip is an urban area of approximately 60 hectares running east to west, designed to distribute urban density over about 2 km as close as possible to existing or planned buildings.

The school, currently under construction, will have a floor area of 40,000 m².

A project that incorporates the Uponor Active Slab thanks to the professionalism of its teams

Thanks to the work of François Murguet, the Uponor Active Slab was recommended by the engineering firm OTEIS for its quality and performance. Our Contec system will enable the distribution of heat and cooling through the floor and ceiling, providing gentle and comfortable comfort for users. With its 40,000 m² of floor space, this building represents a true technical challenge; in fact, it was necessary to create plans for 1,878 modules distributed across 265 different models, representing 15,862 m² of active surface area.

The active slab: an energy-efficient solution for high-performance buildings

The IMT placed particular emphasis on the need to design a building with limited energy consumption, specifically regarding its heating and cooling management. The Uponor heating and cooling solution relies on the energy efficiency of a high-efficiency condensing gas boiler and an active slab system. Heat production for heating will be provided by a condensing gas boiler, perfectly suited for low-temperature output.

Heat and cooling (IT room and restaurant) are provided via heat exchangers connected to the IDEX district heating and cooling networks. A backup chilled water system is planned for the server room and a backup chilled water system for the process. An active floor slab will distribute heat and cooling through the floor and ceiling, providing gentle and comfortable comfort for occupants.

Institut les Mines Telecoms Saclay











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