Uponor

Referenze

Uponor Shanghai office, China



Coinvolgimento Uponor

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360 sqm

Uponor Shanghai office, China

A showcase of Uponor products and systems to customers and also serves as our branch office.

Located at the ground floor of a multi-story office building in Putuo district (Shanghai), Uponor Shanghai office present a showcase of Uponor products and systems to customers and also serves as our branch office. Project was completed in Jan 2017 and is now in operation. Teporis gypsum board with insulation layer ceiling radiant cooling system and floor heating system are installed with air source heating pump for the project to conditioning 360m² office spaces.

Dati del progetto:

Location Anno di completamento

Shanghai, China 2017

Tipologia di edifico Product systems

Ufficio Riscaldamento/Raffrescamento

radiante

Indirizzo Tipologia progetto

Room 102, Block 6, No. 600 West

Nuovo edificio

Yunling Road, Putao District,

Shanghai CHINA

The Uponor Teporis gypsum panel combines the speed of dry-wall techniques with the benefits of ceiling heating. The active panels consist of a reinforced, flame-retardant 15 mm plasterboard panel with an EPS thermal insulation layer that improves performance, while at the same time reducing heat loss. Uponor's tried-and-tested air tight pipes are pre-installed in these panels. Without radiators, noisy fans or other cumbersome devices, room can be heated and cooled at the same time utilizing all potential spaces.

On the other hand, Uponor PEX-a pipe underfloor heating and invisible supply air duct are also installed in the whole office. DOAS (dedicated outdoor air system) in parallel with radiant cooling has been also applied. Cooling load of the conditioned space has been split into sensible load (36kW) and latent load (12kW). 100% of the internal latent load and 30% of the internal sensible load are covered by the DOAS. The remaining sensible load is covered by the Uponor radiant cooling system and controlled by Uponor Smatrix Wave Plus individual room controller. It constantly monitors changes in conditions inside and outside the building. By intelligently adjusting and adapting, Uponor Smatrix ensures that just the right amount of energy is used at just the right time.

This is already the third project we using DOAS in parallel with Uponor Radiant heating and cooling system in Asia region. With a combination with DOAS used in the case, it consists of two VSD fans for exhaust, fresh air and a mixing chamber. It allows maintaining healthy CO\(\text{I}\) levels at the same time to provide fresh air to the office space.

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