

## CASE STUDY

Kooltherm™ FM Pipe Insulation

### French Ministry of Defence

The optimum thermal performance and environmental credentials of Kingspan Kooltherm™ FM Pipe Insulation have been used to full effect at the French Ministry of Defence's new €4.2 billion headquarters in Paris.



Known as the Hexagone Balard, the striking 16.5 hectare facility unites all the Ministry of Defence departments under one roof for the first time, enabling it to become a more collaborative and efficient organisation. The vast project was constructed by Bouygues and contains 3,125 offices, numerous conference rooms and an underground command-and-control centre; in addition to public facilities such as a health centre, children's day-care services and a swimming pool.

Reflective of the Ministry's drive for innovation and efficiency, the Balard complex has been designed to achieve HQE (Haute Qualité Environnementale) certification, the French standard for environmentally conscious buildings. It functions as an almost self-sufficient high performing ecosystem, with a range of state-of-the-art solutions such as its 4,000 m<sup>2</sup> photovoltaic roof. To ensure services ran in accordance to the strict requirements, 10,000 m<sup>2</sup> of Kingspan Kooltherm™ FM Pipe Insulation in various thicknesses was installed on hot and cold water pipework networks throughout the development.

The product's fibre-free insulation core delivers outstanding energy performance, with thermal conductivities as low as 0.025 W/m·K. This allowed the desired thermal performance to be achieved with the slimmest possible solution, saving vital service space whilst contributing towards the energy requirements of the BREEAM Assessment, in which the building achieved a rating of "Very Good". In addition to guaranteeing a constant high energy performance, the system will also help to keep the long-term energy costs of the building to a minimum.

Kingspan Kooltherm™ FM Pipe Insulation holds BDA Agreement® certification, LABC Registered Detail & Warranty, and is available as a freely downloadable BIM object from either [www.kingspanindustrialinsulation.com](http://www.kingspanindustrialinsulation.com) or the BIMStore website. Additionally, it has also been awarded a best-in-class Eurofins Indoor Air Comfort Gold certificate, recognising it as outstanding material according to the VOC Indoor Air Quality emissions regulations.



In addition to its free Pipeline Technical Advisory Service which can be contacted on 0808 168 7363, Kingspan Industrial Insulation has now also launched Premier and Premier Plus Services. These services support purchases of Kingspan Kooltherm™ FM Pipe Insulation and the Kooltherm™ FM Complete Pipe Insulation System (incorporating insulated pipe support inserts and fire sleeves) respectively, delivering clear advice and guidance at every stage in a project, from the initial specification, to site visits and certification.



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