

# Aldgate Tower Development Case Study

## ROCKWOOL®



### FACT FILE

Client:

**Aldgate Developments**

Main Contractor:

**Brookfield Multiplex**

Architect:

**Wilkinson Eyre Architects**

Mechanical Consultant:

**AECOM**

Mechanical Services:

**Murcury Engineering**

Thermal Insulation Contractor:

**Denco Thermal Ltd**

### THE PROJECT

Aldgate Tower is a brand new, state-of-the-art office development, the first phase of a wider regeneration of the Aldgate area in London. This impressive 317,000 sq.ft contemporary office block comprises 16 floors of Grade A revolutionary office space designed to achieve environmental efficiency as well as low running costs for operators.



“ROCKWOOL insulation is strong, but with a degree of flexibility which means it can be fitted neatly around pipework and ductwork without any gaps for optimum performance. It’s an excellent, environmentally friendly product, which met all our criteria on this demanding project .”

**Paul Wittam, Project Manager at Mercury Engineering**

## BENEFITS

- Meets BREEAM 'Excellent' rating requirements
- Highly thermally efficient
- ROCKWOOL materials used to satisfy BS 5422:2009 Method for specifying thermal insulating materials
- Non-combustible stone wool insulation
- RockLap H&V Pipe Sections, Ductwrap and Ductslab are CE marked in accordance with BS EN 14303
- Meets BRE Global Green Guide ratings (RockLap H&V Pipe Section A Ductwrap and Ductslab A+)
- ROCKWOOL insulation is chemically compatible with all types of pipes, ducts, equipment and fittings\* A typical aqueous extract of ROCKWOOL insulation is neutral or slightly alkaline (pH 7 to 9.5)

## THE CHALLENGE

Sustainable products were required that could perform for the lifetime of the building and meet the exacting standards required for an 'Excellent' BREEAM rating.

In addition to a range of energy efficiency choices such as solar hot water, modern European cladding and heat recovery systems, ROCKWOOL products were specified for the insulation of pipework.

Thousands of metres of pipework pre-fabricated offsite by MEP Solutions were then transported to London where the final connections were insulated on site; the key challenge was ensuring the pipe insulation was in the right place at the right time.

## THE ROCKWOOL SOLUTION

The Aldgate Tower project required ROCKWOOL to meet a range of challenging product performance and service criteria. Non-combustible products provided thermal performance for the lifetime of the building.

Over 15,000 linear metres of RockLap H&V Pipe Sections, 5,000m<sup>2</sup> of Ductwrap plus Fire Duct Systems (previously Conlit<sup>®</sup> Ductwork Systems) were specified. RockLap H&V Pipe Sections, Ductwrap and Ductslab provide thermal and acoustic insulation for heating, ventilation and air conditioning services. The Fire Duct Systems (previously Conlit<sup>®</sup> Ductwork Systems) has been fully certified to BS 476-24 (duct types A and B) and tested and assessed by BRE Global Loss Prevention Certification Board (LPCB) in accordance with BS 476-24. Kitchen extract ducts, which are subject to separate BS 476-24 requirements, are additionally covered for ½ and 1 hour protection periods.

ROCKWOOL stone wool tolerates temperatures of up to 1000°C, providing vital fire protection in buildings, keeping people safe as well as minimising damage to valuable assets.

ROCKWOOL products also provided a sustainable solution for the building and helped meet the BREEAM requirements for an 'Excellent' rating. ROCKWOOL stone wool insulation is 97% recyclable, and helps achieve BREEAM credits in: health and wellbeing, acoustic performance, energy (reduction in CO<sub>2</sub> emissions), materials specification, insulation and waste management.

ROCKWOOL insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP) and is made from a renewable and plentiful naturally occurring resource relying on trapped air for its thermal properties.

Excellent communication and a coordinated approach ensured that all products were readily available. Thanks to the UK manufacturing operations of ROCKWOOL, and one of their distributors, SIG Technical Insulation, MEP Solutions and thermal insulation contractor Denco Thermal Ltd, were never short of product with 100% of all delivery targets being met.

\*Guidance is given in BS5970 regarding the treatment of austenitic stainless steel pipework and fittings.

"It's exciting times as everything has gelled together and the site team have been happy with the project. We've had product fed through a floor at a time; and the ongoing collaboration has definitely benefited both our companies."

**Dennis Coles, Managing Director, Denco Thermal Ltd**

**For more information please contact:**

01656 862 621  
info@rockwool.co.uk