KLM ENGINEERING

Antarctic station case study

KLM DOORS: Good enough for the tough Antarctic conditions. Perfect for the UK.

KLM were delighted to have been chosen by the British Antarctic Survey (BAS) and its design partners to provide external and internal Composite Doors for its Halley Research site located in the Antarctic.

The conditions there are extreme as described in the following excerpt from the British Antarctic Survey website:

Life in the Antarctic

Approximately 1.2 metres of snow accumulate each year on the Brunt Ice Shelf and buildings on the surface become covered and eventually crushed by snow, necessitating periodic rebuilding of the station. This part of the ice shelf is also moving westward by approximately 700m per year.

There have been five Halley bases built so far. The first four were all buried by snow accumulation and crushed until they were uninhabitable. Various construction methods were tried, from unprotected wooden huts to steel tunnels. Halley V has the main buildings built on steel platforms that are raised annually to keep them above the snow surface.

A design competition was launched by the Royal Institute of British Architects and the British Antarctic Survey in June 2004 to provide a new design for Halley VI. The competition was entered by a number of architectural and engineering firms. In July 2005 the winning design was chosen, by Faber Maunsell and Hugh Broughton Architects. It is a structure which is, like Halley V, jacked up on legs to keep it above the accumulation of snow. But unlike Halley V, there are skis on the bottom of these legs, which allows the building to be relocated periodically.

For further information about our Composite Door sets, Fire Doors and other materials and accessories please contact:

enquiries@klmeng.co.uk or visit our website at **www.klmeng.co.uk**

KLM Engineering LTD
Earith Business Park, Meadow Drove, Cambridgeshire PE28 3QF, UK
Registered in England: 3166446 | VAT No: GB 927 368 786
Phone: 01487 840885 | Fax: 01487 841551
Email: admin@klmeng.co.uk | Website: www.klmeng.co.uk