

Central Boilerhouse

King's Buildings, University of Edinburgh

ARCHITECTS

Michael Laird and Partners

STRUCTURAL ENGINEERS

Ove Arup & Partners

STEELWORK CONTRACTORS

Chimney: John Thompson Horseley Bridge Ltd

Building: Robert W. Hay Ltd

Judges' Comments

An imaginative and effective engineering design for a small industrial complex combines practical application of steelwork with elegance of appearance. The horizontal lines of the trusses and framework of the boiler house contrasts with the grouping of the high steel chimneys.



The phased development of the boiler house at the King's Buildings has included alterations to existing, and provision of temporary, buildings, culminating in the construction of a permanent central boiler house.

During the construction of the permanent central boiler house a continuous supply of heat had to be maintained to the university buildings on the King's Buildings site. This meant that the new building and flues had to be constructed around the existing buildings, and chimney and tubular steel welded roof trusses with a minimum number of columns provided the best method for spanning the old structure. In addition the steel-framed building proved to be very economical.

The steel flues are constructed as a complex acting integrally through horizontal ring beams to resist wind and differential temperature forces. Steel tripod leg supports at the base of each flue allow the non-structural internal flues to connect with the flues from the boilers. The external structural steel flues are protected from excessive temperature variation by an insulated cavity. The flues have been given external surface protection with a silver Metalife paint treatment.

Opposite and right: The strong sculptural qualities of the chimney group can be seen in these dramatic pictures.

A general view of the new Boilerhouse.



