



Manchester Centre for Civil & Structural Engineering



Structures Division Fire Research, Consultancy and Testing

The Structures Division is part of the Manchester Centre for Civil & Construction Engineering, which is one of the largest departments dealing with Civil & Construction disciplines in the UK.

The Structures Division has diverse expertise, carrying out world leading research and teaching to meet the ever-changing needs of the Built Environment, as well as carrying out commercial consultancy and testing work. One of the Division's major activities is in the area of Fire Engineering.

One-Stop-Shop in the application of Structural Fire Engineering

The Division is currently developing a web-based One-Stop-Shop for the application of Structural Fire Engineering, sponsored by the DTI and twelve Industrial partners. The aim of the one-stop-shop is to aid practising designers in the procurement of projects that utilise the latest design methods in Structural Fire Engineering. The development of the One-Stop-Shop started in September 2003 and practitioners who wish to be involved or contribute to the development of this 'body of knowledge' are encouraged to contact the Structures Division.

Research into Structural Fire Engineering

Together with a number of Industrial Partners, the Division is currently conducting research into fire behaviour, thermal response of materials and the structural behaviour of elements and

whole buildings. The research work is both theoretical and experimental based, typically carried out by PhD students sponsored by Industry.

Consultancy

The Division carries out extensive consultancy work, ranging from simple fire engineering calculations through to sophisticated modelling of fire behaviour, response of structural members, frames and whole buildings. The Division is also involved in the development of the British and European fire design codes and has written a number of Design Guides that are well received and used by Industry. Other Consultancy work has included third-party checking and expert witness into all aspects of fire safety design.

Testing

The Division currently owns a number of gas-fired furnaces, which have been used successfully in product development of fire protection materials. These furnaces have also been successfully used in investigating the structural behaviour of elements and systems.

Further Information

For further information relating to the One-Stop-Shop, research, consultancy or testing, please contact:

*Professor Colin Bailey
Head of Structures Division
Pariser Building
PO Box 88
UMIST
M60 1QD
Tel No: 0161-200-5795
E-mail: colin.bailey@umist.ac.uk*