

Fire prevention on construction sites

November 2009



Guide to changes in the Joint Code of Practice

Modern and emerging fire risks are covered in the latest edition of the Joint Code of Practice – Fire Prevention on Construction Sites. The aim is to help businesses manage fire risks on construction sites practically and cost-effectively.

An important update relating to fire prevention has now been made to the Joint Code of Practice for construction companies and Zurich has summarised the main changes in this Technical Factsheet. By adopting these simple precautions and safe working practices, businesses should be able to ensure adequate detection and prevention measures are built into the design and planning stages. They should also ensure work on a site is undertaken to the highest standards of fire safety.

The Health and Safety Executive estimates that there are around 11 construction fires every day in the UK and that annual losses suffered by the construction industry are around £400 million – or over £1 million every day. A fire on-site can lead to injury or loss of life and the costs to a business can be substantial.

We hope you will be able to use this Factsheet in discussions with your existing construction customers and client prospects.

Background to the Code

The Joint Code of Practice was first published in 1992 in response to two significant fires that resulted in a combined loss in excess of £150 million – a level where insurers were questioning whether the provision of insurance for construction sites could economically continue.

Since that time the Code has, with the backing of both insurers and the construction industry and the continuing support from the Chief Fire Officers' Association, London Fire Brigade and Association of British Insurers (ABI), been responsible for (at least in part) prompting significant improvements in the management of fire safety on construction and refurbishment projects.

Although comprehensive statistics relating to fires on construction sites are not recorded centrally, over the past 17 years the number of incidents appears to have improved significantly and the construction industry has willingly embraced the Code and implemented the recommendations.

Updating the Code

The project of updating the Joint Code of Practice was undertaken by the Technical Division of the Fire Protection Association (FPA) and experts from the insurance industry who report to the RISCAuthority Risk Control Steering Group.

Howard Passey, FPA Education & Training Director and Convener of the RISCAuthority Risk Control Group, commented: "In its 7th edition the Code has undergone, during this iteration, significant revision to cover modern and emerging site fire risks – the principal changes being focused on the use of acetylene, burning of waste on-site, high-rise projects, modern construction methods – including large timber framed projects and in addition to referencing updates to legislation.

"Liaison with the Health and Safety Executive during the drafting of the 7th edition will hopefully bring the fire safety elements of their guide, HSG 168 Fire Safety in Construction Work, which is also under review, into closer alignment.

"Based on a practical, no nonsense and cost-effective approach to managing fire safety on site the Code continues to maintain its place as the key document for construction and insurance industry professionals."

Key changes to the Code

In this document, Zurich has provided a synopsis of the principal changes in relation to the previous 6th edition:

Section	Change
Contents	Chapters 16 and 17 have been re-ordered for ease of reference.
1. Objective of the Code	Reference is made to large timber framed structures. Reference to these and other modern methods of construction is made in subsequent sections of the document.
2. Compliance with the Code	It is specifically stated that the Code applies to all parties involved in the project.
3. Introduction	References have been made to new fire safety legislation and the corresponding need to carry out fire risk assessments on construction sites.
4. Definitions used in the Code	<ul style="list-style-type: none"> • Definitions have been re-ordered to appear in alphabetical order • Reference is made to an alarm-receiving centre, in preference to the now outmoded 'central station' • A high-fire-risk site and its three elements are now defined • A definition of the responsible person as defined in current fire safety legislation has been added.
5. Design phase	<ul style="list-style-type: none"> • Reference is now made to the roles of the Construction Design and Management (CDM) co-ordinator to reflect the requirements of the CDM Regulations 2007, and the responsible person as defined in fire safety legislation • The roles of fire marshals are set out in <i>Paragraph 6.1.2</i>.
6. Construction phase	<i>Paragraph 6.1</i> reflects the requirements of the new legislation and further references are made to the CDM co-ordinator.
7. Liaison with the emergency services	<ul style="list-style-type: none"> • <i>Paragraph 7.1</i> introduces the need for liaising with the fire and rescue service at design stage. Liaison regarding water supplies in the case of large projects is also addressed • Site plans should include the position of hydrants on or near the site.
8. Emergency procedures	<ul style="list-style-type: none"> • <i>Paragraph 8.1</i> introduces the requirements for multiple provisions of manually operated fire alarm sounders, hard-wired call points and Wi-Fi-linked fire alarm systems • <i>Paragraph 8.6</i> requires that fire safety signs should be reviewed regularly • <i>Paragraph 8.7</i> relates to the evacuation of high-fire-risk sites • <i>Paragraph 8.8</i> addresses awareness training of staff.
9. Fire protection	<ul style="list-style-type: none"> • <i>Paragraph 9.1</i> refers to the CDM co-ordinator • <i>Paragraph 9.1(b)</i> adds requirements relating to the planning and implementing of fire-stopping • <i>Paragraph 9.1(i)</i> deals with the early installation of automatic fire protection systems on large items of plant • <i>Paragraph 9.2</i> and <i>9.3</i> are new sections dealing with water supplies • <i>Paragraph 9.7</i> and <i>9.8</i> are new and deal with the occupancy of construction sites.

Section	Change
10. Temporary covering materials	Reference to alternative certification schemes added.
11. Portable fire extinguishers	<i>Paragraph 11.4</i> refers to the accessibility of non-automatic firefighting equipment.
12. Site security against arson	<ul style="list-style-type: none"> • Introductory paragraph emphasises the importance of considering arson with the fire risk assessment • <i>Paragraph 12.8</i> relates to monitored CCTV cameras or a permanent security presence on high-fire-risk sites • <i>Paragraph 12.10</i> refers to precautions in the event of work on-site being suspended.
13. Temporary buildings and temporary accommodation	<ul style="list-style-type: none"> • <i>Paragraph 13.2</i> states specifically that fire risk assessments should be undertaken for temporary buildings and temporary accommodation • <i>Paragraph 13.3</i> provides for the separation of temporary buildings from large timber framed structures • <i>Paragraph 13.8</i> prohibits the installation of temporary accommodation in high-fire-risk sites • <i>Paragraph 13.14</i> deals with automatic fire detection in drying rooms.
14. Site storage of flammable liquids and LPG (Liquefied Petroleum Gas)	<ul style="list-style-type: none"> • <i>Paragraph 14.1</i> amends wording requiring that bunds must not be allowed to accumulate (rather than fill with) water • <i>Paragraph 14.2</i> is amended to allow an assessment approach to the storage of flammable liquids, to allow the minimum necessary to be stored • <i>Paragraph 14.3</i> requires the storage areas to be as far as reasonably practicable from permanent and temporary buildings and at a minimum of 20m wherever possible in the case of high-fire-risk sites • <i>Paragraph 14.4</i> specifies acetylene as a material that must not be stored with LPG and flammable liquids.
15. Acetylene	<p>This is a new section</p> <p>Old sections 15 to 21 have been renumbered 16 to 22.</p>
16. Hot work	<ul style="list-style-type: none"> • <i>Paragraph 16.11</i> is reworded for clarity; the paragraph indicates that the precautions for tar boilers apply in all, rather than exceptional, circumstances • <i>Paragraph 16.14</i> refers to the need for connections to be made using flexible armoured hose • <i>Paragraph 16.15</i> requires that a risk assessed approach be taken to fire watches following hot work.
17. Electricity and gas	<i>Paragraph 17.3(e)</i> discourages the use of unprotected halogen lights.
18. Waste materials	<i>Paragraph 18.3</i> concerns the construction and location of rubbish chutes. <i>18.6</i> and <i>18.7</i> detail the conditions which must be observed if waste materials are burned on-site.
19. Plant and vehicles	<i>Paragraph 19.2(b)</i> introduces designated filling areas for plant and vehicles.
20. Stored materials	<ul style="list-style-type: none"> • Formerly entitled Materials storage, <i>Paragraph 20.1</i> readdresses separation distances between stored combustible materials and partially completed structures • <i>Paragraph 20.3</i> is reworded for clarity.

Section	Change
21. Smoking	Each paragraph in this section has been reworded in the light of new legislation concerning smoking in enclosed public spaces.
22. High-rise construction sites	<p>This is a new section</p> <p>Annex A: Best practice advice for the construction of large timber framed buildings</p> <p>Annex B: Sample hot work permit</p> <p>Annex C: Sample permit to burn waste materials</p> <p>Reference documents – the list has been revised.</p>

Advice for brokers and their customers

To view this factsheet online, visit www.zurich.co.uk/brokerzone

Should you require any further guidance, please contact your insurance broker or your usual Zurich contact.

You can view the full Joint Code of Practice at www.thefpa.co.uk

Zurich Insurance plc

A public limited company incorporated in Ireland. Registration No. 13460. Registered Office: Zurich House, Ballsbridge Park, Dublin 4, Ireland. UK Branch registered in England and Wales Registration No. BR7985.

UK Branch Head Office: The Zurich Centre, 3000 Parkway, Whiteley, Fareham, Hampshire PO15 7JZ.

Authorised by the Irish Financial Regulator and subject to limited regulation by the Financial Services Authority. Details about the extent of our regulation by the Financial Services Authority are available from us on request. FSA Registration No. 203093. These details can be checked on the FSA's register by visiting their website www.fsa.gov.uk/register or by contacting them on 0845 606 1234.

Communications may be monitored or recorded to improve our service and for security and regulatory purposes.

© Copyright – Zurich Insurance plc 2009. All rights reserved. Reproduction, adaptation, or translation without prior written permission is prohibited except as allowed under copyright laws.



Because change happenz®