



working with





FIRE STATISTICS



- **There are around 11 construction site fires everyday in the UK**
- **Estimated costs to the industry are £400m per year, or over £1m a day!**
- **All sites and buildings under construction are susceptible to fire**
- **Hazes occur regardless of simplicity or complexity of the project at hand.**
- **The dangers of construction site fires are material: they destroy property and equipment, cost money, and delay or even permanently halt projects.**
- **But much more importantly, fires cost lives.**



Fire Safety Legislation



HSE Fire Safety Guidelines for construction sites (HSG168; 223)

- HSG168 is relevant to all construction projects
- aimed at all with a role in developing, managing and applying safety standards on site.
- Covers location of materials

FPA, CC, JCOP



- It's a code to prevent fires on construction site, to protect not only the buildings but also the occupants
- Distribution panels, amount of protection required, servicing intervals and other hazards on site.





The Structural Timber Association's 16 Steps to Timber Frame Construction document.

- Guidance for all involved in the design, manufacture and erection of timber frame buildings. It represents the strongest recommendations and advice for all clients
- Electrically operated fire warning devices must always be used in timber frame. These devices should be linked to detection devices strategically places around the structure.

British Standards Institution works closely with the FIA to supply a range of fire safety standards – from emergency lighting, to fire detection and alarm systems, and fixed firefighting equipment.



- **BS5839 (locating and servicing and alarms)**
- **BS 5306 (Locating and servicing extinguishers)**



Development of Fire Safety



2007
Turn & Burn



2008
Air Horn



2009
Stand Alone



2010
Multi-Link



2011
Radio-Link



2012
Zone Leaders & Followers



2014
Cygnus Range
Launched!



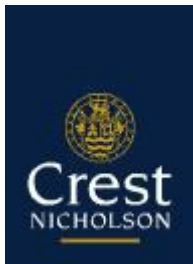
2015
New Stand Alone &
Radio Link Alarm



2016
Cygnus updates and bespoke systems

2007

2017



+ 32
other

Current Challenges In Construction



Government Regulation



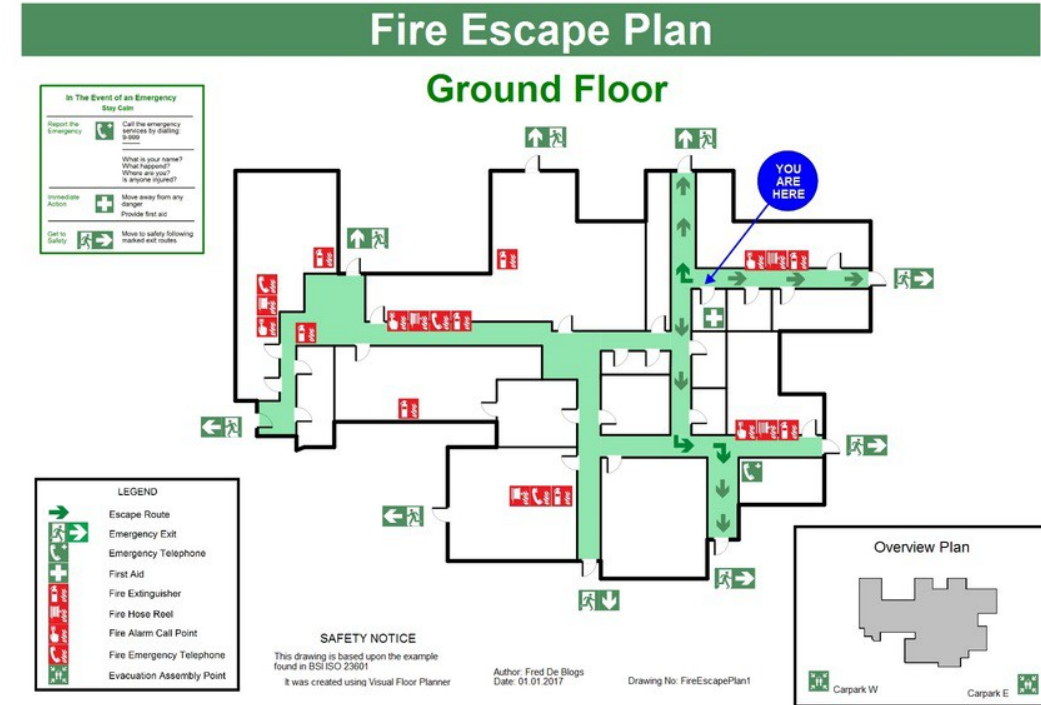
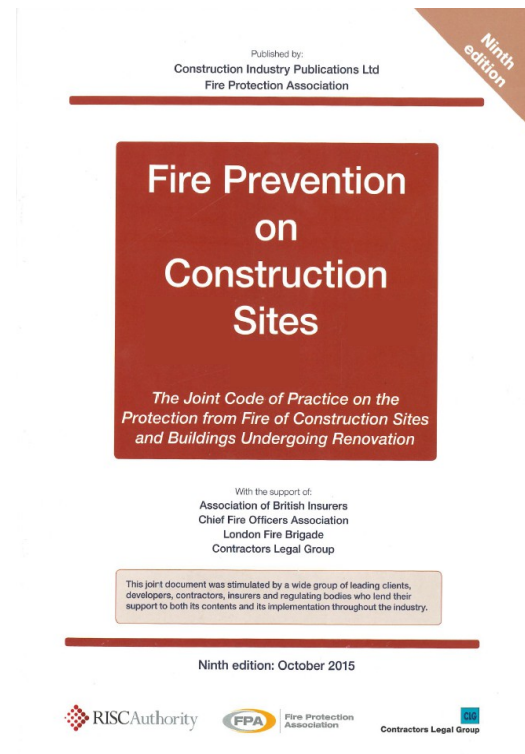
Lack of Training



Time Constraints

Rising Costs





Onsite Fire Safety Recommendations



HOUSING

As a guide there should be 1 fire point every 30m or every 6 houses that are under construction.

For example a project with 100 units may actually only be building 6-8 units at each phase; therefore only 1 fire point trolley will be required which can be moved around as the site progresses.

Recommended Products:

Wheeled Fire Point Trolley, c/w:

- **Double Contractor Trolley**
- **9kg Powder Extinguisher**
- **9ltr Foam Extinguisher**
- **Extinguisher ID, Fire Point & Fire Action Signage**
- **Suitable Alarm – can be a wireless stand-alone or radio-linked versions which have to be audible above the noise of a construction site.**



APPARTMENTS

Ref JCOP 9th Edition Page 16, point 11.3

“Extinguishers must be located in conspicuous positions near to exits on each floor.”

Recommended Products:

Wheeled Fire Point Trolley, c/w:

- **Double Contractor Trolley**
- **9kg Powder Extinguisher**
- **9ltr Foam Extinguisher**
- **Extinguisher ID, Fire Point & Fire Action Signage**
- **Suitable Alarm – can be a wireless stand-alone or radio-linked versions which have to be audible above the noise of a construction site.**





TIMBER FRAME

Considered a high risk environment.

Ref JCOP 9th Edition page 27 Point 23.15

Automatic fire detection must be provided as set out in section 13; these systems must be linked to an alarm receiving centre unless there is a 24 hour security presence on site”.

Recommended Products:

Wheeled Fire Point Trolley, c/w:

- **Double Contractor Trolley**
- **9kg Powder Extinguisher**
- **9ltr Foam Extinguisher**
- **Extinguisher ID, Fire Point & Fire Action Signage**
- **Cygnus Fire Alarm System inc. Call Points, Heat Detectors and Control Panel**
- **An Auto Dialler may be required if 24hr site security presence is not available.**



HIGH RISE

Ref JCOP 9th Edition page 22.1 point 22.8

“In these circumstances a specific fire risk assessment should be undertaken to develop appropriate provisions”
“Electrically operated fire alarm systems must be provide throughout the height of the building, comprising break-glass (or similar) call points and sounders on all levels, plus a link to a permanently occupied security office (or similar). Hard wired systems or radio operated wireless systems of proven reliability, performance and coverage are also acceptable.”

Recommended Products:

Wheeled Fire Point Trolley, c/w:

- **Double Contractor Trolley**
- **9kg Powder Extinguisher**
- **9ltr Foam Extinguisher**
- **Extinguisher ID, Fire Point & Fire Action Signage**
- **Cygnus Fire Alarm System inc. Call Points, Heat Detectors and Control Panel**
- **An Auto Dialler may be required if 24hr site security presence is not available.**





ELECTRICAL EQUIPMENT

E.G. Distribution panels;

Ref JCOP 9th Edition Page 15 point 9.6

“To protect distribution panels and items of electrical equipment, appropriate extinguishers (such as those containing carbon dioxide) must be provided close to the equipment concerned”.

Recommended Products:

- 5kg / 2kg CO₂ Fire Extinguisher



PLANT & MACHINERY

HSG 168 Plant & Equipment, page 72

“Mobile plant should be fitted with an appropriate fire extinguisher (e.g. 1 or 2kg Powder)”

JCOP 9th Edition Page 16 point 11.7

“‘Ride-on’ mechanically propelled site plant should carry an appropriate fire extinguisher where reasonably practicable.”

Recommended Products:

- 1kg / 2kg Powder Fire Extinguisher





HOT WORKS

E.G. Welding or Tar Boilers

Adequate 'spare' extinguishers should always be available to cover any hot works. In this regard special caution and provision should be allowed for when tar boilers are to be used;

JCOP 9th Edition Page 21 point 16.13(e)

"The following precautions should be applied when using tar boilers: (e) at least two appropriate fire extinguishers must be to hand;"

Recommended Products:

- **9Kg Powder Fire Extinguisher**
- **9Ltr Foam Fire Extinguisher**



SMOKING AREAS

JCOP 9th Edition Page 25 Smoking 21.2 (e)

"Where a smoking shelter is provided it must be:... (e) provided with a suitable fire extinguisher."

Recommended Products:

- **Single Fire Extinguisher Stand or Trolley**
- **6Ltr Foam Fire Extinguisher c/w signage**





TEMPORARY ACCOMMODATION UNITS (TAUs)

Canteen c/w Full Cooking Facilities (where cooking oils are used)

Recommended Products:

- Double Fire Extinguisher Stand
- 6Ltr Wet Chemical Fire Extinguisher
- 2kg CO2 Fire Extinguisher
- Fire Blanket
- Fire Extinguisher and Fire Blanket ID Signage



Basic Site Office / Meeting Room

Recommended Products:

- Double Fire Extinguisher Stand
- 6Ltr Foam Fire Extinguisher
- 2kg CO2 Fire Extinguisher
- Fire Extinguisher ID Signage



Site Office c/w Kitchenette/ Basic Canteen

Recommended Products:

- Double Fire Extinguisher Stand
- 6Ltr Foam Fire Extinguisher
- 2kg CO2 Fire Extinguisher
- Fire Blanket
- Fire Extinguisher and Fire Blanket ID Signage



Drying Room

Recommended Products:

- Double Fire Extinguisher Stand
- 6Kg Powder Fire Extinguisher
- 6Ltr Foam Fire Extinguisher
- Fire Extinguisher ID Signage



Compound Area / Fuel Bowser

Recommended Products:

- Wheeled Fire Point Trolley that incorporates the following:
- 9Kg Powder Fire Extinguisher
- 9Ltr Foam Fire Extinguisher
- Fire Extinguisher ID and Fire Action Signage
- Temp



Fire 360 – 12 Steps To Effective Fire Strategy

