

STA Advice Note 15

Fire safety guidance



No. 15 - Part 2, June 2017

Part 2 - Understanding the inputs for a fire safety plan

Who should read this advice note?

This is an aid for Principal Designers and Principal Contractors to manage the risk of fires during the construction phase of a project and to provide enough information to undertake fire risk assessments and as a result establish a fire safety plan for the site.

Fire Risk Management starts with a Fire Risk Assessment to consider the hazards from all parts of the process.

This guidance supports the STA 16 Steps to Fire Safety. This advice note is to address the Principal Designers' (PD) obligation to consider the off site fire spread risks and the Principal Contractor's role to manage the site risks and the off the site risks during the construction phase.

Notes to consider

- The PD is in control of the pre-construction phase just as the PC is on control of the construction phase.
- The PD role includes assisting the Client with the provision of 'pre-construction information' (such as ensuring an offsite fire risk assessment is completed for tender review and inclusion). The offsite risk assessment is part of the PD role to assist the PC with the preparation of the Construction Phase Plan for the project.
- The PD's role is to ensure the designers engaged in the project have complied with the CDM duties to eliminate/reduce/control risks.
- The PD should challenge decisions in design where appropriate and ensure that designers have considered risks and designed them out so far as is reasonably practicable.

The assessment of the offsite fire risks should be carried out at an early a stage as possible - even in a Design and Build contract as the results will have the potential to materially change and affect the design and the tender specification.

CDM2015 (L153) - the CITB website are hosting some HSE/industry Q&A on various CDM topics including the role of the PD and one on self-build. This can be found [HERE](http://www.citb.co.uk/health-safety-and-other-topics/health-safety/construction-design-and-management-regulations/#) or can be found at <http://www.citb.co.uk/health-safety-and-other-topics/health-safety/construction-design-and-management-regulations/#>





Figure 1: Fire risk management strategy

On the site and off the site

The STA 16 Steps guidance is to support the on the site fire risk assessment. All projects will require both on the site and an off the site risk fire risk assessment irrespective of the size of the build.

ON THE SITE	OFF THE SITE
Objective	
To stop a fire occurring	To check the impact of the risk of fire spread should a fire occur and recommended mitigation if required
Advice relates to	
Activities by site workers inside the site boundary	The life safety of public in the neighbouring properties outside the site boundary
Persons being protected	
Provide safety for the site workers and visitors	Site personnel and public
Guidance available from the STA www.structuraltimber.co.uk	
16 Steps Advice notes	Risk assessment checklist Design guidance to separating distances

Figure 2: Differences between on the site and off the site



Scale and sensitivity of a project

All projects require a 16 step fire risk assessment, both on the site and off the site. The larger the project the more in-depth the assessment and action is to be. A large project is considered to be one that is above 600m² total accumulative floor area.

600m² measurement = floor areas based on the internal floor area accumulative per floor level.

For example two storey building with ground floor area of 46m² and upper floor area of 34m² = 80m² total floor area, but 10 such units per project = 800m² floor area.

Below 600m² proportionate and reasonable responses to fire risks is to be expected with full recognition of high risk locations and conditions.

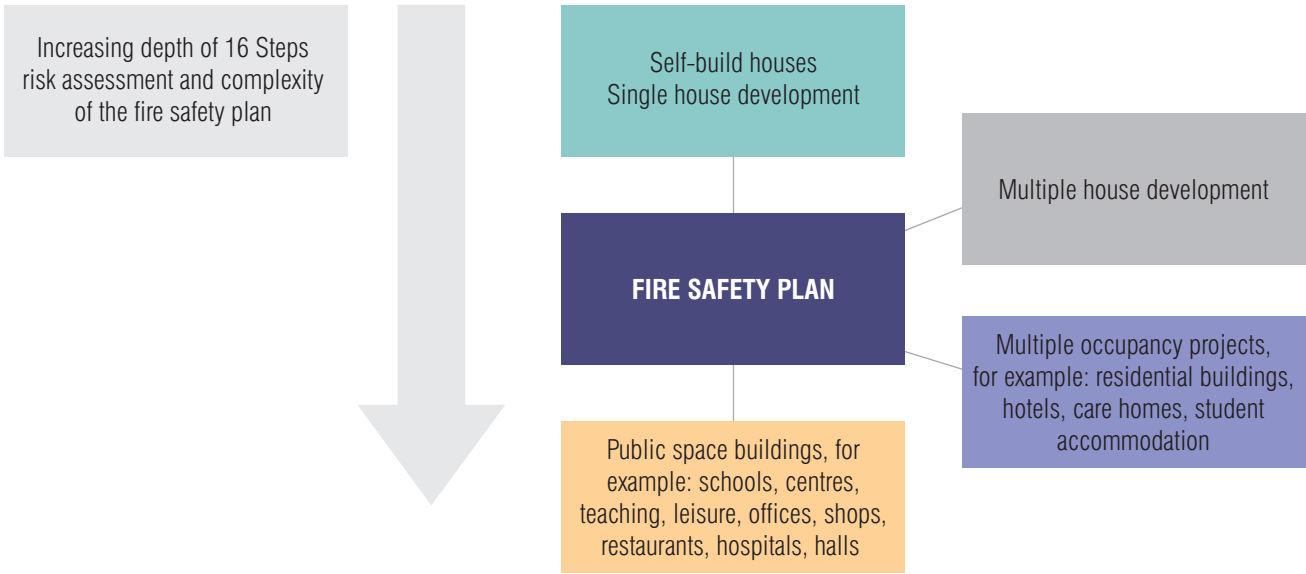


Figure 3: Scale of project influences the depth of fire risk assessments

ON SITE	Site Location				
	Remote site	Remote site but high arson risk	Some surrounding buildings	Land locked neighbouring occupied properties	Land locked neighbouring occupied properties with vulnerable persons
Project Size					
<250m²	Low level review and audit use of 16 Steps proportionate to the site	Moderate level of security and insurance review	Moderate to low level to provide an overview of key points relative to the scale of the site		
Greater than 250m² but <600m²			Relatively high level use of 16 Steps actions to site conditions		
>600m²			Full 16 Steps in depth review		

Table 1: Typical examples of scale and depth of on site fire risk assessment



OFF THE SITE	Site Location				
	No property within a separation distance	No property within a safe separation distance, but known area for arson	Buildings within the safe separation distance	Land locked neighbouring occupied properties	Land locked neighbouring occupied properties with vulnerable persons
Project Size					
<250m²	No risk		Some risk mitigation	Full risk mitigation required	
Greater than 250m² but <600m²			Full risk mitigation required		
> 600m²					

Table 2: Typical examples of off the site fire risk assessment and outcomes

Changing fire safety plans and on the fire risk assessments

Fire safety starts with the initial design phase and then moves to design information which is passed on to the contractor.

The fire safety plans will almost certainly need to change during the construction phase to reflect the changing site conditions. The on-site risk assessment that drives the fire safety plan will require reviews that will subject to the project scale continue throughout the construction phase and only stop being reviewed and changed on completion and hand over of the building.

