# European guideline



Recommended Numbers of Fire Protection Trained Staff

EFSAC Endorsed CFPA-E®-Guidelines

#### **Foreword**

The European fire protection associations have decided to produce common guidelines in order to achieve similar interpretation in European countries and to give examples of acceptable solutions, concepts and models. The Confederation of Fire Protection Associations in Europe (CFPA E) aims to facilitate and support fire protection work in European countries.

The market imposes new demands for quality and safety. Today, fire protection forms an integral part of a modern strategy for survival and competitiveness.

This Guideline is primarily intended for those responsible for safety in companies and organisations. It is also addressed to the rescue services, consultants, safety companies and so on, so that, in the course of their work, they may be able to help companies and organisations to increase their levels of fire safety.

The proposal for this guideline came from VdS and the CFPA Europe Training Commission and the author is Michael Schnell from Germany.

This Guideline has been compiled by Guidelines Commission and adopted by all fire protection associations in the Confederation of Fire Protection Associations Europe.

Zürich, 23 September 2005 CFPA Europe

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> Stockholm, 23 September 2005 Guidelines Commission

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## Guideline No 11:2005

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#### 1 Introduction

Well designed fire protection forms an integral part of a modern company's strategy for survival and competitiveness. In all companies it is important to have a high level of fire safety and fire prevention. Many companies and organisations have established Internal Fire Protection Control in order to identify pinpoint risks, set up goals, organise, train, check, document, monitor and protect their business in a systematic manner.

To ensure that fire safety in a company is of the highest standard it is necessary to have staff members who have been trained in the work and are qualified to assume the responsibility. Some businesses have their own fire brigades, with well trained staff but in most companies there is a need to train persons to perform the various roles in fire safety management.

This Guideline specifies different levels of training and also makes recommendations about how many persons in a company should have those levels training. There exists an earlier CFPA Europe Guideline, Internal Fire Protection Control (no. 1: 2002).

#### 2 Staff functions

In the next section a variety of training courses are mentioned. These courses are described in the appendix to this Guideline.

It is recommended that, depending on knowledge level, a company appoints staff to fill one or more of the following functions:

- Fire Warden
- Fire Safety Manager
- Fire Protection Manager
- Fire Safety Co-ordinator

The Fire Safety Co-ordinator is the person that should report directly to the Management Committee of the company. The functions are related to each other in the following way.



#### 3 Recommendations

In organisations without a professional, on-site fire brigade there is a need to appoint staff to organise and maintain the necessary level of fire protection.

One such person, should have, as an important task, responsibility for making recommendations to management, identifying weak points in fire protection and contriving to management, remedy dangerous situations. In the past when management made such appointments, training was often not considered necessary. In a modern plant such persons require appropriate training in order to be able to manage fire safety in a better and more efficient manner.

CFPA Europe has established four appropriate fire training for such purposes:

Basic Fire Fighting and Fire Prevention (1 day) Principles of Fire Safety at Work (3 - 5 days) Fire Safety at Technical Cycle (100 hours) Fire Safety at Management Cycle

For more detail information, see appendix (page 10).

# 3.1 Recommended levels of trained fire safety staff

#### 3.1.1 General industries

Level of qualification					Level of fire	risk			
		High***			Medium***	,		Low***	
	N	umber of sta	ff	N	umber of sta	ff		Number of staff	
			> 500	< 100	100 - 500	> 500	< 100	100 - 500	> 500
Fire Safety	1	1	1	-	-	-	-	-	-
Coordinator									
Fire Protection	1	2	2	1	1	2	-	1	1
Manager									
Fire Safety	*	*	*	*	*	*	1	*	*
Manager									
Fire Warden **	10 %	10 %	10 %	5 %	5 %	5 %	2 %	1 %	1 %

<sup>\*</sup> To be assessed by the Fire Protection Manager or the Fire Safety Coordinator in relation to the level and type of risk.

10 % means 10 % of the number of staff per fire section and per shift

<sup>\*\*</sup> Percentages by fire sections and by shift, with a minimum of 2 persons.

<sup>\*\*\*</sup> Level of fire risk: determined in accordance with national regulations, standards and practice.

#### 3.1.2 Offices

Loyal of qualification	Number of persons and staff			
Level of qualification	> 500	100 - 500	< 100	
Fire Protection Manager	1	-	-	
Fire Safety Manager	*	1	1	
Fire Warden	2 % wit	h a minimum of 2 perso	ns/floor	

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator and to be dependent upon the nature and scale of the specific risks.

# 3.1.3 Hospitals and similar

Level of qualification	Number of beds			
Level of qualification	> 250	50 - 250	< 50	
Fire Safety Coordinator	1	-	-	
Fire Protection Manager	1	1	1	
Fire Safety Manager	*	*	*	
Fire Warden	2 % with a r	ninimum of 2 persons/fl	oor and shift	

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator and to be dependent upon the nature and scale of the risks present.

# 3.1.4 School and University

Loyal of gualification	Number of people			
Level of qualification	> 2000	500 - 2000	< 500	
Fire Protection Manager	1	-	-	
Fire Safety Manager	*	1	1	
Fire Warden	0,2 % with	n a minimum of 1 persoi	ns/building	

Fire Safety Coordinator is required for University with more than 5 000 people.

Fire Safety Manager is required for college dormitories; some complex school buildings can be considered as hospitals/hotels.

#### 3.1.5 Hotels and similar

Level of qualification	Number of beds		
Level of qualification	> 200	50 - 200	< 50
Fire Safety Coordinator	Chain of h	otel: 1 level A for the he	eadquarter
Fire Protection Manager	1	-	-
Fire Safety Manager	*	1	1
Fire Warden	1 %	with minimum of 2 per	sons

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator and to be dependent upon the nature and scale of the risks.

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator

## 3.1.6 Retail premises and similar

Loyal of qualification	Number of people			
Level of qualification	> 5000	1500 - 5000	< 1500	
Fire Safety Coordinator	Chain of stores: 1 at headquarters			
Fire Protection Manager	1	-	-	
Fire Safety Manager	*	1	1	
Fire Warden	0,1 % with minimum	0,1 % with minimum	0,1 % with minimum	
	of 5 persons/floor	of 2 persons/floor	of 2 persons/floor	

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator and to be dependent upon the nature and scale of the risks.

## 3.1.7 Multi-storey buildings

Level of qualification	Number of people				
Level of qualification	> 5000	1500 - 5000	< 1500		
Fire Safety Coordinator	Chain of stores 1 for the headquarter				
Fire Protection Manager	1	-	-		
Fire Safety Manager	*	1	1		
Fire Warden	0,1 % with minimum	0,1 % with minimum	0,1 % with minimum		
	of 5 persons/floor	of 2 persons/floor	of 2 persons/floor		

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator and to be dependent upon the nature and scale of the risks.

## 3.1.8 Public entertainment places

Loyal of qualification	Number of people			
Level of qualification	> 3000	1500 - 3000	< 1500	
Fire Safety Coordinator		1 at headquarters		
Fire Protection Manager	1	-	-	
Fire Safety Manager	*	1	-	
Fire Warden	0,1 % of people present with a minimum of 2 persons			

<sup>\*</sup> Numbers to be decided by the Fire Protection Manager or the Fire Safety Coordinator.

# 4 Reference publication

CFPA Europe – Fire Prevention and Security Training

# 5 European guidelines

Guideline No	1:2002	-	Internal fire protection control
Guideline No	2:2007	-	Panic & emergency exit devices
Guideline No	3:2003	-	Certification of thermographers
Guideline No	4:2003	-	Introduction to qualitative fire risk assessment
Guideline No	5:2003	-	Guidance signs, emergency lighting and general lighting
Guideline No	6:2004	-	Fire safety in residential homes for the elderly
Guideline No	7:2005	-	Safety distance between waste containers and buildings
Guideline No	8:2004	-	Preventing arson – information to young people
Guideline No	9:2005	-	Fire safety in restaurants
Guideline No	10:2007	-	Smoke alarms in the home
Guideline No	11:2005	-	Number of fire protection trained staff
Guideline No	12:2006	-	Fire safety basics for hot work operatives
Guideline No	13:2006	-	Fire protection documentation
Guideline No	14:2007	-	Fire protection in information technology facilities
Guideline No	15:2007	-	Fire safety in guest harbours and marinas

# 6 Appendix: CFPA Europe training syllabuses

Basic Fire Fighting and Prevention (Fire Warden)

Duration: 1 day

Aim: To provide participants with greater awareness and understanding of the threat posed by fire, their personal responsibility in preventing an outbreak and the action to be taken should a fire occur. Objectives: Students will be able to: execute their fire safety responsibilities; understand the nature of fire and how it spreads; have developed a greater awareness of hazards of fire; understand why emergency procedures are implemented; distinguish between the different types of extinguisher and the fires for which they are suited; tackle small fires with confidence.

Programme: Fire statistics; Combustion principles; Hazard identification; Legislation; Evacuation principles; Specific responsibilities; Fire extinguishing – theory; Selection, actuation and operation of portable fire fighting equipment; Fire extinguishing – practical.

#### <u>Principles of Fire Safety at Work</u> (Fire Safety Manager)

Duration: 3-5 days

Aim: Upon successful completion of the course students will be able to assess fire risks, design emergency and evacuation plans, and organize and train fire fighting teams.

Objectives: To enable delegates to train and organise firefighting teams, assess the risk from fire in the workplace and assess and manage the residual risk in conjunction with their emergency plans. Programme: Elements of legislation, rules, responsibilities; planning of fire protection and prevention systems; risk assessment; emergency plans, evacuation, means of escape; organisational aspects of fire protection; maintenance and control of fire fighting systems and equipment.

#### Fire Safety at Technical Cycle (Fire Protection Manager)

Duration: 100 hours (3 weeks)

Aim: To provide participants with technical knowledge of fire safety and fire protection systems and techniques in industrial and commercial premises.

Objectives: At the end of the course participants will be able to identify risks, understand how to control their causes and minimise the consequences, understand the scope, use and application of prevention and protection systems and techniques, and the regulations and standards that apply. Programme: Regulations; Basic concepts; Construction; Energy; Design, control and maintenance of fire protection systems; Risk in industrial and commercial premises; Organisation; Application of lessons.

#### Fire Safety at Management Cycle (Fire Safety Coordinator)

Duration: Technical Cycle +10 days

Aim: The aim of this course is to explore further the areas covered in the CFPA Europe Diploma in Fire Prevention: Technical Cycle but focusing on organisational and management issues.

Objective: At the end of the course the student will be able to recommend a fire safety policy to the executive management of the organisation. Advise the executive management about the measures, requirements, purchase and maintenance of fire protection, prevention and suppression systems and equipment. Manage and control the fire risks in their company, and be the contact person for authorities and the inspection bodies in the field of fire safety and protection. Provide information to employees and others with regard to fire safety and organise and undertake suitable training. Manage all employees and others responsible for fire safety including fire wardens and fire intervention teams. Programme: European and national regulations (5%). Standards and specifications (5%). Fire risk assessment, including arson and exceptional situations (15%). Organisational topics of safety and security (15%). Fire risk management (15%). Concept of complete protection suitable for the company (10%). Financial aspects (10%). Disaster recovery plan (15%). Crisis management and communication (10%).