

ICS 13.220.01
CCS C 84



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 31592-2015

Fire safety engineering -- General principles

消防安全工程 总则

(English Translation)

Issued on: June 2, 2015

Implemented on: August 1, 2015

Issued by: Standardization Administration of China

Table of Contents

Introduction

Introduction

1 Scope

2 Normative references

3 Terms and definitions

Scope 4 Fire Safety Engineering Method

Application Process 5 Fire Safety Engineering Method

6 Fire safety objectives, functional requirements and performance criteria

6.1 General requirements

6.2 Relationship with "prescriptive" specification-compliant

6.3 Fire Safety Goal

6.4 Functional requirements

6.5 Performance criterion

Fire hazard identification 6

8 6 Test Design

9 Fire scenarios and evacuation scenarios

9.1 Setting fire scene

9.2 Selecting the fire scene

9.3 Evacuation Scenario

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses the redrafted law revision adopted ISO 23932:2009 "General Fire Safety Engineering." this standard and ISO 23932:2009, compared with more adjustment in the structure, listed in Appendix A of this standard and the ISO 23932:2009 is Reg number control list. This standard and ISO 23932:2009 technical differences compared to the presence of Appendix B are given in these technical difference its list of different reasons.

This standard also made the following editorial changes.

--- Deleted international standards foreword, preface redrafted;

--- Modify the introduction of international standards, which is the present standard introduction;

- International standard "this International Standard" be replaced by "this standard";
- The International Standard some punctuation modified to comply with Chinese habit of punctuation;
- Increase the informative Appendix A and Appendix B, given the present international standard reg number and the number of standard clauses and technical controls and reasons for the differences.

The standard proposed by the People's Republic of China Ministry of Public Security.

This standard by the National Standardization Technical Committee on Fire Building Fire Safety Engineering at the Technical Committee (SAC/TC113/SC13) Centralized.

Introduction

Building fire codes generally perform (ie, construction technical standards on fire) the "prescriptive" provisions, but with our work the rapid development of the built environment, new forms, a large space, multi-use building emerging, new technologies, new processes, new materials continue to make with the current provisions are difficult to standardize coverage and meet these special buildings. For the special characteristics of individual buildings, the use of quantitative Fire Safety Engineering methods to analyze and judge the design meets the fire safety objectives set, and propose targeted preventive measures, is to solve this type of One possible method of problem. At present, this method has been used in domestic and foreign construction of fire protection design.

This standard describes the general principles of fire safety engineering methods, design ideas and basic processes, detailed design and calculation methods by the SAC/TC113/SC13 centralized development of the "Fire Safety Engineering Guide" and "Fire Safety Engineering" two national standards are given. The standard Registration available in the fire safety design of technical personnel, to provide technical guidance for the training of fire safety design staff also it can provide a reference for other fire safety design and assessment criteria to prepare.

General Fire Safety Engineering

1 Scope

This standard specifies the terms and definitions fire safety engineering methods and scope, use the process, fire safety objectives, functional requirements and to determine the performance criteria, design and evaluation of fire scenario, and the implementation of other fire safety engineering solutions to make the basic provisions and requirements.

This standard applies to construction design and performance-based assessment.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 5907 (all parts) Fire Vocabulary GB/T 31540.1 Fire Safety Engineering Guide Part 1. Performance of Application Design (GB/T 31540.1-2015, ISO/T R13387-1.1999, MOD) GB/T 31540.2 Fire Safety Engineering Guidelines - Part 2. fire, smoke generation and development (GB/T 31540.2-2015, ISO/T R13387-4.1999, MOD) GB/T 31540.3 Fire Safety Engineering Guidelines - Part 3. External structure in response to the spread of fires and indoor (GB/T 31540.3-2015, ISO/T R13387-6.1999, MOD) GB/T 31540.4 Fire Safety Engineering Guidelines - Part 4. Detection, and start extinguishing (GB/T 31540.4-2015, ISO/T R13387-7.1999, MOD) GB/T 31593.1 Fire safety engineering - Part 1. assessment of the calculation method, verification and validation (GB/T 31593.1-2015, ISO 16730:2008, MOD) GB/T 31593.2 Fire safety engineering - Part 2. Type the required data and information GB/T 31593.3 Fire safety engineering - Part 3. Fire Risk Assessment Guidelines (GB/T 31593.3-2015, ISO/T S16732.2005, MOD) GB/T 31593.4 Fire safety engineering - Part 4. Setting fire scenarios and select the setting fires (GB/T 31593.4-2015, ISO 16733:2006, MOD) GB/T 31593.5 Fire safety engineering - Part 5. fire plume computational requirements (GB/T 31593.5-2015, ISO 16734.

2006, MOD)

GB/T 31593.6 Fire safety engineering - Part 6. smoke layer computational requirements (GB/T 31593.6-2015, ISO 16735.

2006, MOD)

GB/T 31593.7 Fire safety engineering - Part 7. ceiling jet computational requirements (GB/T 31593.7-2015, ISO 16736:2006, MOD) GB/T 31593.8 Fire safety engineering - Part 8. opening stream computing requirements (GB/T 31593.8-2015, ISO 16737:2006, MOD) GB/T 31593.9 Fire safety engineering - Part 9. Evacuation Evaluation Guide (GB/T 31593.9-2015, ISO/T R16738.2009, MOD) ISO/T R13387-5.1999 Fire safety engineering - Part 5. Fire product movement (Firesafetyengineering-Part 5. Movementoffireeffluents)