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**Fire safety engineering —**

**Part 3:**

**Assessment and verification of mathematical  
fire models**

*Ingénierie de la sécurité contre l'incendie —*

*Partie 3: Évaluation et vérification des modèles mathématiques*



## Contents

1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Symbols and abbreviated terms .....	2
5 Potential users and their needs .....	2
6 Documentation .....	3
6.1 General .....	3
6.2 Technical documents .....	3
6.3 User's manual .....	4
7 General methodology .....	5
7.1 General .....	5
7.2 Review of the theoretical basis of the model .....	5
7.3 Analytical tests .....	5
7.4 Comparison with other programmes .....	6
7.5 Empirical verification .....	6
7.6 Code checking .....	6
8 Numerical accuracy .....	7
9 Measurement uncertainty of data .....	8
9.1 General .....	8
9.2 Category A determination of standard uncertainty .....	9
9.3 Category B determination of standard uncertainty .....	9
9.4 Combined standard uncertainty .....	9
9.5 Expanded uncertainty .....	10
9.6 Reporting uncertainty .....	10
10 Sensitivity analysis .....	10
11 Reference fire tests .....	11
Annex A (informative) Literature review .....	13
Bibliography .....	21

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The main task of ISO technical committees is to prepare International Standards, but in exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/TR 13387-3, which is a Technical Report of type 2, was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 4, *Fire safety engineering*.

It is one of eight parts which outlines important aspects which need to be considered in making a fundamental approach to the provision of fire safety in buildings. The approach ignores any constraints which might apply as a consequence of regulations or codes; following the approach will not, therefore, necessarily mean compliance with national regulations.

ISO/TR 13387 consists of the following parts, under the general title *Fire safety engineering*:

- *Part 1: Application of fire performance concepts to design objectives*
- *Part 2: Design fire scenarios and design fires*
- *Part 3: Assessment and verification of mathematical fire models*
- *Part 4: Initiation and development of fire and generation of fire effluents*
- *Part 5: Movement of fire effluents*
- *Part 6: Structural response and fire spread beyond the enclosure of origin*
- *Part 7: Detection, activation and suppression*
- *Part 8: Life safety — Occupant behaviour, location and condition*

Annex A of this part of ISO/TR 13387 is for information only.