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## Reaction-to-fire tests — Full-scale room tests for surface products —

### Part 2: Technical background and guidance

*Essais de réaction au feu — Essais dans une pièce en vraie grandeur pour les matériaux de revêtement intérieur —*

*Partie 2: Données techniques et lignes directrices*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, 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), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this part of ISO/TR 9705 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 9705-2 was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 1, *Fire initiation and growth*.

ISO 9705 consists of the following parts, under the general title *Reaction-to-fire tests — Full-scale room tests for surface products*:

- *Part 1: Full-scale test for surface products* (currently published as ISO 9705:1993, *Fire tests — Full-scale room test for surface products*)
- *Part 2: Technical background and guidance* [Technical Report]

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## Introduction

ISO 9705:1993 specifies a test method simulating a fire that starts under well-ventilated conditions, in a corner of a small room with a single open doorway.

The method is intended to evaluate the contribution to fire growth provided by a surface product using a specified ignition source. The method provides data for a specified ignition source for the early stages of a fire from ignition up to flashover. ISO 9705:1993 also describes different measurement techniques inside and outside the room. This part of ISO 9705 gives background information and support to the potential users of the test. It gives the user of the test technical information on the ignition source, heat fluxes in the room from the burner, heat balance in the room during a fire, aspects of smoke production and toxic gas species production, as well as aspects of modelling the results of these tests. It gives the user the information necessary to select the testing procedure for specific projects or regulations.