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## Reaction to fire tests — Ignitability of building products using a radiant heat source

*Essais de réaction au feu — Allumabilité des produits de bâtiment avec une source de chaleur rayonnante*

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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.

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.

International Standard ISO 5657 was prepared by Technical Committee ISO/TC 92, *Fire safety*, Subcommittee SC 1, *Reaction to fire*.

This second edition cancels and replaces the first edition (ISO 5657:1986), which has been technically revised.

Annexes A to E of this International Standard are for information only.

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## Introduction

Fire is a complex phenomenon: its behaviour and its effects depend upon a number of interrelated factors. The behaviour of materials and products depends upon the characteristics of the fire, the method of use of the materials and the environment in which they are exposed. The philosophy of "reaction to fire" tests is explained in ISO/TR 3814.

A test such as is specified in this International Standard deals only with a simple representation of a particular aspect of the potential fire situation typified by a radiant heat source in the presence of a pilot flame; it cannot alone provide any direct guidance on behaviour or safety in fire. A test of this type may, however, be used for comparative purposes or to ensure the existence of a certain quality of performance (in this case ignitability) considered to have a bearing on fire performance generally. It would be wrong to attach any other meaning to performance in this test.

The term "ignitability" is defined in ISO/IEC Guide 52 as the measure of the ease with which a specimen can be ignited due to the influence of an external heat source, under specific test conditions. It is one of the first fire properties to be manifest and should almost always be taken into account in any assessment of fire hazard. It may not, however, be the main characteristic of the material which affects the subsequent development of fire in a building.

This test does not rely upon the use of asbestos-based materials.