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Second edition
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Smoke and heat control systems — Part 2: Specifications for natural smoke and heat exhaust ventilators

Systèmes de contrôle de fumée et de chaleur —

*Partie 2: Spécifications pour les dispositifs d'évacuation naturelle des
fumées et de la chaleur*



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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 11, *Smoke and heat control systems and components*.

This second edition cancels and replaces the first edition (ISO 21927-2:2006), which has been technically revised. It also incorporates the Amendment ISO 21927-2:2006/Amd1:2010.

The main changes compared to the previous edition are as follows:

- the test apparatus has been amended;
- the whole document has been revised.

A list of all parts in the ISO 21927 series can be found on the ISO website.

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Introduction

In a fire situation, smoke and heat exhaust ventilation systems create and maintain a smoke free layer above the floor by removing smoke. They also serve simultaneously to exhaust hot gases released by a fire in the developing stages. The use of such systems to create smoke-free areas beneath a buoyant layer has become widespread. Their value in assisting in the evacuation of people from buildings and other construction works, reducing fire damage and financial loss by preventing smoke damage, facilitating access for firefighting by improving visibility, reducing roof temperatures and retarding the lateral spread of fire is firmly established. For these benefits to be obtained, it is essential that natural smoke and heat exhaust ventilators (referred to in this document as NSHEV) operate fully and reliably whenever called upon to do so during their installed life. A smoke and heat exhaust ventilation system (referred to in this document as a SHEVS) is a system of safety equipment intended to perform a positive role in a fire emergency.