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Smoke and heat control systems —

Part 2: Specification 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

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.

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

ISO 21927-2 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*.

ISO 21927 consists of the following parts, under the general title *Smoke and heat control systems*:

- *Part 1: Specification for smoke barriers*
- *Part 2: Specification for natural smoke and heat exhaust ventilators*
- *Part 3: Specification for powered smoke and heat exhaust ventilators*

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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 fire-fighting 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 smoke- and heat-exhaust ventilators 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 part of ISO 21927 as a SHEVS) is a system of safety equipment intended to perform a positive role in a fire emergency.