

Australian/New Zealand Standard™

**Alarm and electronic security systems**

**Part 11.2: Electronic access control  
systems — Application guidelines**



AS/NZS IEC 60839.11.2:2019

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The following are represented on Committee EL-031:

- Australian Digital and Telecommunications Industry Association
- Australian Federal Police
- Australian Industry Group
- Australian Security Industry Association
- Engineers Australia
- Fire Protection Association Australia
- Insurance Council of Australia
- New Zealand Security Association
- NSW Police Force
- Queensland Police Service
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Australian/New Zealand Standard™

## **Alarm and electronic security systems**

### **Part 11.2: Electronic access control systems — Application guidelines**

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## Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-031, Intruder Alarm Equipment and Installations.

The objective of this Standard is to define the minimum requirements and guidance for the installation and operation of electronic access control systems (EACS) and/or accessory equipment to meet different levels of protection.

This Standard includes requirements for planning, installation, commissioning, maintenance and documentation for the application of EACS installed in and around buildings and areas. The equipment functions are defined in AS/NZS IEC 60839.11.1.

When the EACS includes functions relating to hold-up or the detection of intruders, the requirements in Standards relating to intrusion and hold-up are also applicable.

This Standard provides application guidelines intended to assist those responsible for establishing an EACS to ascertain the appropriate design and planning of the EACS, both in terms of levels of protection and levels of performance necessary to provide the degree of access control and protection considered appropriate for each installation.

This Standard does not cover the methods and procedures for conducting a risk assessment.

This Standard is identical with, and has been reproduced from, IEC 60839-11-2:2014, *Alarm and electronic security systems — Part 11-2: Electronic access control systems — Application guidelines*.

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## NOTES

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ALARM AND ELECTRONIC SECURITY SYSTEMS –****Part 11-2: Electronic access control systems –  
Application guidelines**

## FOREWORD

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International Standard IEC 60839-11-2 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

The text of this standard is based on the following documents:

FDIS	Report on voting
79/476/FDIS	79/489/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60839 series, published under the general title *Alarm and electronic security systems*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

This standard is part of the IEC 60839 series, written to include the following parts:

Part 11-1: Electronic access control systems – System and components requirements

Part 11-2: Electronic access control systems – Application guidelines

This part of IEC 60839 describes the general requirements for planning, installation, operation, maintenance and documentation for the application of electronic access control systems (EACS).

The performance of the EACS is determined by the security grades allocated to the access points. A risk assessment that identifies the risks and perceived threats should first be carried out in order to establish the appropriate security grades.

Four security grades are available based upon the knowledge and tools available to a person intent upon gaining unauthorised access and the type of application, taking into account specific organizational aspects and the value of the assets.

Separate guidance is provided for each activity along with recommendations for the documentation needed. A brief description of each section covering the activities is provided below:

System planning: this section is intended to assist the designer with the selection of an electronic access control system (EACS) that provides the control of access and security integrity commensurate with the value of the assets requiring protection and the associated risks. See Clause 7.

System design should minimise potential vulnerabilities that could be exploited to circumvent the access control measures. It is recommended that safeguards are incorporated to give early warning of attempts to circumvent the access control measures. See 7.3.

System installation: this section is intended to help those responsible for installing the EACS by identifying issues which should be considered prior to commencing the installation and during the installation of the system in order to ensure the EACS is correctly implemented as specified during system planning. See Clause 8.

Commissioning and system handover: this section provides guidance to ensure the level of performance required in the system planning is obtained and that the end user is provided with the necessary documentation, records and operating instructions during the handover of the EACS. See Clause 9.

System operation and maintenance: includes information regarding the responsibilities of the end user of the EACS to ensure the system is operated correctly and adequately maintained. It covers inspection, service and the use of remote diagnostics in order that the level of performance determined during the system planning stages can be maintained. See Clause 10.

## ALARM AND ELECTRONIC SECURITY SYSTEMS –

### Part 11-2: Electronic access control systems – Application guidelines

#### 1 Scope

This part of IEC 60839 defines the minimum requirements and guidance for the installation and operation of electronic access control systems (EACS) and/or accessory equipment to meet different levels of protection.

This standard includes requirements for planning, installation, commissioning, maintenance and documentation for the application of EACS installed in and around buildings and areas. The equipment functions are defined in the IEC 60839-11-1.

When the EACS includes functions relating to hold-up or the detection of intruders, the requirements in standards relating to intrusion and hold-up are also applicable.

This standard provides application guidelines intended to assist those responsible for establishing an EACS to ascertain the appropriate design and planning of the EACS, both in terms of levels of protection and levels of performance necessary to provide the degree of access control and protection considered appropriate for each installation. This is achieved by scaling or classifying the features of electronic access control systems related to the security functionality (e.g. recognition, access point actuation, access point monitoring, duress signaling and system self-protection) in line with the known or perceived threat conditions.

This standard does not cover the methods and procedures for conducting a risk assessment.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60839-11-1:2013, *Alarm and electronic security systems – Part 11-1: Electronic access control systems – System and components requirements*

#### 3 Terms and definitions

For the purposes of this document the terms and definitions given in IEC 60839-11-1, as well as the following, apply.

##### 3.1

##### **area zone**

part of a protected area which has its own set of access levels

Note 1 to entry: It may have a different security grade than other area zones within the same protected area.

##### 3.2

##### **competent organization**

organization possessing sufficient resources and staff with adequate expertise and training in the maintenance of EACS