



AUTORIDADE NACIONAL DE EMERGÊNCIA E PROTEÇÃO CIVIL
SEGURANÇA CONTRA INCÊNDIO EM EDIFÍCIOS

**Fire safety on lower tier sites
in industrial establishments lower level of danger
(SEVESO)**

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Fire Safety in Buildings in industrial establishments lower level of danger (SEVESO)

Fire Safety in Buildings in industrial establishments (SEVESO)

Autoridade Nacional de Emergência e Proteção Civil

Fire Safety in Buildings - legal regime

Fire Safety in Buildings - technical regulation

Inspection act



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General principles

We have the preservation of human life, the environment and cultural heritage

For that you have to...

Reduce the probability of fires occurring

Limit the development of possible fires

Facilitate the evacuation and rescue of occupants at risk

Enable effective and safe intervention of emergency services

How to make?

With passive measures

OF ORGANIZATION

AND PROTECTION / ISOLATION

With active measures

WITH THE INSTALLATION OF
EQUIPMENT AND SYSTEMS



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General principles

Fire Safety in Buildings, in organizational terms, is carried out as follows:



Responsibility for applying and verifying fire safety conditions in buildings and enclosures...

In design

- We have,
- Project authors
 - Project coordinators

In construction

- We have,
- Company responsible for carrying out the work
 - Construction director
 - Director of construction supervision

In building exploration

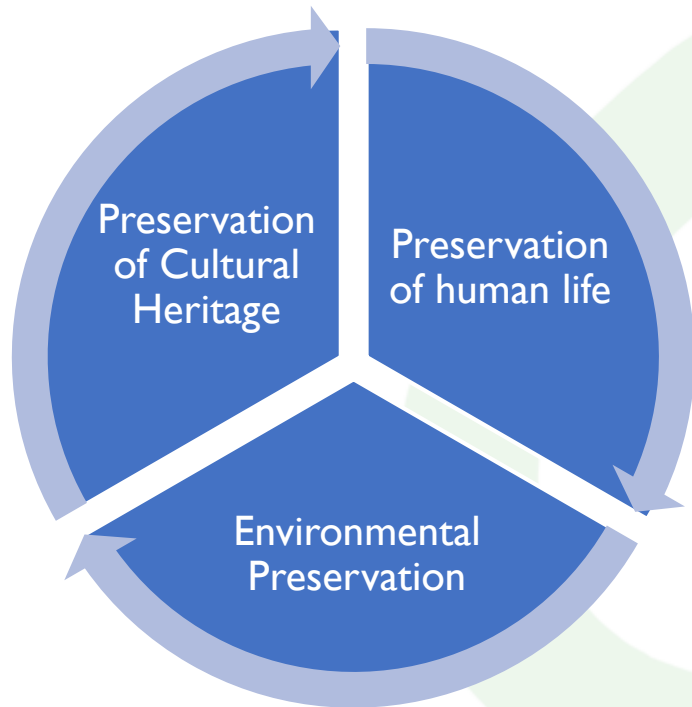
- We have,
- Owner
 - Whose to explore the building
 - Management entities (in common spaces)



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Skills

ANEPC is the competent entity to ensure compliance with the fire safety in buildings regime with the exception of buildings and premises that are classified in the first (1.^a) risk category whose responsibility lies with the municipalities



LEGAL REGIME

FIRE SAFETY IN BUILDINGS

Decree-law (DL 220/ 2008)

In force since January 1, 2009, in its current wording



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Scope

They are subject to the fire safety regime **buildings, or their autonomous fractions**, whatever the use and respective surroundings

Installation - Technical unit where dangerous substances are produced, used, manipulated or stored (legal regulations do not apply)

Support buildings

Management - administration
Services and leisure - employees
Ordinance
Parking
Administrative buildings
Bathhouses
Kitchens/dining rooms
Dormitories
Museum
Library
Files

The legal regulation only applies to support buildings of the following facilities:

to petroleum product storage facilities

to industrial storage and treatment facilities for crude oil, its derivatives and residues

to reception, storage and regasification facilities for liquefied natural gas

to installations used in the pyrotechnic industry and the extractive industry

to facilities that transform or store explosive or radioactive substances and products



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Scope

Are still subject to the fire safety regime

Other buildings

Buildings or premises that are outside the scope of application of this decree-law and complementary legislation are also subject to the legal regime for fire safety in buildings, **in terms of accessibility of rescue equipment and availability of water for fire fighting**, but whose specific legislation does not cover those matters.



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Implementation methodology

In Portugal, there are twelve typical uses:

Buildings and enclosures

Typical uses

Risk category

Inside the buildings

Risk locations

Evacuation routes

UT I – housing

UT II – parking

UT III – administrative

UT IV – schoolchildren

UTV – hospitals and nursing homes

UTVI – public meetings

UTVII – hotels and restaurants

UTVIII – commercials

UTIX – sports and leisure

UTX – museums

UTXI – libraries

UTXII - industrial



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Implementation methodology

Buildings and enclosures

Typical uses

Risk category

Inside the buildings

Risk locations

Evacuation routes

Risk categories depend on the following risk factors

Building height

Effective

Number of floors below reference plane

Gross area (in parking)

Fire load density (in industrial)

There are four risk categories:

1.^a risk category - reduced

2.^a risk category - moderate

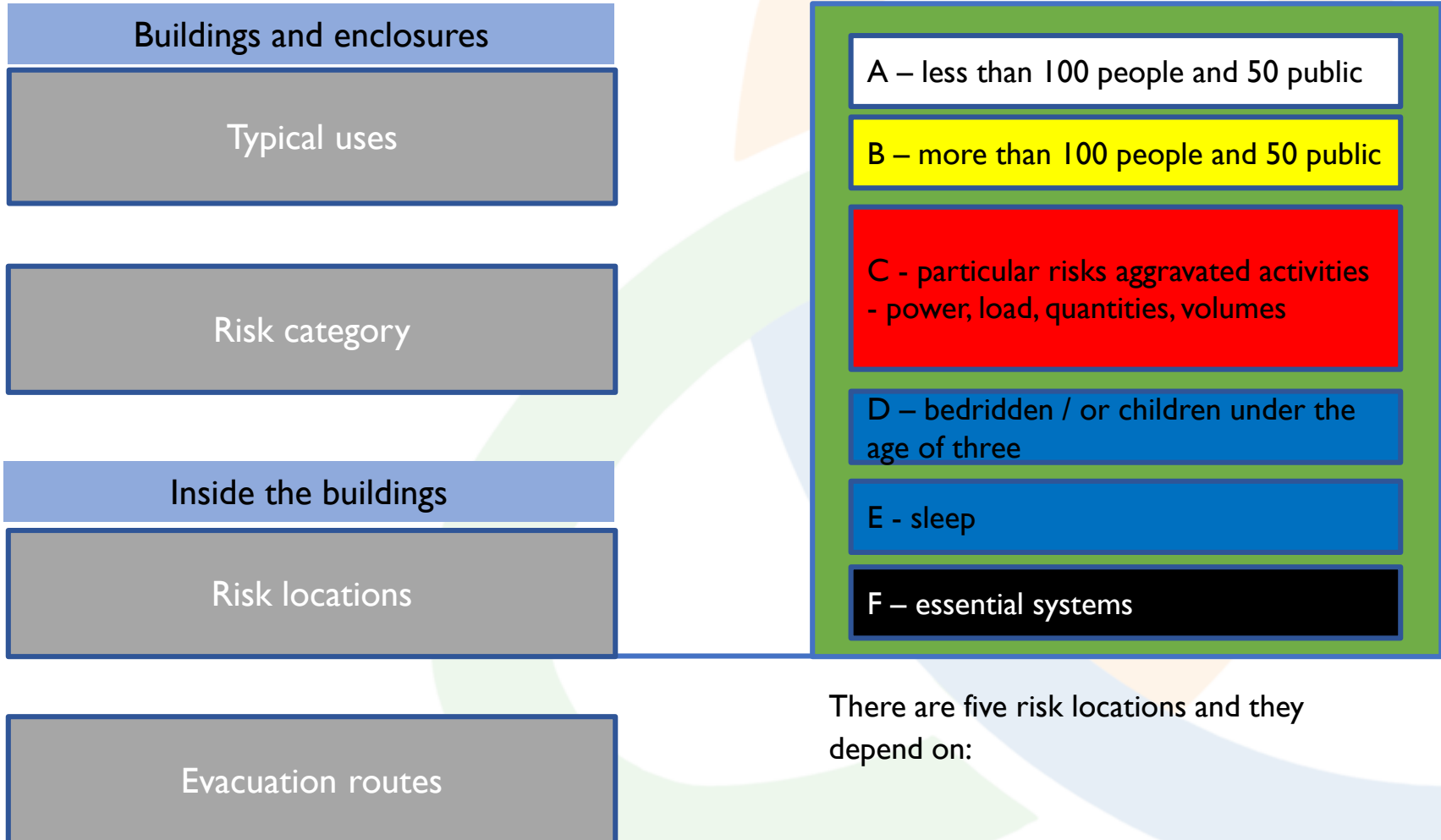
3.^a risk category - high

4.^a risk category – very high



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Implementation methodology



There are five risk locations and they depend on:



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Implementation methodology

Buildings and enclosures

Typical uses

Risk category

Inside the buildings

Risk locations

Evacuation routes

We have two types of evacuation routes:

Horizontal evacuation routes

Vertical evacuation routes



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Implementation methodology

In buildings/places/roads, with
Dimensions . Distances
Location
Evacuation

In buildings/places/roads, with
Compartmentalization
Protection / Isolation
Reaction to fire
Smoke control

In terms of implementation we have passive measures

OF ORGANIZATION

AND PROTECTION / ISOLATION

With active measures

WITH THE INSTALLATION OF
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Implementation methodology

In buildings/places/roads

- Water supply
- Emergency lights
- Emergency signage
- SADI - fire detection
- Smoke control
- 1st intervention - Fire extinguishers / reels
- 2nd intervention – columns
- Generator
- Pumping plant
- SFEAI - sprinklers
- Pollution control
- Gas detection
- Accessory installations

In terms of implementation we have passive measures

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Self-protection measures

These are **security organization and management measures**, during the operation of a building or premises, intended to mitigate risks and plan the response to emergencies.

(prevention, planning and action measures in case of emergency)



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Security manager

Is responsible for maintaining safety conditions against fire risk and implementing applicable self-protection measures

- You must designate a **Security Delegate**
- Verify the adequacy of self-protection measures and **request approval** from ANEPC
- Keep self-protection measures **permanently updated**
- Organize, direct and evaluate the operation of **security teams**
- Distribute the rules of **exploration and behavior**, provided for in self-protection measures, to all occupants
- Disclose **self-protection measures** to all occupants who perform functions in the building or premises, including companies contracted to provide services
- Promote **training and drills within the scope** of self-protection measures
- Request **regular inspections**



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Security delegate

You must carry out self-protection measures and test them through simulations, proposing changes if necessary, resulting from their evaluation

The Security Manager delegates powers to the Security Delegate, but not responsibilities



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Implementation methodology

Self-protection measures

Self-protection and management during exploration, it is the responsibility of the Security Manager, Security Delegate and security team

Preventive measures

With, procedures or prevention plan

Intervention measures in case of fire

With, procedures or internal emergency plan

Security records

With, reports, maintenance actions and occurrences

Fire Safety in Buildings training

With, actions aimed at employees, collaborators

Simulacrum

With, test of Self-protection Measures and behavior training

Passive measures

ORGANIZATION

PROTECTION / ISOLATION

Active measures

EQUIPMENT AND SYSTEMS



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Implementation methodology

Self-protection measures – PEI - Internal emergency plan (Portaria 135/2019)

Self-protection and management during exploration, it is the responsibility of the
Security Manager, Security Delegate and security team

Organization to adopt in case of emergency

Activation flowcharts

(with the various phases of the emergency situation)

Identification of teams, missions, responsibilities

Action plan

Prior knowledge of the risks

Alarm broadcast planning and alert transmission

Coordination of operations

Activation of intervention means

Maneuvering safety devices

Provision of first aid

Protection of risky locations

Evacuation plan

Forwarding Instructions

Helping people with limited capacity

Confirmation of total evacuation of spaces



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Inspection act - inspection

All buildings or premises and their fractions are subject to inspections

For **verification of maintenance of approved/licensed** Fire Safety in Buildings conditions implementation of **Self-Protection Measures**

There are two types of inspection acts

Regular inspections – are mandatory, must be requested by the building operator and have a fee associated with the respective service

Extraordinary inspections – are carried out on the initiative of ANEPC (DIC), or by complaint



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Thanks.

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