

Order of [date] amending the order of 25 June 1980 approving the general provisions of the safety regulations against fire and panic risks in establishments open to the public (ERP)

NOR: INTE1722723A

Chapter VI
PS-type establishments
Covered car parks
Section I
Overview

Section II
Constructive arrangements
Article PS 6
structures

§1 The elements carrying a covered car park, whether or not topped by a building, not equipped with a sprinkler system, are fire-rated for 2 hours or R 120 and the intermediate floors fire-resistant to 2 hours or REI 120.

The load-carrying elements of a covered car park, whether or not surmounted by a building, equipped with an automatic sprinkler system, are fire-resistant to a degree of 1 hour 30 or R 90 and intermediate floors fire-resistant to 1 hour 30 or REI 90.

However, the elements carrying a covered car park not surmounted by a building and equipped with a sprinkler system are fireproof to 1 hour or R 60 and intermediate floors are fire-resistant to 1 hour or REI 60 in the following cases:

- covered car park with a structure above it of two storeys at most above the reference level;
- covered car park with a structure above it of two storeys at most;
- mixed car park with two storeys at most.

§2 In the case where the provisions of Article PS 7 are not applied, the load-bearing elements of widely-ventilated car parks are:

- 1-hour or R 60 fire-resistant and the intermediate floors 1-hour fire-resistant or REI 60 fire-resistant if they are not topped by a building and do not have more than two storeys above the reference level;
- 1 hour 30 minutes or R 90 fire-resistant and the intermediate floors 1 hour 30 minutes or REI 90 in other cases.

However, in mitigation of paragraphs 1 and 2, the provisions of Articles CO 13, § 3 and CO 14 of the general provisions of the Regulation relating to the main elements of roof structures and buildings on the ground floor are applicable.

Article PS 12 Compartmentation

§ 1. With the exception of the widely ventilated car parks, each level is divided into compartments of less than 3,000 square meters. This value can be increased to the area of the storey without exceeding 3,600 square meters. The area of a compartment can be increased to 6,000 square meters when equipped with a sprinkler system.

Article PS 14 Vehicle circulation aisles

The ramps and driveways of vehicles are free of obstacles over a height of at least two meters. The maximum height of eligible vehicles is entered at the park entrance. The parts of the car park reserved for the circulation of vehicles by forming a tunnel with a width greater than 50 meters respect the following provisions:

- their width is dimensioned to allow the occupants of any vehicle to leave it in case of immobilization;
- the maximum distance to go on foot from such a tunnel or to reach an exit or storey of the park is 40 meters;
- when the car park is equipped with a mechanical smoke extraction system, the smoke extraction of the tunnel designed for rate of 900 cubic meters per hour, per fraction of 5 linear meters of tunnel length; this value may be reduced to 600 cubic meters per hour per 5 linear meters fraction of the tunnel if the park is equipped with an automatic sprinkler system. This smoke extraction can be ensured by the system within the car park subject to being taken into account in the calculation of the flow at that storey;
- they have safety lighting in accordance with Article PS 22;
- if the park is equipped with a fire detection system or an automatic sprinkler system, these systems are extended to the volume of the tunnel.

Section III facilities

Section IV Technical and electrical installations Article PS 18 Smoke Control

§ 3. Mechanical smoke extraction.

Smoke extraction shall be achieved mechanically in the storeys below the reference level and in the superstructure storeys, with the exception of the cases provided for in the third and fourth subparagraphs of § 2 above and special cases where the park has storeys that meet the natural smoke-extraction requirements warranted by a study using smoke-extraction engineering, and in these storeys only.

The mechanical smoke extraction is carried out by compartment and ensures a minimum extraction flow corresponding to 900 cubic meters per hour, per vehicle and compartment.

This value may be reduced to 600 cubic meters per hour, per vehicle and per compartment, if the compartment is equipped with an automatic sprinkler system.

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4.3. Smoke evacuation fans:

Exhaust fans perform their function for 2 hours at 400 ° C or are rated F400 120. These requirements can be reduced to 200 ° C for two hours or F 200 120 if the compartment is equipped with a sprinkler system.

Article PS 20

Power supply of security installations

§ 2. The power supply for safety installations is made of category CR 1 cables.

The power cables of a compartment's own smoke extraction systems are not arranged above the parking spaces of the compartment unless they fulfil one of the following two conditions:

- they are placed in firestop ducts of degree 1 hour or EI 60 (ve or ho) (oi);
- The compartment is protected by a sprinkler system.

Section V

Fire Rescue

Article PS 27

Means of detection, alarm and alert

§ 2. (c) If the entire car park is equipped with a sprinkler system, automatic fire detection is not required.

Article PS 29

Means of fire fighting

A sprinkler system is installed in all storeys of covered car parks with more than two storeys below or above the reference level. However, this measure is not mandatory in widely ventilated parking lots.

Section VI

Air quality

Section VII

Checks and visits

Article PS 32

Maintenance and checks

Electrical installations, mechanical smoke extraction, signalling devices, alarm, fire detection and fire safety systems, fire-fighting equipment, fire compartment devices and monitoring devices are to be regularly maintained by a qualified professional. On these occasions, performance tests are to be carried out at least once every two years for car parks with a capacity of less than or equal to 250 vehicles and once every year for other parks.

These installations, with the exception of air quality monitoring devices, are checked when they are put into service and then at least once every five years by an approved body.

Section VIII
Existing establishments
Article PS 39
Means of rescue

A sprinkler system is installed to limit the spread of the fire. This provision does not apply to car parks with a maximum of three storeys.

Section IX
Special parking lots
Subsection I
Covered automatic car parks

Subsection II
Covered car parks
Accessible to transit vehicles

Article PS 43
Rescue means

In addition to article PS 29, § 2, the establishment has a sprinkler system, except in the case of a largely ventilated car park.