

The provisions of the present normative are obligatory when designing, realizing and exploiting the constructions of the new underground car parks and the utilities related to them, as well as the extension of the existing underground car parks or the change of the destination of the existing underground constructions in the car parks, regardless of their form of ownership.

Article 3. -

At the works of extension, modernization or rehabilitation of the existing underground car parks or the change of the destination of the existing underground constructions in car parks, when some provisions of the present regulation cannot be fulfilled, alternative fire safety measures will be provided through the project. , according to the provisions of the applicable technical regulations.

Article 4. -

Underground car parks existing in operation or under construction at the date of entry into force of this regulation do not require agreement with its provisions if they comply with the technical regulations applicable at the time of their implementation.

Article 5. -

In order to meet the essential requirement of "fire safety" quality, underground constructions intended for parking cars will be designed, executed and operated so that, in the event of a fire,:

- a) the** stability of the supporting elements of the underground construction must be ensured during the normalized period of time;
- b) the** possibilities of initiation and propagation of fire and smoke inside the underground construction are reduced;
- c) the** propagation and extension of the fire to the neighboring spaces should be limited;

taken into account.

Article 6. -

The provisions of this norm refer to the design, execution and operation of underground car parks and their trailers, with the total authorized load of maximum 3,500 kg.

Article 7. -

The following are not the subject of this regulation:

- a) underground car parks for a maximum of 10 cars;
- b) underground car parks for other vehicles (which are not cars);



- c) underground car parks;
- d) underground garages (spaces where maintenance work and repairs of cars are performed);
- e) underground car parks where the provision of cars on parking spaces is provided with automated distribution systems, other than elevators or lifting platforms for access to underground parking levels.

Article 8. -

The provisions of the present normative regarding the operation are obligatory also in the case of the existing underground car parks.

SECTION 2 Terminology

Article 9. -

In this regulation, the terminology established in the applicable regulations and the following terms is used:

- a) related activities - specific services admitted in underground parking lots;
- b) functional annexes - rooms and spaces related to the functioning of the underground parking lot;
- c) protected evacuation clearance - any part of the underground

d) fire safety dispatcher - separate room, separated from the space for parking cars, with easy access from the outside and equipped with means of surveillance, control and operation of fire protection facilities related to the parking lot, as well as with means of transmissions, devices alarm and alert in case of fire;

e) drencher (open sprinkler) - remote-controlled water head or from sensing elements independent of the head (water head not blocked by a heat-sensitive element);

f) parking level - the space delimited by two successive floors (lower and upper);

g) reference level - the level at which the external access roads to the underground parking lot are located and which can be used by the means of rescue and intervention in case of fire. If the underground parking lot has several road accesses located at different elevations, the reference level is the external access path located below;

h) underground parking - construction with one or more levels, placed below the level of the surrounding land and intended for parking cars and their trailers. Underground car parks can be closed with perimeter walls and floors (covered) or open perimeter (naturally ventilated underground car parks).

Underground parking spaces compartmentalized and / or provided with interior partitions EI 60 constitute a single parking lot;

i) underground parking with automated distribution system - underground parking in which the arrangement of cars on parking places is realized in automated system, with special machines;

j) naturally ventilated underground parking - underground parking with one or more free levels perimeter (open to the outside) and which simultaneously fulfills the following conditions:

(i) on each level of parking, the free surfaces of the side walls open to the outside are located on at least two opposite facades and each represents at least 50% of the total surface of the open facade (the height considered being the free distance between the finished floor and the ceiling)



level represent at least 5% of the floor area of the respective level;

(iv) the open outer space has a horizontal area at least equal to the sum of adjacent perimeter free surfaces;

k) parking level - space delimited by floors arranged offset at half level. Two consecutive levels are a level of parking;

l) sprinkler - head of water cut off by a heat-sensitive element;

m) fire stability - the global normed capacity of an underground car parking construction to respond to the action of a fire. The level of fire stability of the underground construction for parking cars is determined by its element with the most unfavorable classification in the normed values;

n) crossing unit (flow) - user's passing width (discharge flow), of at least 0.60 m. When one or two passing units are required, 0.90 m (instead of 0, is provided) 60 m) and 1.40 m respectively (instead of 1.20 m). If 3 or more passage units (streams) are required, their width will be multiple of 0.60 m;

o) Shutter - automatic, fire-resistant closing / opening device mounted on smoke exhaust pipes or air inlets, normally closed or open in the standby position.

CHAPTER II

Spaces and rooms with specific activities and functions

Article 10. -

Depending on the number of cars possible to park, underground parking is classified in the following types:

- P1: from 11 to 100 cars;
- P2: between 101 and 300 cars;
- P3: between 301 and 1,000 cars;
- P4: over 1,000 cars.

Article 11. -

Inside the underground parking is allowed the provision of parking places for cars and functional annexes to the parking, as well as areas for the related activities authorized and specified in the present regulations

[indaco](#)

[START](#) [DOCTRINE](#) [COURTS IN COURT](#) [JUDGMENTS](#) [COMPANY GOC](#)

constituted by operating offices, payment rooms, surveillance, for personnel, fire safety dispatch, transformation station, water management, generator, ventilation rooms, toilets.

(2) The functional annexes are located inside the underground car park, provided they are separated and ventilated according to the provisions of the present norm.



Article 13. -

Surveillance, maintenance and operation of fire protection installations for underground car parks are ensured:

- a) by the parking operator, who is responsible for operating the parking lot under fire safety conditions, at underground parking lots type P1 and P2;
- b) from the fire safety dispatcher, at the underground car parks type P3;
- c) from one or more fire safety dispatchers, depending on the compliance and equipping with fire safety installations, in the P4 type car parks.

Article 14. -

(1) The fire safety service is compulsory in underground parking lots, type P3 and P4 or with more than 4 underground levels, regardless of the number of parking places, and consists of at least two persons in exchange, having adequate training, depending on of the size and level of equipping the parking lot with fire protection installations, respectively one person in exchange for the P3 type parking lots.

(2) The fire safety service of an underground parking lot may be organized jointly with other specific parking activities.

Article 15. -

(1) The fire safety dispatcher must:

- a) be disposed at the first level below the reference level of the parking lot, in its area of operation, with easy access from the

devices, opening of escape doors, smoke evacuation systems in case of fire and installations of drainage curtains (open sprinklers), signaling of the installation for the detection of LPG leaks, as well as signaling the functioning status of the protection devices and the level of the water supply for firefighting, internal communication systems and with the services for emergency situations, as well as alarm systems for users in case of fire;

- c) be separated from the rest of the underground construction with vertical and horizontal elements resistant to fire, according to the

provisions of the present normative.

(2) In the underground parking lots disposed in the basements of the underground buildings, the security dispatcher may be common and disposed according to par. (1) or at the ground floor of the building above, according to the requirements of the applicable regulations.

Article 16. -

The functional communication gaps between the space for parking cars and the functional annexes of the parking lot are protected according to the provisions of the present normative.

Article 17. -

(1) Within the underground car parks designed to comply with the present norms, areas may be provided where they are authorized to be carried out, without additional fire safety measures, but in compliance with the provisions of Law [no. 10/1995](#) , with the subsequent modifications, and of the specific normative acts in force, the following related activities:

- a) washing of cars;
- b) mounting of small equipment and accessories for cars (ornaments, radios, windows);

Alerte prin email și sms pentru Dosare Instanță, Hotărâri Judecătorești, Buletinul Insolvenței, MO partea a IV-a



- c) car geometry and wheel balancing;
- d) reception and delivery of cars;
- e) rental of cars and bicycles;
- f) battery charging points for electric cars.

Article 18. -

At the disposal of the related activities authorized in the underground parking for cars, the following will be considered:

- a) **the** operator who operates the parking lot is responsible for ensuring fire safety;
- b) **it** is forbidden to use open fire when carrying out the authorized related activities;

- c) the capacity of flammable liquid stored or used in a related activity must be less than 5 liters;**
- d) the arrangement of the related activities authorized not to disturb the smoke evacuation in case of fire;**
- e) the storage space included in a related activity must be limited to 100.00 m², separated by minimum fire-resistant walls EI 120 and to ensure the smoke evacuation in case of fire, and the functional circulation gap protected by a resistant door fire EI 60-C;**
- f) the density of the thermal load in the storage spaces related to the authorized related activities must be limited to 900 Mj / m²;**
- g) the charging places of the batteries of the electric cars must be equipped with appropriate ventilation systems;**
- h) the spaces in which the authorized related activities are carried out are equipped with fire signaling and extinguishing facilities, if the parking lot is equipped with such facilities, and in all cases is provided with means of first intervention in case of fire, respectively at least one extinguisher portable 6 liters (kg), with extinguishing performance in accordance with SR EN 3 (with its parts) or equivalent regulations, depending on the specific risks, returning to each maximum 200.00 m².**

Article 19. -

(1) When the reception and delivery of cars are arranged in the underground car park, they shall be:

- a) accessible to cars with a total authorized load of maximum 3,500 kg;**
- b) arranged at the level of parking closest to the reference level of the parking lot;**
- c) with the area limited to a maximum of 100.00 m²;**

- d) with the volume delimited by the fire-resistant walls EI 120 and the communication gaps with the parking garage protected by fire-resistant doors EI 90-C, also provided with autonomous detectors or with automatic fire detection and signaling installations;**
- e) maintained with the doors closed outside the delivery hours;**
- f) without direct communication between two adjacent delivery areas;**

g) provided with a door of evacuation of the users for each room of reception-delivery.

(2) It is obligatory to ensure the smoke evacuation in case of fire from the reception-delivery rooms through:

a) own mouths provided for each delivery area;

b) mechanical draft to ensure an exhaust flow of $1.5 \text{ m}^3 / \text{s}$ for each reception-delivery room or, when possible, by natural-organized drawing, with a smoke evacuation device having the minimum free area 1.00 m^2 .

CHAPTER III Fire risks

Article 20. -

(1) Underground spaces and rooms for parking cars are classified with high fire risk.

(2) The other rooms related to the underground parking shall have fire risks determined and specified in the documentation, depending on the destination and density of the thermal load, according to the provisions of the applicable technical regulations.

Article 21. -

Inside the underground spaces and spaces for parking cars it is prohibited:

a) the arrangement of rooms and spaces with another destination, other than those provided in the present norm;

b) filling or removing fuel from car tanks or transferring combustible liquids;

c) smoking and use of open fire in any form;

the provisions of the present normative;

e) parking the cars outside the spaces specially designed and marked for this purpose, such as car ramps and parking traffic;

f) the use for other purposes of spaces intended for underground parking of cars;

g) access to the underground parking of cars and their trailers with flammable, explosive, radioactive or corrosive substances, in addition to fuels and lubricants in the equipment of cars.

- peste 13.000 de articole publicate
- peste 470.000 de vizitatori lunar
- articole de specialitate și știri din diverse domenii
(fiscal, financiar-contabil, HR & muncă, juridic etc.)



CHAPTER IV Fire stability

Article 22. -

Underground car parks for more than 10 cars must meet at least the performance requirements for level II fire stability.

Article 23. -

The main performances for the construction elements of the underground parking for level II fire stability are minimum:

- a)** supporting elements with fire separation role:
 - walls - REI 120;
 - floors - REI 60;
- b)** supporting elements without role of fire separation (poles, columns) - R 180;
- c)** perimeter closures (exterior walls not important) - EI 15;
- d)** unimportant elements (partitions) - EI 45.

Article 24. -

When underground car parks are located in the basements of high, very high buildings, with crowded rooms or are P4 type car parks or more than 4 underground levels, they must meet the performance requirements for level I fire stability.

Article 25. -

The main performances for the construction elements of the

[indaco](#)

START DOCTRINE COURTS IN COURT JUDGMENTS COMPANY GOC

- walls - REI 180;
- floors - REI 90;
- b)** load-bearing elements without fire separation role (poles, columns) - R 240;
- c)** perimeter closures (exterior walls not important) - EI 30;



Toate numerele
integrate
în Lege5



d) unimportant elements (partitions) - EI 60.

Article 26. -

The conditions of fire behavior and the measures of protection in case of fire of the main elements of construction, materials and equipment used in the construction of underground parking are provided in the technical documentation by their specialized designers, respectively:

- a)** architects: for partition walls, exterior perimeter closures, partition walls, protection of functional communication gaps, smoke evacuations through natural-organized circulation;
- b)** structural engineers: for pillars, columns, diaphragms, breaches, load-bearing walls, floors, terraces and roofs;
- c)** installing engineers: for the systems, equipment and installations designed, respectively water, electrical, ventilation, heating, lightning.

Article 27. -

Underground parking for cars located in the basement of the underground buildings is subdivided against them by walls and fire-resistant floors according to the provisions of the present norm.

Article 28. -

The built areas of the underground parking lots for cars with fire stability level I or II are not limited, in the conditions of their division into separate areas, separated by EI 60 walls, which will limit the light propagation of fires on large areas of the parking lot (according to the provisions of art. 92 and 93).

[indaco](#)

START DOCTRINE COURTS IN COURT JUDGMENTS COMPANY GO

fire behavior, according to the provisions of the [Regulation](#) regarding the classification and classification of construction products based on fire behavior performances, approved by the Order of the Minister of Transport, Construction and Tourism and of the Minister of State, Minister of Administration and Interior, [no. 1.822 / 394/2004](#) , as subsequently amended and supplemented.

CHAPTER V

Location of underground parking lots

Article 30. -

Underground car parks can be located:

- a) independently, at safety distances normated with respect to neighboring underground or subterranean constructions, according to the provisions of the applicable technical regulations;
- b) attached to other constructions, against which it is compartmentalized with fire-resistant walls EI 240;
- c) embedded in subterranean constructions with another destination, against which it is subdivided with EI 240 walls and REI 180 floors when they are high, very high buildings or with crowded rooms, respectively with EI 120 walls and REI 120 floors when the respective above-ground buildings does not fall into the category of those mentioned.

Article 31. -

The functional communication between the parking lot and the buildings or portions of underground buildings from which they are attached or in which they are included is ensured by gaps protected according to the provisions of the present norm.

Article 32. -

By locating the underground car parks, accesses and movements from the adjacent streets will be provided for the extinguishing and rescue vehicles, as well as the possibilities of access and intervention of the fire services in case of fire in the parking lot.

When establishing parking places for cars in underground parking lots, the following are taken into account:

- a) **the** cars must park only in the spaces designated and marked for parking;
- b) **the** space for parking 3 motorcycles, scooters or ATVs is considered the equivalent of a parking place for cars;
- c) providing parking spaces for cars with people with disabilities;

d) compliance with the provisions of the applicable technical regulations when designing, executing and operating;

e) the places located outside the underground parking (outside) are not taken into account when establishing the capacity of receiving the underground parking.

Article 34. -

In order to ensure the conditions of fire safety, the number of accesses for cars in the underground parking lots is determined according to the type of parking, without being less than:

a) an access with a traffic wire to the P1 type parking lots, ensuring the traffic light entry and exit of cars; underground car parks for up to 20 cars can only be provided with an elevator (access) platform;

b) two accesses with one traffic wire or one access with two traffic wires to the P2 type parking lots, as well as to the P3 type parking lots, where the parking of cars is performed only by specially hired personnel;

c) two accesses, of which one with two traffic wires and the other with a traffic wire, to the P3 type car parks;

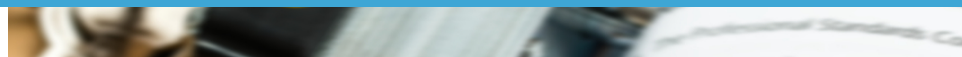
d) 3 accesses, of which two accesses with two traffic wires and one access with a traffic wire, to the P4 parking lots.

Article 35. -

(1) The ramps of access and circulation of the cars in the underground parking lots must not exceed the slope of 18%.

(2) Specific climatic conditions shall be taken into account when designing and accessing the external access ramps.

(3) At a distance of at least 4,00 m from the edge of the outer roads, the slope of the access ramps in the underground parking lots, ~~uncovered or covered~~ shall be of maximum 5%



Article 36. -

(1) Inside the underground parking lot the traffic of the cars is organized in such a way that the number of points of conflict is as small as possible.

(2) Mirrors and, where appropriate, traffic lights are provided in the points of conflict of the traffic of cars.

Article 37. -

(1) The vertical and horizontal functional circulations for cars, respectively the ramps and the internal circulations of the parking lot, shall be dimensioned and made according to the provisions of the technical regulations specific to the parking lots.

(2) In order to limit the light propagation of fires between the parking levels, the interior ramps for the circulation of cars must meet the following conditions:

a) be delimited with EI 60 side walls or, when no side walls are provided, the respective gaps should be protected with drainage curtains (open sprinklers) and EI 15 diaphragms of at least 0.50 m high, arranged below the floors between the levels parking;

b) the access gates of the cars on the interior ramps at each parking level are protected with drainage curtains (open sprinklers), without having to provide diaphragms, in all cases where the underground parking is equipped with sprinkler fire extinguishing systems. .

(3) Drainage curtains (open sprinklers) shall be sized and made in accordance with the provisions of the specialized technical regulations, ensuring:

a) normalized spray intensity;

b) the theoretical operating time of 60 minutes.

Article 38. -

Inside the underground car park, the traffic of the cars must be at least 5.00 m wide for 90 ° parking angles and at least 3.50 m for parking along the traffic lane.

Article 39 -

The radii of braking and the widths of the car traffic conform in such a way as to allow the circulation of the cars that have access in the

[indaco](#)

[START](#) [DOCTRINE](#) [COURTS IN COURT](#) [JUDGMENTS](#) [COMPANY GO](#)

The minimum free height of car frame inside the parking lot must be at least 2.15 m.

Article 41. -

At the first underground level of parking, compared to the reference level, at least 0.5% of the number of parking spaces for cars will be provided and conformed for people with locomotor handicap, and by their location the protection of the pedestrian traffic of the users will be ensured. of the respective places, taking into account the provisions of the applicable technical regulations.

Article 42. -

<p>lege [5] Cea mai mare bibliotecă juridică virtuală</p>	<p>142 cărți comentate de la editurile C.H. BECK și HAMANGIU</p> <p>14 reviste de specialitate, zeci de conferințe video, dosare instanță, toate hotărârile judecătorești, insolvență, MO partea IV-a</p>
--	---

(1) The elevating platforms and elevators for accessing cars in underground parking lots shall be located, dimensioned and realized in accordance with the provisions of the specific technical regulations and of the present normative.

(2) The lifting platforms and the elevators for cars are equipped with devices that in case of fire automatically bring them to the reference level.

Article 43. -

Road traffic in underground parking lots, including car ramps, shall be provided with a safety lighting installation, powered and made in accordance with the provisions of the applicable technical regulations, so as to ensure the minimum level of lighting required for safe traffic conditions.

Article 44. -

The safety luminaires are mounted on both the top and the bottom of the circulation spaces, as the case may be, on the floor.

Article 45. -

In the utilitarian spaces related to the underground parking, the safety lighting is realized according to the provisions of the applicable technical regulations.

Article 46. -

(1) The ramps of access and circulation of the cars must be free on

[indaco](#)

START DOCTRINE COURTS IN COURT JUDGMENTS COMPANY GOC

parking shall be specified at each access ramp in the parking lot.

Article 47. -

(1) The underground parking areas provided only for the circulation of cars and which constitute tunnels longer than 50.00 m shall comply with the following:

a) the width of the tunnel will be dimensioned so as to allow the occupants to get out of cars;

- b)** the maximum distance up to a user exit shall not exceed 40.00 m;
 - c)** when the parking lot is equipped with a smoke evacuation system by mechanical draft, a volume of 900 m³ / hour will be provided on fractions (sections) of 5.00 m from the tunnel length, a value that can be reduced to 600 m³ / hour in fractions of 5.00 m in tunnel length, if the parking lot is equipped with automatic sprinkler fire extinguishing system;
 - d)** to provide safety lighting;
 - e)** if the parking lot is equipped with automatic signaling and extinguishing systems sprinkler fires, they will also protect the tunnel provided for the circulation of cars.
- (2) The** evacuation of the smoke can be carried out through its own installations or with the evacuation installations related to the parking lot, provided that they are taken into account in their calculation and the respective flow.

Article 48. -



- (1) The** parking of cars fueled with liquefied petroleum gas (LPG) is allowed in the entire parking lot or only in the spaces arranged for it, if the specific requirements stipulated in the present norm are fulfilled.
- (2) If** the parking of vehicles fueled with LPG is allowed only in spaces designed for this purpose, the observance of the specific requirements is mandatory only for the respective areas.

designed, executed and maintained in accordance with the provisions of SR EN 50073 or equivalent regulations in the Member States of the European Union, must be provided. to ensure that the following requirements are met:

- a) the** detection of LPG leaks by a fixed, automatic installation, equipped with LPG detectors;
- b) the** placement of LPG detectors up to a maximum of 0,15 m of floor, in areas that are protected from drafts and blows;

c) the arrangement of the detectors, according to their specific performances, throughout the parking lot or in the area established for the parking of powered cars and LPG.

Article 50. -

(1) The LPG leakage installation shall be connected to the fire detection and signaling plant.

(2) During the simultaneous detection of the presence of LPG and the parameters of the fire (smoke, temperature, etc.), the ventilation system shall ensure the highest flow rate for the respective space.

(3) If the LPG leakage facility is also connected to the carbon monoxide detection plant, during the simultaneous detection of the presence of LPG, carbon monoxide and fire parameters, the ventilation system related to the space shall be dimensioned for the flow rate. the highest value.

Article 51. -

(1) When detecting LPG leaks, the automatic operation of the optical and audible alarm systems of the users is obligatory.

(2) The alarm signals must be perceived from anywhere in the parking lot and not be confused with other signals.

(3) The audible signals must be heard outside the car in normal ventilation conditions.

Article 52 -

(1) It is mandatory to provide the mechanical ventilation system, which will ensure the flow of $0,003 \text{ m}^3 / \text{s}$ for each m^2 of surface used for parking and circulation of cars powered with LPG.

(2) The ventilation must start within 15 seconds after the LPG leak has been detected and cover the respective parking area.

Article 53. -



(1) Upon reaching 10% of the lower explosion limit of the LPG mixture with the air, the detection system shall automatically activate

the start of the ventilation system and the user alarm system.

(2) In the event of a signal leaking from the LPG leakage installation, the ventilation system shall start in the regime provided in art. 52, and the repairs must be performed immediately and properly.

Article 54. -

(1) The power supply from two electrical sources, basic and backup, the LPG leak detection system, the mechanical ventilation system and the user alarm system shall be provided.

(2) The backup electrical source of the mechanical ventilation system shall ensure a minimum service life of the installations of 60 minutes and a switching time of no more than 60 seconds.

Article 55. -

(1) In the general electrical distribution panel, independent circuits are provided to supply mechanical ventilation systems, to detect LPG leaks and to alert users.

(2) The general electrical distribution panel and the secondary distribution panels equipped with switches for the electrical supply of the safety installations shall be marked with warning signs.

Article 56. -

(1) Underground car parks that do not meet the requirements of the present regulation regarding the parking of cars fueled with LPG shall be marked at the entrances with panels and visible indicators to prohibit the access of these vehicles.

(2) At the entrances and inside the parking lots that meet the requirements of the present norm and in which the parking of cars fueled with LPG is allowed, appropriate indicators are provided.

CHAPTER VII

[indaco](#)

START DOCTRINE COURTS IN COURT JUDGMENTS COMPANY GOC

At each level the underground car parks must be provided with means of evacuation of the users (people) so arranged and constructed that, in case of fire, they can leave the building as soon as possible.

Article 58. -

The escape routes provided for the users of the underground car parks must open out, directly or through protected openings.

Article 59. -

(1) The number of escape routes for the users of the underground parking, irrespective of the arrangement, is determined according to the time (lengths of escape) to be ensured (insured), respectively:

a) 100 seconds (40.00 m), when the evacuation can be done in two directions;

b) 63 seconds (25.00 m), when the evacuation is provided in one direction (corridor blocked).



(2) A clogged corridor less than 25.00 m in length, measured from an escape path with access to two stairs or exits located in opposite directions, shall be considered as an escape route if the total distance up to a ladder or outside exit does not exceed 40.00 m.

Article 60. -

At naturally ventilated underground car parks, the accepted escape times (lengths of the paths) are 125 seconds (50.00 m) in two different directions and 75 seconds (30.00 m) in one direction (corridor blocked).).

Article 61. -

The distances on the escape routes are measured horizontally in the axis of the traffic routes, depending on the parking mode, as the case may be, from the longitudinal or transverse axis of the parking space to the farthest to the door of the buffer room or the protected access clearance. at the nearest escape stairs or a direct outside door.

Art. 62 -

When measuring the distances on the escape routes, it is considered

When the stairs are provided with several successive buffer rooms, for the purpose of entering the normal distance of the evacuation route, the solution does not correspond to the provisions of art. 59.

Article 64. -

On the evacuation routes of the users of the underground car parks, the free height of at least 2.10 m is ensured.

Article 65. -

(1) The ways of evacuation of the users of the underground car parks, such as the doors, corridors, hallways and stairs, are dimensioned, made and realized according to the provisions of the present normative and of the applicable technical regulations, so as to ensure the number of units of passage (flows). evacuation) determined by calculation, taking into account the provisions of art. 9 lit. n).

(2) For the dimensioning of the width of the stairs of the escape stairs, the number of users from the busiest level of underground parking is taken into account.

Article 66. -

(1) The number of users simultaneously in the parking lot and on each parking level shall be specified in the technical design documentation.

(2) In order to determine the number of users, a simultaneous 15% of the number of cars and two persons in each car shall be considered.

Article 67. -

The normative capacity of evacuation of a unit of passage (flow of evacuation) of the users of the underground parking is of 70 persons.

Art. 68. -

Alerte prin email și sms pentru Dosare Instanță, Hotărâri Judecătorești, Buletinul Insolvenței, MO partea a IV-a



(1) The carriageway ramps for access to the parking lot and for traffic between the levels of the underground car parks are not means of evacuation of the users.

(2) The access ramps in the underground parking lot can be considered as evacuation routes for users only if they are provided

Article 69. -

(1) The doors provided for the evacuation routes of the users of the underground car parks shall be of normal type, on hinges or pivots.

(2) When used for the evacuation of more than 30 persons, the doors must open in the direction of evacuating the users outwards.

Article 70. -

The escape doors provided for the stairs access buffer rooms will always open in the direction of outward drainage.

Art. 71 -

The free width of the doors used on the escape routes of the users of the underground parking lot shall be at least 0,90 m.

Art. 72. -

The escape doors of the users of the underground car parks are provided with devices that allow their easy opening, through a simple maneuver inside the car park, or they are provided with panic bars.

Art. 73 -

Exhaust doors can be provided with electromagnetic locking systems that can be opened locally (button located next to the door, in a window box that can be broken) and centralized, from the parking garage.

Art. 74 -

(1) The corridors and hallways through which the users are evacuated are separated from the rest of the construction with EI 60 fire-resistant walls and floors.

(2) When the walls of the corridors or hallways separate them from the space in which the cars are parked, they shall be fire resistant EI 120.

(3) The doors of the walls of the corridors or of the escape halls shall be fire-resistant EI 60-C when it opens into the parking space and EI 30-C, to other destinations.

Article 75. -

The widths of the exit corridors must ensure the number of passage units (exhaust flows) determined by calculation and comply with the



Managementul dosarelor din instanță și al echipei care le monitorizează

(1) The stairs for the evacuation of the users of the underground parking for cars shall be conformed, constructed and dimensioned in such a way as to ensure the circulation of the users of the parking according to the specific provisions of the escape routes from civil buildings and of the present normative.

(2) In the houses of stairs of evacuation of the users of the underground parking are not allowed arrangements for other activities.

Article 77. -

Exit stairs can be provided inside the underground parking lot (enclosed in staircases) or outside (open), located in light yards.

Article 78. -

The stairs for the evacuation of the users of the underground car parks will have straight and wide ramps, including those of the buffer rooms of access in them, of at least 0,90 m.

Article 79. -

(1) The ramps of the closed stairs related to the underground part are separated from the ramps of the stairs of the underground building in which the parking is included as follows:

a) at underground car parks enclosed in high, very high above-ground buildings or with crowded rooms, the ramps of the escape stairs related to the underground levels are separated from the ramps of the above-ground building with fire-resistant walls EI 180;

b) in the underground parking lots included in buildings that do not fall under the letter. a), separates with fire resistant walls EI 120.

(2) The closed underground escape stairs shall be provided with an independent smoke evacuation system in case of fire.

Article 80. -

(1) In the wall separating the underground ramps from the underground ramps, the functional circulation of the users can be ensured through a gap placed at the level of the ground floor or the intermediate level between the ground floor and the first underground level of parking, protected by fire-resistant door EI 90-

[indaco](#)

[START](#) [DOCTRINE](#) [COURTS IN COURT](#) [JUDGMENTS](#) [COMPANY GO](#)

road surfaces, separately from the exits of the above-ground building.

Article 81. -

It is forbidden to provide one or two isolated steps on the escape routes to stairs or exits outside.

Article 82. -

The walls of the underground stairway evacuation houses will be fire resistant EI 180 in constructions with fire stability I level and fire resistant EI 120 in constructions with fire stability level II.

Article 83. -

Exit stairs outside the underground parking lot, placed in light yards, are located so as to be protected from possible flames in the parking lot (next to full walls EI 30 that exceed the stairs by at least 3.00 m) or at a minimum distance 3.00 m from the outside wall of the parking lot.

- peste 13.000 de articole publicate
- peste 470.000 de vizitatori lunar
- articole de specialitate și știri din diverse domenii (fiscal, financiar-contabil, HR & muncă, juridic etc.)



Article 84. -

The ramps and the steps of the interior stairs must be fire resistant REI 60, and those of the exterior stairs may be R 15, the fire reaction class A1.

Article 85. -

Access to the escape stairs from underground car parks located independently or placed in the basements of buildings that are not high, very high or with crowded rooms, is made, as appropriate:

- at the interior stairs closed in staircase houses through buffer rooms with an area of at least 3.00 m², ventilated under pressure and equipped with fire-resistant doors EI 60-C;
- at the exterior stairs opened by fire resistant door EI 30-C.

Article 86. -

(1) The accesses of the users from the levels of the underground parking areas included in the basements of the high, very high

(2) The buffer rooms of access to the stairs of evacuation of the underground parking areas included in the basements of the high, very high buildings or with crowded rooms will have ensured the mechanical evacuation of the smoke in case of fire by means of air intakes and the exhausts of smoke by mechanical draft and shall be fitted with fire-resistant doors EI 90-C.

(3) The buffer rooms of access to the stairs of evacuation of the underground parking included in the basements of the buildings that are not high, very high or with crowded rooms will be provided with

fire resistant doors EI 60-C and will have an overpressure that will does not exceed 80 Pa per door.

(4) When the underground car parks are provided with open exterior stairs, access to the staircase is ensured by a fire-resistant door EI 60-C.

Article 87. -

The houses of closed stairs of the underground car parks will have assured the evacuation of the smoke in case of fire by natural-organized draft or mechanical draft (the admission of the air at the bottom and the evacuation of the smoke at the top or the overpressure with respect to the adjacent rooms with which it communicates - mechanical introduction of the air in the ladder, the mechanical introduction of the air in the buffer room and the mechanical evacuation of the smoke from the buffer room).

Article 88. -

(1) The accesses from the levels of the underground car parks to the elevators shall be protected with buffer rooms ventilated in over pressure and provided with fire-resistant doors EI 90-C for the underground car parks embedded in the basements of the high, very high buildings or with crowded rooms.

(2) The accesses from the levels of the underground car parks to the elevators shall be protected with buffer rooms ventilated in over pressure and provided with fire-resistant doors EI 60-C for the underground car parks contained in the basements of the buildings that are not high, very high or with crowded rooms.

Article 89. -

The evacuation routes for the users of the underground parking lots are provided with safety lighting designed, constructed and realized according to the provisions of the present normative and the

Compartmentalization, separation and finishing

SECTION 1

Compartmentalization with respect to other buildings or destinations



Toate numerele
integrate
în Lege5



Article 90. -

Underground car parks are subdivided against other constructions or destinations arranged in basements (other than functional annexes and related activities allowed), through fireproof walls EI 240 when they are buildings or portions of high, very high buildings or with crowded rooms and fire-resistant floors REI 180, respectively EI 120 walls and REI 120 floors, when the above-ground buildings do not fall into the categories listed.

Article 91 -

Functional circulation gaps in the compartment walls compared to other constructions or destinations are protected by overpressure ventilated buffer rooms and equipped with fire-resistant doors EI 90-C.

SECTION 2**Separations inside the underground parking lot****Article 92 -**

Underground car parks that are equipped with automatic sprinkler fire extinguishing systems are separated by fire-resistant partitions EI 60, in areas of maximum 6,000.00 m².

Article 93 -

Underground car parks that are not equipped with automatic sprinkler fire extinguishing systems, in the cases and under the conditions allowed by the present norm, are separated by fire-resistant partitions EI 60, in areas of maximum 3.000,00 m².

Article 94 -

(1) The functional circulation gaps in the fire-resistant partition walls EI 60 (provided in articles 92 and 93) shall be protected on the traffic

on hinges or pivots, fire-resistant EI 60-C.

Article 95. -

The fire safety dispatcher is separated from the rest of the underground construction with minimum fire-resistant walls EI 120 and fire-resistant communication door EI 90-C, and any glazing of partitions must be fire-resistant EI 60-C or protected with shutters EI 60-C.

Article 96. -

The fire pumping station and its backup power supply are provided with direct access from outside.

Article 97. -

(1) The fire pumping water station, its power supplies (basic and backup) shall be compartmentalized against the underground parking with fire-resistant walls EI 180 and REI 180 floors.

(2) Functional circulation gaps in the compartment walls are protected by overpressure ventilated buffer rooms provided with fire-resistant doors EI 90-C.

Article 98. -

De ce au ales profesioniștii Lege5 ?

- Cea mai bună căutare din business
- Singura aplicație care face analiză comparativă
- Flexibil - acces la 3 servicii cu un singur abonament
- Complex - cea mai variată gamă de module
- Configurabil - plătesc doar modulele de interes

indaco

competence

(1) The rooms for the garbage and the annexes of the households (tenants' storage rooms) are divided by the fireproof parking lot EI 120.

(2) In the fire-resistant walls provided for the compartmentalization of the parking lot in front of the garbage rooms or the annexes of the houses (storage rooms), the eventual gaps of functional circulation are protected with buffer rooms ventilated in over pressure and provided with fire-resistant doors EI 60-C.

Article 99. -

The surveillance spaces, the payment rooms and the operating offices of the underground parking lot are separated from the parking spaces with structures R 15, fire resistant walls and ceilings E 15 and class A1 fire reaction glass.

Article 100. -

indaco

START DOCTRINE COURTS IN COURT JUDGMENTS COMPANY GOC

a) EI 60 fire resistant walls and REI 60 fire resistant floors,

b) EI-C doors, with the fire resistance specified in this regulation;

c) the evacuation of smoke in case of fire or, as the case may be, overpressure, according to the provisions of the present normative;

d) minimum area of 3.00 m², being recommended 10.00 m² when transporting goods with trolleys through the buffer rooms.

Article 101. -

If for the protection of the circulation gaps of the cars from the fire-resistant partitions EI 60, provided in art. 92 and 93, no fire resistant doors or curtains can be provided, the protection of openings with open drums is allowed.

Article 102. -

(1) The open drums provided for the protection of the holes in the fire-retardant partitions EI 60 shall be constructed and constructed in such a way as to meet the following conditions:

- a) EI 60 fire-resistant walls and REI 60 fire-resistant floors;
- b) the minimum length of 4.00 m for each drum;
- c) on all the horizontal surface of the open drum, under the upper floor, there will be provided drainage (open sprinklers), located 1 pcs / m² ;
- d) automatic start-up of the drainage system (open sprinklers) in case of fire in any of the spaces separated by the partition wall and manual drives, with buttons mounted in both spaces separated by the wall.

(2) The drainage system (open sprinklers) of the open drums shall be designed, constructed and made according to the provisions of the specific technical regulations.

Article 103. -



(1) The channels and sheds for the underground parking utilities shall be constructed and constructed so as not to constitute fire propagation routes.

Article 104. -

(1) The passageways of the canals and hinges for installations through fire-resistant construction elements shall be sealed around the pipes.

(2) When passing through REI or EI fire resistant construction elements, which compartmentalize the parking lot in front of another building or space with another destination or operated by another

beneficiary, the gaps around the pipes shall be sealed so as to ensure the same fire resistance with that of the pierced element.

(3) In technically justified cases, when sealing the holes around the pipes is not possible, it is ensured:

a) the walls of the EI 180 hinges and the protection holes with fire-resistant caps EI 90, for the first level of fire stability;

b) the walls of the EI 120 hinges and the protection holes with fire-resistant caps EI 60, for level II fire stability.

Article 105 -

Natural gas installations must comply with the provisions specific to the applicable technical regulations.

Article 106. -

The interior finishes of the walls and ceilings of the underground car parks are made from materials from the fire reaction class A1 or A2-s1, d0.

Article 107 -

The thermal or acoustic insulation of the walls and ceilings will be made of materials classified at least in the fire reaction class A2-s1, d0 and on floors A2 (FL) -s1.

Art. 108 -

The floors of the underground parking lots are provided with slopes so that the water and any liquids accidentally spilled to drain to sewers provided with floor siphons and hydrocarbon separators or other accepted system.

Article 109 -

The wear layer of the underground parking floors will be made of materials from at least fire reaction class A2 (FL) -s1.

[indaco](#)

[START](#) [DOCTRINE](#) [COURTS IN COURT](#) [JUDGMENTS](#) [COMPANY GOO](#)

of the car ramps between the parking levels will be at least 2.5 cm above the current level of parking.

lege **[5]**
Cea mai mare
bibliotecă juridică
virtuală



CHAPTER IX Utilities

SECTION 1

Smoke evacuation in case of fire

Article 111. -

(1) At underground car parks it is mandatory to ensure the smoke evacuation in case of fire through the systems:

- a) natural-organized print;
- b) mechanical draft.

(2) Other smoke evacuation systems from underground car parks may be used only if they are provided in specialized technical regulations or are technically approved.

(3) In addition, fan / jet impulse systems may be used to direct the smoke to the outlet holes.

Article 112. -

Depending on the location and compliance of each underground parking lot, combinations of the mentioned smoke evacuation systems in case of fire may be used, in compliance with the provisions of the applicable technical regulations.

Article 113. -

The provision of anti-theft devices, such as grilles or grills mounted next to smoke exhaust openings or other construction and installation elements, should not reduce the effectiveness of the smoke evacuation systems in the event of fire.

Article 114 -

(1) Smoke evacuation by natural-organized circulation is allowed for underground parking spaces with a maximum of two levels, if for each parking level the openings for air intake and smoke evacuation ensure a minimum surface of 12 dm² for each car.

[indaco](#)

[START](#) [DOCTRINE](#) [COURTS IN COURT](#) [JUDGMENTS](#) [COMPANY GO](#)

(2) Highly ventilated underground car parks are considered to ensure the natural-organized evacuation of smoke.

Article 115. -

The air inlets through the natural-organized draft are placed at the bottom of each parking level, and the exhaust vents are arranged at the upper part of the parking level.

Article 116. -

The air inlet and the exhaust of the smoke through natural-organized circulation are achieved through gaps, which communicate directly or through pipes with the outside, through:



a) distinct vertical channels for each level of parking, with the area equal to that of the corresponding mouths, separated by fire-resistant walls EI 120 when passing through other levels of the underground parking or other destinations;

b) vertical collecting channels, with the dimensioned area to take the evacuation and admission requirements of the two parking levels, respectively, separate channels with EI 180 walls when passing through the other parking level or other destinations, having the mouths of the evacuation of smoke shielded with EI 60 fireproof and E 60 fireproof flanges at the air inlets, respectively. All volleys will have automatic action in case of fire.

Art. 117 -

(1) The evacuation of smoke in case of fire by mechanical draft is ensured for their car parks and compartments, by means of mouths of smoke disposed at the top of each level and mouths of air inlet at the lower part, ensuring a flow of smoke extraction of at least $600 \text{ m}^3 / \text{h}$ for each car, if the space is equipped with automatic sprinkler extinguishing systems.

(2) For parking areas and compartments not equipped with automatic sprinkler fire extinguishing systems, the smoke extraction rate shall be at least $900 \text{ m}^3 / \text{h}$ for each car.

Art. 118. -

flow, with a tolerance of plus or minus 10%.

Article 119 -

The commissioning of the smoke evacuation system in case of fire with mechanical draft from a fire compartment of the parking lot (realized according to articles 92 and 93) will automatically interrupt the normal mechanical ventilation in this compartment.

Article 120. -

(1) Smoke and air intake vents for the mechanical draft system shall be connected through separate pipes to vertical collecting ducts made with fire resistant walls EI 180 when crossing other parking levels or other destinations.

(2) The air inlet and smoke exhaust pipes inside the parking compartment and which provide smoke evacuation in the event of fire must be of materials of the fire reaction class A2-s2, d0 and fireproof E 30 -oi, v (e) or h (o). When passing these pipes through other compartments of the parking lot or other destinations, they must be fire resistant EI 60 v (e) or h (o).

(3) At the entrance of the pipes of each level of parking in the vertical channels of smoke evacuation or of the intake of air there are provided flames resistant to the fire EI 60 to the ones of evacuation and flames sealed to the fire E 60 to those of the intake of air. All volleys will be automatically operated in case of fire.

Article 121. -

Smoke evacuation installations by mechanical draft are provided with automatic actuation in case of fire and manual controls placed near the entrances and in the security dispatchers or, when the dispatchers are not obligatory, at the permanent parking surveillance service.

Article 122. -

(1) Smoke vents by natural-organized circulation or by mechanical draft and the air intake vents shall be located in such a way as to ensure the satisfactory coverage of the smoky space and the necessary flow rates established in these regulations.

(2) The air inlets shall be mounted on the underside of the fading space, with their upper part up to a maximum of 1,00 m of floor, connecting directly or through pipes to the holes in the outside or to

directly or through pipes to fire-resistant fans. In the interior car ramps of the parking lots, it is forbidden to install smoke vents.



Te-au păcălit să semnezi pentru 12 luni?

la-ți Lege5: Plătești ce vrei, când vrei, pentru cât timp vrei!

cel mai mare conținut juridic, structurat în 30 de module configurabile
libertatea de a alege, fără clauze ascunse și cu garanția calității

Article 123. -

The pipes of the natural-organized smoke evacuation system in case of fire must comply with the following:

- a)** their section shall be equal to that of the mouths to which they are connected;
- b) the** ratio between the sides of the section of the pipes shall not be greater than 2, including in cases where local internal diaphragms are provided;
- c)** the vertical exhaust pipes shall have no more than two deviations, and their angle to the vertical shall not exceed 20 °;
- d) the** length of the horizontal connections of the exhaust pipe shall not exceed 2 meters;
- e)** inside the space where the pipes are smoked, they must be fireproof E 30-sheep, v (e) or h (o).

Article 124. -

The pipes of the mechanical exhaust system must comply with the following:

- a)** their section shall be equal to that of the mouths to which they are connected;
- b) the** ratio between the sides of the section of the pipes shall not be greater than 2;
- c)** inside the space that is fading, the pipes must be fireproof E 30-sheep, v (e) or h (o).

Article 125. -

The natural air inlet openings, when adopted, will have a minimum area of 6 dm² for each car, provided that the required flow rate of smoke discharge by mechanical draft is 600 m³ / hour and 9 dm² for each car in the conditions in which the required flow of smoke

spaces or compartments of the parking lot is allowed provided that the pipes are protected with fire-resistant materials EI 60.

Article 127 -

Pipes for natural-organized smoke exhaust systems (inlets and outlets) must be independent and separate on each level of parking and on each compartment.

Article 128. -

The pipes of smoke exhaust systems by mechanical draft can be connected to vertical collecting channels, provided that the height between the connections to the collecting channel is at least one level of the parking lot.



Article 129. -

(1) The vertical channels of smoke evacuation in case of fire by natural-organized draft or mechanical draft shall have the external smoke evacuation holes located at the top of the above-ground buildings and so arranged that they are outside the areas that can be set on fire. .

(2) Except the outer mouths of the smoke exhaust pipes from the underground car parks type P1 and P2, which can be disposed at ground level, at a distance of at least 8.00 m from any overland construction.

Article 130. -

A minimum distance of 8.00 m must be provided between the fresh air inlets and the openings of the exhaust flues.

Article 131. -

The normal parking ventilation facilities can also be used for smoke evacuation in case of fire, if they fulfill the specific conditions for both functions.

SECTION 2 Smoke exhaust fans

smoke control systems. Part 3: Specifications for heat and smoke exhaust fans.

(2) When underground car parks are equipped with automatic sprinkler fire extinguishers, smoke exhaust fans in case of fire may be fire resistant, class F₂₀₀ 120, according to SR EN 12101-3: control of heat and smoke. Part 3: Specifications for heat and smoke exhaust fans.

(3) Smoke blowers located inside the parking lot shall be fire resistant, class F₃₀₀ 120, according to the provisions of SR EN 12101-3: Heat and smoke control systems. Part 3: Specifications for heat and smoke exhaust fans

Article 133. -

Air inlet and exhaust fans in case of fire are supplied from the base source and the backup source, according to the provisions of the specific regulations.

Article 134. -

In order not to be affected in case of fire the functioning of the smoke exhaust fans located inside the parking lot, they are located at more than 3.00 m from any parked car. If this condition cannot be met, the fan is screened with EI 60 fire-resistant construction elements.

Article 135. -

(1) At underground parking spaces of type P3 and P4, near the access ramps, a legible signaling device is provided at the reference level, so that it is easy to spot both day and night, equipped with priority manual commands, selective on the compartments of the parking lot, which allow to stop and restart the exhaust fans.

(2) If the parking is provided with two or more such devices, the use of one of the devices shall cancel the operation of the other.

(3) For parking lots P1 and P2, the device equipped with manual controls shall be located in the parking surveillance room.

Alerte prin email și sms pentru Dosare Instanță, Hotărâri
Judecătorești, Buletinul Insolvenței, MO partea a IV-a



Article 136.

At underground car parks it is obligatory to supply the following vital consumers from two sources of electricity or with a thermal engine or combined, basic and backup power:

- a) fire detection and signaling installations;
- b) fire extinguishing installations with water;
- c) smoke evacuation installations by mechanical draft;
- d) means for alerting users;

- e) lifts for locomotive handicapped persons;
- f) fire lifts (fire intervention), when required;
- g) lifting platforms and lifts for cars;
- h) fire resistant curtains.

Article 137. -

- (1) The electrical supply of the vital consumers is realized by two distinct ways of supply, protected against the effects of the fire.
- (2) The electric cables and power conductors mounted inside the parking lot shall be protected with fire-resistant elements EI 60.

Article 138. -

The general electrical panel of the underground parking is located in a separate room, made according to the provisions of the specialized technical regulations and compartmentalized with fire-resistant elements EI 90. The functional circulation gap is protected by a fire-resistant door EI 90-C with opening to the outside of the room.

Article 139. -

- (1) Underground car parks type P1, P2, P3 and P4 shall be provided with safety lighting, constructed and constructed in accordance with the provisions of the applicable technical regulations and the present regulations.
- (2) The safety lighting of the escape routes of the users shall consist of light points arranged at the top and the bottom of the escape routes, operating for a minimum of 60 minutes.
- (3) The luminous points arranged at the top shall be mounted at a maximum of 15.00 m distance between them.



lumens over a period of 60 minutes.

- (5) The light points arranged at the bottom may be recessed in the floor, provided that the required mechanical strength is respected, or they may be located near the floor.
- (6) The luminous points arranged at the bottom that do not fit into the floor shall be placed at most 0.50 m above the floor.

Article 140. -

(1) The number of rechargeable equipment and terminals of electric car batteries is limited to 3 for each parking lot.

(2) The number of electrical outlets for charging cars equipped with batteries and internal charger, without the release of hydrogen, is not limited.

SECTION 4 Elevators for persons and freight, lifting platforms and elevators for cars

Article 141. -

(1) Elevators for persons, for freight, fire lifts and elevators shall be designed, constructed and installed in accordance with the provisions of Government Decision [no. 439/2003](#) on establishing the conditions for placing lifts on the market, as amended and supplemented, which transposes into national law Directive [95/16 / EC](#) of the European Parliament and of the Council of 29 June 1995 on the approximation of the laws of the Member States relating to lifts.

(2) At the underground parking lots with more than 4 basements, it is mandatory to provide at least one lift for firefighters, easily accessible from the reference level and provided with priority call for firefighters.

(3) In underground parking lots with more than 4 underground levels included in high or very high buildings, the elevators for firefighters related to the parking lot are separated from the elevators for firefighters of the upper levels.

(4) The fire station with its own well, separated from the rest of the building with fire-resistant walls REI 180, will ensure access to all underground levels and will ensure its operation for 120 minutes.

(1) Elevators for persons and freight elevators in underground parking lots are isolated from the rest of the parking lot by fire-resistant walls EI 120.

(2) The access gaps shall be protected by overpressure ventilated buffer rooms and EI 90-C doors for underground parking lots embedded in the basements of high, very high buildings or with crowded rooms. Access gates are protected by overpressure ventilated buffer rooms and EI 60-C doors for underground car parks

embedded in the basements of buildings that are not high, very high or with crowded rooms.

(3) The freight elevators are not located in the stairs.

Article 143. -

Elevators for people with disabilities can also be used to evacuate them in case of fire, when they meet the following conditions:

a) have access to the common horizontal traffic routes, to a hall or a direct access road outside;

- peste 13.000 de articole publicate
- peste 470.000 de vizitatori lunar
- articole de specialitate și știri din diverse domenii
(fiscal, financiar-contabil, HR & muncă, juridic etc.)



b) are in connection with a staircase or an exit to the outside, directly or through a separate access path (corridor, hall), without crossing the parking lot;

c) the buffer rooms for access to the lift have a minimum area of 5.00 m² and a minimum width of 1.50 m;

d) in front of the landing doors of these elevators, a waiting area is provided, dimensioned in proportion to the number of parking spaces for people with locomotor disabilities, respectively 2.00 m² for a parking place, and the waiting area must not block other users' evacuation circulation;

e) are supplied from the base source and the backup source;

f) ensure the proper marking and signaling of the lifts.

Article 144. -

(1) Lifting platforms and lifts for cars shall be designed and manufactured according to the provisions of the specific technical

b) the landing doors shall be fire resistant EI 90-C;

c) the landing doors shall be provided with a threshold of 2.5 cm or the floor shall have a slope so as to avoid leakage of liquids into the lift platform or elevator shaft;

d) the operation of the fire alarm system in the parking lot will automatically command the lifting platform or the lift to be brought to the reference level.

(2) There shall be inscriptions referring to the compulsory stopping of the engine after positioning the car on the lift platform or in the elevator.

Article 145. -

At the underground car parks provided only with lifting platform or elevator, stairs for intervention and rescue are provided, at least one at 500.00 m² of parking.

CHAPTER X Fire protection installations

SECTION 1 Alarm systems

Article 146. -

(1) Underground parking spaces of type P1, P2, P3 and P4, as well as those with more than 4 underground levels, regardless of the number of parking places, shall be provided with a user alarm system in case of fire and with alert means, as the case may be, of the parking operator, fire safety services (referred to in Articles 13 and 14), as well as emergency services.

(2) The alarm shall be audible and visible from any point of the parking lot and of the escape routes.

(3) Parking lots type P3 and P4, as well as those with more than 4 underground levels, irrespective of the number of parking places, shall be provided with means of automatic alert in case of fire of the fire safety services.



Toate numerele
integrate
în Lege5



than 4 underground levels, is provided in the security dispatch, and at the P2 type parking lots, in the parking surveillance area.

(5) The telephone connection for alerting the services for emergencies in the parking lots P1 and P2 shall be provided according to the provisions established by the parking operator.

Article 147. -

The alarm trigger in the parking lot must act automatically:

a) opening the locked exits from all the parking;

- b)** displaying the prohibition of access of cars in the parking lot;
- c)** broadcasting a pre-recorded message, when the parking is provided with sound equipment, without affecting other spaces.

SECTION 2

Fire detection and signaling installations

Article 148. -

(1) Underground car parks of type P1, P2, P3 and P4, regardless of the number of parking places, shall be equipped with fire detection and signaling installations, designed and built according to the provisions of the specialized technical regulations.

(2) Underground car parks equipped with automatic sprinkler extinguishing systems shall be provided with fire detection and signaling facilities.

Article 149. -

(1) Fire detection and signaling facilities shall also be provided with manual signaling buttons.

(2) The manual signaling buttons are placed at each parking level, on the pedestrian traffic, near each staircase and near the exits.

(3) The manual signal buttons shall be mounted at a height of not more than 1,40 m from the floor and shall be placed in such a way that they will not be blocked by opening the doors. The thickness of the buttons can exceed the wall surface by a maximum of 0.10 m.

Article 150. -

(1) The signaling plants related to the detection-signaling installations must be located in the parking dispatchers, and in case the dispatcher is not obligatory, the power station is located in a room where supervision is permanently ensured

Article 151. -

The detectors for the fire detection and signaling installation are distributed in the parking lot, in the technical spaces and those for the related activities, according to the specialized project and the manufacturer's instructions.

De ce au ales profesioniștii Lege5?

- Cea mai bună căutare din business
- Singura aplicație care face analiză comparativă
- Flexibil - acces la 3 servicii cu un singur abonament
- Complex - cea mai variată gamă de module
- Configurabil - plătesc doar modulele de interes

indaco

competence

Article 152. -

(1) The fire detection and signaling installation shall act automatically:

- a) triggering the alarm in the security dispatcher;
- b) fire safety devices in the compartment or space where the fire broke out;
- c) commissioning of the smoke exhaust system in the respective compartment or space;
- d) the automatic triggering of the alarm throughout the parking lot;
- e) opening locked doors and parking barriers.

(2) A delay of the actions of maximum 5 minutes is allowed only if the parking lot has, during the presence of the public, personnel trained for the direct management of the restricted alarm at the level of the compartment in which the fire broke out.

SECTION 3 Fire-fighting installations

Article 153. -

(1) At underground parking areas of type P1, P2, P3 and P4, it is obligatory to equip with the following fire extinguishing installations:

- a) indoor hydrants;
- b) sprinkler;

sprinklers) in the open areas (when provided),

- d) dry columns, arranged in stairs houses, in parking lots with more than two underground levels;
- e) exterior hydrants.

(2) The exemption from the provision of automatic sprinkler fire extinguishing systems is an exception:

- a) underground parking spaces of type P1 and P2 with maximum two levels of parking, related to residential buildings that are not high and

very high buildings or with crowded rooms, provided with fire detection and signaling facility and smoke evacuation facility mechanic with a flow rate of 900 m³ / h for each car;

b) the underground car parks strongly ventilated naturally.

Article 154. -



(1) In the underground parking lots with 4 levels and more, irrespective of the number of parking places, the following are additionally provided:

a) the flow rates of the jets for the internal fire hydrants are calculated for the maximum values, provided in the standards SR EN 671-1: Fixed fire fighting systems. Systems equipped with hose. Part 1: Indoor hydrants equipped with semi-rigid hoses and SR EN 671-2: Fixed fire fighting systems. Systems equipped with hose. Part 2: Indoor hydrants equipped with flat hoses, not less than 2,5 l / s;

b) the operating time of the internal hydrants of 60 minutes;

c) at least two jets in simultaneous operation that reach each point in the parking area, regardless of the equipment with automatic sprinkler extinguishing system, established according to art. 153 para. (1) lit. b).

(2) At underground parking lots in categories P1, P2, P3 and P4 that are not subject to par. (1), a minimum of two jets in simultaneous operation and the operating time of the internal hydrants of at least 10 minutes are ensured.

(3) At underground parking lots of category P1 and P2 not equipped



(4) The calculation flow for the external hydrants is ensured according to the level of fire stability and the volume of the parking lot, as follows:

Fire stability level	Parking volume (m ³)		
	Up to 5,000	5,001 to 15,000	15,001 to 30,000
External fire hydrants water flow (l / s)			

I, II	5	10	15
-------	---	----	----

(5) When establishing the calculation flow in the case of the incorporation of the underground parking lots in the underground buildings, the highest normative flow shall be taken into account, respectively for the underground building or for the underground parking.

(6) In all cases the theoretical operating time of the external hydrants is 180 minutes.

Article 155. -

The fire extinguishing facilities provided for underground parking are designed, dimensioned and made in accordance with the provisions of the specialized technical regulations.

Article 156. -

Underground car parks are provided on each level with at least the following means of first intervention in case of fire:

- a)** portable fire extinguishers of 6 kg or 6 liters, corresponding to the fire risks and arranged in such a way as to return one extinguisher to a maximum of 10 cars;
- b)** transportable extinguishers of 50 kg, placed in such a way that a fire extinguisher has a maximum of 500,00 m² of parking;
- c)** boxes of 100 liters with sand and shovel for each level, placed near each car ramp;
- d)** a reserve of 10 portable fire extinguishers is provided at the fire safety station or its annex.

Article 157. -

(1) For the portable extinguishers the reference documents are the

European Parliament and of the Council of 29 May 1997 on the approximation of the laws of the Member States relating to pressure equipment , and SR EN 3 (with its parts).

lege **[5]**
Cea mai mare
bibliotecă juridică
virtuală

142 cărți comentate de la
editurile C.H. BECK și HAMANGIU

14 reviste de specialitate, zeci de conferințe video, dosare
instanță, toate hotărârile judecătorești, insolvență, MO
partea IV-a

(2) For mobile extinguishers with a nominal load of 50 kg / l the reference document is SR EN 1866-1: Mobile fire extinguishers. Part 1: Characteristics, performance and test methods.

(3) The extinguishers must be certified according to the law.

Article 158. -

Underground car parks must have a reserve of at least 2% of the number of sprinkler heads with which the underground level is equipped with the largest number of cars, but at least 25 pieces.

CHAPTER XI Intervention

Article 159. -

The access for intervention in case of fire must be ensured on at least one road that allows the movement of the intervention vehicles.

Article 160. -

The conformation of the construction of the underground parking lot must be carried out in such a way as to ensure access and intervention routes inside, easily recognizable and properly constructed, equipped and marked.

Article 161. -

The access roads and the functional inner movements of the underground parking lot will be permanently maintained in a state of use, so that in case of necessity they can be used by the intervention services for emergencies.

CHAPTER XII Markings

Article 163. -

On the doors that do not serve to evacuate the users of the parking lot, the words "WITHOUT EXIT" are inscribed in Romanian and English.

Article 164. -

The parking spaces of cars are marked and numbered visibly on the floor and are indicated with orientation indicators.

Article 165. -

Road signs are provided for the circulation of cars, fitted at the top and bottom of the parking routes and evacuation indicators for users, in accordance with the provisions of SR ISO 3864-1,2,3, SR ISO 6309 or equivalent regulations in the Member States of European Union.

**Article 166. -**

Near the exits and the accesses to the stairs of evacuation are displayed general prohibitions, plans of evacuation and instructions to follow in case of fire.

CHAPTER XIII Operation

Article 167. -

The owners, operators and users of the car parks, as the case may be, have the obligation:

- a) the** fulfillment of the legal provisions regarding the organization and conduct of the activity of defense against fires to ensure the fire safety of the underground parking;
- b) maintenance** in permanent state of operation, with the necessary reliability and efficiency, of the technical means of defense against fires and of the installations related to the underground parking, according to the provisions of the specific technical regulations.

Article 168. -

The maintenance and repair works of the parking lot which increase

personnel according to the regulations. specific, after taking the necessary protective measures and obtaining, if necessary, the work permit with open fire, issued by the persons nominated by the parking operator.

Article 169. -

(1) Electrical installations, ventilation systems, smoke evacuation systems in the event of fire, elevators, lifting platforms, fire protection devices and installations, as well as constructive elements

and devices for fire safety (compartmentalization, separation, passage through fire-resistant elements, protections for functional circulation gaps, etc.) are checked, tested and maintained periodically by natural or legal persons certified according to the law, in order to ensure that they remain in operation at the designed parameters.

(2) The relevant data shall be recorded in the control register of the respective installations, according to the provisions of the specific technical regulations.

(3) At type P2, P3 and P4 parking lots, at least half-yearly operating tests are performed and at P1 type parking lots at least once a year.

Article 170. -

Checks and controls of fire protection installations are carried out according to the specific regulations by natural and legal persons certified according to the law.

Article 171. -

Smoke exhaust fans in case of fire, as a rule, are tested semi-annually, and the other elements (flaps, flaps) are tested annually.

Article 172. -

(1) The storage of materials and the placement of electrical panels or cabinets are not allowed in the buffer rooms.

(2) It is prohibited to block or reduce the passage gauge with objects or materials of stairs, corridors, escape halls and buffer rooms.



Article 173. -

CHAPTER XIV Technical and legislative references

1. Standards

Nr. crt.	standards	The name
1.	SR EN 50073: 2002	SR EN 50073: 2002

		Recommendations for the selection, installation, use and maintenance for the detection and measurement of combustible gases and
2.	SR EN 12101-3: 2003 SR EN 12101-3: 2003 / AC: 2005	SR EN 12101-3: 2003 Heat and smoke control systems. Part 3: Specifications for heat and smoke control systems. Part 3: Specifications for smoke release
3.	SR EN 671-1: 2002 SR EN 671-1: 2002 / AC: 2003	SR EN 671-1: 2002 Fixed fire fighting systems. Systems equipped with hose. Part 1: Systems equipped with semi-rigid hoses SR EN 671-1: 2002 / AC: 2003 Fixed fire fighting systems. Systems equipped with hose. Part 1: Systems equipped with semi-rigid hoses
4.	SR EN 671-2: 2002 SR EN 671-2: 2002 / A1: 2004	SR EN 671-2: 2002 Fixed fire fighting systems. Systems equipped with hose. Part 1: Systems equipped with flat hoses SR EN 671-2: 2002 / A1: 2004 Fixed fire fighting installations. Systems equipped with hose. Part 1: Fire hydrants
5.	SR EN 1866-1: 2008	SR EN 1866-1: 2008 Mobile fire extinguishers. Part 1: Characteristics, performance
6.	SR ISO 3864-1: 2009 SR ISO 3864-2: 2009 SR ISO 3864-3: 2009	ISO 3864-1: 2009 Graphic symbols. Colors and security signs. Part 1: Design principles for workplaces and public areas ISO 3864-2: 2009 Graphic symbols. Colors and security signs. Part 2: Design principles for labeling ISO 3864-3: 2009 Graphic symbols. Colors and security signs. Part 3: Design principles for workplaces and public areas
7.	SR ISO 6309: 1998	SR ISO 6309: 1998 Fire protection - Security indicators

		SR EN 3-3: 1997 Portable fire extinguishers. Construction, pressure resistance, SR EN 3-6: 1997 Portable fire extinguishers. Part 6: Method of assessing the construction of extinguishers with EN 3 part 1 to part 5 SR EN 3-8: 2007 ver. eng. Portable fire extinguishers. Part 8: Additional requirements to pressure resistance and mechanical tests for extinguishers having permissible pressure equal to or less than 30 bar
--	--	--

	SR EN 3-9: 2007 ver. eng. Portable fire extinguishers. Part 9: Additional requirements to resistance of CO2 extinguishers SR EN 3-7 + A1: 2007 Portable fire extinguishers. Part 7: Characteristics, performance SR EN 3-9: 2007 / AC: 2008 Portable fire extinguishers. Part 9: Additional requirements to resistance of CO2 extinguishers SR EN 3-8: 2007 / AC: 2008 Portable fire extinguishers. Part 8: Additional requirements to pressure resistance and mechanical tests for extinguishers having permissible pressure equal to or less than 30 bar
--	---

2. Legislation

Nr. crt.	Legislative acts
1.	Law no. 10/1995 regarding the quality in constructions, with the subsequent modifications
2.	Government Decision no. 622/2004 on establishing the conditions for placing the construction products on the market, republished
3.	Government Decision no. 796/2005 for amending and supplementing Government Decision no. 622/2004 on establishing the conditions for placing the construction products on the market
4.	Regulation regarding the classification and classification of construction products based on fire behavior performances, approved by the Order of the Minister of Transport, Construction and Tourism and the Minister of State, Minister of



START DOCTRINE COURTS IN COURT JUDGMENTS COMPANY GOV

	Administration and Interior no. 163/2007
6.	Directive 97/23 / EC of the European Parliament and of the Council of 29 May 1992 on the approximation of the laws of the Member States relating to pressure equipment Government Decision no. 584/2004 on establishing conditions for placing pressure equipment on the market, with subsequent modifications and completions
7.	Directive 95/16 / EC of the European Parliament and of the Council of 29 June 1992 on the approximation of the laws of the Member States relating to lifts Government

Decision [no. 439/2003](#) regarding the establishment of the conditions for placing t
lifts on the market, with the subsequent modifications and completions

This document may have subsequent changes. Buy the document in [an updated form](#) or choose a [Lege5 subscription](#) that allows access to any updated form.

;

Follow us

Sales department

Phone: **(+40 21)**

311.97.11

E-Mail:

vanzari@indaco.ro

Find out more

About Law5 Online

User manual

Terms and conditions

Consumer Protection

- ANPC

Change your language

Online Law · 5.0.2.588 - 24.09.2019 05:14
Copyright © 2019 Indaco Systems. All rights reserved.

