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THE ENVIRONMENT AND ENERGY

Office of the Secretary of State for Energy

Ordinance

The application of Ordinance No 361/98 of 26 June, as amended by Ordinance No 690/2001of 10 July, which approved the technical regulation on the design, construction, operation and maintenance of piped gas installations in buildings, has demonstrated the fundamental importance of a set of clear and well-defined rules in this plan for the work performed by installers, inspectors and distributors, in order to ensure the quality and safety of installations.

During the period covered by the aforementioned ordinance and by Decree-Law No 521/99 of 10 December, which established the rules applicable to gas installation projects to be included in the construction, extension or reconstruction of buildings, as well as the regime applicable to implementing the inspection of these installations, which was meanwhile repealed by Decree-Law No 97/2017 of 10 August, in its current wording, new materials, devices and appliances have emerged, together with the publication of numerous Portuguese, European and international technical standards covering materials, products, equipment and appliances for burning gaseous fuels and the assembly and testing of installations.

To this end, the technical rules applicable to gas installations in buildings should be revised to ensure that they are properly updated, thereby boosting the development of productivity and the quality of performance of the entities involved in this field.

[*This ordinance was submitted to the European Commission at the draft stage in accordance with Directive (EU) 2015/1535 of the European Parliament and of the*

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Council, of 9 September 2015, which established the procedure for the provision of information in the area of technical regulations and rules on information society services].

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Therefore:

The Government, through the Secretary of State for Energy, in accordance with the powers delegated by the Minister for the Environment and Energy, by means of Order no. 3495-B/2025, of 19 March, published in the government gazette *Diário da República*, series II supplement, no. 55, of 19 March 2025, as amended, and for the purposes of Article 8(7) of Decree-Law no. 97/2017, of 10 August, in its current wording, hereby orders the following:

Article 1

Subject

The technical regulation relating to the design, construction, operation, use and maintenance of piped gas installations in buildings is hereby approved under the terms set out in the annex to this ordinance, and is an integral part of it.

Article 2

Repeal

Ordinance No 361/98 of 26 June, in its current wording, is hereby repealed.

Article 3

Entry into force

1 - This ordinance shall enter into force 90 days after its publication, without prejudice to the provisions of the following paragraph.
2 - The provisions of Article 13(8) of the Regulation shall take effect 180 days after the date on which this ordinance is published.

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ANNEX

(referred to in Article 1)

Technical Regulation on the design, construction, operation, use and maintenance of piped gas installations in buildings

CHAPTER I

General provisions

Article 1

Subject

1 - The technical regulation on the design, construction, operation, use and maintenance of piped gas installations in buildings, hereinafter referred to as the Regulation, lays down the technical conditions for the design, assembly and operation of piped gas installations in single or multiple-occupancy buildings, provided that the installed power per dwelling or place of consumption does not exceed 500 kW.

2 - Extensions, alterations, conversions or retrofitting of installations in buildings already existing on the date of entry into force of the Regulation are also covered.

3 - The provisions of this Regulation shall not apply to sections of piped gas installations upstream of the general shut-off device for the building, nor to sections to be located in places upstream of the general shut-off device for the building when buried. These are subject to compliance with the requirements of the Regulation of the National Gas Distribution Network, provided for in Articles 119 and 121 of Decree-Law No 62/2020 of 28 August, in its current wording.

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Article 2

Definitions

For the purposes of this Regulation:

a) 'Grade 1 Accessibility' - a situation in which there is access to a device or location, without restriction or the need to use mechanical means, and the device is positioned at a maximum height of 1.60 m from the floor;

b) 'Grade 2 Accessibility' - a situation in which access to a device or location involves the use of mechanical means, or when it is positioned at a height of more than 1.60 m from the floor;

c) 'Gas meter box' - existing location in a building with grade 1 accessibility exclusively for the housing of meters, regulators with built-in safety device and shut-off devices, including the corresponding pipes;

d) 'Sleeve' - continuous casing around a gas pipe that provides thermal, electrical or chemical insulation, protection against mechanical stresses or possible leaks;

e) 'Inverter block' - semi-automatic device for selective use of batteries of gas cylinders to ensure the automatic entry into operation of the back-up cylinders when those that are in service are empty, and to allow the automatic system to be reversed manually;

f) 'Strong brazing' - bonding process without melting the base metal using a filler metal, the melting temperature of which is equal or superior to 450° C;

g) 'Soft brazing' - bonding process without melting the base metal using a filler metal, the melting temperature of which exceeds 100° C, but is less than 450° C;

h) 'Manhole' - a box designed to house valves, fittings or pipe couplings which enables them to be inspected;

i) 'Flue' - a confined space with grade 2 accessibility, with one or more conduits, which may also contain some fittings and equipment, designed to provide mechanical protection and venting of any gas leakage;

j) 'Conduit' or 'cable duct' - part designed to mechanically protect pipes;

k) 'Basement' - part of a building with a floor at a lower level than the threshold of the exit door to the outside of the building or which although located at a level higher than the said threshold, contains areas with drop or uneven floors, preventing free and natural continuation of the flow of occasional gas leaks to the outside, excluding lightwells or interior courtyards which are not considered outside areas;

l) 'Partial basement' - the premises of a building which, although considered a basement in relation to one or more of the elevations of the building, are floors in elevation in relation to at least one of the other elevations, with access to allow free and natural continuity of the outflow of possible gas leaks, excluding lightwells and interior courtyards which are not considered outside areas;

m) 'Fire resistance class' - the rating given to structural or partitioning units in accordance with the legal framework for fire safety in buildings (SCIE), approved by Decree-Law No 220/2008 of 12 November, in its current wording;

n) 'Rising main' - the series of pipes and fittings, starting with the general shut-off device (included), usually installed in the common parts of the building, or in some cases in the supply branch, which enables gas to be supplied to the

different floors of the building, as well as the shut-off devices and/or individual regulators for each dwelling (excluded);

o) 'Gas meter' - device for measuring the volume of gas passing through it;

p) 'Conversion' - the operation required to provide an existing building with a gas installation;

q) 'Insulating tubes' - semi-cylindrical components, usually fitted in pairs, designed to ensure the pipe is protected;

r) 'Floor branch line' - the series of pipes and fittings, forming part of the rising main, starting from the floor branch line shut-off device and supplying the various dwellings located on the same floor of the building, up to the individual shut-off devices and/or regulators for each (exclusive) dwelling;

s) 'Shut-off device' - an installation fitting, also known as a shut-off valve, which makes it possible to interrupt the flow of gas in a section of pipe;

t) 'Quarter-turn shut-off device - installation fitting that makes it possible to stop the flow of gas with a quarter turn of the handle;

u) 'Building' - any structure intended for human use which contains, in whole or in part, a usable indoor space or a technical area, covering the various standard uses;

v) 'High-rise building' - building, rated by the technical regulation referred to in Article 15 of the SCIE, with a height equal to or greater than 28 m, defined as the difference between the height above the ground of the last covered habitable floor and the height above the ground of the access path to the building, at the location, of the greatest height, from where firefighters can effectively conduct people rescue and firefighting operations on the whole building;

w) 'Gas family' - set of combustible gases, exactly as described in the applicable technical standard;

x) 'Dwelling' or 'unit' - a single-family dwelling in a single or multi-occupancy building;

y) 'Ignition source' - an object or appliance capable of being the source of flames or sparks, hot spots or other sources likely to cause the ignition of air mixtures with vapours from fuels;

z) 'Low pressure installation' - a gas installation whose operating pressure does not exceed 0.05 bar (50 mbar);

aa) 'Gas installation' - the system installed in a building consisting of the series of pipes, devices, fittings and measuring instruments, which ensures the supply of gas from the general shut-off valve for the building to the shut-off valves for the gas appliances, covering these valves, as well as any extension of the piping downstream of them;

bb) 'Medium pressure installation' - a gas installation with an operating pressure which exceeds 0.05 bar (50 mbar) and does not exceed 1.5 bar;

cc) 'Joint' or 'connection' - coupling system between two components of a gas installation;

dd) 'Isolating joint' - a device designed to interrupt the electrical continuity of the installation, while simultaneously ensuring the normal flow of gas;

ee) 'Mechanical joint' - the coupling system of two components of an installation in which the connection is achieved with a non-sealed thread in filaments and the tightness of the gas circuit by mechanical compression, with or without the support of other supplementary means of sealing;

ff) 'Threaded joint' - a coupling system of two components of an installation in which the tightness of the gas circuit is achieved by the metal in metal

contact in a thread, either with or without the aid of a supplementary means of sealing;

gg) 'Welded joint' - coupling system with two components of the installation in which the tightness of the gas circuit is achieved by welding, brazing or soldering, simultaneously ensuring it is connected and tight;

hh) 'Pressure regulator' - a device, located downstream of a pressure reduction deck, designed to prevent the pressure from exceeding a pre-set pressure at its outlet;

ii) 'Place of consumption' - the unit or place in the building where gas is used to supply gas-fired equipment and/or appliances, and which may or may not be equipped with a gas installation;

jj) 'Technical area' - location in the building which is connected to the outside or to common premises and which is used for the installation of appliances burning gaseous fuels, as well as for their supply pipes, air inlet pipes or flue ducts for the extraction of combustion products;

kk) 'Filler metal' - the alloy or metal which, after reaching the melting point, allows two or more parts to be connected;

ll) 'Car park' - buildings or parts of buildings intended exclusively for the collection of vehicles and their trailers, off public roads, or enclosed outdoor areas for the same purpose, with a gross floor area equal to or greater than 200 m^2;

mm) 'Indoor courtyard' - the enclosure inside or surrounded by buildings, with no access for motor vehicles;

nn) 'Pressure' - pressure relative to atmospheric pressure (gauge pressure), whereby a negative value is assigned to a vacuum, whereas the pressures

referred to in the Regulation without any other indication are set as relative pressures;

oo) 'Operating pressure (Pf)' - the pressure in the gas installation under normal operating conditions;

pp) 'Test pressure (Pt)' - the minimum pressure applied to a gas installation during the mechanical resistance test;

qq) 'Sealing pressure (Pe)' - the minimum pressure applied to a gas installation during the leak-tightness test;

rr) 'Retrofitting' - adapting a gas installation and its appliances by a change of fuel gas family;

ss) 'Safety regulator - regulator with built-in safety device that automatically causes the flow of gas to stop when at least one of following conditions apply;

a. The upstream pressure is less than or exceeds a certain percentage of its nominal value;
b. The downstream pressure does not reach (by excess flow) or exceeds pre-set values.

tt) 'Pressure Regulator - device that reduces the gas inlet pressure between certain values, and regulates it to a pre-set downstream pressure;

uu) 'Gas installation registration (GIR)' - the unambiguous number identifying the gas installation, assigned by the Directorate-General for Energy and Geology (DGEG);

vv) 'Repair' - all work involving constructive techniques on the piping or on components affecting the safety of the gas installation, which does not alter its scale, layout, deployment or operating conditions;

ww) 'Lightwell - confined and uncovered area located inside a building;

xx) 'Electric welding - binding process in which the base metal is connected by an electrical effect, and there may be a filler metal, or not;

yy) 'Soldering' - the operation of depositing filler metal into a joint using a technique similar to that used in welding;

zz) 'Visible piping' - the piping visible throughout its length that is fixed to a wall or ceiling by supports;

aaa) 'Embedded pipes' - pipes inserted into the wall, floor or ceiling of a building;

bbb) 'Standard uses of buildings' - the uses defined in Article 8 of the CEIS;

ccc) 'Branch valve' - the shut-off device, of the quarter-turn type, nearest to or at the edge of the property, accessible from outside the property, which is easy to locate and identified by the word 'Gas' written in indelible and legible characters.

Article 3

Description of installation boundaries

1 - Gas installations are limited:

a) Upstream, by the general shut-off device to the building and, or, by the shut-off device at the cylinder post;

b) Downstream, by the shut-off valves to the gas appliances, as well as any possible extension of the pipe downstream of these.

2 - The maximum allowable pressures in the various sections of the gas installations are as follows:

a) 1.5 bar, between the general shut-off device to the building and the safety regulator;

b) 0.05 bar (50 mbar) between the safety regulator and the gas appliances or, in the case of low-pressure installations, between the general shut-off device to the building and the gas appliances;

c) 0.5 bar (500 mbar) in pipes installed in the common spaces of buildings between drop ceilings and actual ceilings, as provided for in Article 14(7);

d) 0.05 bar (50 mbar) in cases of retrofitting in buildings, installations assembled with lead pipes;

e) The pressure required by the operating instructions of the appliances to be fed into the pipework directly supplying gas appliances with a power per appliance greater than 35 kW downstream of the safety regulators and/or meters.

3 - Whenever the gas installation of the building operates at a Pf exceeding 0.4 bar, the installation must be protected with a pressure regulator, calibrated to a value equal or less than 1.8 bar, which must be installed immediately downstream of the general shut-off device for the building.

4 - The pressure regulator referred to in the preceding paragraph may be dispensed with in cases where the pressure in the network is less than 1.8 bar and is already protected by a pressure regulator adjusted to the same conditions.

CHAPTER II

Pipes, fittings and devices

Article 4

Materials

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All components, pipes, devices and auxiliary means of sealing must ensure appropriate operating and safety conditions for their use, must be accompanied by a certificate, where applicable, and must comply with the requirements of the applicable technical standards in accordance with Article 36.

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Article 5

Piping

1 - Pipes must be transported and stored with their ends protected in such a way as to prevent foreign material from entering and be protected from the action of atmospheric agents.

2 - The use of lead pipes in gas installations is only permitted in cases of minor repairs to installations already in service on the date the Regulation was published.

3 - The use of aluminium pipes in gas installations shall be prohibited, but the use of multi-layer pipes shall be permitted in accordance with the technical standards applicable pursuant to Article 36.

4 - The use of non-metallic pipes in buildings shall be prohibited, without prejudice to the situations mentioned in the list referred to in Article 36(2), the connections to gas appliances, or the assembly of the sections provided for in Article 1(3).

5 - The use of flexible pipes must comply with the requirements referred to in Article 27.

Article 6

Fittings

1 - The materials used in the manufacture of fittings and joints must meet the same quality and safety requirements as those required for the pipes to which they are applied.

2 - Welded, brazed or soldered joints must be used wherever possible to connect different sections of piping.

3 - Prefabricated couplings or joints must be used for interconnecting pipes of different types.

4 - Insulating joints should have plain, threaded, flanged or spherical-tapered ends, according to the type of joint to be fitted;

5 - Valves and shut-off devices should be mechanical and chemically resistant to distributed gases, and their external components must be non-combustible.

6 - The open and closed position must be unambiguously indicated on the valves and shut-off devices.

7 - The piping components must be appropriate for:

a) the types of gases being distributed;

b) the calculation pressure of the pipes;

c) the location of the piping installation;

d) the temperature of the piping under normal operating conditions;

e) potentially corrosive environments.

8 - Regulators and gauges must be appropriate for the range of flow rates and pressures that are expected to occur during their use.

9 - The direction of the gaseous flow must be indelibly marked on valves and shut-off devices whenever the type of the fitting makes it necessary.

10 - The sleeves, conduits and insulation tubes intended for mechanical protection of pipes must be made of material with fire resistance performance rating E120/EI 60 (resistance to flame and flammable gases for at least 120 minutes and thermal insulation for at least 60 minutes) in accordance with the rating referred to in the SCIE.

11 - The metal sleeves must be protected against corrosion and electrically insulated from the piping they protect.

12 - In the mechanical protection of piping, particular attention should be paid to hydrogen sulphite, water content, dust content and the water vapour/hydrocarbon dew point, which may require adapted materials, low-point draining and filtration.

Article 7

Auxiliary sealing resources

1 - Gaskets and jointpastes must be resistant to the type of gas used. In particular, materials made of natural rubber, leather, asbestos, banded cotton, minium or zarcon, linen, zinc or lead white and polymer pastes shall not be permitted.

2 - The use of gaskets with elastomer-based sealing rings of appropriate quality is permitted, provided that they work under compression on flat backrests with a suitable surface.

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CHAPTER III

Installation design

Article 8

Design of gas installations

1 - The design of gas installations and the installation of gas appliances shall be subject to compliance with the provisions of this Regulation and other applicable legislation, so that their assembly and use, under normal conditions, does not cause the accumulation of combustible gas, or gases resulting from combustion which is hazardous for persons and property.

2 - Gas appliances must comply with the requirements laid down in Regulation (EU) 2016/426 of the European Parliament and of the Council of 9 March 2016 on gas appliances, in conjunction with the provisions of Decree-Law No 129/2019 of 29 August, in its current wording, which ensures it is incorporated into Portuguese law.

3 - The project designer, as the professional responsible for the design of the gas installation, including defining and checking the suitability and characteristics of the appliances to be installed, must be duly qualified in accordance with Law No 15/2015 of 16 February.

4 - The design of the installation is contained in a document called a project, to be drawn up by the designer, who is responsible for making sure it complies with the applicable regulatory and technical standards.

5 - The design project must clearly identify the gas installation, in a descriptive and explanatory report, calculation note and the drawings necessary for its assembly;

6 - The descriptive and explanatory report must contain information on:

a) The building's ventilation system, and its suitability for installing and operating gas appliances;

b) The specific conditions of the gas to be used in the installation. The distribution entity for the area where the building is located must make available the characteristics of the gas to be considered when preparing the project, as well as the supply pressure of the installation;

c) The type of material to be used in the piping and fittings;

d) The type of joints;

e) The fitting of piping (visible, embedded, in a conduit, or other);

f) The description of the gas meter boxes, gas meters and the gas power supply;

g) The location and installation of the pipes, taking into account the risks of damage caused by mechanical impacts, ultraviolet rays, corrosion, or other specific impacts;

h) How the pipe is ventilated and secured;

i) The distances from other infrastructures and services, in particular water, sewerage, electricity, telecommunications and heating;

j) The type of gas appliances, in accordance with the European classification model according to the method of extracting combustion products.

7 - The calculation note must take into account:

a) The supply pressure and flow rate necessary for the proper operation of gas appliances;

b) The number of appliances envisaged and whether they are used simultaneously;

c) The flow velocity so as not to cause significant effects on the piping, such as erosion or noise;

d) Localised and distributed load losses;

e) Load losses due to the height of the building;

f) The supply of the installation with natural gas.

8 - Appropriate scale drawings of the gas installation must include, where applicable:

a) The isometric scale, including the rising main and floor and unit branch lines;

b) The boundaries of the gas installation;

c) Details of the branch lines and joints;

d) The details of the fitting of the gas installation;

e) The details of the gas meter boxes and gas meters;

f) The location of the fittings;

9 - The design project must in its applicable parts be prepared in accordance with the requirements set out in:

a) The technical regulation referred to in Article 15 of the SCIE;

b) The General Urban Building Regulations, approved by Decree-Law No 38382/51 of 7 August, in its current wording.

10 - The rules relating to the project shall apply to amendments and additions thereto.

11 - The preparation of the design project is not necessary in situations where there have been no changes to the routing or material used in the pipes, namely:

a) The conversion of gas installations;

b) Repairs;

c) In the simple exchange of gas appliances.

12 - It is mandatory that the project also be submitted in a digital version.

Article 9

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Scale of gas installations

The project designer must:

a) Scale the installation between the general shut-off valve and the various use points so as to ensure the gas flows necessary for the regular supply of the gas appliances;

b) Scale the shape of the pipe supports and the distance between them in such a way as to ensure the safety of the installation, taking into account the thickness and material of the wall, the types of joints and the pressure testing procedure;

c) Precisely define where the gas appliances are to be installed, as well as the distances to be observed under the Regulation;

d) List the technical characteristics of the gas-fired appliances to be installed, which must:

i) Be suitable for the family, or families of combustible gases that are planned to be used in this installation;

ii) Be installed according to the manufacturer's instructions.

iii) Be compatible with the other equipment, the architecture of the installation site and the building in which it is located, as well as the types of ventilation in the building.

Article 10

Pipe inlet in buildings

1 - When a buried pipeline enters a building through its walls or foundations in the subsoil, the annular space between the pipeline and the wall must be sealed.

2 - The polyethylene pipes emerging from the ground and not embedded in the outer wall of the building must be protected by a sleeve, according to the following requirements:

a) Be driven into the ground to a minimum depth of 0.20 m;

b) Be appropriately fixed;

c) Accompany the gas pipe to a height of 1.40 m above the ground unless the gas pipe enters the building at a lower height;

d) Comply with the provisions of Article 6(10) and (11);

e) The upper end of the annular space between pipe and sleeve must be closed with an inert material.

3 - When the polyethylene pipe is embedded in the outer wall of the building, it should be protected by an accompanying sleeve resistant to chemical attack from mortars.

Article 11

Fitting of the pipes

1 - The routing of the pipeline, to be fitted along the walls, must be straight, horizontally and vertically, and comply with the provisions of this article and Articles 12, 14, 15, 16 and 17.

2 - The laying of pipes in basements is permitted for gases that are less dense than air, provided that the efficiency of ventilation, removal of combustion products and connections to gas-fired appliances is ensured.

3 - The gas pipes must not cross:

a) Premises containing tanks for liquid fuels, containers for gaseous fuels or solid fuel tanks that are not part of the installation;

b) Domestic waste ducts;

c) Miscellaneous ducts, e.g. electricity, water, telecommunications and mail;

d) Lift shafts or hoists;

e) Engine rooms of lifts or hoists;

f) Transformer or switchboard cabins;

g) Empty spaces between double walls, except where on crossing the piping is protected by a sleeve without continuity solutions, the ends of which are coplanar with the wall, and the annular space between the pipe and sleeve is filled with an insulating, non-hygroscopic material;

h) Car parks;

i) Other sites with a fire hazard.

4 - The restrictions imposed in the preceding paragraph shall not apply to gas pipes contained in a continuous, sealed metal hose the ends of which are in well-ventilated spaces so that any gas leaks are conducted to the ends of the hose for safe extraction.

5 - Crossing gas meter boxes is subject to compliance with the provisions of the preceding paragraph.

6 - The pipes must comply with the clearances to other pipes, electrical cables or similar, corresponding to the respective installation methods, by applying the provisions of Articles 12, 14, 15 and 16.

7 - Gas pipes can be fitted between drop ceilings and actual ceilings, if the following requirements are cumulatively met:

a) Drop ceilings must have a sufficiently open surface to prevent the accumulation of gas;

b) Compliance with the minimum distances of 0.03 m (30 mm) in parallel runs and 0.02 m (20 mm) at intersections between the gas pipes and other pipes;

c) The space between the actual ceiling and the drop ceiling must be accessible along the entire route of the piping.

8 - When installed in covered car parks, gas pipes must be protected from possible accidental impacts resulting from inadvertent vehicle manoeuvres by the fitting of appropriately strong metal guards that prevent vehicles from coming into contact with them.

9 - In modular buildings, constructed of materials made from standard fire resistance class for up to 60 minutes or in buildings constructed of wood, the installation of gas pipes must comply with the following requirements:

a) With a ventilated sleeve resistant to mechanical stress;

b) In visible pipes, under the condition that it is protected against mechanical stress in places where this is likely to occur;

c) Embedded on the ground floor, entering the building or emerging from the floor, as close as possible to the place of installation of the gas appliances.

10 - The amendment to the conditions for fitting the gas pipes after the supply of the installation must be preceded by the respective draft amendments, which must be drawn up in accordance with the provisions of the Regulation.

Article 12

Pipes passing through buildings

Pipes passing through buildings are subject to at least one of the following requirements:

a) Ventilated galleries;

b) Conduit with a cover in the form of a grill, or equivalent;

c) Ventilated sleeve resistant to mechanical stress;

d) Visible pipes, on condition that they are protected against mechanical stress in places where they may be susceptible to this.

Article 13

General gas shut-off devices to buildings

1 - The general shut-off device must be accessible, well identified and capable of being operated manually, to enable the gas supply to an installation to be interrupted in the event of an emergency which presents a risk or danger to persons or property.

2 - The general shut-off device must be of the interlocking quick shut-off type and, once activated, may only be reset by the distributing entity or by the operator of Class I and Class II gas storage and distribution networks and lines (EEG), or by someone authorised by those entities.

3 - The general shut-off device for buildings must be installed at the property boundary, outside the building, preferably near the entrance. It should be in a grade 1 accessibility location, in a closed recessed box or embedded in the wall of the building with access from outside the building, except, where necessary, in cases of retrofitting or conversion.

4 - The lid of the box must contain the word ‘Gas’ in indelible letters which are legible from the outside, with grade 1 accessibility to the general shut-off device.

5 - In type I and single-family buildings, the general shut-off device may be replaced by a safety regulator with a manual quarter-turn reset, located immediately upstream of the meter.

6 - Where an installation has several rising mains, each main must be fitted with a quarter-turn sealable shut-off device in accordance with paragraph 1.

7 - The box referred to in paragraph 3 may also, where available, house a regulator for servicing the building.

8 - With the exception of buildings situated in areas of low seismicity (ag.S ≤ 0.98 m/s^2), as defined in the National Annex to Eurocode 8 (NP EN 1998-1), gas installations must have an automatic mechanical valve to shut off gas to the building in the event of an earthquake.

5 - The characteristics of the valve referred to in the preceding paragraph, as well as its installation and maintenance requirements, are specified by order of the Director-General of the DGEG, and published on its website.

6 - In buildings classified as immovable property of cultural interest, pursuant to Decree-Law No 309/2009 of 23 October, in its current wording, the location of the box with the general shut-off device falls outside the provisions of paragraph 3, subject to compliance with the other requirements set out in this article and its approval by the municipal council with territorial jurisdiction.

7 - In installations dedicated to a single consumer, the general shut-off valve may not have the automatic interlocking device.

8 - After the tests have been carried out, the end of the branch line must be capped and the valve sealed in the closed position by the entity which carried out the tests.

Article 14

Visible Pipes

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1 - In visible pipes:

a) The horizontal sections must be located at the top of the wall, at a maximum distance of 0.2 m (200 mm) from the ceiling or from the load-bearing structural elements, except in cases of conversion or retrofitting;

b) Without prejudice to the preceding point, in exceptional cases and duly substantiated by the designer, the sections may be oblique.

2 - Visible pipes crossing an internal floor must be protected by a sleeve subject to compliance with the following requirements:

a) be resistant to corrosion caused by water or other products;

b) Coplanar with the ceiling at its lower end, clearing the floor by at least 0.05 m (50 mm), in accordance with Figure 1 of the Annex to the Regulation;

c) Be filled with an insulating, non-hygroscopic material in the annular space between the pipe and the protection.

3 - The visible pipes must not come into contact with any other piping, wiring or the like and the minimum distances of 0.03 m (30 mm) at parallel runs and 0.02 m (20 mm) at junctions shall be complied with.

4 - Gas pipes must not remain in contact with combustion product extraction ducts, and the minimum distances indicated in the preceding paragraph should be applied.

5 - The subsequent covering of the pipes is subject to compliance with Article 11(10) and Article 15.

6 - The type, number and strength of the pipe supports must be appropriate for the pipe materials.

7 - The visible pipes installed must be suitably supported and secured.

8 - Pipes passing through floors, walls or other obstacles must be protected in accordance with Articles 10(2) and (3), 11(4), 12 and 15.

9 - All pipes that are out of service or are put out of service must be removed or, if this is not possible, must be shut by closing the shut-off valve upstream of that section, if any, and capped, and no provisional solutions may be adopted for this purpose.

Article 15

Embedded pipes

1 - The routing of the gas pipes inside the walls is subject to compliance with the following rules:

a) The routing must be straight, either horizontally or vertically;

b) In horizontal sections, pipes must be located at the top of the wall at a maximum distance of 0.2 m (200 mm) from the ceiling or of the load-bearing structural elements;

c) In the case of pipes embedded in floors, the routing should preferably be done in a parallel direction, with a maximum spacing of 0.2 m (200 mm), or be perpendicular to the adjoining wall.

2 - Embedded gas pipes must not incorporate any mechanical joint except when indispensable, in which case the joint must be contained in a manhole and have grade 2 accessibility.

3 - The provisions of the preceding paragraph shall apply to valves and fittings with mechanical joints.

4 - Branch lines, changes in diameter or changes in direction of pipes, when carried out by means of welding or brazing, must be contained in manholes in accordance with paragraph 2, except in cases of duly justified use of seamless steel pipes welded by electric arc.

5 - Embedded pipes must have a coating at least 0.02 m (20 mm) thick.

6 - Steel pipes embedded in concrete do not require any protection, except in the case of plaster towing, for which the pre-coating of the piping with an inert corrosion-resistant material is required.

7 - Copper pipes embedded in concrete must have an unalterable coating of PVC, PE or equivalent to ensure chemical and electrical protection.

8 - Embedded pipes must not come into contact with steam, hot water or electricity, and the following minimum distances must be respected:

a) 0.05 m (50 mm) in parallel runs and 0.03 m (30 mm) at intersections, in the case of steam or hot water networks;

b) 0.1 m (100 mm) in parallel runs and 0.03 m (30 mm) at crossings in the case of electricity or telecommunications networks;

c) 0.05 m (50 mm) for chimneys.

9 - The pipes may be re-covered, recessed or embedded in the walls, partitions or floors, provided that:

a) They do not enter into direct contact with metal of structures or frameworks of walls, pillars or floors;

b) They do not cross expansion joints or break joints in masonry or concrete;

c) They do not pass inside hollow elements, unless the pipes are inside a sealed sleeve with no continuous connection, where at least one of the ends of this sleeve is in a ventilated area;

d) They shall not be installed on chimney walls;

e) Any groove made after construction does not reduce the strength, ventilation, tightness, thermal or acoustic insulation of the building.

10 - Non-compliance with the provisions of point (b) of the preceding paragraph is permitted if there is sufficient flexibility for the pipes in a grade 2 accessible

manhole, in the area of the expansion or break joint, in accordance with Figure 2 of the Annex to the Regulation.

11 - The implementation of the solution referred to in the preceding paragraph, including the attachment of the pipes, the radii of curvature of the pipes and the foreseeable movement of the assembly, shall not transmit stresses higher than the permissible yield values for the pipe material.

12 - No grooves should be cut for gas pipes which are:

a) Horizontal, in walls or partitions made of air brick less than 0.06 m (60 mm) thick;

b) Horizontal, in massive concrete walls or partitions or cells less than 0.08 m (80 mm) thick;

c) In gypsum walls or partitions less than 0.1 m (100 mm) thick;

d) In pre-fabricated walls less than 0.1 m (100 mm) thick;

e) In thin partitions, on ribbed moulded concrete floors or other similar surfaces.

13 - The provisions of paragraphs 8 and 9 of the previous article shall apply mutatis mutandis to embedded pipes.

Article 16

Pipes in conduits

1 - Gas pipes may be housed in conduits intended exclusively for this purpose, provided that they comply with Article 6(10).

2 - The conduits should:

a) As far as possible, be straight and of uniform cross-section throughout the height of the building, with lower and upper openings to the outside of the building, protected by a flame arrester;

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b) Be inspectable by means of mechanically fixed covers made from the same type of material;

c) Be ventilated through an air inlet at the bottom with a minimum cross section of 0.01 m^2 (10 000 mm^2) leading to a ventilated area outside the building;

d) Maintain a free passage through the different floors in accordance with the previous paragraph;

e) Be protected in the free extraction section at the top to prevent the entry of foreign matter and the action of atmospheric agents;

f) Have the lower opening referred to in point (c) at a height equal to or greater than 2 m above the level of the street outside;

g) Have a flue between the vertical portion of the conduits and their lower opening with an inclination equal to or greater than 1%.

h) Have suitably sealed outlets for floor branch lines;

i) Have mechanically protected floor branch lines constructed using materials classified with fire resistance performance rating E120/EI 60.

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Article 17

Rising mains, floor and dwelling branch lines

1 - Rising mains and floor and dwelling branch lines may be installed inside or outside buildings, be visible, embedded or in conduits, and comply in the applicable parts with Articles 14, 15 and 16 and with the following requirements:

a) They must have the minimum number of joints possible and be fixed with materials rated with a fire-resistance class appropriate to the type of use of the building;

b) They must be at least 1 m away from any opening or window in the building, unless they enter the building near that opening;

c) If they are installed in visible locations outside the building, they must be protected against possible mechanical damage and corrosion up to a height of at least 2.5 m from the ground;

d) The mechanical protection referred to in the previous point may consist of a steel sheath, or other material that ensures effective protection against direct collisions, including from motor vehicles;

e) If they are installed inside multiple-occupancy buildings, they should not pass through the interior of any of the dwellings.

2 - Rising mains and floor and dwelling branch lines may also be placed in conduits, in accordance with the requirements of the previous article.

3 - In the case of high-rise buildings, rising mains and floor and dwelling branch lines may be internal and contained in conduits exclusively intended for that purpose, provided that their placement and location do not jeopardise

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compliance with the safety requirements set out in the technical regulation referred to in Article 15 of the SCIE.

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Article 18

Other shut-off devices

1 - In addition to the general shut-off device to the building, gas installations must have quarter-turn shut-off devices located:

a) At the beginning of each floor branch line;

b) Upstream of the meter;

c) Upstream of each gas appliance, in which case the valves must be firmly supported or fixed to the wall or structure replacing it, and supplied by vertical sections.

2 - The floor branch line shut-off device may be replaced by the device referred to in point (b) of the preceding paragraph if there is only one dwelling per floor and the rising main passes through the inside of the meter box.

3 - The shut-off device may be replaced by a safety regulator fitted adjacent to each meter, provided that this regulator is the quarter-turn manual reset type, and is located on the same floor or at the upper or lower entrance, within a maximum distance of 20 m from the dwelling concerned, measured along the pavement.

4 - If the safety regulator is of the automatic reset type, this must always be preceded by a quarter-turn shut-off device.

5 - The shut-off devices for floor branch lines must be installed in a manhole, in a meter box, or in conduits.

6 - Where several shut-off devices are grouped together, indelible means must be provided to identify them unambiguously for the consumer.

7 - Shut-off devices must always be installed in places with grade 1 accessibility.

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Article 19

Installation of pressure regulation devices

1 - The individual regulators for each dwelling must be safe and must be installed immediately upstream of the gas meter or gas appliances.

2 - The installation of the regulators and individual reducers referred to in the preceding paragraph may be dispensed with in the case of low pressure gas installations.

3 - Pressure regulators or pressure reducers must be preceded by a shut-off device.

4 - The shut-off device referred to in the preceding paragraph may be common to several pressure reducers or regulators installed in parallel and must be located along the common section.

5 - Where pressure reducers or pressure regulators have an internal excess pressure safety system, the released gas must be extracted as follows:

a) If the system is installed inside buildings, the gas released must be removed through the flue or, if necessary, collected by a head pipe;

b) If the system is installed outside buildings, this security system must be placed in a ventilated housing.

6 - The head pipe must also meet the following requirements:

a) Have a free end, facing downwards, situated on the outside of the building at a distance equal to or greater than 2 m from any hole into which gases may enter;

b) Be made of metal and have its end protected against entry by insects or foreign bodies:

c) Have a sufficient diameter such that the system does not offer resistance to the passage of gas flow.

7 – The distance referred to in point (a) of the previous paragraph may be reduced by up to 0.5 m in cases of conversion, retrofitting or the impossibility of their application, duly substantiated by the designer.

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Article 20

Installation of gas meters

1 - The gas meter and its safety regulator must be installed in the gas meter box.

2 - Outside the boxes housing the meters, there must be the word ‘Gas’ written in indelible letters and the words ‘No smoking or lighting fires’, or the corresponding pictograms.

3 - The housing shall not prevent access to the building or to doors and windows and their normal operation.

4 - When several meters are grouped at the same location, each must bear indelible information which unambiguously identifies the dwelling it supplies.

5 - The meters and their safety regulators must be installed so that they are fixed or supported, in order not to affect the tightness of the system or its satisfactory operation.

6 - The entry points and outlets of pipes in the meter boxes must be sealed with inert materials.

7 - A branch line may be placed downstream of the meter for testing the gas installation, and a shut-off valve must be placed on the branch line.

8 - After the tests have been carried out, the end of the branch line must be capped and the valve sealed in the closed position by the entity which carried out the tests.

9 - Gas meters cannot be installed inside dwellings.

10 - In cases of conversion and retrofitting, in which the meter must be installed inside the dwelling or private location, it must be located:

a) As close as possible to the rising main;

b) In a suitable position to ensure proper ventilation;

c) At a height not exceeding 1.60 m;

d) At a distance of at least 0.40 m (400 mm) from the gas appliances;

e) At a distance of at least 0.20 m (200 mm) from electrical switches or sockets, water drainage pipes and flue ducts for the extraction of combustion products.

11 - In the case of interior rising mains and those housed in conduits, the following requirements must be met:

a) Gas meters must be placed as close as possible to the rising mains, within reserved compartments connected to conduits;

b) Access to the flue or meter compartment and conduits must be protected by a door with fire resistance performance rating E120/EI 60, opening in the outward direction, and provided with an automatic system for return to the closed position;

c) There must be a low wall of a height equal to or greater than 0.2 m from the inside of the door referred to in the preceding point, near the floor, in accordance with Figure 3 of the Annex to the Regulation;

d) The illumination of the meter compartments and the rising mains must be external to those compartments and suitable for their location.

Article 21

Gas installations inside dwelling

1 - The pipes downstream of the meter must not pass through private property, other than the dwelling locations they supply.

2 - The fixed pipes should convey the gas to a distance equal to or less than 0.8 m from the site intended for the assembly of the gas appliance.

3 - Fixed pipes must be fitted with a shut-off device, known as a quarter-turn shut-off, as close as possible to the ends of the pipe.

4 - The shut-off devices for the appliances must be positioned at a height between 1 m and 1.4 m above the floor level, in a location with grade 1 accessibility.

5 - Pipes for gases denser than air must not pass through basements unless the nature of the building so requires, in which case the following additional requirements must be met:

a) The location where the pipes are installed must be sufficiently ventilated;

b) The gas pipes shall be contained in a continuous, sealed metal sleeve, the ends of which are located in well-ventilated spaces, in such a way that any gas leakage is conducted to the ends of the sleeve;

c) The ends of the sleeve referred to in the previous point must be at a distance equal to or greater than 3 m from any opening that connects with the basement.

6 - The absence of ignition sources.

Article 22

Gas meter box

1 - When the shut-off device, safety regulator and meter are housed in a gas meter box, this must consist of a panel, either recessed, or not, on the outer face of the wall of the building, or inside the building as close as possible to the entrance, as applicable, at a place with grade 1 accessibility.

2 - A plate with the fire resistance performance rating E15 written in indelible letters, showing the GIR, the concessionaire or the EEG and their emergency contact number should be placed in a prominent position.

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3 - Meter boxes must:

a) Be constructed from materials with fire resistance performance rating E120/EI 60;

b) Be ventilated at the top and bottom through permanent openings;

c) Have doors made of the same type of material, with a latch, which open outwards;

d) Be identified with the word ‘Gas’, in indelible letters, and with the pictograms prohibiting smoking or lighting fires;

e) Remain properly cleaned, closed, dried and ventilated.

4 - If using a gas meter box, the pipes downstream of the meters must be protected by conduits in areas subject to possible mechanical stresses, in accordance with Section 16.

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CHAPTER IV

Assembly of gas installations

Article 23

General provisions

1 - The assembly of the gas installations and the installation of the gas appliances are carried out by the gas installing entities (IE), pursuant to Law No 15/2015 of 16 February.

2 - Once the gas installation or gas appliances have been completed, the IE must apply for and issue a declaration of compliance, in accordance with the provisions of Decree-Law No 97/2017 of 10 August, in its current wording.

3 - Gas installations must be assembled and gas appliances fitted in accordance with the design and provisions of the Regulation.

4 - Any alterations to the design may only be carried out with the express consent of the designer on the condition that they are specified in the final drawings.

5 - The reuse of pipes and connection fittings previously used in other installations is not permitted.

6 - When installing gas appliances connected to a solar thermal system, it must be ensured that the appliance can be isolated from the system so that it can be tested during inspection.

Article 24

Connections

1 - Steel pipes must be interconnected with each other, through the use of one of the following methods:

a) Electric butt welding;

b) Electric welding for joints or flanges, tees or sliding blocks of the PN 10 class, of the slip-on or welding neck types;

c) Threaded joints, in pipes with an outside diameter equal to or less than 0.0603 m (60.3 mm).

2 - Fillet-tight threaded connections in steel pipes or steel pipes with any fittings are only permitted provided they comply with the requirements of the relevant technical standards pursuant to Article 36, and the manual assembly of threads is not permitted.

3 - The use of mechanical joint or flange connections is allowed only if the steel pipes need to be dismantled in future, or when the routing so requires.

4 - The use of mechanical joints should be limited to the installation of valves, fittings and connections for appliances and, where copper pipes are used, in situations where strong brazing or soldering cannot properly be done on site.

5 - Copper pipes should be interconnected using the following methods:

a) Strong capillary brazing, when their outer diameter is equal to or less than 0.054 m (54 mm);

b) Soldering, when their diameter is greater than 0.054 m (54 mm) and equal to or less than 0.11 m (110 mm); capillary brazing is not allowed;

c) Pressing in accordance with the applicable technical standards pursuant to Article 36.

6 - Interconnections of copper pipes with brass or bronze should be carried out by means of strong brazing.

7 - Interconnections between steel and copper pipes must be made with the aid of insulating joints or mixed fittings, either welded or soldered on the steel side and brazed or soldered at the other end.

8 - The use of insulating joints is subject to the following conditions:

a) Excessive heating of the insulated core is not permitted during welding, soldering or strong brazing operations;

b) The bare ends must be of sufficient length to allow welding without excessive heating of the coating;

c) They should be installed in such a way that they are not subjected to stresses.

9 - The use of small quantities of accessory products, such as PTFE tape and appropriate pastes or liquids, is permitted for the sealing of non-welded joints, when achieved by metal-to-metal tightening, while the use of oakum or polymer pastes is prohibited.

10 - The means of sealing must comply with the provisions of Article 7.

11 - Only welded or soldered joints may be used for buried pipes.

12 - The mechanical joints of embedded or buried pipes must be enclosed in manholes, the covers of which must be mechanically secured.

Article 25

Welding

1 - All welding must be carried out in accordance with procedures and by qualified welders, in accordance with the applicable technical standards, pursuant to Article 36.

2 - Welding on steel pipes may only be carried out by a fusion steel welder in the gas area authorised by the DGEG, in accordance with Law No 15/2015 of 16 February.

3 - Welding, involving other materials, may only be carried out by an installer of gas installations and gas networks authorised by the DGEG, in accordance with Law No 15/2015 of 16 February.

4 - In the case of steel pipes, the filler metal must be of a quality and composition compatible with the quality of the steel to be welded.

5 - The use of phosphorous alloys is not permitted for copper pipes.

Article 26

Earthing of gas installations

1 - The gas installation must be provided with an earth connection, using the building's earthing system, except in the following cases:

a) Conversion or retrofitting where this is not possible, and therefore a dedicated earth electrode must be installed to connect the gas installation, that meets the requirements indicated by the designer for this type of installation;

b) When using material in the gas installation with a minimum electrical resistivity of $10^{16}\Omega\cdot m$, in particular, rubber or similar polymers.

2 - The use of gas pipes for earthing electrical or other mains is not permitted.

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Article 27

Connections of gas appliances in buildings

1 - The connection of appliances to the gas installation must be carried out with metal, rigid or flexible pipes, in particular in cases of:

a) Free-standing cookers and work tables;

b) Automatic or storage water heaters;

c) Fixed room heating appliances;

2 - The connection of appliances to the gas installation may be carried out with the aid of flexible metal or non-metallic pipes, in accordance with the relevant technical standards pursuant to Article 36, in the case of:

a) Portable barbecues and stoves;

b) Movable space heaters;

c) Washing machines and dryers;

d) Dishwashers.

3 - The flexible pipe must:

a) Supply a single gas appliance;

b) Be installed so as to avoid any mechanical stress (traction, torsion, bending or other);

c) Be protected from the flames of the burner on the appliance, hot parts of appliances or flue gas ducts;

d) Have a maximum length of 1.5 m;

e) Be fully accessible;

f) Be used with clamps at either end in the case of non-metallic pipes;

g) If applicable, be within the validity period, according to the respective marking.

4 - It is forbidden to join two flexible pipes to supply gas appliances.

5 - The connection of gas to equipment for mixing oxygen/gas and compressed air/gas shall not be permitted, with the exception of buildings of standard-use XII referred to in SCIE.

Article 28

Ventilation and extraction of combustion products

The technical conditions, materials and assembly of devices for ventilation of rooms and extraction of combustion products shall be subject to compliance with the requirements of the applicable technical standards pursuant to Article 36.

Article 29

Gas cylinder stations

1 - LPG cylinder stations must comply with the requirements of the safety regulation on liquefied petroleum gas (LPG) storage facilities, with a capacity of up to 200 m^3 per container, approved by Ordinance No 460/2001 of 8 May.

2 - The panel should be located in an accessible position, on the outside of a building, and never below floor level or in circumstances that may facilitate the possible accumulation of gas in nearby compartments, canals, wells, sewers, or other low points.

3 - The cylinders must remain in the upright position at all times, with the valve upwards and in such a way that they do not tip over.

4 - When using inverter blocks, these must be equipped with a device indicating which area of the cylinder battery is in service.

5 - The gas installation, originating from the panel, must comply with the requirements laid down in this Regulation.

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6 - The installation of gas appliances powered directly by cylinders placed at the point of consumption is excluded from the scope of these regulations, provided that the length of the flexible pipe does not exceed 1.5 m.

Article 30

Powering the facilities

For gas installations in LPG-powered buildings, where applicable, at least two reduction floors must be used, the last of which must be located at the meter inlet point.

Article 31

Installation of gas appliances

1 - All installations must be adapted to safely operate the gas appliances they supply, and the combustion gas ventilation and extraction conditions must comply with the applicable technical standards, in accordance with Article 36.
2 - A type C sealed gas appliance may be installed in any environment.
3 - The installation of gas appliances of type A or B in toilets or bedrooms is not permitted.
4 - A type A gas appliance not designed to be connected to a duct may only be installed in a room with a volume equal to or greater than 8 $m^{3.}$
5 - Appropriate condensate collection must be checked, when installing condensing gas appliances.
6 - When installing devices, the manufacturer’s assembly instructions must be followed.

CHAPTER V

Gas installation commissioning

Article 32

General provisions

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1 - After its assembly and before it is put into service, the gas installation must be subject to an initial inspection (II) by a gas inspection unit (GIU), in order to verify compliance with the corresponding project.
2 - Where the operating pressure Pf of the installation exceeds 0.4 bar, the gas installation must be subjected to a mechanical resistance test in accordance with Article 33 prior to the leakage test in accordance with Article 34.
3 - The measuring instruments to be used must have a valid metrological verification, and where not applicable, be calibrated by organisations accredited by the Instituto Português de Acreditação, I.P. (Portuguese Accreditation Institute), and be appropriate to the range of measurements for which they will be used.
4 - At the end of the II, the EIG issues the corresponding inspection report with the values from the tests and checks carried out, and the result of the inspection.

Article 33

Mechanical resistance test

1 - The pipes must be visible during the mechanical resistance test, except for the sections contained inside the sleeves.
2 - The mechanical resistance test is applicable to pipes and fittings, excluding pressure reduction, regulating and limitation devices, general or automatic shut-off devices and meters;
3 - The sections to be tested must be disconnected from the rest of the installation prior to the mechanical resistance test.
4 - The mechanical resistance test shall be carried out only on sections where the Pf is greater than 0.4 bar (400 mbar) and the following must be observed:
a) The value of the minimum test pressure Pt is 6 bar;

b) The test must be performed:

i) with the use of air or nitrogen;

ii) Hydraulically, if Pt is greater than 6 bar.

c) The Pt must be maintained for the time required for inspection and detection of any leakage, but no less than 30 minutes.

5 - The test is considered to have failed if there is a drop in pressure, which corresponds to a leak in the installation.

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Article 34

Leakage test

1 - The leakage test must be carried out with air, nitrogen, or the gas supplying the gas installation.

2 - The gas installation must be purged at the end of the test if air or nitrogen is used.

3 - The leakage test must be carried out in three stages corresponding to the sections of the installations located:

a) Upstream of the meter;

b) Downstream of the meter to the shut-off valve for the appliances;

c) Downstream of the shut-off valve for the appliances.

4 - Each of the assemblies referred to in points (a) and (b) of the preceding paragraph may be tested, in their entirety or in fractions, under the following conditions:

a) In medium pressure installations, Pe = 1.5 times Pf, with a minimum of 1 bar, except downstream of the last reducing storey, where Pe = 0.15 bar (150 mbar);

b) In low pressure installations, Pe = 0.05 bar (50 mbar);

c) Pe = Pf where the gas supplying the installation is used as the test fluid;

d) All connections must be easily accessible;

e) The pressure shall be maintained as long as is necessary for inspecting and detecting any leakage, but not less than 10 minutes.

5 - The assembly referred to in point 3(c) must be tested at pressure Pf.

6 - The test is considered to have failed if there is a drop in pressure, which corresponds to a leak in the installation.

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Article 35

Detecting leaks

1 - Leaks should be detected using the appropriate means, such as a liquid or foaming solution.

2 - The use of a flame for detecting leaks is prohibited.

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Article 36

Applicable technical standards

1 - For the purposes of applying the provisions of the Regulation, only the Portuguese, European and international technical standards contained in the list published on the DGEG website shall be accepted.

2 - For the purposes of the previous paragraph, the list of applicable standards shall be approved by order of the Director-General of the DGEG.

3 - Without prejudice to the provisions of the preceding paragraphs, the marketing of the products, materials, components and equipment covered by it shall not be prevented, provided that they bear the CE marking and are accompanied by the corresponding declaration of conformity or performance issued by the manufacturer.

Article 37

Transitional provisions

In existing gas installations at the date of entry into force of this Regulation:

a) The general shut-off device may be the branch valve, if the installation is supplied at low pressure;

b) The automatic mechanical valve referred to in Article 13(8) becomes mandatory only in the event of a change in the gas installation;

c) Gas pipes initially visible and subsequently covered which do not comply with the requirements of Article 15 may continue to be supplied with gas up to a maximum of 5 years after the first periodic or extraordinary inspection of the installation after the entry into force of this Decree-Law.

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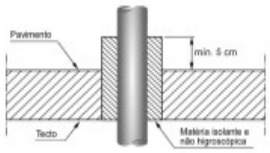
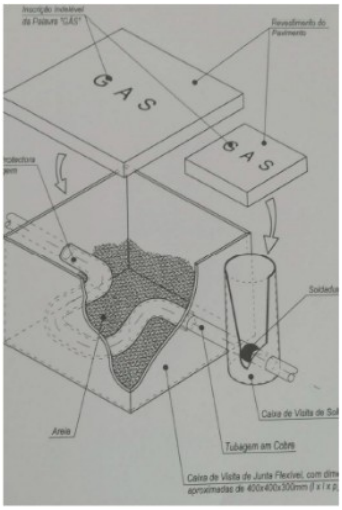
ANNEX

(referred to in Articles 10(1) and 10(2)(d), 14(2)(b), 15(10) and 20(11)(c) of the Regulation)

List of Figures

No	Reference in the Regulation	Figure
1	Article 14(2)(b)	 Teto Pavimento — Walking floor Teto — Ceiling Matéria isolante e não higroscópica — Insulating, non-hygroscopic material
2	Article 15(10)	

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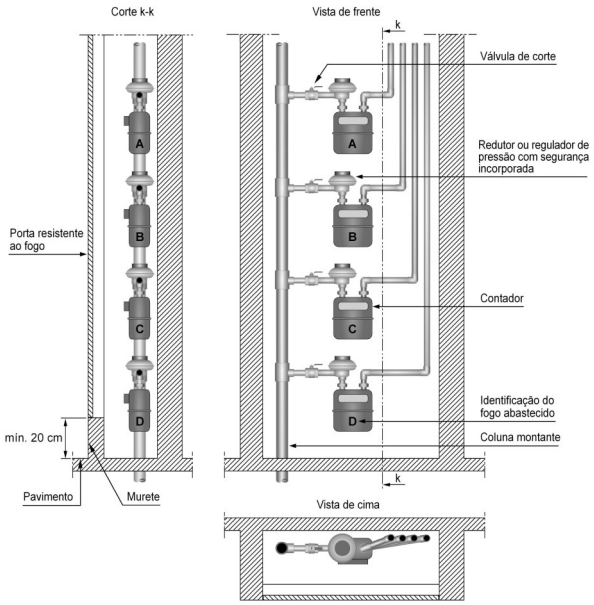
3	Article 20(11)(c)	 Compartimento para alojamento dos contadores e canalete da coluna montante Corte k-k / Cross-section k-k Porta resistente ao fogo / Fire-resistant door Pavimento / Walking floor Murete / Low wall Vista de frente / Front view Válvula de corte / Shut off valve Redutor ou regulador de pressão com segurança incorporada / Pressure reducer or regulator with built-in safety device Contador / Meter Identificação do fogo abastecido / Identification of the dwelling supplied Coluna montante / Rising main Vista de cima / Top down view Compartimento para alojamento dos contadores e canalete da coluna montante / Compartment for housing the meters and the conduit of the rising main