

## KINGDOM OF BELGIUM

### FEDERAL PUBLIC SERVICE ECONOMY, SMEs, SMALL BUSINESSES AND ENERGY

**Royal Order amending Chapter 7.1 of Book 1 and certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Installations for the Transport and Distribution of Electrical Energy**

#### Report to the King

**Sire,**

The Royal Order, which is submitted to you by the Minister of Labour and the Minister of Energy, allows His Majesty to amend Chapter 7.1 of Part 7 of Book 1 and certain parts of Books 1, 2, and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on low-voltage and very low-voltage electrical installations, Book 2 on high-voltage electrical installations, and Book 3 on installations for the transmission and distribution of electrical energy (referred to in this report as the 'Royal Order of 8 September 2019').

The three thematic books mentioned above have constituted, since 1 June 2020, the restructuring of the General Regulations on Electrical Installations (RGIE), which had been made mandatory by the Royal Order of 10 March 1981 for domestic installations and certain transmission and distribution lines of electrical energy, and by the Royal Order of 2 September 1981 for electrical installations in establishments classified as dangerous, unhealthy, or inconvenient, as well as those referred to in Article 28 of the General Work Safety Regulations. The three books therefore contain the safety measures applicable to very low-voltage, low-voltage, and high-voltage electrical installations.

Since the publication of the three books, the restructuring of safety measures has continued to ensure the ongoing enhancement of the safety of people and property against the effects of electricity, particularly to address the technological and normative evolution of electrical installations.

#### **I. General comment**

The main objective of this Royal Order is:

(1) to amend the safety measures in Book 1 of the Royal Order of 8 September 2019 concerning:

- a) low-voltage and very low-voltage electrical installations in places containing a bathtub and/or shower;
- b) the selection and installation of low voltage socket-outlets.

(2) to define the concept of 'place accessible to the public' used in the three books of the Royal Order of 8 September 2019 and clearly identify this place in each non-domestic electrical installation.

This Royal Order also includes the adaptation of certain current terms in connection with the aforementioned amendments and the correction of certain ambiguities in the current text for a better understanding of the three books of the Royal Order of 8 September 2019.

Transitional provisions (places containing a bathtub and/or shower and low voltage socket-outlets) are provided for projects or works in progress at the time of entry into force of this Royal Order and for which the conformity check before putting into use must still take place from the entry into force of this Royal Order. Projects or works therefore mean the construction of a new electrical installation or the carrying out of major modifications or extensions to an existing electrical installation. The start of the implementation of the project or works may be linked, for example, to the estimate, the study, the building permit, the award of the contract, the start of the site.

## **II. Comments on the articles**

The structure of this Royal Order is as follows:

- (1) Articles 1 to 32: amendments to Book 1 of the Royal Order of 8 September 2019;
- (2) Articles 33 to 42: amendments to Book 2 of the Royal Order of 8 September 2019;
- (3) Articles 43 to 59: amendments to Book 3 of the Royal Order of 8 September 2019;
- (4) Article 60: transitional provision for existing non-domestic electrical installations concerning places accessible to the public;
- (5) Article 61: entry into force of this Royal Order;
- (6) Article 62: execution of this Royal Order by the ministers concerned;
- (7) Annex: replacement of Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019.

Article 1:

Refers to Subsection 2.2.1.1. of Part 2 of Book 1 of the Royal Order of 8 September 2019 (general terms of the characteristics of the installations).

Article 1 inserts the new definition of a place accessible to the public.

The place accessible to the public is therefore considered a place open to all, i.e. a place where everyone can go and move anywhere without prior authorisation, whether access is permanent, temporary or subject to certain conditions.

Article 2:

Refers to Section 2.4.1 of Part 2 of Book 1 of the Royal Order of 8 September 2019 (general terms of protection against electric shock).

Article 2 adapts the terminology of the current term 'bewapening' in the Dutch definition of ground.

Article 3:

Refers to Section 2.10.5. of Part 2 of Book 1 of the Royal Order of 8 September 2019 (external influences - presence of corrosive or polluting substances (AF)).

Article 3 standardises the terminology of the term 'place accessible to the public' in

Table 2.10 in line with the new definition of this place.

Article 4:

Refers to Section 2.10.11. of Part 2 of Book 1 of the Royal Order of 8 September 2019 (external influences - competence of persons (BA)).

Article 4 standardises the terminology of the term 'place accessible to the public' in Table 2.15 in line with the new definition of this place.

Article 5:

Refers to Section 2.10.14. of Part 2 of Book 1 of the Royal Order of 8 September 2019 (external influences - possibilities for evacuation of persons in the event of an emergency (BD)).

Article 5 standardises the terminology of the term 'place accessible to the public' in Table 2.18 in line with the new definition of this place.

Article 6:

Refers to Subsection 4.2.2.3. of Part 4 of Book 1 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in ordinary places).

Article 6 corrects a drafting error in a Dutch term in point (d).

Article 7:

Refers to Subsection 4.2.2.4. of Part 4 of Book 1 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in places of electrical service).

Article 7 corrects drafting errors in the Dutch text of point a.3.3.

Article 8:

Refers to Subsection 4.2.2.5 of Part 4 of Book 1 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in special cases)).

Article 8 standardises the terminology of the term 'place accessible to the public' in points (d), (e), (j) and (m) in accordance with the new definition for this place. This Article also standardises the use of the term 'wall' in points (a) and (c) in accordance with the new definition of a fixed wall in the Annex to this Royal Order (new Chapter 7.1. of the Royal Order of 8 September 2019).

Article 9:

Refers to Subsection 4.2.3.2. of Part 4 of Book 1 of the Royal Order of 8 September 2019 (grounding installation).

Article 9 aligns the Dutch text with the French text concerning the local placement of the additional equipotential bonding. In view of this difference, a derogation is provided for existing electrical installations in places containing a bathtub and/or shower.

Article 10:

Refers to Subsection 4.2.4.3. of Part 4 of Book 1 of the Royal Order of 8 September 2019 (protection against electric shock by indirect contact in domestic installations).

Article 10 clarifies in point (b) what the circuits of places containing a bathtub and/or shower are, i.e. those referred to in Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019. In the same point, this article also removes the ambiguity of Figure 4.11 in relation to the text, i.e. the number of socket-outlets per terminal circuit.

Article 11:

Refers to Subsection 4.3.3.7. of Part 4 of Book 1 of the Royal Order of 8 September 2019 (special fire protection measures).

Article 11 standardises the terminology of the term 'place accessible to the public' in Table 4.10 of point (a) in accordance with the new definition of this place.

Article 12:

Refers to Section 4.5.4. of Part 4 of Book 1 of the Royal Order of 8 September 2019 (protection against overvoltages - ducts common to energy and telecommunication conductors).

Article 12 standardises the terminology of the term 'place accessible to the public' in the text in accordance with the new definition of this place.

Article 13:

Refers to Subsection 5.2.1.4. of Part 5 of Book 1 of the Royal Order of 8 September 2019 (rules for the isolation of conductors).

Article 13 standardises the terminology of the term 'place accessible to the public' in point (b) in accordance with the new definition of this place.

Article 14:

Refers to Subsection 5.2.6.1 of Part 5 of Book 1 of the Royal Order of 8 September 2019 (general connections).

Article 14 adapts the terminology of the current term 'bewapening' in the Dutch text.

Article 15:

Refers to Subsection 5.2.9.2. of Part 5 of Book 1 of the Royal Order of 8 September 2019 (method of installation of underground wiring systems).

Article 15 adapts the terminology of the current term 'bewapening' in point (a) of the Dutch text.

Article 16:

Refers to Subsection 5.3.5.1. of Part 5 of Book 1 of the Royal Order of 8 September 2019 (distribution and control panels).

Article 16 standardises the terminology of the term 'place accessible to the public' in point (a) in accordance with the new definition of this place. In the same point, this article adds conformity to the standard registered by the NBN.

#### Article 17:

Refers to Subsection 5.3.5.2. of Part 5 of Book 1 of the Royal Order of 8 September 2019 (socket-outlets and lighting).

Article 17 specifies in point (a) the degree of protection and the choice of low-voltage socket-outlets in low-voltage and very low-voltage domestic and non-domestic installations. The positioning height of a socket-outlet is no longer specified. Reference is made to good practice. Point (b) (specific rules for domestic installations) refers to point (a) concerning the type of low-voltage socket-outlet. Transitional provisions are provided for projects and works in progress at the time of the entry into force of this Royal Order to allow for the installation of socket-outlets that meet the applicable requirements before the entry into force of this Royal Order.

#### Article 18:

Refers to Subsection 5.4.3.1. of Part 5 of Book 1 of the Royal Order of 8 September 2019 (nature of protective conductors).

Article 18 amends the terminology of the French text (domestic place) that was forgotten when the Royal Order of 5 March 2023 amending certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations.

#### Article 19:

Refers to Subsection 6.4.7.2. of Part 6 of Book 1 of the Royal Order of 8 September 2019 (conformity check of a transportable, mobile or temporary installation).

Article 19 amends the terminology (socket-outlet) that was forgotten when drafting the Royal Order of 5 March 2023 amending certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations.

#### Article 20:

Refers to Subsection 6.5.7.2. of Part 6 of Book 1 of the Royal Order of 8 September 2019 (content of the inspection visit report concerning domestic installations).

Article 20 amends the terminology in point (b.4) of the Dutch text (stopcontactdoos) that was forgotten when the Royal Order of 5 March 2023 amending certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations.

#### Article 21:

Refers to Subsection 6.5.8.1. of Part 6 of Book 1 of the Royal Order of 8 September 2019 (derogations for existing parts of domestic installations made from 1 June 2020).

Article 21 adds two new derogations. One concerns the possibility of keeping in service socket-outlets meeting the application requirements prior to the entry into force of this Royal Order. The other concerns the possibility of keeping in service the electrical installations of places containing a bathtub and/or shower that meet the requirements of Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019, applicable prior to the entry into force of this Royal Order.

Article 22:

Refers to Subsection 6.5.8.2. of Part 6 of Book 1 of the Royal Order of 8 September 2019 (derogations for existing parts of non-domestic installations made from 1 June 2020).

Article 22 adds two new derogations. One concerns the possibility of keeping in service socket-outlets meeting the application requirements prior to the entry into force of this Royal Order. The other concerns the possibility of keeping in service the electrical installations of places containing a bathtub and/or shower that meet the requirements of Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019, applicable prior to the entry into force of this Royal Order.

Article 23:

Article 23 replaces the text of Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 concerning places containing a bathtub and/or shower. The new chapter 7.1. referred to above is commented on in point (III) of this report.

Article 24:

Refers to Section 7.2.5 of Part 7 of Book 1 of the Royal Order of 8 September 2019 (specific rules for electrical installations in swimming pools).

Article 24 deletes Section 7.2.5. of Book 1 of the Royal Order of 8 September 2019. Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 is no longer applicable to private swimming pools in domestic installations. For existing private swimming pools, the derogations in Parts 6 and 8 of Book 1 of the Royal Order of 8 September 2019, which are provided for existing places containing a bathtub and/or shower, may apply if necessary. The requirements of Chapter 7.2. of the Royal Order of 8 September 2019 applicable to balneotherapy installations are also deleted. As regards balneotherapy installations, Chapter 7.1 or Chapter 7.2 of Book 1 of the Royal Order of 8 September 2019 applies if the balneotherapy installation meets either the concept of a bathtub/shower or the concept of a swimming pool.

Article 25:

Refers to Subsection 7.102.8.4. of Part 7 of Book 1 of the Royal Order of 8 September 2019 (installation of wiring systems in ATEX electrical installations).

Article 25 adapts the terminology of the current terms 'armature' and 'bewapening' in the French and Dutch texts.

Article 26:

Refers to Section 8.1.1. of Part 8 of Book 1 of the Royal Order of 8 September 2019 (definitions of electrical installations made before 1 June 2020).

Article 26 inserts the common parts of a residential estate completed before 1 June 2020 to consider these parts as non-domestic facilities as of 1 June 2023. This integration was forgotten when drafting the Royal Order of 5 March 2023 amending certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations.

Article 27:

Refers to Section 8.2.1. of Part 8 of Book 1 of the Royal Order of 8 September 2019 (derogations for existing parts of domestic installations made before 1 October 1981).

Article 27 adds two new derogations. One concerns the possibility of keeping in service socket-outlets meeting the existing derogations and the application requirements prior to the entry into force of this Royal Order. The other concerns the possibility of keeping in service the electrical installations of places containing a bathtub and/or shower that comply with the existing derogations and Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019, applicable prior to the entry into force of this Royal Order.

Article 28:

Refers to Section 8.2.2. of Part 8 of Book 1 of the Royal Order of 8 September 2019 (derogations for existing parts of former RGIE domestic installations).

Article 28 adds two new derogations. One concerns the possibility of keeping in service socket-outlets meeting the existing derogations and the application requirements prior to the entry into force of this Royal Order. The other concerns the possibility of keeping in service the electrical installations of places containing a bathtub and/or shower that comply with the existing derogations and Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019, applicable prior to the entry into force of this Royal Order.

Article 29:

Refers to Subsection 8.3.2.2. of Part 8 of Book 1 of the Royal Order of 8 September 2019 (derogations for existing parts of former RGIE non-domestic installations).

Article 29 adds two new derogations. One concerns the possibility of keeping in service socket-outlets meeting the existing derogations and the application requirements prior to the entry into force of this Royal Order. The other concerns the possibility of keeping in service the electrical installations of places containing a bathtub and/or shower that comply with the existing derogations and Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019, applicable prior to the entry into force of this Royal Order.

Article 30:

Refers to Section 8.4.3. of Part 8 of Book 1 of the Royal Order of 8 September 2019 (inspection visit of an old household electrical installation not meeting the criteria in sections 8.4.1. and 8.4.2.).

Article 30 deletes the common parts of a residential estate in the French text concerning the free on-the-spot inspection of a former domestic installation. These parties have been covered since 1 June 2023 by Section 8.4.4. of Book 1 of the Royal Order of 8 September 2019 on the free on-the-spot inspection of a former non-domestic installation without staff. This deletion was forgotten when drafting the Royal

Order of 5 March 2023 amending certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations.

Article 31:

Refers to Section 9.1.6. of Part 9 of Book 1 of the Royal Order of 8 September 2019 (document on external influences).

Article 31 requires the owner, manager, or operator of a non-domestic low-voltage and very low-voltage electrical installation to indicate on the external influences document the places accessible to the public supplied by the electrical installation. If no place accessible to the public is supplied by the electrical installation, this information shall also be included in the external influences document.

Article 32:

Refers to Book 1 of the Royal Order of 8 September 2019 in general.

Article 32 standardises the terminology of the term 'place accessible to the public' in Book 1 of the Royal Order of 8 September 2019 in accordance with the new definition of this place. This article also adapts the terminology of the current terms 'pantsering' and 'bepantsering' in the Dutch text of Book 1 of the Royal Order of 8 September 2019.

Article 33:

Refers to Subsection 2.2.1.1. of Part 2 of Book 2 of the Royal Order of 8 September 2019 (general terms of the characteristics of the installations).

Article 33 inserts the new definition of a place accessible to the public, as commented on in Article 1 of this Royal Order.

Article 34:

Refers to Section 2.4.1 of Part 2 of Book 2 of the Royal Order of 8 September 2019 (general terms of protection against electric shock).

Article 34 adapts the terminology of the current term 'bewapening' in the Dutch definition of ground.

Article 35:

Refers to Section 2.10.5. of Part 2 of Book 2 of the Royal Order of 8 September 2019 (external influences - presence of corrosive or polluting substances (AF)).

Article 35 standardises the terminology of the term 'place accessible to the public' in Table 2.10 in line with the new definition of this place.

Article 36:

Refers to Section 2.10.11. of Part 2 of Book 2 of the Royal Order of 8 September 2019 (external influences - competence of persons (BA)).

Article 36 standardises the terminology of the term 'place accessible to the public' in



Table 2.15 in line with the new definition of this place.

Article 37:

Refers to Section 2.10.14. of Part 2 of Book 2 of the Royal Order of 8 September 2019 (external influences - possibilities for evacuation of persons in the event of an emergency (BD)).

Article 37 standardises the terminology of the term 'place accessible to the public' in Table 2.18 in line with the new definition of this place.

Article 38:

Refers to Subsection 4.2.2.3. of Part 4 of Book 2 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in places of electrical service).

Article 38 corrects drafting errors in the Dutch text of point a.3.3.

Article 39:

Refers to Subsection 4.2.2.4 of Part 4 of Book 2 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in special cases)).

Article 39 standardises the terminology of the term 'place accessible to the public' in points (c) and (e) in accordance with the new definition of this place.

Article 40:

Refers to Subsection 4.3.3.7. of Part 4 of Book 2 of the Royal Order of 8 September 2019 (special fire protection measures).

Article 40 standardises the terminology of the term 'place accessible to the public' in Table 4.6. of point (a) in accordance with the new definition of this place.

Article 41:

Refers to Section 9.1.5. of Part 9 of Book 2 of the Royal Order of 8 September 2019 (document on external influences).

Article 41 requires the owner, manager, or operator of a high-voltage electrical installation to indicate on the external influences document the places accessible to the public supplied by the electrical installation. If no place accessible to the public is supplied by the electrical installation, this information shall also be included in the external influences document.

Article 42:

Refers to Book 2 of the Royal Order of 8 September 2019 in general.

Article 42 standardises the terminology of the term 'place accessible to the public' in Book 2 of the Royal Order of 8 September 2019 in accordance with the new definition of this place. This article also adapts the terminology of the current term 'pantsering' in

the Dutch text of Book 2 of the Royal Order of 8 September 2019.  
Article 43:

Refers to Subsection 2.2.1.1. of Part 2 of Book 3 of the Royal Order of 8 September 2019 (general terms of the characteristics of the installations).

Article 43 inserts the new definition of a place accessible to the public, as commented on in Article 1 of this Royal Order.

Article 44:

Refers to Subsection 2.4.1.1. of Part 2 of Book 3 of the Royal Order of 8 September 2019 (general terms of protection against electric shocks).

Article 44 adapts the terminology of the current term 'bewapening' in the Dutch definition of ground.

Article 45:

Refers to Section 2.10.5. of Part 2 of Book 3 of the Royal Order of 8 September 2019 (external influences - presence of corrosive or polluting substances (AF)).

Article 45 standardises the terminology of the term 'place accessible to the public' in Table 2.10 in line with the new definition of this place.

Article 46:

Refers to Section 2.10.11. of Part 2 of Book 3 of the Royal Order of 8 September 2019 (external influences - competence of persons (BA)).

Article 46 standardises the terminology of the term 'place accessible to the public' in Table 2.15 in line with the new definition of this place.

Article 47:

Refers to Section 2.10.14. of Part 2 of Book 3 of the Royal Order of 8 September 2019 (external influences - possibilities for evacuation of persons in the event of an emergency (BD)).

Article 47 standardises the terminology of the term 'place accessible to the public' in Table 2.18 in line with the new definition of this place.

Article 48:

Refers to Subsection 4.2.2.2. of Part 4 of Book 3 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in ordinary places).

Article 48 corrects a drafting error in a Dutch term in point (b).

Article 49:

Refers to Subsection 4.2.2.3. of Part 4 of Book 3 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in places of electrical service).

Article 49 corrects drafting errors in the Dutch text of point a.3.3.

Article 50:

Refers to Subsection 4.2.2.4 of Part 4 of Book 3 of the Royal Order of 8 September 2019 (protection against electric shock by direct contact in special cases)).

Article 50 standardises the terminology of the term 'place accessible to the public' in point (b) in accordance with the new definition of this place.

Article 51:

Refers to Subsection 4.2.3.2. of Part 4 of Book 3 of the Royal Order of 8 September 2019 (grounding installation).

Article 51 aligns the Dutch text with the French text concerning the local placement of the additional equipotential bonding.

Article 52:

Refers to Subsection 4.3.3.7. of Part 4 of Book 3 of the Royal Order of 8 September 2019 (special fire protection measures).

Article 52 standardises the terminology of the term 'place accessible to the public' in Table 4.9. of point (a) in accordance with the new definition of this place.

Article 53:

Refers to Subsection 4.5.2.3. of Part 4 of Book 3 of the Royal Order of 8 September 2019 (protection against overvoltages - ducts common to energy and telecommunication conductors).

Article 53 standardises the terminology of the term 'place accessible to the public' in accordance with the new definition of this place.

Article 54:

Refers to Subsection 5.2.6.1 of Part 5 of Book 3 of the Royal Order of 8 September 2019 (general connections).

Article 54 adapts the terminology of the current term 'bewapening' in the Dutch text.

Article 55:

Refers to Subsection 5.2.10.2. of Part 5 of Book 3 of the Royal Order of 8 September 2019 (method of installation of underground wiring systems).

Article 55 adapts the terminology of the current term 'bewapening' in point (a.2) of the Dutch text.

Article 56:

Refers to Subsection 5.3.5.1. of Part 5 of Book 3 of the Royal Order of 8 September

2019 (distribution and control panels).

Article 56 standardises the terminology of the term 'place accessible to the public' in point (a) in accordance with the new definition of this place.

Article 57:

Refers to Subsection 7.1.6.5. of Part 7 of Book 3 of the Royal Order of 8 September 2019 (overhead lines in the vicinity of other pipelines).

Article 57 adapts the terminology of the current term 'bewapening' in point (d.3) of the Dutch text.

Article 58:

Refers to Section 9.1.5. of Part 9 of Book 3 of the Royal Order of 8 September 2019 (document on external influences).

Article 58 requires the owner, manager, or operator of an electrical installation for the transmission and distribution of electrical energy to indicate on the external influences document the places accessible to the public supplied by the electrical installation. If no place accessible to the public is supplied by the electrical installation, this information shall also be included in the external influences document.

Article 59:

Refers to Book 3 of the Royal Order of 8 September 2019 in general.

Article 59 standardises the terminology of the term 'place accessible to the public' in Book 3 of the Royal Order of 8 September 2019 in accordance with the new definition of this place. This article also adapts the terminology of the current terms 'pantsering' and 'bepantsering' in the Dutch text of Book 3 of the Royal Order of 8 September 2019.

Article 60:

Article 60 lays down a transitional provision for existing electrical installations in Books 1, 2 and 3 of the Royal Order of 8 September 2019 concerning the indication of places accessible to the public on the external influences document. For any electrical installation made prior to the entry into force of this Royal Order, the aforementioned obligation must be implemented no later than 2 years from the entry into force of this Royal Order. If the existing places accessible to the public are already clearly indicated on any other document that may be made available to any person who needs to consult it in order to carry out their activity on the electrical installation, it is permissible not to comply with this obligation.

Article 61:

Article 61 defines the transitional period prior to the entry into force of this Royal Order. The latter shall enter into force on the first day of the fifth month following its publication in the Moniteur belge.

Article 62:

In view of the shared competence of the General Regulations on Electrical Installations (Articles 13 and 14 of the Royal Order of 8 September 2019), the Minister for Labour

and the Minister for Energy are charged with the execution of this Order.

### **III. Comments on the Annex**

The new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 contains the safety measures applicable to electrical installations in places containing a bathtub and/or shower.

The content of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019, applicable until the entry into force of this Royal Order, has been taken from Article 86.10 of the former RGIE. The above-mentioned article had been revised in 2004. In view of the evolution of the international standard IEC 60364-7-701 since 2004 for electrical installations in these places, it was decided, in collaboration with various stakeholders, to once again revise the applicable safety measures for electrical installations in places containing a bathtub and/or shower, in light of changes made to the aforementioned standard.

The structure of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 is as follows:

- (1) the scope;
- (2) terms and definitions;
- (3) determination of general characteristics;
- (4) protection against electric shock;
- (5) selection and installation of electrical equipment.

The general and specific requirements of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 apply to the electrical installations of places containing a bathtub and/or shower.

In Parts 6 and 8 of Book 1 of the Royal Order of 8 September 2019, derogations are also provided for the electrical installations of places containing a bathtub and/or shower that are already in service at the entry into force of this Royal Order. These derogations apply to the electrical installations of these places during an on-the-spot inspection carried out by an approved body, as well as to any non-significant modification or extension made to the electrical installation of these places or having no impact on the volumes of these places.

Section 7.1.1 of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 defines the scope of places containing a bathtub and/or shower:

- (1) indoor or outdoor places containing a bathtub and/or shower permanently installed in a specific location (examples: bathroom in a building, fixed beach shower);
- (2) mobile applications (e.g. mobile shower for construction site).

There are also five exceptions for which the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 does not apply. A reference to a new chapter in Part 7 of Book 1 of the Royal Order of 8 September 2019 concerning places for medical use is already provided for any derogating provisions.

The concept of 'place containing a bathtub and/or shower' is new. It is linked to a location bounded by the finished ground, a 3 m horizontal plane from the finished ground, and a 4 m vertical plane measured horizontally from the fixed water inlets. Under certain conditions, the horizontal and vertical walls may influence the dimensions of the place. This also applies to the presence of doors and windows. These conditions

are also set out in Subsection 7.1.3.1. of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019. To help understand the determination of the dimensions of the place, examples are included in Section 7.1.3 of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019.

Transitional provisions are provided for projects and works in progress at the time of entry into force of this Royal Order in order to still apply the requirements of Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 applicable prior to the entry into force of this Royal Order. The applicant for the inspection must indicate at the time of the conformity check before putting into use whether or not the approved body responsible for the inspection must apply the transitional provisions. This information must be included in the inspection report by the approved body responsible for the inspection. The communication of the application of the transitional or non-transitional provisions and the determination of the date linked to the start of the implementation of the project or works fall under the responsibility of the applicant for the inspection.

Section 7.1.2. of the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 provides for the definition of certain specific terms used in this new chapter.

Section 7.1.3 of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 determines:

- (1) the influence of walls, doors, and windows;
- (2) the determination of the volumes around a bathtub and a shower with or without a tray.

For the sizing of the place, the doors and windows forming part of the fixed walls may influence the dimensions of the place and are considered closed. A fixed vertical wall with a height of at least 2.25 m may also influence the sizing of the place. A lower height may also be considered under certain conditions.

For the sizing of volumes around the bathtub or shower, with or without a tray, the height of fixed walls can influence the dimensions of the volumes. This influence is considered with a vertical and horizontal clearance. Doors and windows forming part of the fixed walls and located in the volumes must be considered open, with the exception of shower doors forming part of the shower, and as fixed walls with the same influence.

The new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019 also takes into account the type of ceiling or false ceiling that may have an influence on the place and volumes.

Two specific cases are also provided for a shower: a bathtub with a shower and a shower with multiple water inlets.

As regards the definition of volumes, Subsection 7.1.3.2. of the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 distinguishes between the case of a bathtub and the case of a shower.

Volume 3 as defined until the entry into force of this Royal Order no longer exists.

Volume 1a, as defined until the entry into force of this Royal Order, is incorporated into Volume 1.

Volume 2 of a shower, as defined until the entry into force of this Royal Order, is incorporated into Volume 1.

The volumes defined around a bathtub are therefore Volumes 0, 1 and 2.

The volumes defined around a shower with or without a tray are therefore Volumes 0 and 1.

Subsection 7.1.3.2. of the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 sets out how to determine each volume for a bathtub and shower with or without a tray in the horizontal and vertical planes.

To aid in understanding the sizing of the volumes of a bathtub and a shower with or without a tray, various figures are included in Section 7.1.3 of the new Chapter 7.1 of Book 1 of the Royal Order of 8 September 2019.

Section 7.1.4. of the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 provides for specific safety measures against electric shock in places containing a bathtub and/or shower.

These measures are as follows:

- (1) the degree of protection of the electrical equipment according to its location in the place. The degree of protection IP00 is permitted when using very low safety voltage, the maximum voltage of which depends on the location of the electrical equipment in the place;
- (2) the use of very low safety voltage (direct and indirect contacts), the maximum voltage of which depends on the location of the electrical equipment in the place;
- (3) protection by means of safety separation of circuits under certain conditions;
- (4) passive protection against electric shock by indirect contact referred to in point (d) of Subsection 4.2.3.3. of Book 1 of the Royal Order of 8 September 2019 (protection making simultaneous contact between parts that may be brought to dangerously different potentials impossible). This measure is considered only as additional;
- (5) active protection against electric shock by indirect contact by means of a high or very high sensitivity residual current protective device that is placed outside the place. This device may be used to protect circuits in other places;
- (6) the installation of an additional equipotential bond in the place. A figure illustrates this placement as an example.

Measures are also provided for the placement of electrical heating elements incorporated into the fixed walls of the place containing a bathtub and/or shower.

Section 7.1.5. of the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 lays down specific safety measures for the installation of electrical equipment in the place containing a bathtub and/or shower.

The place containing a bathtub and/or shower is characterised by the combination of three external influences for the selection and installation of electrical equipment: AD, BB and BC. They depend on the location of the electrical equipment in the place.

Subsection 7.1.5.2. of the new Chapter 7.1. of Book 1 of the Royal Order of 8 September 2019 defines the electrical equipment authorised in the various volumes of the place, i.e. prefabricated baths or showers covered by an EU declaration of conformity, electrical switchboards, junction boxes, fixed electrical machines or appliances, socket-outlets, control devices, etc. and the related conditions.

Overcurrent protection devices for circuits in places containing a bathtub and/or shower

are not circuits dedicated exclusively to these places.

The aforementioned subsection specifies the methods of laying low-voltage and very low-voltage safety wiring systems permitted in the volumes and their limitation to those necessary in the volumes. Wiring systems with steel armouring or conduit are prohibited in a place containing a bathtub and/or shower.

The place containing a bathtub and/or shower shall extend to a recess depth of 0.05 m in the fixed walls.

We remain,

Sire,

Your Majesty's

most respectful and faithful servants,

The Minister for Labour,  
Pierre-Yves Dermagne

The Minister of Energy,  
Tinne Van der Straeten

COUNCIL OF STATE  
legislation section

Sixteenth Chamber

The request for an opinion submitted on 4 July 2024 by the Minister for Energy, on a draft Royal Order 'amending Chapter 7.1 of Book 1 and certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on low-voltage and very low-voltage electrical installations, Book 2 on high-voltage electrical installations and Book 3 on installations for the transmission and distribution of electrical energy', with



number 76.938/16 of the roll of the Legislation Section of the Council of State, was removed from the roll on 10 July 2024, in accordance with Article 84(5) of the Laws 'on the Council of State', coordinated on 12 January 1973.

## KINGDOM OF BELGIUM

### FEDERAL PUBLIC SERVICE ECONOMY, SMES, SMALL BUSINESSES AND ENERGY

**Royal Order amending Chapter 7.1 of Book 1 and certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Installations for the Transport and Distribution of Electrical Energy**

PHILIPPE, King of the Belgians,  
To all those present and to come, Greetings.

Having regard to the Law of 10 March 1925 on electrical energy distribution, Article 21(1);

Having regard to the Law of 4 August 1996 on the well-being of workers in the performance of their work, Article 4(1), subparagraph 1, as amended by the Law of 7 April 1999 and Article 5(3);

Having regard to the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Installations for the Transport and Distribution of Electrical Energy;

Having regard to the opinion of the Finance Inspector, given on 28 August 2023;

Having regard to the opinion of the High Council for Prevention and Protection at Work, given on 15 December 2023, pursuant to Article 95, subparagraph 1, of the Law of 4 August 1996 on well-being of workers in the performance of their work;

Having regard to the opinion of the Standing Committee on Electricity, given on 9 January 2024, pursuant to Article 22(5) of the Law of 10 March 1925 on the distribution of electricity, as amended by the Law of 8 May 2014;

Having regard to the communication 2024/0022/B to the European Commission of

17 January 2024, pursuant to Article 5(1), of the Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services;

Having regard to the request for an opinion to the Council of State, within 30 days, pursuant to Article 84(1), subparagraph 1(2), of the Laws on the Council of State, coordinated on 12 January 1973;

Whereas the request for an opinion was placed on 4 July 2024 in the registry of the Legislation Section of the Council of State under number 76.938/16;

Having regard to the decision of the Legislation Section of 10 July 2024 not to give an opinion within the period requested, pursuant to Article 84(5), of the Laws on the Council of State, consolidated on 12 January 1973;

On the proposal of the Minister of Labour and the Minister of Energy,

WE HAVE DECREED AND HEREBY DECREE:

**Article 1:** In Annex 1, Book 1, Part 2, Chapter 2.2., Section 2.2.1., Subsection 2.2.1.1., of the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Installations for the Transport and Distribution of Electrical Energy, as amended by the Royal Order of 5 March 2023, the following definition is inserted between the definitions 'Ordinary place' and 'Normal operation', worded as follows:

' **Place accessible to the public (premises or site):** a place accessible to all, without prior authorisation, whether access is permanent, temporary or subject to certain conditions.'

**Article 2** In Annex 1, Book 1, Part 2, Chapter 2.4., Section 2.4.1. of the same Order, as amended by the Royal Order of 5 March 2023, in the Dutch definition of mass, the word 'bewapening' is replaced by the word 'wapening'.

**Article 3** In Annex 1, Book 1, Part 2, Chapter 2.10., section 2.10.5, Table 2.10., second row, fourth column, of the same Order, the words 'premises open to the public' are replaced by the words 'premises accessible to the public'.

**Article 4** In Annex 1, Book 1, Part 2, Chapter 2.10., Section 2.10.11., Table 2.15., second row, fourth column, of the same Order, the words 'premises open to the general public' are replaced by the words 'premises accessible to the public'.

**Article 5** In Annex 1, Book 1, Part 2, Chapter 2.10., Section 2.10.14., Table 2.18., of the same Order, the following amendments are made:

(1) in the fourth row, fifth column, the words 'Establishments open to the public' are replaced by the words 'Buildings with places open to the public';

(2) in the fifth row, fifth column, the words 'Establishments open to the public in tall buildings (higher than 25 m)' are replaced by the words 'Buildings of a height greater than 25 m with locations open to the public'.

**Article 6** In Annex 1, Book 1, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.3., d., of the same Order, in the Dutch text, the word 'genaakbare' is replaced by the word 'samenstellende'.

**Article 7** In Annex 1, Book 1, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.4., a.3.3., of the same Order, the following amendments are made to the Dutch text:

(1) the words 'naast een gewone ruimte gelegen is die toegankelijk is voor het pubk' are replaced by the words 'aan een voor het publicationk Toegankelijke ruimte grenst,';

(2) the words 'of van elke ander' are replaced by the words 'of door een ander'.

**Article 8** In Annex 1, Book 1, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.5, of the same Order, as amended by the Royal Order of 5 March 2023, the following amendments are made:

(1) in provision a., second indent, in the French text, the words 'in a material or in the ground' are replaced by the words 'in a material or in a wall';

(2) in the same provision, in the Dutch text, the words 'in materialen of in vloeren' are replaced by the words 'in een materiaal of in een wand';

(3) in the provision c., in the French text, the words 'in a material or in the ground' are each time replaced by the words 'in a material or in a wall';

(4) in the same provision, in the Dutch text, the following amendments are made:

a) the words 'in materialen of in vloeren' are replaced by the words 'in een materiaal of in een wand';

b) the words 'in een materiaal of in een vloer' are replaced by the words 'in een materiaal of in een wand';

(5) in provision d., the following amendments are made:

a) the words 'permanently installed in ordinary places not open to the public' are repealed;

b) the same provision shall be supplemented by a fourth indent, worded as follows: '- they are not installed in places open to the public.';

(6) in the provision e., subparagraph 2, the words 'ordinary places not open to the public' are replaced by the words 'ordinary places';

(7) in the provision j., the words 'ordinary places not open to the public' are replaced by the words 'ordinary places which are not considered to be places open to the public';

(8) in the provision m., the following amendments are made:

a) the words 'ordinary places not open to the public' shall be replaced by the words 'ordinary places';

b) the same provision shall be supplemented by a fifth indent, worded as follows:

'- ordinary places shall not be regarded as places open to the public.'

**Article 9** In Annex 1, Book 1, Chapter 4.2., Section 4.2.3., Subsection 4.2.3.2., subparagraph 8, of the same Order, as amended by the Royal Order of 5 March 2023, in the Dutch text, the word 'plaatselijk' is inserted after the word 'hij'.

**Article 10** In Annex 1, Book 1, Chapter 4.2., Section 4.2.4., Subsection 4.2.4.3., b., of the same Order, replaced by the Royal Order of 5 March 2023, the following amendments are made:

(1) in subparagraph 5., 3., the words 'places containing a bathtub and/or shower' are replaced by the words 'places containing a bathtub and/or shower as referred to in Chapter 7.1.';

(2) in Figure 4.11., the words "16 single or multiple sockets per terminal circuit" are repealed.

**Article 11** In Annex 1, Book 1, Chapter 4.3., Section 4.3.3., Subsection 4.3.3.7., a., Table 4.10., third line, of the same Order, the words 'Premises open to the public' are replaced by the words 'Publicly accessible premises'.

**Article 12** In Annex 1, Book 1, Part 4, Chapter 4.5., Section 4.5.4., of the same Order, the words 'ordinary places not accessible to the public' are replaced by the words 'ordinary places which are not considered to be places accessible to the public'.

**Article 13** In Annex 1, Book 1, Part 5, Chapter 5.2., Section 5.2.1., Subsection 5.2.1.4., b., second indent of the same Order, the words 'ordinary places not accessible to the public' are replaced by the words 'ordinary places which are not considered to be places accessible to the public'.

**Article 14** In Annex 1, Book 1, Part 5, Chapter 5.2., Section 5.2.6., Subsection 5.2.6.1., subparagraph 6, of the same Order, in the Dutch text, the word 'bewapening' is each time replaced by the word 'wapening'.

**Article 15** In Annex 1, Book 1, Part 5, Chapter 5.2., Section 5.2.9., Subsection 5.2.9.2., a., first indent of subparagraph 4, of the same Order, in the Dutch text, the word 'bewapening' is replaced by the word 'wapening'.

**Article 16** In Annex 1, Book 1, Part 5, Chapter 5.3., Section 5.3.5., Subsection 5.3.5.1., a., of the same Order, as amended by the Royal Order of 5 March 2023, subparagraph 2 is replaced by the following:

' In electrical installations in places open to the public, distribution and control panels shall comply with the related standards approved by the King or registered by the NBN or with provisions which ensure a safety level at least equivalent to that defined in these standards.'

**Article 17** In Annex 1, Book 1, Part 5, Chapter 5.3., Section 5.3.5., of the same

Order, as amended by the Royal Order of 5 March 2023, Subsection 5.3.5.2. is replaced by the following:

**‘a. Low voltage socket-outlets in alternating current electrical installations**

Socket-outlets have a protection rating of at least IPXX-B.

Socket-outlets with a rated current not exceeding 16A and the rated voltage not exceeding 250V shall have a protection rating of at least IPXX-D.

Socket-outlets with a rated current not exceeding 32A and the rated voltage not exceeding 400V shall comply with standard NBN C 61-112-1:2017 for power connections for domestic and similar uses.

By way of derogation from subparagraphs 2 and 3, other socket-outlets may be used in the following cases:

- socket-outlets which are intended exclusively for the supply of one or more appliances for specific use;
- socket-outlets placed in or on distribution and control panels;
- the fixed connection point for power supply:
  - campsites referred to in Chapter 7.8. ;
  - marinas referred to in Chapter 7.9. ;
  - road vehicles or trailers while parked as referred to in Chapter 7.101. ;
- temporary, mobile or transportable installations as defined in Subsection 2.2.1.1. ;
- the places of the electrical service;
- socket-outlets fitted with mechanical or electrical interlock that de-energises the active parts of the socket-outlet after the plug has been removed.

Socket-outlets that are embedded in the walls (floor, ceiling, wall) are housed either in metal boxes or in insulating boxes.

**b. Specific rules for domestic installations**

The socket-outlets, with the exception of those at SELV, shall all have an earth contact connected to the wiring system protection conductor, unless the socket-outlet is supplied via an individual circuit separation transformer in accordance with the provisions of Subsection 4.2.3.3., c. They are of a type as referred to in point (a).

The number of single or multiple socket outlets is limited to eight per circuit.

The circuits supplying lighting fixtures shall be at least two separate circuits for residential units that comprise more than two spaces and/or locations.

Socket-outlets, lighting fixtures and other fixed appliances, with the exception of fixed appliances in dedicated circuits and referred to in Subsection 5.2.1.2., may be supplied by the same terminal circuit. The requirements for these circuits are those for circuits supplying socket-outlets, a fixed appliance or a set of fixed appliances controlled by a common control device being treated as a socket-outlet.

**c. Transitional provisions**

By way of derogation from point (a), Subsection 6.5.8.1., 2. and Subsection 6.5.8.2., 3. may be applied to projects or works commenced on site before the entry into

force of Subsection 6.5.8.1., 2. and Subsection 6.5.8.2., 3., provided that the pre-use compliance check takes place from the entry into force of Subsection 6.5.8.1., 2. and Subsection 6.5.8.2., 3. The approved organisation which is entrusted with the conformity check before putting into use shall be informed by the applicant of the monitoring of the application of Subsection 6.5.8.1., 2. or Subsection 6.5.8.2., 3. The approved organisation shall include in the monitoring report on the application of Subsection 6.5.8.1., 2. or Subsection 6.5.8.2., 3.’

**Article 18** In Annex 1, Book 1, Part 5, Chapter 5.4., Section 5.4.3., Subsection 5.4.3.1., subparagraph 2, of the same Order, in the French text, the words ‘domestic places’ are replaced by the words ‘domestic installations’.

**Article 19** In Annex 1, Book 1, Part 6, Chapter 6.4., Section 6.4.7., Subsection 6.4.7.2, subparagraph 1(2), of the same Order, the words ‘with power connections’ are replaced by the words ‘with socket-outlets’.

**Article 20** In Annex 1, Book 1, Part 6, Chapter 6.5., Section 6.5.7., Subsection 6.5.7.2., b.4., subparagraph 2(b), of the same Order, in the Dutch text, the word ‘stopcontactdozen’ is replaced by the word ‘contactdozen’.

**Article 21** In Annex 1, Book 1, Part 6, Chapter 6.5., Section 6.5.8., Subsection 6.5.8.1., of the same Order, inserted by the Royal Order of 5 March 2023, the provisions 2. and 3. are inserted, worded as follows:

## **‘2. Socket-outlets**

It is authorised, by way of derogation from the requirements of Subsection 5.1.3.1. and Subsection 5.3.5.2., a., to leave socket-outlets installed in accordance with Book 1 before the entry into force of Subsection 6.5.8.1., 2.

## **3. Protection of places containing a bathtub and/or shower**

This derogation applies to:

1. existing electrical installations in premises containing a bath and/or shower and existing domestic installations containing a private swimming pool, the operation of which was started on site before the entry into force of Subsection 6.5.8.1., 3. ;
2. places containing a bath and/or shower and existing domestic installations containing a private swimming pool, the operation of which was started on site before the entry into force of Subsection 6.5.8.1., 3., and for which:
  - non-significant modifications or extensions are made to the electrical installation;  
or
  - changes have no impact on the volumes defined in 3.2. or on the electrical installation.

**3.1.** By way of derogation from Subsection 7.1.1.1., subparagraph 5, it is authorised to delineate the place containing a bathtub and/or shower as a place limited by the volumes defined in 3.2.

**3.2.** By way of derogation from section 7.1.3., the following volumes and the presence of fixed walls or pivoting wall elements may be taken into account to delineate the place containing a bathtub and/or shower:

**a) volume 0:** the inner volume of the bathtub or shower tray.

For a place containing several collective showers without partitions, the volume 0 is as described above considering that the shower tray or what acts as a shower tray consists of the drainage surface for the water projected by the shower.

**b) volume 1:** the volume contained in the vertical surface at the edge of the bathtub or shower tray which is limited at the bottom, by the horizontal plane of the floor surrounding the bathtub or shower tray and at the top, by the horizontal plane located 2.25 m from the preceding horizontal plane and from which the volume 0 as described above and the possible volume 1a as described below are extracted. However, if the bottom of the bathtub or shower tray is located at a height greater than 0.15 m from the floor, the height of the top horizontal plane shall be measured from the bottom of the bathtub or shower tray. If a shower does not have a tray, this latter is replaced by a circle on the floor with a radius of 0.60 m, the centre of which is directly below the shower head when this is attached to its support.

For a place containing several collective showers without partitions, the volume 1 is as described above considering that the shower tray or what acts as a shower tray consists of the drainage surface for the water projected by the shower.

**c) volume 1a:** the volume delimited by the outer wall of the bathtub and a full structure connecting to the edge of the bathtub and joining the floor.

**d) volume 2:** the volume outside volume 1 and any volume 1a, limited by the vertical plane 0.60 m away from the limit of volume 1 and by the same horizontal planes as those defined in volume 1.

For a place that contains individual showers without individual changing area, volume 2 is the volume outside volumes 0 and 1 and limited by the vertical plane located 3 m from the limit of volumes 0 and 1 and by the same horizontal planes as those defined in volume 1.

For a place that contains several collective showers without partitions, volume 2 is the volume outside volumes 0 and 1 and limited by the vertical plane located 3 m from the limit of volumes 0 and 1 and by the same horizontal planes as those defined in volume 1.

**e) Volume 3:** the volume outside volume 2, limited by the vertical plane 2.40 m from volume 2 and by the same horizontal planes as those defined in volume 1 and limited to the place containing the bathtub and/or shower.

For a place that contains several individual showers including the shower itself and possibly the individual changing area partially separated from each other, volume 3 is the volume outside volume 2 and limited by the vertical plane consisting of the walls of the place and by the same horizontal planes as those defined in volume 1.

For a place that contains several collective showers without partitions, volume 3 is the volume outside volume 2 and limited by the vertical plane consisting of the walls of the place and by the same horizontal planes as those defined in volume 1.

**3.3.** By way of derogation from Subsection 7.1.4.2., b., it is authorised to leave in service terminal circuits supplying several appliances which are protected by means of the safety separation of the circuits.

**3.4.** By way of derogation from Subsection 7.1.4.4., it is authorised to leave in

service an additional equipotential bond which does not connect locally all the grounds of the electrical equipment and all simultaneously accessible foreign conductors located in volumes 0, 1, 1a, 2 and 3 described in 3.2.

**3.5.** By way of derogation from Subsection 7.1.5.2., it is authorised to leave in service:

- in volume 0 described in 3.2., the electrical equipment referred to in Subsection 7.1.5.2., b., as well as SELV-powered control apparatus and lighting (IPX7: 12V AC, 18V non-smooth DC and 30V smooth DC and IP00: 6V AC, 12V non-smooth DC and 20V smooth DC);
- in volume 1 described in 3.2., the electrical equipment referred to in Subsection 7.1.5.2., c., as well as fixed domestic hot water production appliances supplied at low voltage;
- in volume 2 described in 3.2., the electrical equipment referred to in Subsection 7.1.5.2., d.;
- in volume 1a described in 3.2. :
  - the electrical equipment necessary for the operation of a hydromassage bathtub including the power supply point. This equipment has an IPX4 protection rating. If the power supply point is a low-voltage socket-outlet, this outlet has an IPXX protection rating;
  - electrical equipment powered by SELV (IPX4: 25V AC, 36V non-smooth DC and 60V smooth DC and IP00: 12V AC, 18V non-smooth DC and 30V smooth DC).

**3.6.** By way of derogation from Subsection 7.1.5.2, it is authorised to add a new circuit to an existing distribution and control panel in volume 3 described in 3.2.’

**Article 22** In Annex 1, Book 1, Part 6, Chapter 6.5., Section 6.5.8., Subsection 6.5.8.2., of the same Order, inserted by the Royal Order of 5 March 2023, the provisions 3. and 4. are inserted, worded as follows:

### **‘3. Socket-outlets**

It is authorised, by way of derogation from the requirements of Subsection 5.1.3.1. and Subsection 5.3.5.2., a., to leave socket-outlets installed in accordance with Book 1 before the entry into force of Subsection 6.5.8.2., 3.

### **4. Protection of places containing a bathtub and/or shower**

**4.1.** The derogations referred to in Subsection 6.5.8.1., 3. shall apply.

**4.2.** By way of derogation from Subsection 7.1.5.2., e., it is authorised to leave in service wiring systems passing through these premises which are not intended for supplying such premises. If these wiring systems have armouring, they are covered with insulating material throughout their course.’

**Article 23** In Annex 1, Book 1, Part 7, of the same Order, as amended by the Royal Orders of 10 July 2022 and 5 March 2023, Chapter 7.1 is replaced by the text annexed to this Order.

**Article 24** In Annex 1, Book 1, Part 7, Chapter 7.2., of the same Order, Section 7.2.5. is repealed.



**Article 25** In Annex 1, Book 1, Part 1, Chapter 7.102., Section 7.102.8., Subsection 7.102.8.4, of the same Order, the following amendments are made:

(1) in the French text, the word 'armour' is each time replaced by the word 'armouring';

(2) in the Dutch text, the word 'bewapening' is each time replaced by the word 'wapening'.

**Article 26** In Annex 1, Book 1, Part 8, Chapter 8.1., Section 8.1.1., subparagraph 3, of the same Order, the words 'and the common parts' shall be inserted after the words 'in the technical rooms'.

**Article 27** In Annex 1, Book 1, Part 8, Chapter 8.2., Section 8.2.1. of the same Order, as amended by the Royal Order of 5 March 2023, the following amendments are made:

(1) provision 6. shall be replaced by the following:

#### **'6. Socket-outlets**

It is authorised to:

a) by way of derogation from the requirements of Subsection 5.1.3.1. and Subsection 5.3.5.2., a., to leave in service socket-outlets installed before 1 October 1981 and meeting the requirements of Book 1 applicable before the entry into force of Section 8.2.1., 6., a);

b) by way of derogation from the requirements of Subsection 5.3.5.2., b., to leave in service:

- socket-outlets which have no earth contact due to the fact that the wiring system has no protective conductor and provided that these socket-outlets are protected by a high or very high sensitivity differential-residual current protection device;
- by terminal circuit a number of more than 8 single or multiple socket-outlets provided that the power of fixed and stationary connected apparatus does not exceed the permissible power in the wiring system.

Socket-outlets with an earth pin that is not effectively galvanically connected to the earth electrode of the electrical installation are prohibited.';

(2) provision 15. is replaced by the following:

#### **'15. Protection of places containing a bathtub and/or shower**

**15.1.** The derogations referred to in Subsection 6.5.8.1., 3. shall apply.

**15.2.** By way of derogation from Subsection 7.1.4.4., Subsection 7.1.4.5. and Subsection 7.1.5.2., e., it is authorised, provided that the distance from volume 2 is 1 m:

- wiring systems that do not meet the requirements may be left in operation;
- the additional equipotential bond may be dispensed with;

to keep in service heating resistors incorporated into the floor which do not meet the requirements of Subsection 7.1.4.5. or as regards their installation as a result of the impossibility of connecting them to the additional equipotential bond referred to in the second indent.'

**Article 28** In Annex 1, Book 1, Part 8, Chapter 8.2., Section 8.2.2. of the same Order, as amended by the Royal Order of 5 March 2023, the following amendments are made:

(1) in provision 5., the seventh indent is replaced by the following:

‘- of Subsection 7.1.5.2., e., to leave in operation in premises containing a bathtub and/or a shower, cables fitted with metal armour such as VFVB type, for electrical installations commenced on site before 22 July 1986.’;

(2) in provision 6., a subparagraph 2 is inserted, worded as follows:

‘ It is authorised, by way of derogation from the requirements of Subsection 5.1.3.1. and Subsection 5.3.5.2., a., to leave in operation socket-outlets installed between 1 October 1981 and 31 May 2020 and meeting the requirements of Book 1 applicable prior to the entry into force of Section 8.2.2, subparagraph 2, 6.’;

(3) in section 8.2.2. a provision 11. is inserted, worded as follows:

**‘11. Protection of places containing a bathtub and/or shower**

The derogations referred to in Subsection 6.5.8.1., 3. shall apply.’.

**Article 29** In Annex 1, Book 1, Part 8, Chapter 8.3., Section 8.3.2., Subsection 8.3.2.2., of the same Order, as amended by the Royal Order of 5 March 2023, provisions 5. and 6. are inserted, worded as follows:

**‘5. Socket-outlets**

It is authorised, by way of derogation from the requirements of Subsection 5.1.3.1. and Subsection 5.3.5.2., a., to leave in operation socket-outlets installed between 1 October 1981 and 31 May 2020 and meeting the requirements of Book 1 applicable prior to the entry into force of Subsection 8.3.2.2., 5.

**6. Protection of places containing a bathtub and/or shower**

The derogations referred to in Subsection 6.5.8.2., 4. shall apply.’.

**Article 30** In Annex 1, Book 1, Part 8, Chapter 8.4., Section 8.4.3. of the same Order, as amended by the Royal Order of 5 March 2023, in the French text, the words ‘of a residential estate’ are repealed.

**Article 31** In Annex 1, Book 1, Part 9, Chapter 9.1., Section 9.1.6. of the same Order, as amended by the Royal Order of 5 March 2023, a paragraph worded as follows is inserted between paragraphs 4 and 5:

‘ The owner, manager or operator shall indicate places open to the public on the external influences document. If there is no place open to the public, the owner, manager or operator shall mention it on the external influences document.’.

**Article 32** In Book 1 of Annex 1, to the same Order, as amended by the Royal Orders of 10 July 2022 and 5 March 2023, the following amendments are made:

(1) the words ‘ordinary place(s) open to the public’ shall each time be replaced by

the words 'place(s) open to the public';

(2) in the Dutch text, the words 'pantsering' and 'bepantsering' are replaced each time by the word 'wapening'.

**Article 33** In Annex 2, Book 2, Part 2, Chapter 2.2., Section 2.2.1., Subsection 2.2.1.1., of the same Order, as amended by the Royal Order of 5 March 2023, the following definition is inserted between the definitions 'Ordinary place' and 'Normal operation', worded as follows:

**'Place accessible to the public (premises or site):** a place accessible to all, without prior authorisation, whether access is permanent, temporary or subject to certain conditions.'

**Article 34** In Annex 2, Book 2, Part 2, Chapter 2.4., Section 2.4.1. of the same Order, as amended by the Royal Order of 5 March 2023, in the Dutch definition of mass, the word 'bewapening' is replaced by the word 'wapening'.

**Article 35** In Annex 2, Book 2, Part 2, Chapter 2.10., Section 2.10.5., Table 2.10., second row, fourth column, of the same Order, the words 'premises open to the public' are replaced by the words 'premises accessible to the public'.

**Article 36** In Annex 2, Book 2, Part 2, Chapter 2.10., Section 2.10.11., Table 2.15., second row, fourth column, of the same Order, the words 'premises open to the general public' are replaced by the words 'premises accessible to the public'.

**Article 37** In Annex 2, Book 2, Part 2, Chapter 2.10., Section 2.10.14., Table 2.18., of the same Order, the following amendments are made:

(1) in the fourth row, fifth column, the words 'Establishments open to the public' are replaced by the words 'Buildings with places open to the public';

(2) in the fifth row, fifth column, the words 'Establishments open to the public in tall buildings (height above 25 m)' are replaced by the words 'Buildings of a height greater than 25 m with places open to the public'.

**Article 38** In Annex 2, Book 2, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.3., a.3.3., of the same Order, in the Dutch text, the following amendments are made:

(1) the words 'naast een gewone ruimte gelegen is die toegankelijk is voor het pubk' are replaced by the words 'aan een voor het publicationk Toegankelijke ruimte grenst,';

(2) the words 'of van elke ander' are replaced by the words 'of door een ander'.

**Article 39** In Annex 2, Book 2, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.4, of the same Order, the following amendments are made:

(1) in the provision c., subparagraph 2, the words 'ordinary places not open to the public' are replaced by the words 'ordinary places';

(2) in the provision e., the words 'ordinary places not open to the public' are replaced by the words 'ordinary places which are not considered to be places open to the public,'.

**Article 40** In Annex 2, Book 2, Chapter 4.3., Section 4.3.3., Subsection 4.3.3.7., a., Table 4.6., third row, of the same Order, the words 'Premises open to the public' are replaced by the words 'Premises accessible to the public'.

**Article 41** In Annex 2, Book 2, Part 9, Chapter 9.1., Section 9.1.5., of the same Order, a subparagraph 5 is inserted, worded as follows:

'The owner, manager or operator shall indicate places open to the public on the external influences document. If there is no place open to the public, the owner, manager or operator shall mention it on the external influences document.'

**Article 42** In Annex 2, Book 2, of the same Order, as amended by the Royal Order of 5 March 2023, the following amendments are made:

(1) the words 'ordinary place(s) open to the public' shall each time be replaced by the words 'place(s) open to the public';

(2) in the Dutch text, the words 'pantsering(en)' is replaced each time by the word 'wapening(en)'.

**Article 43** In Annex 3, Book 3, Part 2, Chapter 2.2., Section 2.2.1., Subsection 2.2.1.1., of the same Order, as amended by the Royal Order of 5 March 2023, the following definition is inserted between the definitions 'Ordinary place' and 'Normal operation', worded as follows:

' **Place accessible to the public (premises or site):** a place accessible to all, without prior authorisation, whether access is permanent, temporary or subject to certain conditions.'

**Article 44** In Annex 3, Book 3, Part 2, Chapter 2.4., Section 2.4.1., Subsection 2.4.1.1., of the same Order, as amended by the Royal Order of 5 March 2023, in the Dutch definition of mass, the word 'bewapening' is replaced by the word 'wapening'.

**Article 45** In Annex 3, Book 3, Part 2, Chapter 2.10., Section 2.10.5., Table 2.10., second row, fourth column, of the same Order, the words 'premises open to the public' are replaced by the words 'premises accessible to the public'.

**Article 46** In Annex 3, Book 3, Part 2, Chapter 2.10., Section 2.10.11., Table 2.15., second row, fourth column, of the same Order, the words 'premises open to the general public' are replaced by the words 'premises accessible to the public'.

**Article 47** In Annex 3, Book 3, Part 2, Chapter 2.10., Section 2.10.14., Table 2.18., of the same Order, the following amendments are made:

(1) in the fourth row, fifth column, the words 'Establishments open to the public' are replaced by the words 'Buildings with places open to the public';

(2) in the fifth row, fifth column, the words 'Establishments open to the public in tall buildings (higher than 25 m)' are replaced by the words 'Buildings of a height greater than 25 m with places open to the public'.

**Article 48** In Annex 3, Book 3, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.2., b., of the same Order, in the Dutch text, the word 'genaakbare' is replaced by the word 'samenstellende'.

**Article 49** In Annex 3, Book 3, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.3., a.3.3., of the same Order, the following amendments are made to the Dutch text:

(1) the words 'naast een gewone ruimte gelegen is die toegankelijk is voor het pubk' are replaced by the words 'aan een voor het publicationk Toegankelijke ruimte grenst,';

(2) the words 'of van elke ander' are replaced by the words 'of door een ander'.

**Article 50** In Annex 3, Book 3, Part 4, Chapter 4.2., Section 4.2.2., Subsection 4.2.2.4, b., of the same Order, the following amendments are made:

(1) the words 'permanently installed in ordinary places not open to the public' are repealed;

(2) in the same provision, a fourth indent is inserted, worded as follows:

'- they are not installed in places open to the public.'

**Article 51** In Annex 3, Book 3, Chapter 4.2., Section 4.2.3., Subsection 4.2.3.2., subparagraph 5, of the same Order, as amended by the Royal Order of 5 March 2023, in the Dutch text, the word 'plaatselijk' is inserted after the word 'hij'.

**Article 52** In Annex 3, Book 3, Chapter 4.3., Section 4.3.3., Subsection 4.3.3.7., a., Table 4.9., third row, of the same Order, the words 'Premises open to the public' are replaced by the words 'Premises accessible to the public'.

**Article 53** In Annex 3, Book 3, Part 4, Chapter 4.5., Section 4.5.2., Subsection 4.5.2.3., of the same Order, the words 'ordinary places not accessible to the public' are replaced by the words 'ordinary places which are not considered to be places accessible to the public'.

**Article 54** In Annex 3, Book 3, Part 5, Chapter 5.2., Section 5.2.6., Subsection 5.2.6.1., subparagraph 6, of the same Order, in the Dutch text, the word 'bewapening' is each time replaced by the word 'wapening'.

**Article 55** In Annex 3, Book 3, Part 5, Chapter 5.2., Section 5.2.10., Subsection 5.2.10.2., a.2., first indent of the same Order, in the Dutch text, the word 'bewapening' is replaced by the word 'wapening'.

**Article 56** In Annex 3, Book 3, Part 5, Chapter 5.3., Section 5.3.5., Subsection 5.3.5.1., a., of the same Order, subparagraph 2 is replaced by the following:

' In electrical installations in places open to the public, distribution and control panels shall comply with the related standards approved by the King or registered by the NBN or with provisions which ensure a safety level at least equivalent to that defined in these standards.'

**Article 57** In Annex 3, Book 3, Part 7, Chapter 7.1., Section 7.1.6., Subsection 7.1.6.5., d.3., of the same Order, in the Dutch text, the word 'bewapening' is replaced by the word 'wapening'.

**Article 58** In Annex 3, Book 3, Part 9, Chapter 9.1., Section 9.1.5., of the same Order, a subparagraph 5 is inserted, worded as follows:

' The owner, manager or operator shall indicate places open to the public on the external influences document. If there is no place open to the public, the owner, manager or operator shall mention it on the external influences document.'

**Article 59** In Annex 3, Book 3, of the same Order, as amended by the Royal Orders of 10 July 2022 and 5 March 2023, the following amendments are made:

(1) the words 'ordinary place(s) open to the public' shall each time be replaced by the words 'place(s) open to the public';

(2) in the Dutch text, the words 'pantsering(en)' and 'bepantsering' are replaced each time by the word 'wapening(en)'.

**Article 60** Any existing non-domestic electrical installation which was carried out before the entry into force of this Order and which is referred to in Books 1, 2 and 3 of the Order of 8 September 2019 establishing Book 1 on Low Voltage and Very Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations satisfy not later than two years after the entry into force of this Order the provisions of Articles 31, 41 and 58.

By way of derogation from subparagraph 1, any other document mentioning places open to the public may comply with the provisions of Articles 31, 41 and 58.

**Article 61** This Order enters into force on the first day of the fifth month following its publication in the Moniteur belge (Belgian Official Gazette).

**Article 62** The Minister for Labour and the Minister for Energy shall each be responsible for the execution of this Order.

Issued

By the King:  
The Minister for Labour,  
Pierre-Yves Dermagne

The Minister of Energy,

Tinne Van der Straeten

## Annex

### Chapter 7.1. Locations containing a bathtub or shower

#### Section 7.1.1. Scope

##### Subsection 7.1.1.1. General points

The general requirements of the other parts of this Book apply to particular installations and locations dealt with in this Chapter 7.1. The requirements of this Chapter supplement these general requirements.

The special requirements of this Chapter shall apply to:

1. places containing permanently a bathtub and/or shower;
2. places where mobile applications are installed (e.g. mobile shower for construction site);
3. modifications or extensions that are made at these places.

The following shall not be regarded as a bathtub or shower:

1. equipment for emergency installations, e.g. emergency showers used in industrial installations or laboratories;
2. baby washbasins;
3. height-adjustable bathtubs and showers and possibly moveable for medical treatment;
4. bathtubs and showers for animals;
5. showers and bathtubs installed in transportable, mobile or temporary installations and of which:
  - the entire transportable, mobile or temporary installation in which a bathtub and/or shower is installed, is covered by an appropriate standard approved by the King or registered by the NBN, and;
  - the bathtub and/or shower also meets the requirements of the above-mentioned standard.

In places used for medical purposes where a bathtub and/or shower for medical treatment is located, special requirements may apply.

The place containing a bathtub and/or shower is delimited by:

1. the finished floor, and;
2. the horizontal plane located 3 m above the finished floor and possibly a ceiling or, if present, a false ceiling that is not open or removable without the help of a tool, if it is lower than 3 m above the finished floor, and;
3. the vertical plane:



- a) located at a distance of 4 m from the fixed water inlets, and;
- b) measured in the horizontal plane by the fixed water inlets at the bathtub or shower:
  - either from the outlet of the tap of the bathtub;
  - or the outlet of the fixed shower head;
  - or the outlet of the mixer or tap to which the shower hose is connected, and;
- c) delimited by fixed vertical walls with a height of at least 2.25 m or which are joined with a ceiling or, if present, a false ceiling that is not open or removable without the help of a tool.

(See Subsections 7.1.3.3., g. and 7.1.3.4., c.).

### **Subsection 7.1.1.2. Transitional provisions**

By way of derogation from Subsection 7.1.1.1., Subsection 6.5.8.1., 3. and Subsection 6.5.8.2., 4. may be applied to projects or works commenced on site before the entry into force of 6.5.8.1., 3. and 6.5.8.2., 4., provided that the pre-use compliance check takes place from the entry into force of Subsection 6.5.8.1., 3. and Subsection 6.5.8.2., 4. The approved organisation which is entrusted with the conformity check before putting into use shall be informed by the applicant of the monitoring of the application of Subsection 6.5.8.1., 3. or Subsection 6.5.8.2., 4. The approved organisation shall include in the monitoring report on the application of Subsection 6.5.8.1., 3. or Subsection 6.5.8.2., 4.

### **Section 7.1.2. Terms and definitions**

**Bathtub:** a receptacle with intentional retention of water intended for washing a human body with total or substantial immersion of this body in water, and intended to be emptied after use.

**Shower:** a defined place with or without a shower tray intended for washing a human body under a jet of water without intentional water retention.

**Shower tray:** a lower part of a shower used to collect and evacuate water.

The shower tray is placed on the floor or integrated into the floor.

**Electric multifunction shower cubicle:** prefabricated shower cubicle that incorporates at least one electrical function in addition to the shower function.

**Electric multifunction shower column:** multifunction shower column without a prefabricated shower cubicle that incorporates at least one electrical function in addition to the shower function.

**Shower function:** washing a human body under a jet of water.

**Fixed wall:** fixed and permanent element, possibly with doors and windows, that deflect water directed towards its surface, such as a floor, ceiling or wall.

The following definitions apply:

1. ceiling: structural member fixed directly on the structural element of the building

and covering the lower side of a horizontal wall separating two floors or from the roof;

2. false ceiling: suspended or self-supporting structural member fixed with vertical spacing with a structural element of the building and covering the lower panel with a horizontal wall separating two floors or from the roof.

The doors and windows integrated into the fixed walls prevent the water escaping from the area through these closed doors and windows.

The open space at the bottom of closed doors and fixed vertical walls is less than or equal to 0.10 m.

The following shall not be regarded as a fixed wall:

1. a curtain;
2. a fixed wall open or removable without the help of a tool;
3. a moving wall, e.g. a sliding wall.

### **Section 7.1.3. Determination of general characteristics**

#### **Subsection 7.1.3.1. General points**

The presence of fixed walls, doors and windows may influence the dimensions of the place containing a bathtub and/or shower as defined in Subsection 7.1.1.1. as well as the dimensions of the volumes defined in Subsection 7.1.3.2. :

1. when determining the dimensions of the place containing a bathtub and/or shower as defined in Subsection 7.1.1.1., the following shall be taken into account:

- a) fixed vertical walls which:
  - have a height of at least 2.25 m, or;
  - have a lower height and are joined with a ceiling or, if present, a false ceiling that is not open or removable without the help of a tool,are only taken into consideration;

b) doors and windows that are integrated into the fixed walls of this place shall be considered closed. Shower doors that form part of the shower are not taken into consideration.

2. when determining the dimensions of the volumes defined in Subsection 7.1.3.2., the following shall be taken into account:

- a) when the dimensions defined by the fixed walls are smaller than those of the volumes, account shall be taken of the out-of-reach around these walls.
- b) doors and windows which are integrated into the fixed walls and which are located totally or partially in the volumes of the place containing a bathtub and/or shower, shall be considered:
  - fully open, and;
  - as fixed walls that can influence the dimensions of the volumes.

By way of derogation from 2., b), shower doors forming part of the shower shall be considered closed, provided that the lower part of these doors is joined to the lower

level of volume 1, as referred to in Subsection 7.1.3.2., 2).

When a shower is located in volume 1 of a bathtub, as referred to in Subsection 7.1.3.2., 2), the volumes defined for this bathtub shall apply.

When a shower has more than one fixed water inlet, the volume limits to be taken into account are those given by the most severe combination of volumes obtained by considering each water inlet separately.

Subsections 7.1.3.3. and 7.1.3.4. illustrate possible configurations. These are not exhaustive:

### **Subsection 7.1.3.2. Definition of volumes**

#### **1) Volume 0**

Volume 0 is limited:

**a)** for a bathtub by the inside the bathtub as shown in Subsection 7.1.3.3., a. and g. and Subsection 7.1.3.4., a., b. and c.

**b)** for a shower:

**b.1)** with a shower tray whose depth is greater than or equal to 0.10 m, by the inside of the shower tray on a horizontal plane located 0.10 m above the highest level enabling to move from the shower tray.

**b.2)** without a shower tray or with a shower tray whose depth is less than 0.10 m, by:

**b.2.1.)** the volume from the lowest level enabling to move from the finished floor or shower tray to a horizontal plane at 0.10 m above the highest level for moving from the finished floor or shower tray, and;

**b.2.2.)** the vertical plane:

- situated at a distance of 1.20 m from the centre of each fixed water inlet, and;
- possibly bounded by fixed walls preventing water from entering the area on the other side of the walls.

(See Subsection 7.1.3.3., b., c., d., e., f. and g. and Subsection 7.1.3.4., d., e., f. and g.).

#### **2) Volume 1**

Volume 1 is limited:

**a)** for a bathtub by:

**a.1.)** the highest horizontal plane coinciding with:

- either the plane being 2.25 m above the highest level enabling to move from the bottom of the bathtub, or;
- or the plane coinciding with the highest fixed water inlets if they are higher than 2.25 m above the highest level enabling to move from the bottom of the tub, or;
- or the plane situated 2.25 m above the highest level enabling to move, between the vertical plane at the limit of volume 1 and the parallel vertical plane at 0.60 m

from it, and;

**a.2.)** the vertical plane circumscribed by the outer edge of the bathtub.

Volume 1 includes the space under the bathtub and excludes volume 0.

(See Subsection 7.1.3.3., a. and g. and Subsection 7.1.3.4., a., b. and c.).

**b)** for a shower, by:

**b.1.)** the lowest level enabling to move from the finished floor or the bottom of the shower tray, and;

**b.2.)** the highest horizontal plane coinciding with:

- either the plane coinciding with the highest fastening of the fixed water inlets; or
- or the plane situated 2.25 m above the highest level enabling to move from the finished floor or the bottom of the shower tray, and;

**b.3.)** the vertical plane:

- situated at a distance of 1.20 m from the centre of each fixed water inlet, and;
- possibly bounded by fixed walls preventing water from entering the area on the other side of the walls.

If the shower tray has a depth greater than or equal to 0.10 m with one or more outer edges with a distance greater than or equal to 1.20 m from the centre of the fixed water inlets, the vertical plane referred to in point b.3.) shall also be moved to that outer edge or outer edges of the shower tray.

Volume 1 includes the space under the shower tray and excludes volume 0.

(See Subsection 7.1.3.3., b., c., d., e., f. and g. and Subsection 7.1.3.4., d., e., f. and g.).

### **3) Volume 2**

Volume 2 is limited:

**a)** for a bathtub by:

**a.1.)** the horizontal plane coinciding with the lowest level enabling to move, between the vertical plane of volume 1 and the vertical plane at 0.60 m, and;

**a.2.)** the highest horizontal plane coinciding with that of volume 1, and;

**a.3.)** the vertical plane located at the limit of volume 1 and the parallel vertical plane located 0.60 m from the latter.

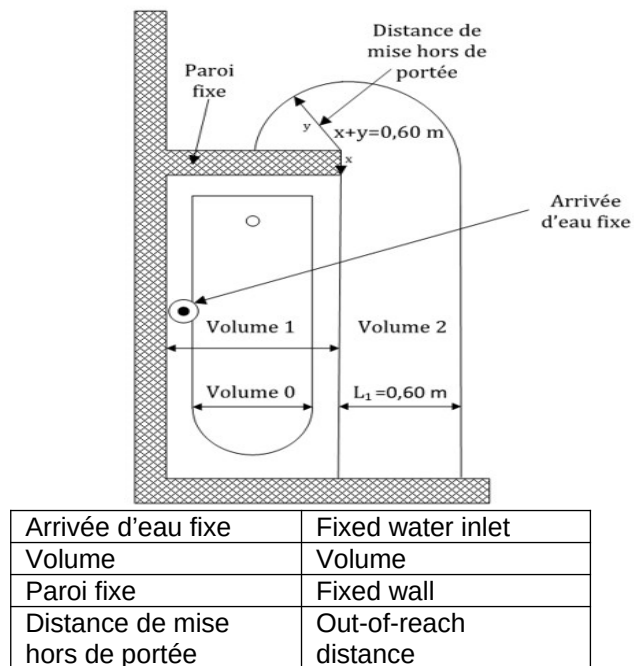
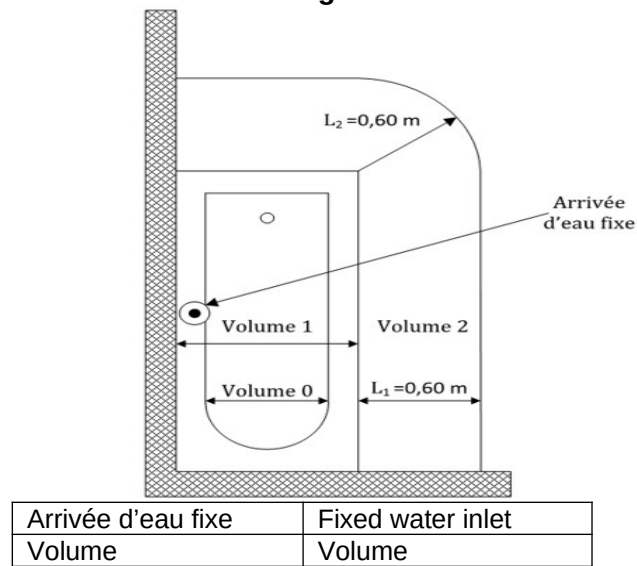
(See Subsection 7.1.3.3., a. and g. and Subsection 7.1.3.4., a., b. and c.).

**b)** Volume 2 is not defined for a shower.

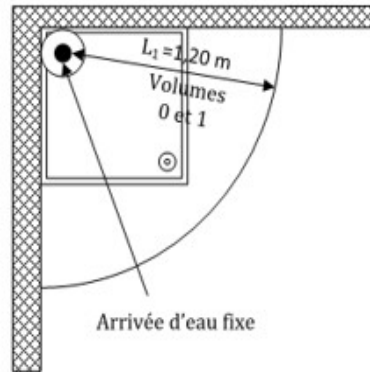
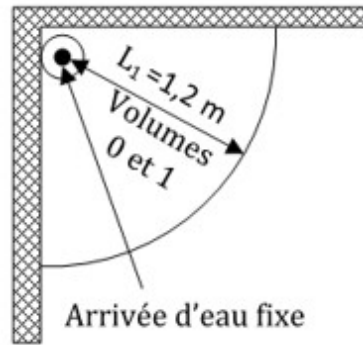
(See Subsection 7.1.3.3., b., c., d., e., f. and g. and Subsection 7.1.3.4., d., e., f. and g.).

### Subsection 7.1.3.3. Dimensions of volumes and place - Top view

#### a. Bathtubs with fixed walls limiting the volumes

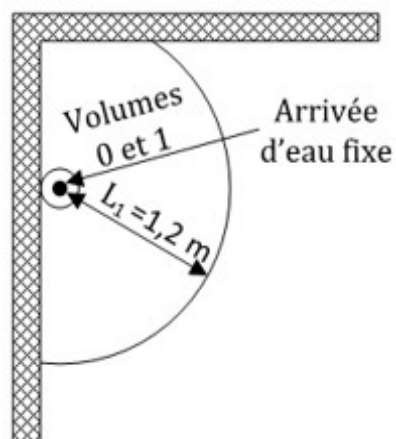


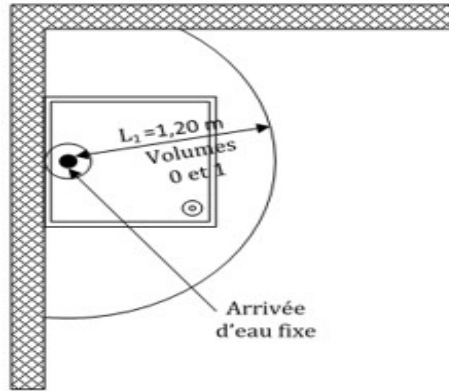
#### b. Showers without a shower tray or with a shower tray of a depth of less than 0.10 m, with fixed walls limiting volumes and with a fixed water inlet close to a corner



Arrivée d'eau fixe	Fixed water inlet
Volumes 0 et 1	Volumes 0 and 1

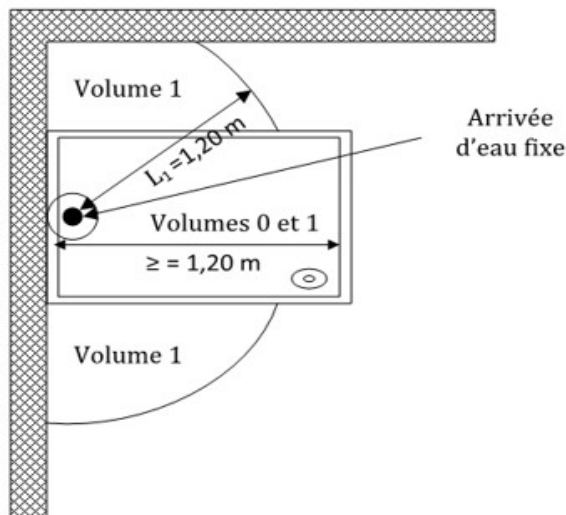
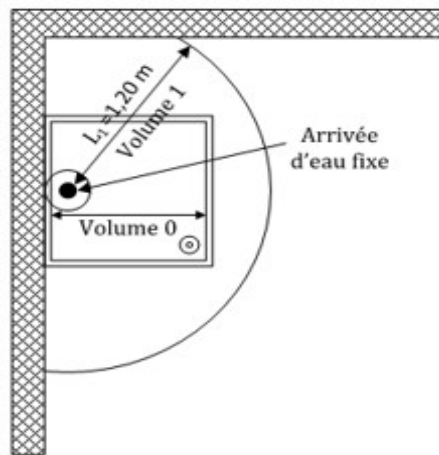
c. Showers without a shower tray or with a shower tray of a depth of less than 0.10 m, with fixed walls limiting volumes and with a fixed water inlet at a distance from a corner





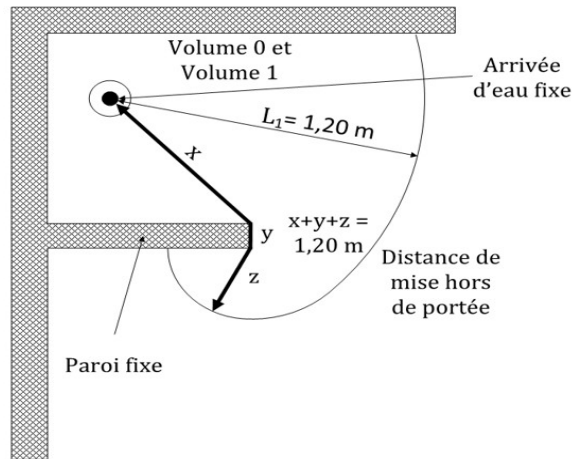
Arrivée d'eau fixe	Fixed water inlet
Volumes 0 et 1	Volumes 0 and 1

**d. Showers with shower tray with a depth greater than or equal to 0.10 m, with fixed walls limiting volumes and with a fixed water inlet at a distance from a corner**



Arrivée d'eau fixe	Fixed water inlet
Volumes 0 et 1	Volumes 0 and 1
Volume	Volume

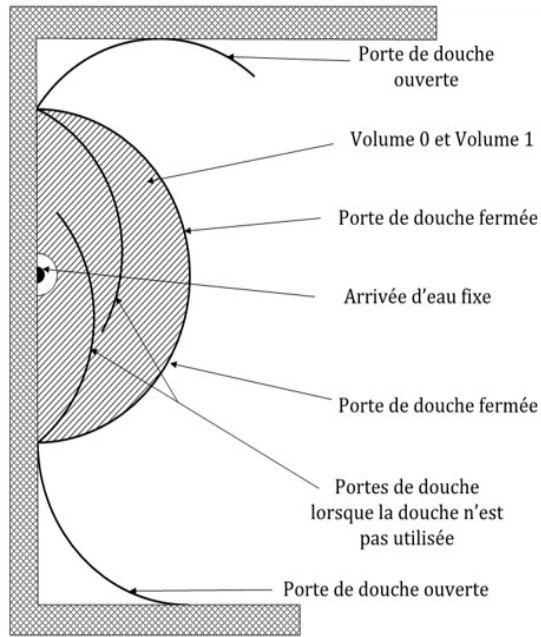
**e. Shower without shower tray or with shower tray of a depth of less than 0.10 m, with fixed walls limiting volumes**



Arrivée d'eau fixe	Fixed water inlet
Volume 0 et Volume 1	Volume 0 and Volume 1
Paroi fixe	Fixed wall
Distance de mise hors de portée	Out-of-reach distance

**f. Shower without shower tray with fixed walls and rotating doors limiting volumes**

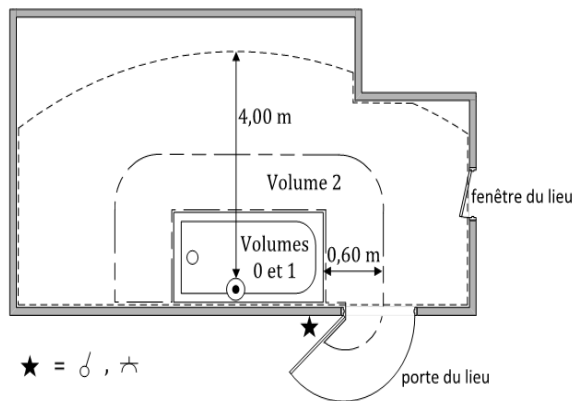




Porte de douche ouverte	Open shower door
Volume 0 et Volume 1	Volume 0 and Volume 1
Porte de douche fermée	Closed shower door
Arrivée d'eau fixe	Fixed water inlet
Portes de douche lorsque la douche n'est pas utilisée	Shower doors when the shower is not used

### g. Limitation of volumes and place by fixed walls, doors and windows

#### g.1 Room containing a bathtub



★ = ⚪, ☆

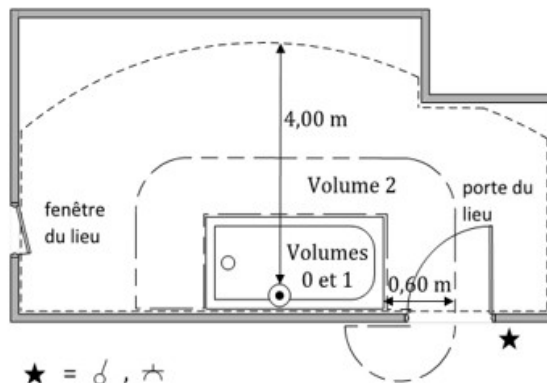
⊙ = arrivée d'eau fixe

--- délimitation du volume 2

----- délimitation du lieu contenant une baignoire

Volume	Volume
Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
arrivée d'eau fixe	fixed water inlet
delimitation du	delimitation of volume

volume 2	2
délimitation du lieu contenant une baignoire	delimitation of the place containing a bathtub



★ = ♂, ♀

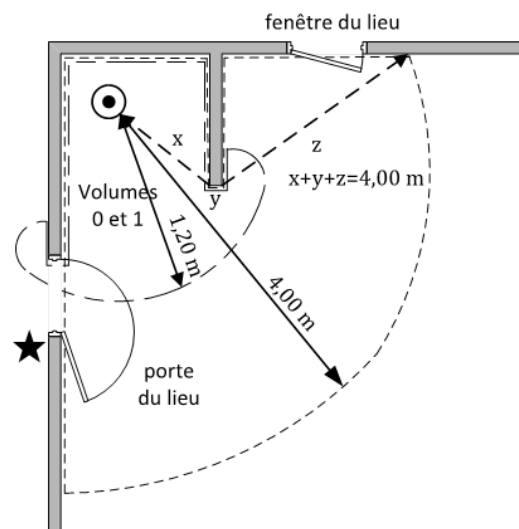
⊙ = arrivée d'eau fixe

— — — — — délimitation du volume 2

- - - - - délimitation du lieu contenant une baignoire

Volume	Volume
Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
arrivée d'eau fixe	fixed water inlet
delimitation du volume 2	delimitation of volume 2
délimitation du lieu contenant une baignoire	delimitation of the place containing a bathtub

**g.2 Room containing a shower, with fixed vertical walls all with a height of at least 2.25 m or with fixed vertical walls which are all joined with a ceiling or, if present, a false ceiling that is not open or removable without the help of a tool**



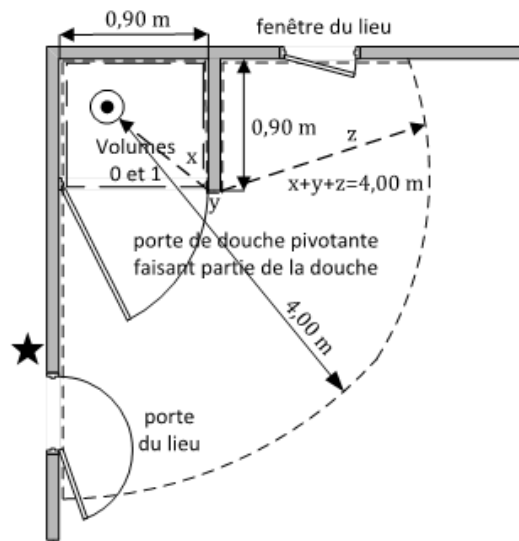
★ = ♂ . ☆

⊙ arrivée d'eau fixe

- - - délimitation des volumes 0 et 1

..... délimitation du lieu contenant une douche

Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
arrivée d'eau fixe	fixed water inlet
delimitation des volumes 0 et 1	delimitation of volumes 0 and 1
délimitation du lieu contenant une douche	delimitation of the place containing a shower



★ = ♂ . ☆

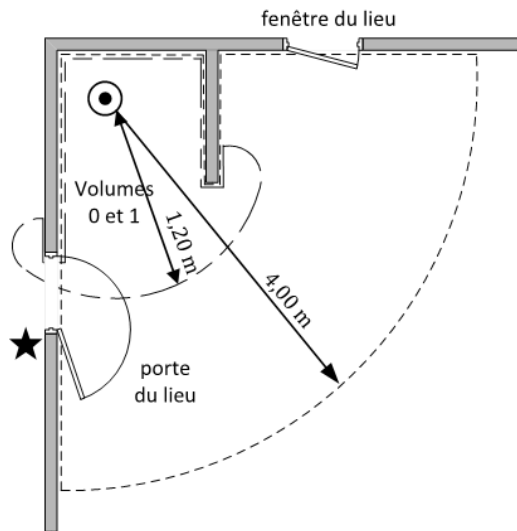
⊙ arrivée d'eau fixe

- - - délimitation des volumes 0 et 1

..... délimitation du lieu contenant une douche

Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
porte de douche pivotante faisant partie de la douche	hinged shower door that is part of the shower
arrivée d'eau fixe	fixed water inlet
delimitation des volumes 0 et 1	delimitation of volumes 0 and 1
délimitation du lieu contenant une douche	delimitation of the place containing a shower

**g.3 Room containing a shower, with several fixed vertical walls with a height of at least 2.25 m or which are joined with a ceiling or, if present, a false ceiling that is not open or removable without the help of a tool, and with a fixed vertical wall of a height of less than 2.25 m and which is not joined with the ceiling or, if present, the false ceiling**



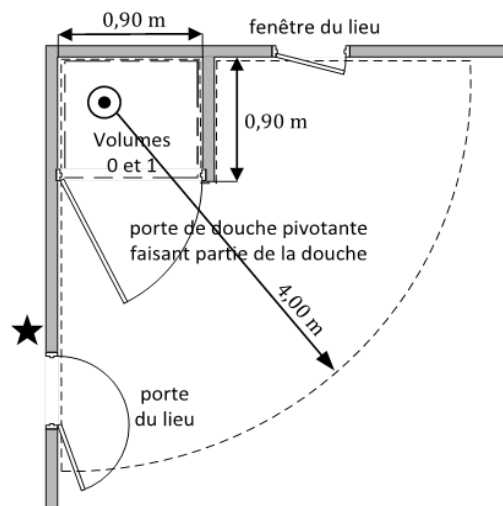
★ = ♂ . ☆

⊙ arrivée d'eau fixe

- - - délimitation des volumes 0 et 1

..... délimitation du lieu contenant une douche

Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
arrivée d'eau fixe	fixed water inlet
délimitation des volumes 0 et 1	délimitation of volumes 0 and 1
délimitation du lieu contenant une douche	délimitation of the place containing a shower



★ = ♂ . ☆

⊙ arrivée d'eau fixe

- - - délimitation des volumes 0 et 1

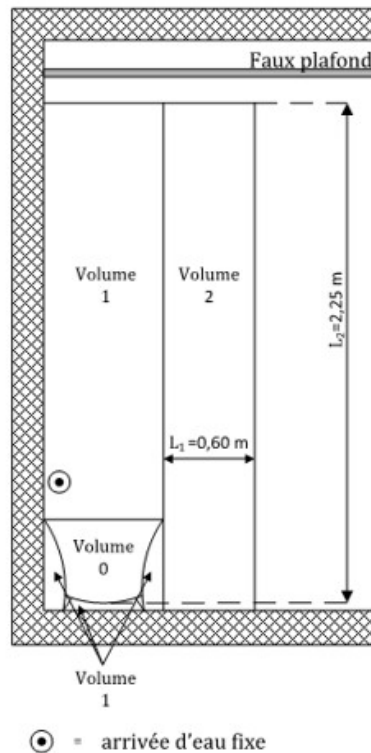
..... délimitation du lieu contenant une douche

Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place

porte du lieu	door of the place
porte de douche pivotante faisant partie de la douche	hinged shower door that is part of the shower
arrivée d'eau fixe	fixed water inlet
delimitation des volumes 0 et 1	delimitation of volumes 0 and 1
délimitation du lieu contenant une douche	delimitation of the place containing a shower

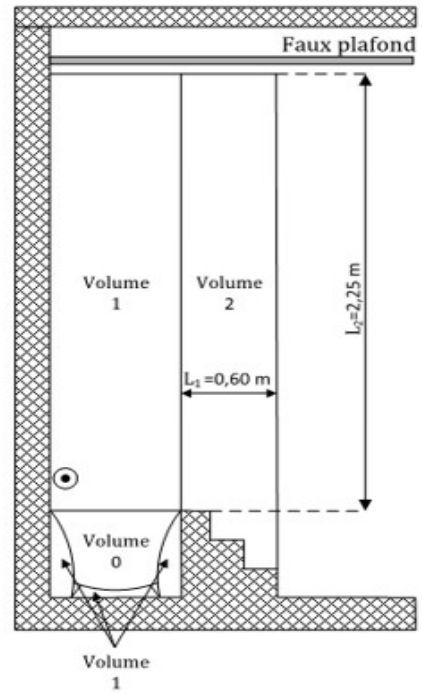
### Subsection 7.1.3.4. Volume dimensions - Vertical view

#### a. Bathtub at ground level of volume 2



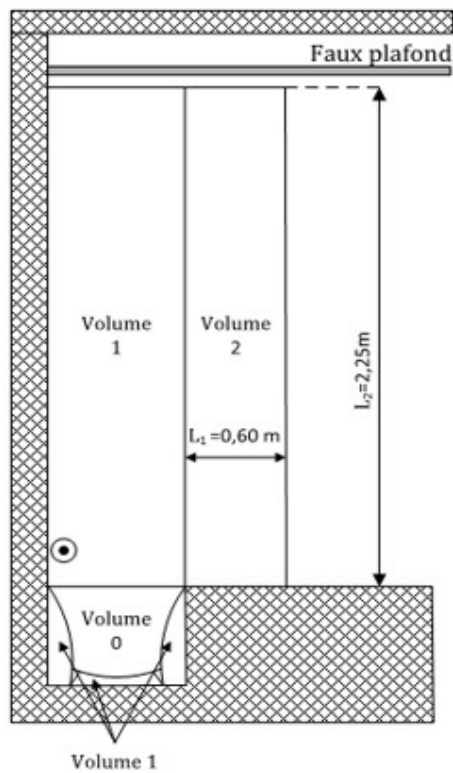
Volume	Volume
Faux plafond	False ceiling
arrivée d'eau fixe	fixed water inlet

#### b. Bathtubs with bottoms that do not coincide with the highest level of volume 2 enabling to move



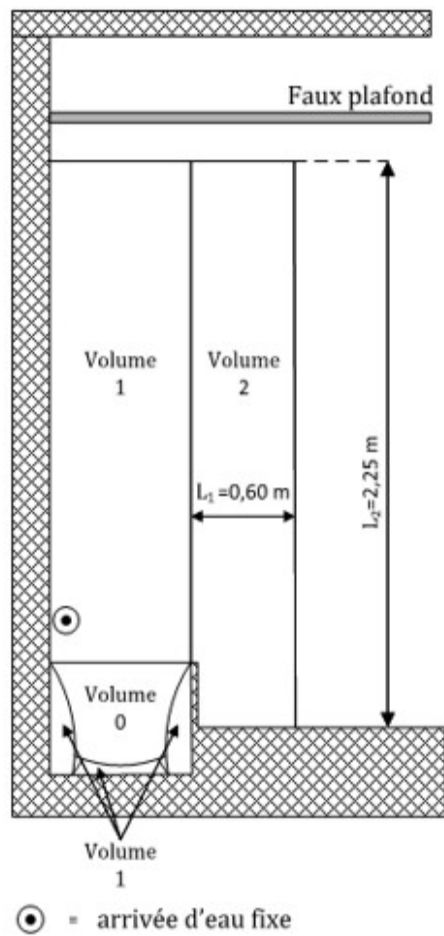
⊙ = arrivée d'eau fixe

Volume	Volume
Faux plafond	False ceiling
arrivée d'eau fixe	fixed water inlet



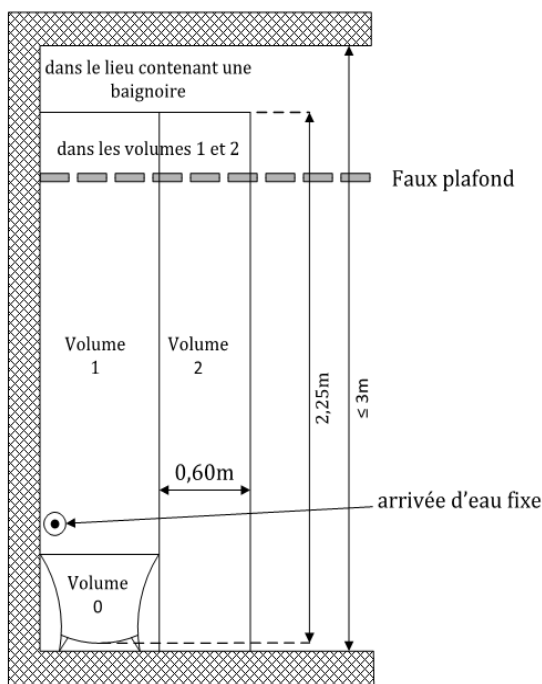
⊙ = arrivée d'eau fixe

Volume	Volume
Faux plafond	False ceiling
arrivée d'eau fixe	fixed water inlet



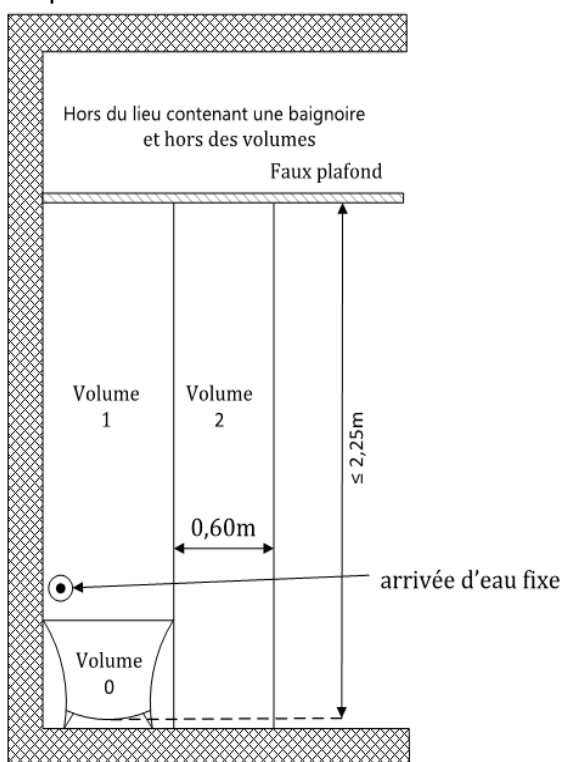
Volume	Volume
Faux plafond	False ceiling
arrivée d'eau fixe	fixed water inlet

**c. Limitation of volumes and place by a false ceiling (example of a place containing a bathtub)**



Volume	Volume
Faux plafond	False ceiling
dans le lieu contenant une baignoire	in the place containing a bathtub
dans les volumes 1 et 2	in volumes 1 and 2
arrivée d'eau fixe	fixed water inlet

No limitation of the place containing a bathtub and volumes by a false ceiling open or removable without the help of a tool



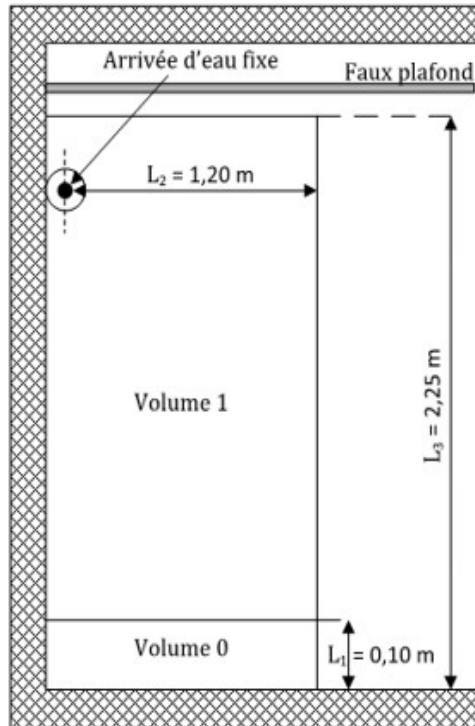
Volume	Volume
Faux plafond	False ceiling
Hors du lieu	Outside the place



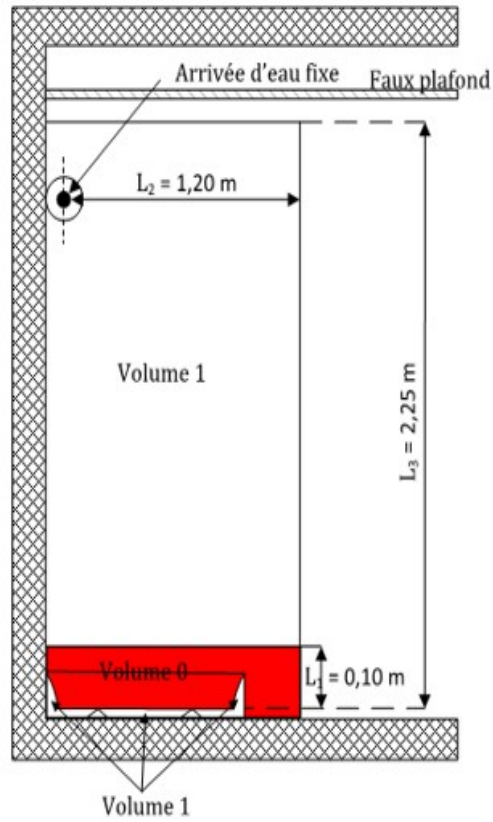
contenant une baignoire et hors des volumes	containing a bathtub and excluding volumes
arrivée d'eau fixe	fixed water inlet

Limitation of the place containing a bathtub and volumes by a false ceiling unopened and only removable using a tool

**d. Shower without shower tray or with shower tray of a depth of less than 0.10 m, with fixed walls limiting volumes**

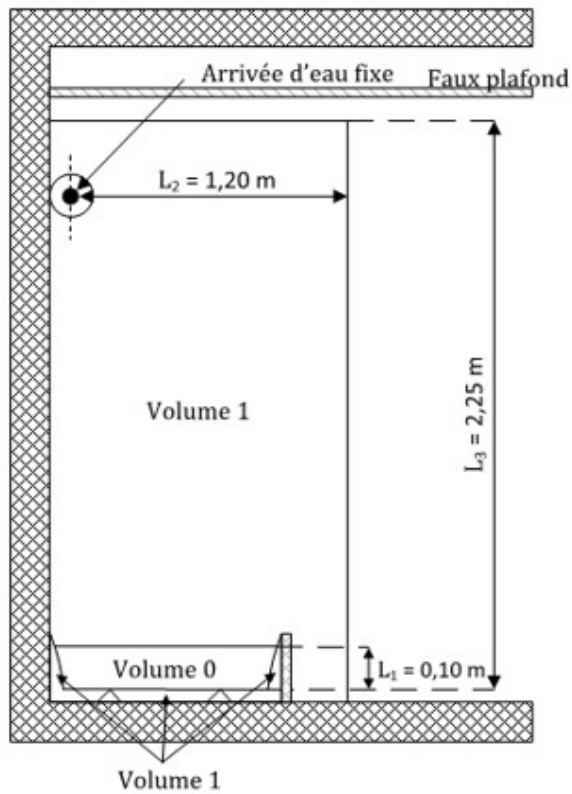


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet

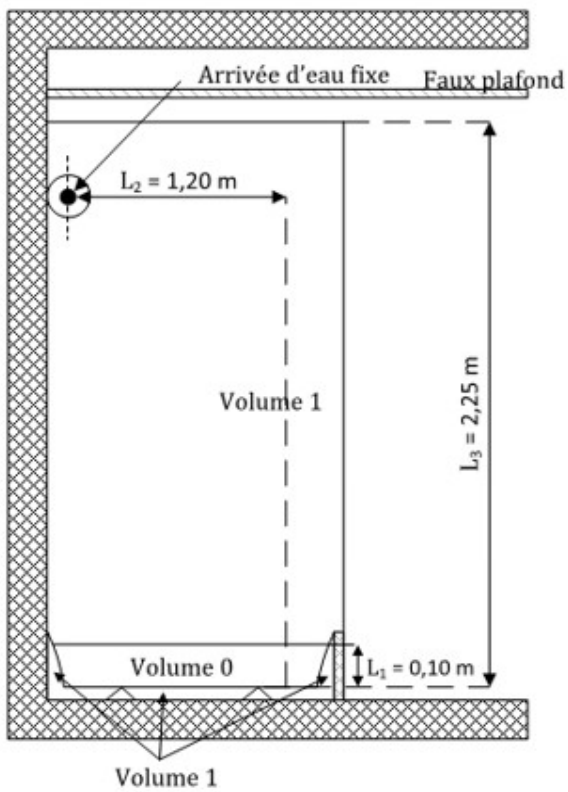


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet

**e. Showers with shower tray of a depth greater than or equal to 0.10 m, with fixed walls limiting volumes**

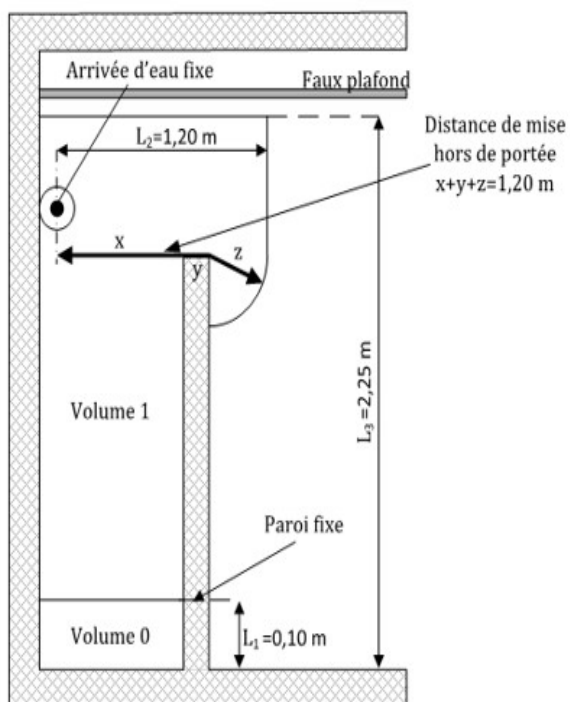


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet



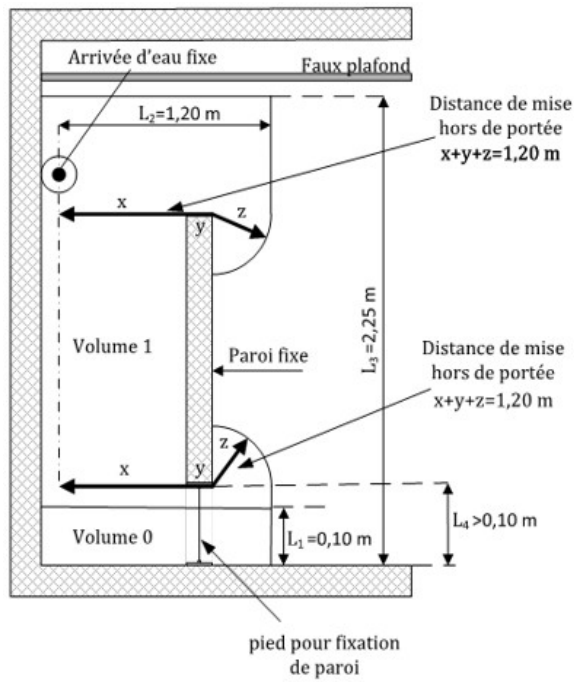
Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet

f. Shower without shower tray or with shower tray of a depth of less than 0.10 m, with fixed walls limiting volumes

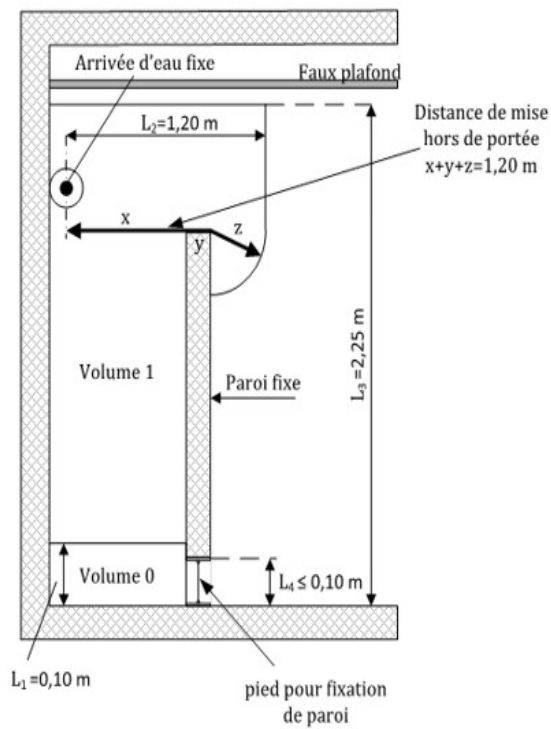


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet
Paroi fixe	Fixed wall
Distance de mise hors de portée	Out-of-reach distance

g. Limitation of volumes by a fixed wall with an open space at the bottom of the fixed wall less than or greater than 0.10 m (example of a place containing a shower)



Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet
Paroi fixe	Fixed wall
Distance de mise hors de portée	Out-of-reach distance
pied pour fixation de paroi	foot for wall mounting



Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet
Paroi fixe	Fixed wall

Distance de mise hors de portée	Out-of-reach distance
ped pour fixation de paroi	foot for wall mounting

## Section 7.1.4. Protection against electric shock.

### Subsection 7.1.4.1. Protection against electric shocks due to direct contact

#### a. Protection rating of electrical equipment

When the protection against electric shock by direct contact is ensured by the use of SELV, its maximum voltage shall be equal to the corresponding value set out in Table 7.2.

The protection rating of electrical equipment allowed in places containing a bathtub and/or shower shall be chosen according to the external AD influence mentioned in Table 7.3.

When using SELV as protection against electric shock by direct contact, the IP00 protection rating is allowed if its maximum voltage is equal to the corresponding value in Table 7.1.

**Table 7.1. Protection against electric shock by direct contact: maximum SELV when using electrical equipment with IP00 protection rating**

Maximum voltage in V	≈ Max. V	≈ Max. V	= Max. V
Volume 0	6	12	20
Volume 1	6	12	20
Volume 2	12	18	30
Place containing a bathtub and/or shower (excluding volumes)	12	18	30

#### b. Protection by distance and by means of obstacles

Protection by distance as described in Subsection 4.2.2.1., d. and by means of obstacles as described in Subsection 4.2.2.1., e. is not authorised.

### Subsection 7.1.4.2. Protection against electrical shock by indirect contact without automatic disconnection of the power supply

#### a. Protection against electrical shock by indirect contact by the use of SELV

When protection against electrical shock by indirect contact is ensured by the use of SELV, its maximum voltage is equal to the corresponding value in Table 7.2.

**Table 7.2. Protection against electrical shock by indirect contact: maximum voltage when using the SELV**

Maximum voltage in V	≈ Max. V	≈ Max. V	= Max. V
Volume 0	12	18	30
Volume 1	12	18	30
Volume 2	25	36	60
Place containing a bathtub and/or shower (excluding volumes)	25	36	60

**b. Protection via safety separation of circuits**

Protection by means of safety separation of circuits as described in Subsection 4.2.3.3. c. shall only be used for:

1. terminal circuits supplying a single appliance, or
2. only one electric socket.

Protection by means of safety separation of circuits is not authorised for heating cables and built-in electric heating systems.

**c. Additional protection against electrical shock by indirect contact without automatic disconnection of the power supply**

As additional protection, it is authorised to apply the provisions of Subsection 4.2.3.3., d.

**Subsection 7.1.4.3. Protection against electrical shock by indirect contact with automatic power supply disconnection**

With the exception of terminal circuits using SELV protection or protection by means of safety separation of circuits or part of a safety facility, circuits supplying a place containing a bathtub and/or shower shall be protected by one or more high or very high sensitivity differential-residual current protection devices.

It is authorised to use these devices to protect circuits from other premises or locations. In domestic installations and common areas of a residential complex, these devices are installed downstream of those placed at the origin of the electrical installation in accordance with Subsection 4.2.4.3.

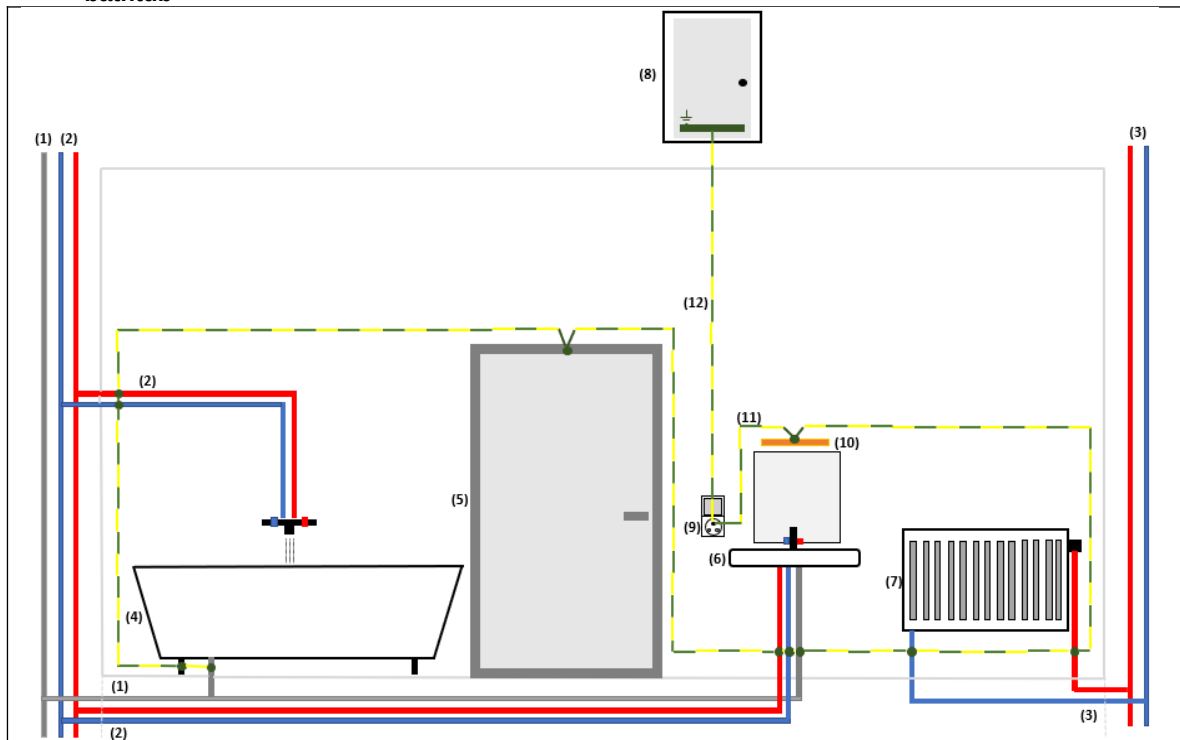
These devices are installed outside the place containing a bathtub and/or shower.

#### Subsection 7.1.4.4. Additional equipotential bond

An additional equipotential bond as determined in Subsection 4.2.3.2., created in accordance with the provisions of Subsection 5.4.4.2., shall locally connect all grounds of electrical equipment and all simultaneously accessible foreign conductors located in the place containing a bathtub and/or shower except:

1. the grounds of the electrical equipment powered by SELV;
2. non-conductive electricity pipes, such as synthetic material;
3. radiators or convectors supplied by pipes referred to in 2. ;
4. metal enclosures of Class II electrical equipment or equivalent to that of Class II electrical appliances.

**Figure 7.1 Example of installation of the additional equipotential bond in a place containing a bathtub**



- (1) metal discharge
- (2) metal water pipes
- (3) central heating metal pipes
- (4) metal bathtub
- (5) metal door frames
- (6) washbasin
- (7) metal radiator
- (8) distribution and control panel of the electrical installation
- (9) low voltage socket-outlet
- (10) class I low voltage lighting fixture
- (11) additional equipotential bond
- (12) protective conductor of the terminal circuit of the place containing a bathtub

#### Subsection 7.1.4.5. Electric heating elements built into fixed walls

Electrical heating elements embedded in fixed walls which comply with the requirements of Subsection 4.2.2.5., c. and Subsection 5.2.9.13. are authorised in the place containing a bathtub and/or shower provided that:



1. they are not in volume 0;
2. they are covered with a wire mesh connected to an additional equipotential bond.

### Section 7.1.5. Choice and implementation of electrical equipment

#### Subsection 7.1.5.1. Common requirements - external influences

##### a. Implementation of electrical equipment according to external influences

The combinations of external influences “presence of water”, “state of human body” and “contact by persons with earth potential” in places containing a bathtub and/or shower are mentioned in Table 7.3.

**Table 7.3. Places containing a bathtub and/or shower: combinations of external influences AD, BB and BC**

<b>External influences</b>	Presence of water	State of human body	Contact by persons with earth potential
Volume 0	AD7	BB3	BC4**
Volume 1	AD4*	BB3	BC3**
Volume 2	AD4***	BB2	BC3**
Place with bath and/or shower (excluding volumes)	AD2***	BB2	BC2**

\* Minimum value and to be determined according to the external influences present.

\*\* External influence BC to be respected in a domestic installation. In a non-domestic installation, the external influence BC to be determined based on the configuration of the place containing a bathtub and/or shower.

\*\*\* Permitted protection rating of low voltage socket-outlets: IPXX

Where electrical equipment straddles several locations in the place containing a bathtub and/or shower, the more stringent requirements of Table 7.3. shall apply.

#### Subsection 7.1.5.2. Electrical equipment

##### a. General points

The specific provisions of Subsection 7.1.5.2. do not apply to:

1. electric multifunction shower cubicles;
2. electric multifunction shower columns;
3. bathtubs or showers with electrical functions,

provided that the equipment referred to above is covered by an EU declaration of conformity.

However, the volumes formed by the equipment referred to above must be taken into account.

Branch boxes, junction or connection boxes are not permitted in volume 0.

Installation in volumes 0, 1 and 2 of electrical equipment used for supplying or protecting electrical equipment in other locations is prohibited.

Distribution and control panels are prohibited in volumes 0, 1 and 2.

It is authorised that the circuits of the premises containing a bathtub and/or shower also supply electrical equipment located in other premises or locations.

#### **b. Volume 0**

Only fixed electrical machinery or appliances may be used provided that they:

- meet the application requirements on volume 0 and are suitable for use in this volume in accordance with the manufacturer's instructions for use and assembly; and;
- are permanently connected, and;
- are supplied with SELV, with the SELV power source installed outside volumes 0 and 1.

In volume 0, socket-outlets and control devices shall not be authorised except for control apparatus which are part of the fixed electrical machinery or appliances referred to in the preceding subparagraph, provided that these control apparatus are supplied with SELV, with the SELV power source installed outside volumes 0 and 1.

#### **c. Volume 1**

Only the following electrical equipment is allowed:

1. fixed electrical machinery or appliances powered by SELV, with the SELV power source installed outside volumes 0 and 1;
2. SELV socket-outlets, with the SELV power supply installed outside volumes 0 and 1;
3. fixed electrical machinery or appliances powered by low voltage provided that they:
  - meet the application requirements on volume 1 and are suitable for use in this volume in accordance with the manufacturer's instructions for use and assembly; and;
  - are permanently connected. Power supply through a socket-outlet is therefore not authorised.

Both socket-outlets and control apparatus which are part of the fixed electrical machinery or appliances referred to in 3. are authorised provided that these socket-outlets and control apparatus are supplied with SELV, with the SELV power source installed outside volumes 0 and 1;

4. SELV powered control apparatus, with the SELV power source installed outside volumes 0 and 1.

#### **d. Volume 2**

Only the following electrical equipment is allowed:

1. fixed electrical machinery or apparatus, including socket-outlets and control apparatus which are part of such machinery or appliances, permanently connected or powered by a socket-outlet;
2. low voltage socket-outlets:
  - either protected by a residual differential current protection device with very high sensitivity;
  - or individually protected by a circuit separation transformer with a maximum power of 100 W;
3. SELV socket-outlets, with the SELV power supply installed outside volumes 0 and 1;
4. SELV powered control apparatus, with the SELV power source installed outside volumes 0 and 1;
5. Low-voltage control apparatus.

#### **e. Wiring systems**

The following requirements apply to wiring systems installed in places containing a bathtub and/or shower, as well as to wiring systems embedded in the fixed walls of these places up to a depth of 0.05 m.

Wiring systems do not have any metal elements such as armouring, steel duct, etc. other than their cores.

In volume 0, wiring systems are limited to those that are part of accepted electrical equipment.

In volumes 1 and 2, the wiring systems are limited to those required to supply the electrical equipment in volumes 0, 1 and 2.

For the supply of electrical equipment authorised in volume 0, it is only recessed installation with or without ducts in the fixed walls of volume 0 is authorised in accordance with the requirements of Subsections 5.2.9.3. and 5.2.9.10.

In volumes 1 and 2, only the following installation methods are approved:

1. installation under ducts embedded in fixed walls in accordance with the requirements of Subsection 5.2.9.3. ;
2. installation in the open air or surface-mounted, in accordance with the requirements of Subsection 5.2.9.5. ;
3. installation in construction voids, in accordance with the requirements of Subsection 5.2.9.9; ;
4. flush-mounted installation without ducting, in accordance with the requirements of

Subsection 5.2.9.10.

In volumes 0, 1 and 2, if SELV-powered wiring systems are used, the insulation protection mode defined in Subsection 4.2.5.4., a. shall be applied, regardless of the installation method used.'

Seen to be annexed to our Order of ..... amending Chapter 7.1 of Book 1 and certain parts of Books 1, 2 and 3, introduced by the Royal Order of 8 September 2019 establishing Book 1 on Low Voltage and Extra Low Voltage Electrical Installations, Book 2 on High Voltage Electrical Installations and Book 3 on Electrical Energy Transport and Distribution Installations.

By the King:  
The Minister for Labour,  
Pierre-Yves Dermagne

The Minister of Energy,  
Tinne Van der Straeten