

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 the 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 to the European Commission of xx xx xxxx, 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 opinion xx xx xxxx of the Council of State, given on xx xx xxxx pursuant to Article 84(1)subparagraph 1(2), of the laws on the Council of State, coordinated 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., to 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 open to the public' are replaced by the words 'ordinary places which are not considered to be places open 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 open to the public' are replaced by the words 'ordinary places which are not considered to be places open 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 set out in the Annex 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 'wapingen'.

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 of application before 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 power sockets installed between 1 October 1981 and 31 May 2020 and meeting the requirements of Book 1 of application before 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 'a residential complex' 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., to that 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., to that 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., to 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 'Premisses 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 open to the public' are replaced by the words 'ordinary places which are not considered to be places open 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 Book 3 of Annex 3, 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(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 Extra 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 Journal).

Article 62 The Minister of Labour and the Minister of Energy shall be responsible for the execution of this Order, each as far as they are concerned.

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.

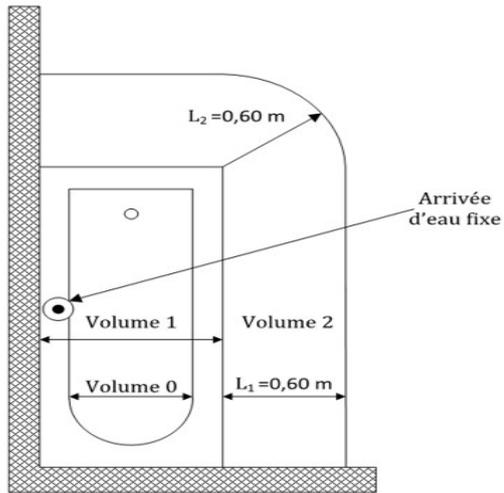
(See Subsection 7.1.3.3., a. and g. and Subsection 7.1.3.4., a., b. and c.).

b) Volume 2 is not defined for a shower.

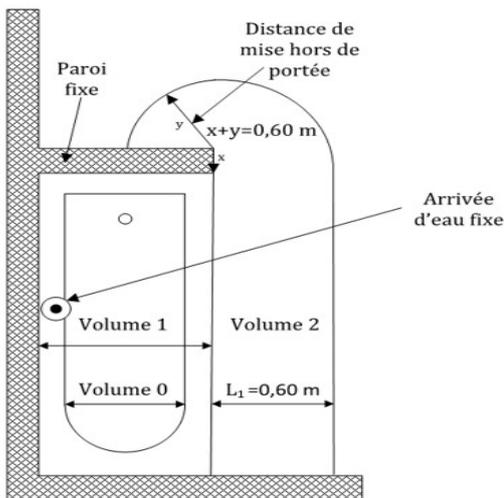
(See Subsection 7.1.3.3., b., c., d., e., f. and g. and Subsection 7.1.3.4., d., e., f. and g.).

Subsection 7.1.3.3. Dimensions of volumes and place - Top view

a. Bathtubs with fixed walls limiting the volumes

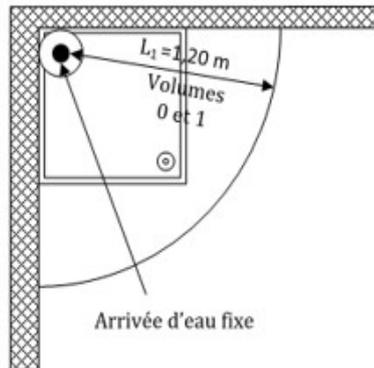
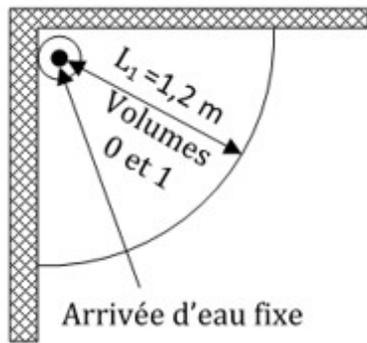


Arrivée d'eau fixe	Fixed water inlet
Volume	Volume



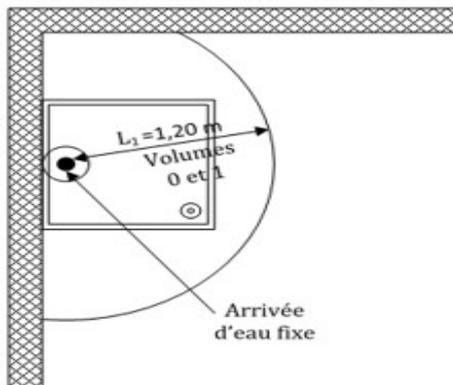
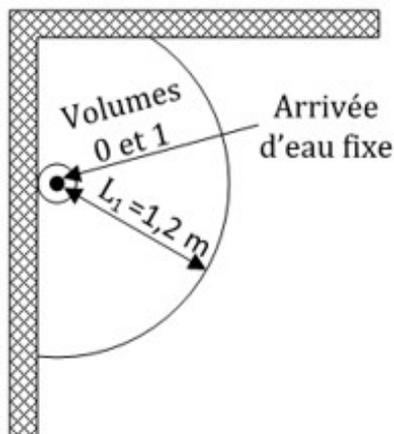
Arrivée d'eau fixe	Fixed water inlet
Volume	Volume
Paroi fixe	Fixed wall
Distance de mise hors de portée	Out-of-reach distance

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



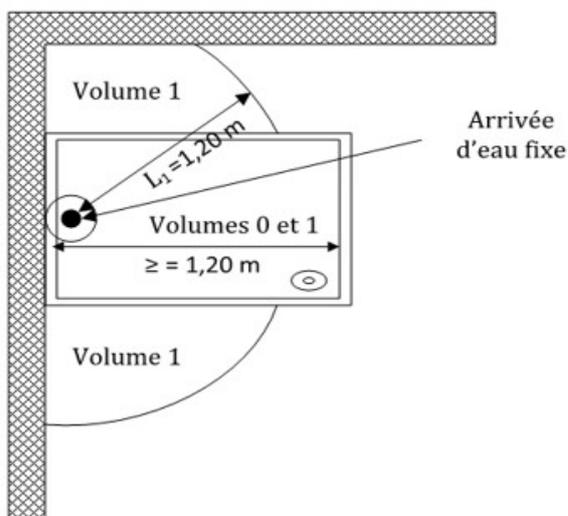
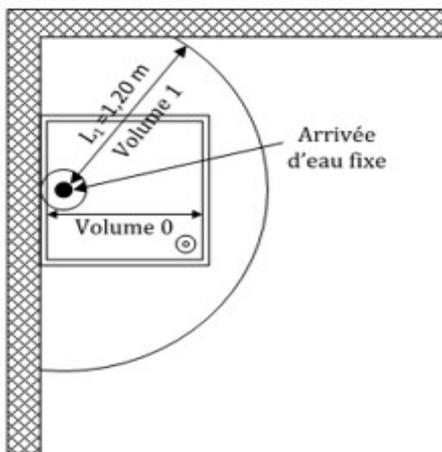
Arrivée d'eau fixe	Fixed water inlet
Volumes 0 et 1	Volumes 0 and 1

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



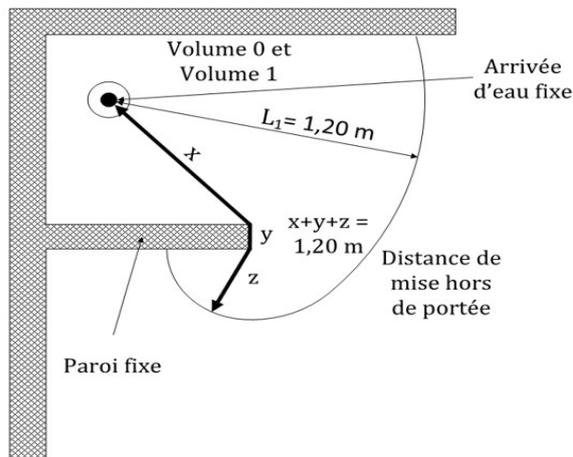
Arrivée d'eau fixe	Fixed water inlet
Volumes 0 et 1	Volumes 0 and 1

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



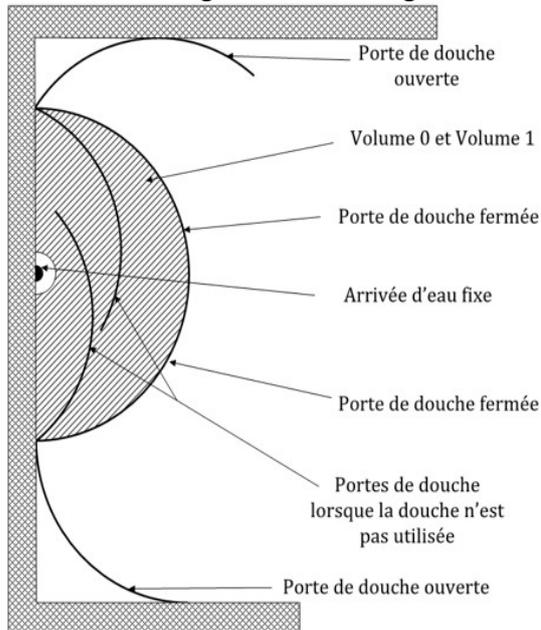
Arrivée d'eau fixe	Fixed water inlet
Volumés 0 et 1	Volumés 0 and 1
Volume	Volume

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

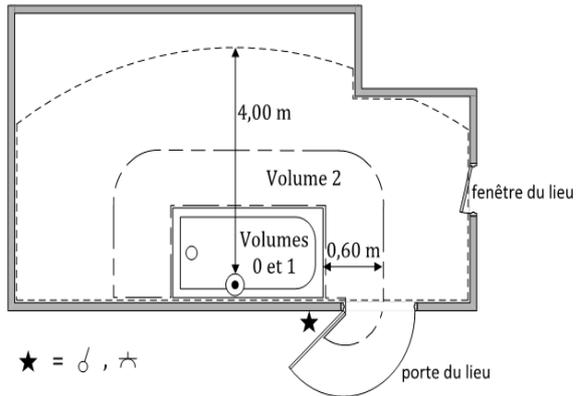


Porte de douche ouverte	Open shower door
Volume 0 et Volume 1	Volume 0 and Volume 1
Porte de douche fermée	Closed shower door
Arrivée d'eau fixe	Fixed water inlet
Portes de douche lorsque la douche n'est pas utilisée	Shower doors when the shower is not used

g. Limitation of volumes and place by fixed

walls, doors and windows

g.1 Room containing a bathtub



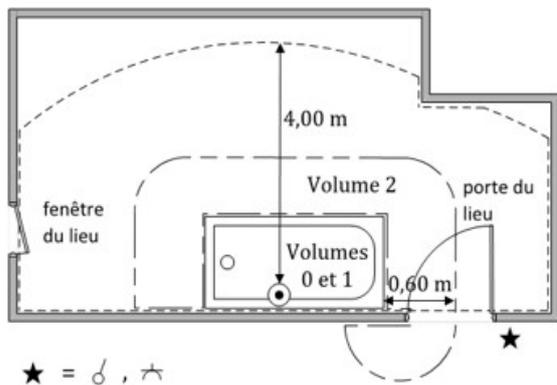
★ = ⚪ , ⚫

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



★ = ⚪ , ⚫

⊙ = arrivée d'eau fixe

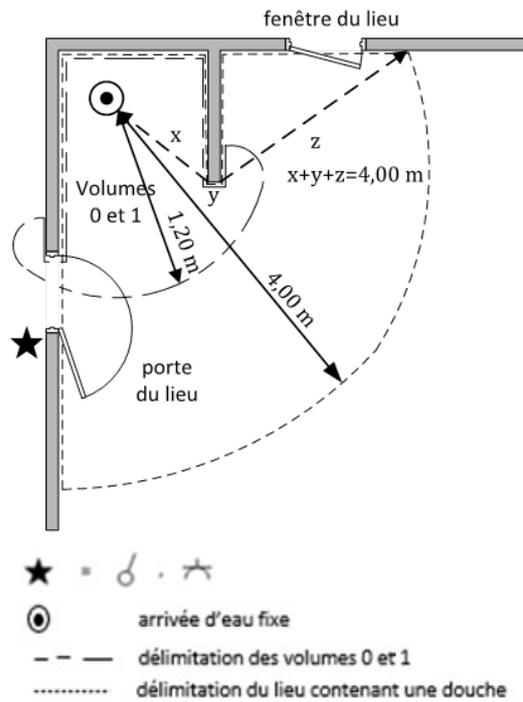
- - - - - délimitation du volume 2

..... délimitation du lieu contenant une baignoire

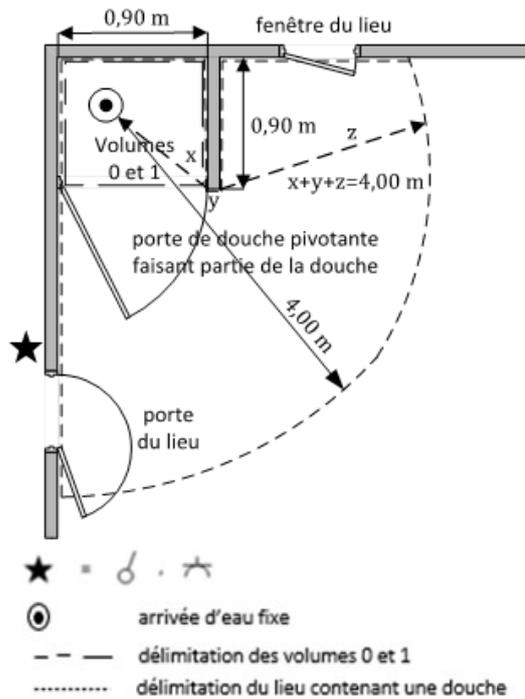
Volume	Volume
Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
arrivée d'eau fixe	fixed water inlet
délimitation du volume 2	délimitation of volume 2
délimitation du lieu	délimitation of the

contenant une baignoire	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

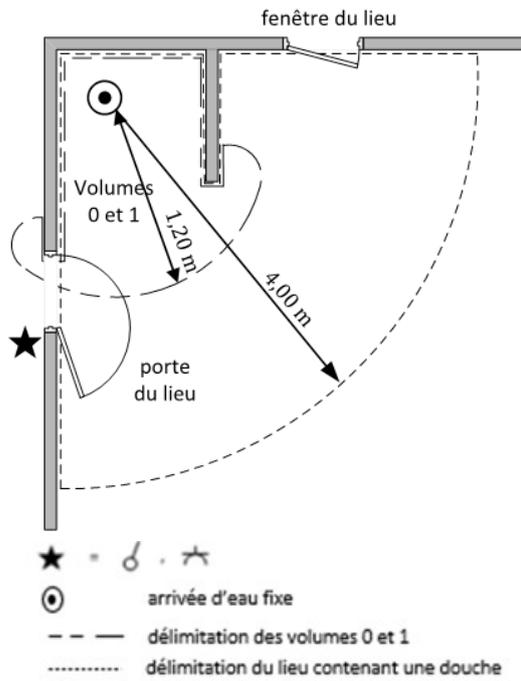


Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
arrivée d'eau fixe	fixed water inlet
délimitation des volumes 0 et 1	délimitation of volumes 0 and 1
délimitation du lieu contenant une douche	délimitation of the place containing a shower

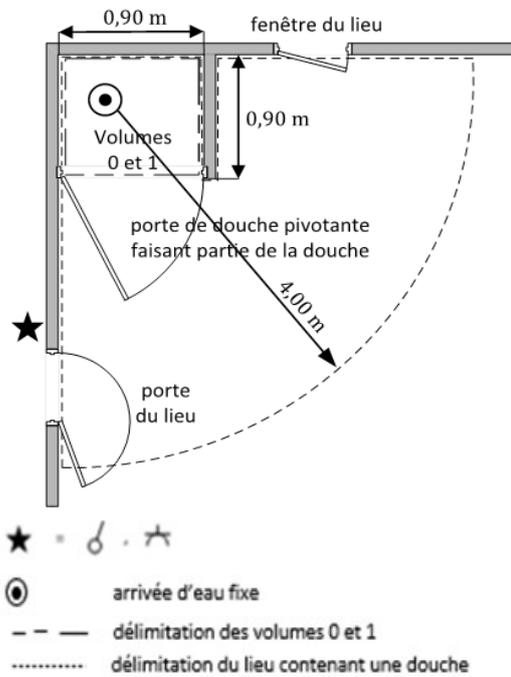


Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place
porte de douche pivotante faisant partie de la douche	hinged shower door that is part of the shower
arrivée d'eau fixe	fixed water inlet
delimitation des volumes 0 et 1	delimitation of volumes 0 and 1
délimitation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



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

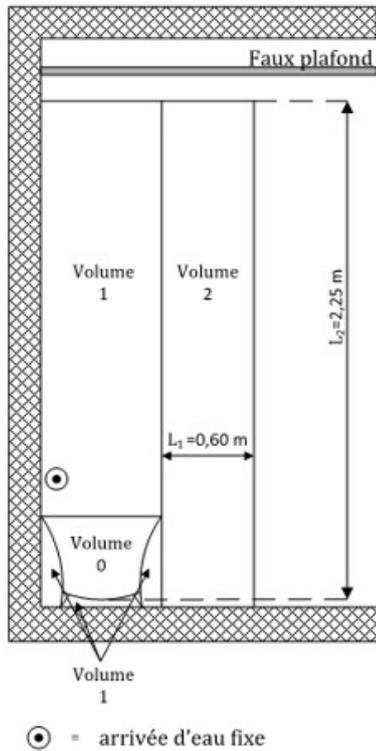


Volumes 0 et 1	Volumes 0 and 1
fenêtre du lieu	window of the place
porte du lieu	door of the place

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

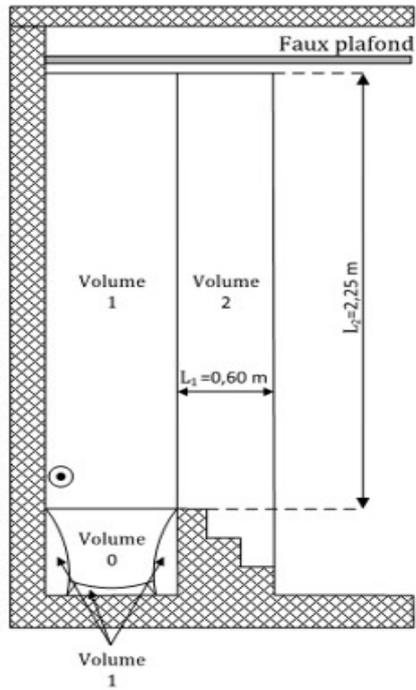
Subsection 7.1.3.4. Volume dimensions - Vertical view

a. Bathtub at ground level of volume 2



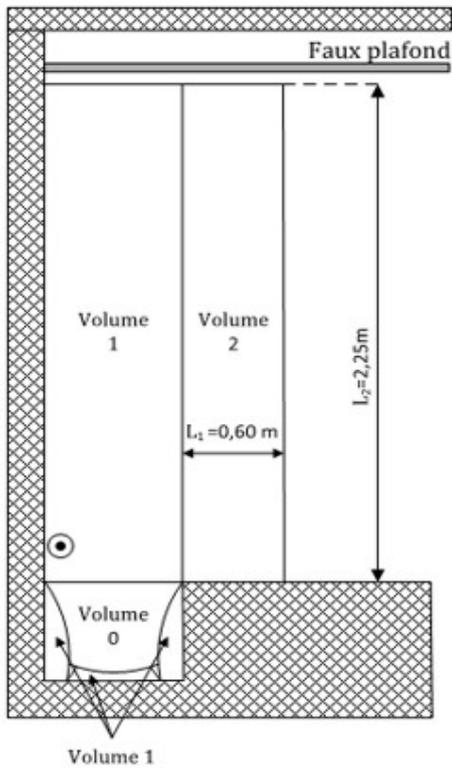
Volume	Volume
Faux plafond	False ceiling
arrivée d'eau fixe	fixed water inlet

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



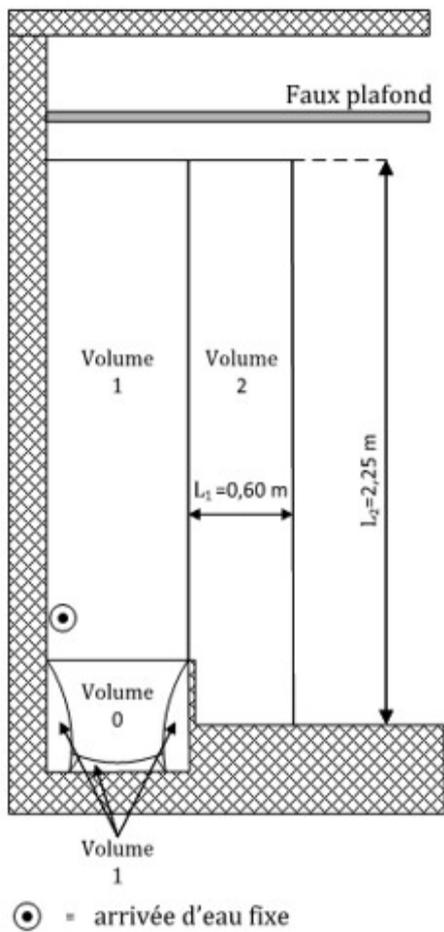
⊙ = arrivée d'eau fixe

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



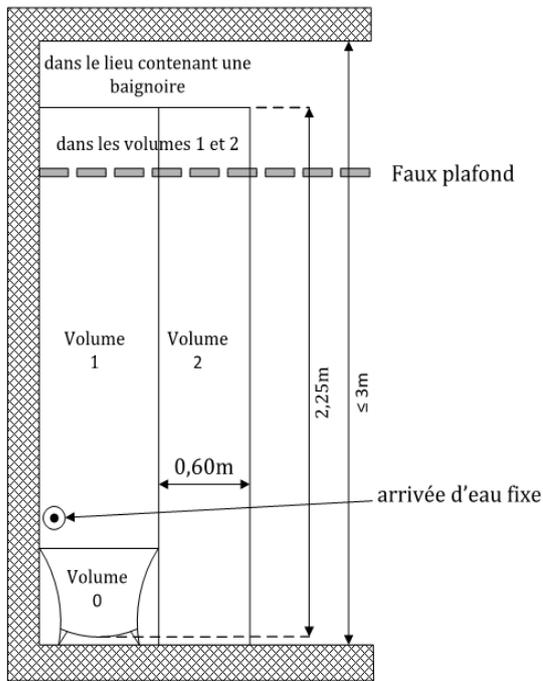
⊙ = arrivée d'eau fixe

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



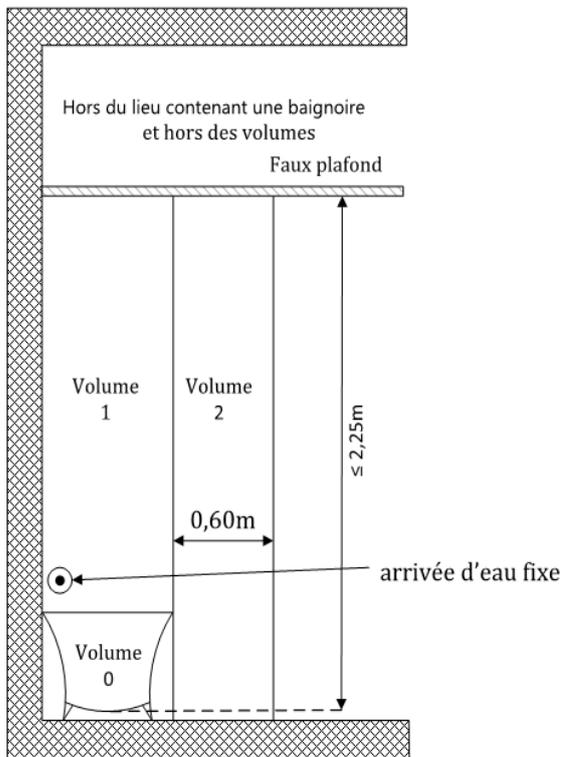
Volume	Volume
Faux plafond	False ceiling
arrivée d'eau fixe	fixed water inlet

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

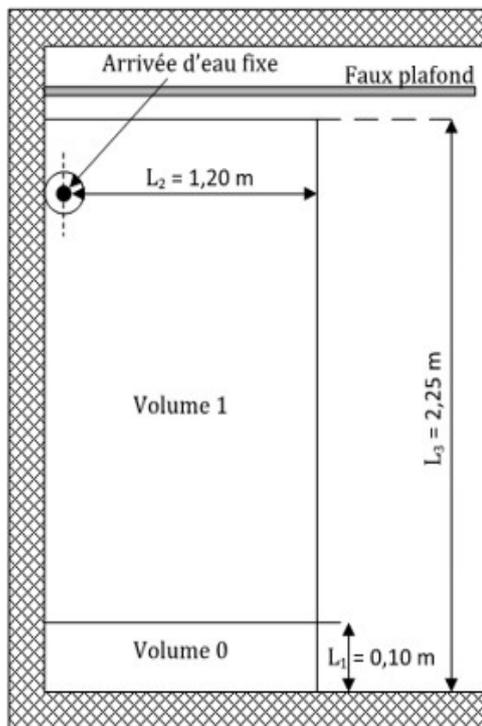


Volume	Volume
Faux plafond	False ceiling

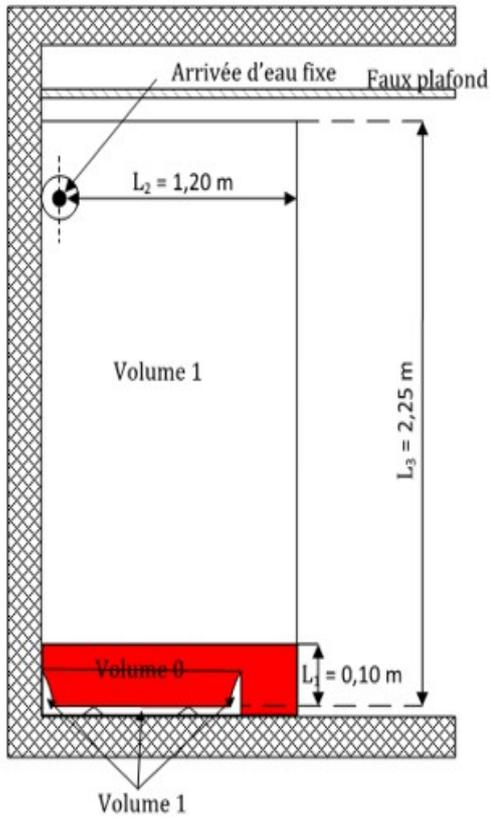
Hors du lieu contenant une baignoire et hors des volumes	Outside the place containing a bathtub and excluding volumes
arrivée d'eau fixe	fixed water inlet

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

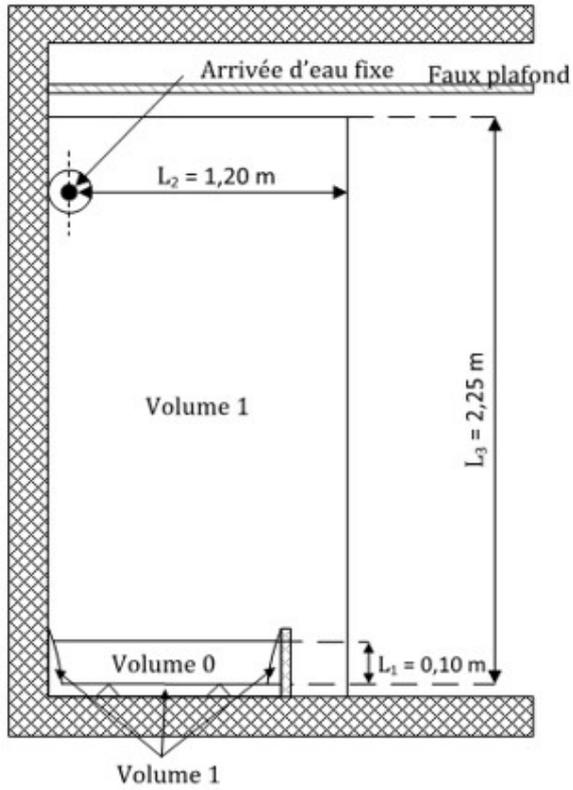


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet

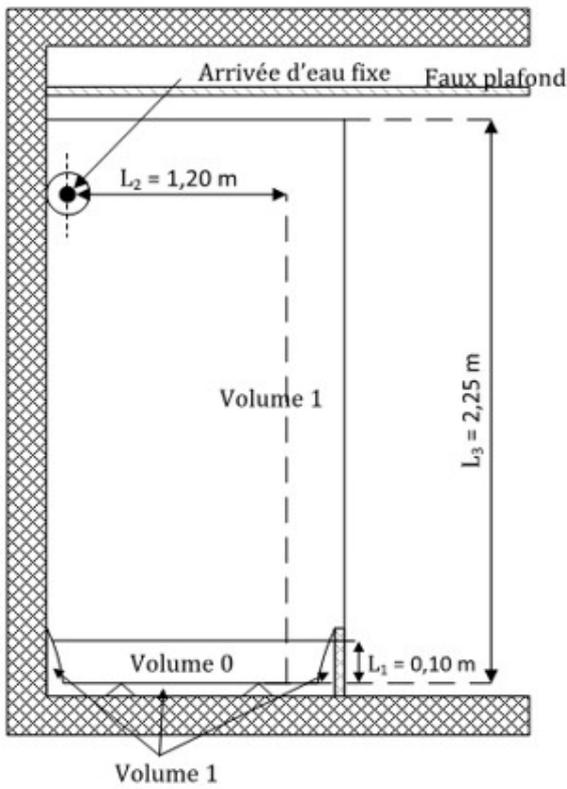


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet

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

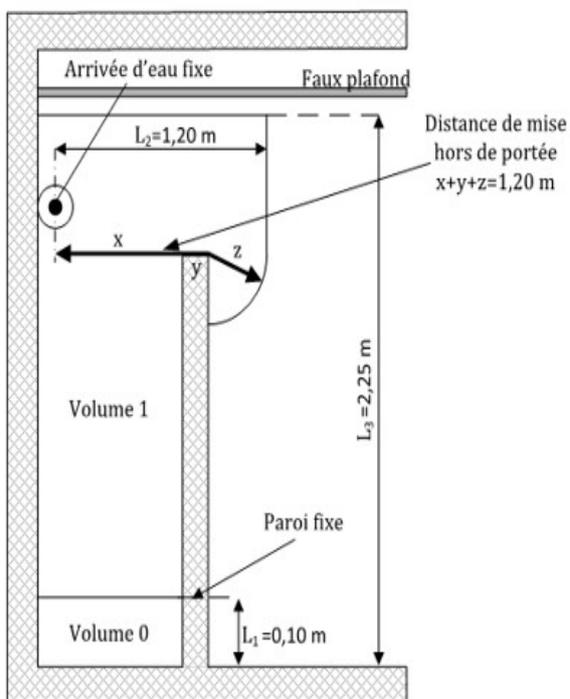


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet



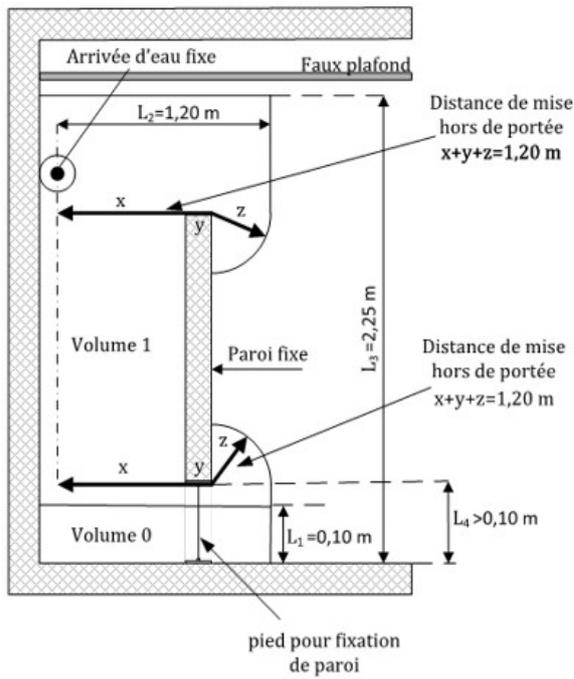
Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet

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

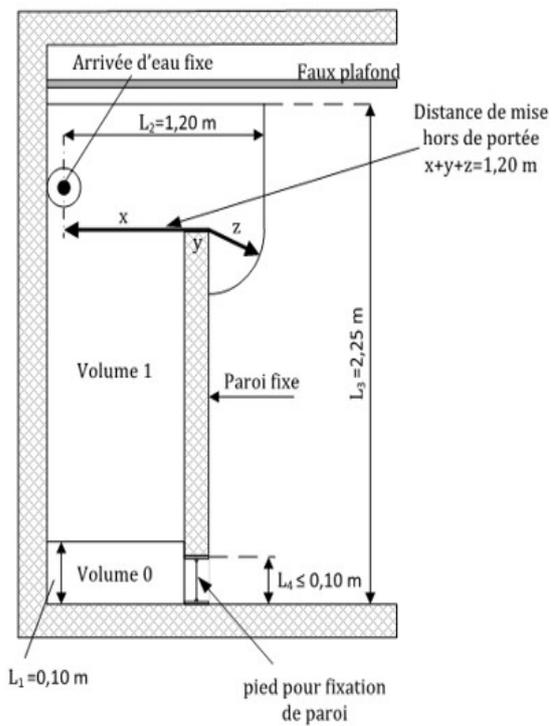


Volume	Volume
Faux plafond	False ceiling
Arrivée d'eau fixe	Fixed water inlet
Paroi fixe	Fixed wall
Distance de mise hors de portée	Out-of-reach distance

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
ped 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.

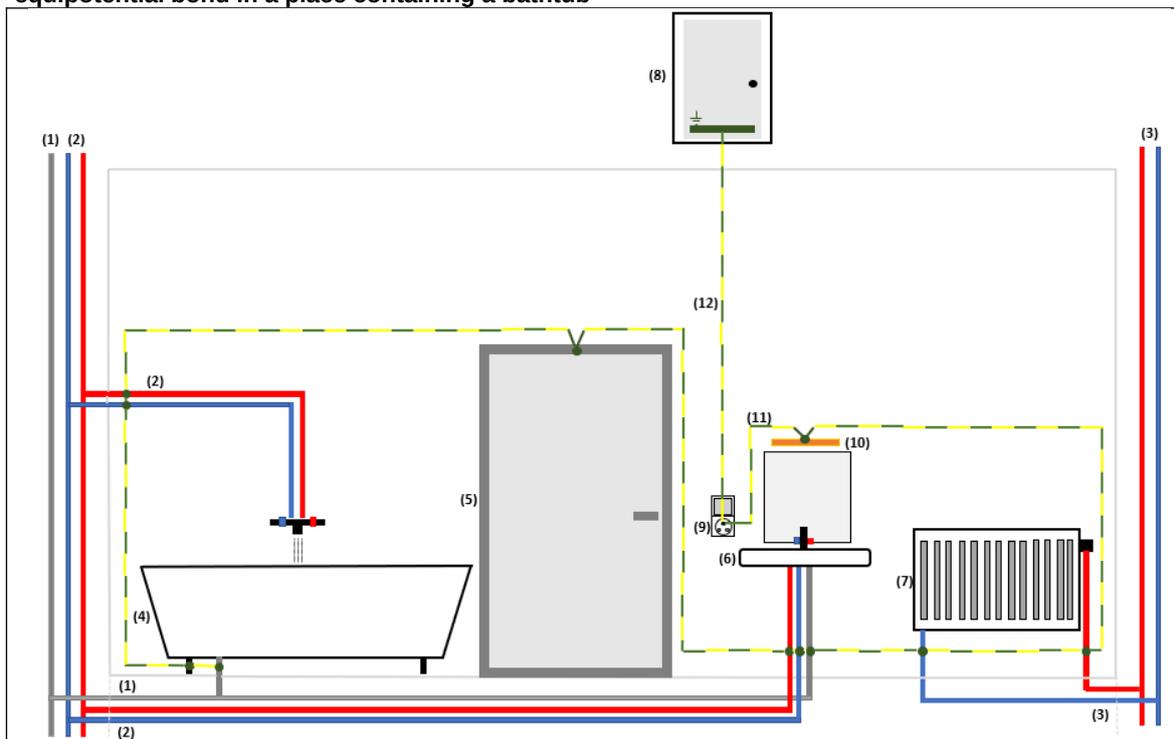
These devices are installed outside the place containing a bathtub and/or shower.

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

External influences	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