

# **Guidelines on Portable Batteries and Battery Peripherals Marking Requirements in the European Union**

JANUARY 2015

***Disclaimer***

*This document is intended to provide guidance on the marking requirements as foreseen by art.21 of the Batteries Directive and other relevant legislation. The document is not a legally binding interpretation of the Batteries Directive, and should therefore not be relied upon as legal advice. This document can be updated at any time without prior notice.*

## Content

1. INTRODUCTION.....	4
2. LEGAL REQUIREMENTS.....	4
2.1 Introduction.....	4
2.2 Marking Requirements of the Batteries Directive .....	5
2.2.1 Symbols.....	5
2.3 Marking Dimensions – Separate Collection Symbol.....	5
2.3.1 On Batteries .....	5
2.3.2 On Packaging.....	5
2.4 Marking Dimensions – Chemical Symbol.....	6
2.5 Capacity marking requirements for portable rechargeable batteries.....	6
2.5.1 Introduction.....	6
2.5.2 Individual portable rechargeable batteries .....	7
2.5.3 Portable Battery packs .....	7
2.5.4 Small portable rechargeable batteries .....	7
2.5.5 Portable Button cells and memory back-up batteries. ....	7
2.5.6 Batteries supplied together with battery chargers.....	7
2.5.7 Exemption of the capacity marking requirement for embedded batteries .	8
2.6 Capacity marking for portable primary batteries.....	8
3. INDUSTRY STANDARDS.....	9
3.1 Introduction.....	9
3.2 Multiple Chemical Symbols.....	9
3.3 Button Cells .....	9
3.4 Battery Packs.....	10
3.5 Qualification of Separate Collection Symbol .....	10
3.6 Batteries Incorporated into Appliances.....	11
3.6.1 Applications Exempted from Ready Removability .....	11
3.6.2 Applications Designed for Ready Removability .....	11
3.6.3 Instructions for Ready Removability .....	11
4. BATTERY PERIPHERALS AND BATTERY RELATED PRODUCTS .....	12
4.1 Introduction.....	12
4.2 Marking requirements for cables and wiring.....	12
4.2.1 RoHS.....	12
4.2.2 WEEE .....	12

4.3.2 Low Voltage Directive.....	13
4.3 Marking requirements for chargers .....	13
4.3.1 Low Voltage Directive.....	13
4.3.2 WEEE .....	13
4.3.3 ROHS.....	13
4.3.4 EMC.....	13
4.4 Marking requirements for Battery spacers .....	14
4.4.1 WEEE .....	14
4.4.2 RoHS.....	14
4.5 Marking for portable battery charging stations .....	14
4.6 Marking requirements in Medical Devices .....	14
4.7 Marking requirement for Electromagnetic Compatibility.....	14
ANNEX I.....	16
ANNEX II .....	18
ANNEX III .....	19

## 1. INTRODUCTION

These guidelines are intended as a tool to aid compliance with certain marking requirements for batteries and battery peripherals based on the applicable EU legislation.

The guidelines look into requirements coming out of the Batteries Directive 2006/66/EC and Regulation (EU) 1103/2010 on capacity marking of portable rechargeable batteries.

In addition, this document also looks into other EU legislation such as the RoHS, WEEE, Low Voltage and Medical Equipment Directives.

As a principle, all batteries are required to be marked, either on the battery or its packaging depending on size, with the separate collection symbol (crossed-out wheeled bin)

Batteries containing mercury, cadmium and lead are also required to be marked with the appropriate chemical symbol(s) under the crossed-out wheeled bin.

Portable rechargeable batteries are required to be marked with their capacity from 30 May 2012 (Regulation (EU) 1103/2010).

The producer placing batteries on the market is responsible for fulfilling the marking requirements in accordance to the provisions of the Batteries Directive 2006/66/EC.

Certain battery peripherals are required to bear the standardized CE marking label, as well as the crossed-out wheeled bin. This is further detailed in chapter 4 of these guidelines

## 2. LEGAL REQUIREMENTS

### 2.1 Introduction

Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators (hereafter 'the Batteries Directive) requires that end users shall be informed about the necessity to collect separately for recycling all types of waste batteries and accumulators and that consumers should be informed about the heavy metals content of batteries. The Batteries Directive also requires that the capacity of all portable and automotive batteries and accumulators is indicated on them in a visible, legible and indelible form. The Directive was partially amended by Directive 2013/56/EU which was published in the Official Journal of the European Union in November 2013<sup>1</sup>.

---

<sup>1</sup> <http://ec.europa.eu/environment/waste/batteries/>

Regulation (EU) 1103/2010 defines the capacity marking requirements for portable rechargeable and automotive batteries.

At the time of publication of these Guidelines, the EU Commission has not yet proposed any requirement for the capacity marking of portable primary batteries (see § 2.7 below).

*NB: The term battery, or batteries, used in this document means single cells, assembly of cells or battery packs used as individual units in an appliance.*

## **2.2 Marking Requirements of the Batteries Directive**

### **2.2.1 Symbols**

All batteries, accumulators and battery packs are required to be marked with the separate collection symbol (crossed-out wheeled bin) either on the battery or its packaging depending on size.

In addition batteries, accumulators, battery packs and button cells should include the chemical symbol Hg when containing more than 0,0005% mercury, the chemical symbol Cd when containing more than 0,002% cadmium, the chemical symbol Pb when containing more than 0,004% lead. If the content is higher for more than one of the substances in question, all relevant chemical symbols have to be marked.

The symbols can be placed on the existing colour background as long as they are visible, legible and indelible. The symbols can be attached as labels, by durable printing, or as a surface profile, either indented or as relief.

## **2.3 Marking Dimensions – Separate Collection Symbol**

### **2.3.1 On Batteries**

Prismatic shapes: The symbol shall cover at least 3% of the area of the largest side of the battery, accumulator or battery pack, up to a maximum size of 5x5 cm. The symbol may be marked on any side.

Cylindrical shapes: The symbol shall cover at least 1.5% of the battery surface area to a maximum of 5cm x 5cm.

### **2.3.2 On Packaging**

Where the size of the battery, accumulator or battery pack is such that the symbol would be smaller than 0.5cm x 0.5cm, the battery, accumulator or battery pack need not be

marked but a symbol measuring 1 cm x 1 cm shall be printed on the packaging offered to the consumer.

## **2.4 Marking Dimensions – Chemical Symbol**

Irrespective of whether the separate collection symbol is on the product or on the packaging, where relevant the chemical symbol Cd, Hg or Pb must be placed beneath the separate collection symbol and be at least one quarter of the area of that symbol.

Detailed dimensions of the symbols are available in the Annex I.

In absence of clear guidance in the Directive and in conjunction with IEC 61429:1995, it is proposed that the background of the area in which the chemical symbol will be placed is included in the calculations for the dimensions.

## **2.5 Capacity marking requirements for portable rechargeable batteries.**

### **2.5.1 Introduction**

Regulation (EU) 1103/2010 governs the capacity marking requirements of **portable rechargeable batteries** including specific requirements related to its minimum size and location. The capacity label shall include both the numeral and its units.

The capacity label is a marking which has to appear either on the battery label, the battery casing and/or the packaging.

The capacity of portable rechargeable batteries shall be expressed in 'milliampere-hour(s)' or 'ampere-hour(s)', using the abbreviations mAh or Ah respectively.

The capacity of portable rechargeable batteries shall be expressed as:

- an integer when 'mAh' units are used, e.g. 1200 mAh.
- a decimal number with one digit when the capacity is expressed in 'Ah', e.g. 1.2 Ah.

As indicated in Article 2 §2 of Regulation (EU) 1103/2010, the capacity of portable secondary (rechargeable) batteries and accumulators shall be determined on the basis of IEC/EN 61951-1, IEC/EN 61951-2, IEC/EN 60622, IEC/EN 61960 and IEC/EN 61056-1 standards depending on chemical substances contained therein.

The size of the capacity marking shall include the size of the numeral and the units combined.

The capacity of all rechargeable batteries will be indicated on these batteries in a visible, legible and indelible form. This can be placed on the existing colour background and can

be attached as labels, by durable printing, or as a surface profile, either indented or as relief.

### ***2.5.2 Individual portable rechargeable batteries***

For individual portable cells and batteries with the exception of button cells and memory back-up batteries, the capacity label shall be placed on the front of the packaging and on the battery inside the packaging. When batteries are sold without packaging, the capacity label shall be located on the rechargeable battery itself.

Where the capacity label is printed on cells and battery labels, the minimum size shall be 1,0 x 5,0 mm (H&L). When printed on the packaging, the capacity label shall have a minimum size of 5,0 x 12,0 mm (H&L).

### ***2.5.3 Portable Battery packs***

For portable battery packs, the capacity label only has to be placed on the external housing of the battery and not on each individual cell inside the battery pack.

The following size requirements apply:

- Pack's largest side < 70 cm<sup>2</sup>: minimum size of the capacity label is 1,0 x 5,0 mm (H x L)
- Pack's largest side ≥ 70 cm<sup>2</sup>: minimum size of the capacity label is 2,0 x 5,0 mm (H x L)

### ***2.5.4 Small portable rechargeable batteries***

Where the size of the portable rechargeable battery is such that the above mentioned minimum capacity labels cannot be shown upon it, the capacity label shall be marked on the packaging with a minimum size of 5,0 x 12,0 mm (H x L). In case the portable rechargeable battery is not supplied with its own packaging, the capacity label shall be marked on the packaging of the appliance with which the batteries are sold.

### ***2.5.5 Portable Button cells and memory back-up batteries.***

The capacity label shall be placed on the front of the packaging and shall have a minimum size of 5,0 x 12,0 mm (H x L).

### ***2.5.6 Batteries supplied together with battery chargers***

For portable batteries supplied with battery chargers, the capacity label shall be placed on the front of the packaging which contains both the individual batteries and the charger. The capacity label shall also be placed on the battery inside the packaging provided the minimum size requirements can be respected.

Where the capacity label is printed on battery labels, the minimum size shall be 1,0 x 5,0 mm (H&L). When printed on the packaging, the capacity label shall have a minimum size of 5,0 x 12,0 mm (H&L).

### ***2.5.7 Exemption of the capacity marking requirement for embedded batteries***

Portable secondary (rechargeable) batteries and accumulators incorporated or designed to be incorporated in appliances before being provided to end-users, and not intended to be removed pursuant to Article 11 of Directive 2006/66/EC are exempt from the capacity labeling requirements. (Annex I – Regulation (EU) 1103/2010).

For more detailed rules please consult Regulation (EU) 1103/2010 published in the Official Journal which is the legally binding document.

### ***2.6 Capacity marking for portable primary batteries***

As described in the European Commission's Batteries FAQ Document<sup>2</sup>, published in May 2014, it has proved not currently possible to draw up harmonised rules for the capacity labeling of portable non-rechargeable batteries. The Commission – taking account of the suggestions made in the CENELEC feasibility study – will look into other performance-based labeling options to meet the overall objective of the provisions Article 21(2) in the Batteries Directive.

Until EU harmonised legislation for portable non-rechargeable batteries and accumulators is in place, Member States are not obliged to introduce or require the use of capacity labels, and battery producers are not obliged to place capacity labels on them, unless required under national law. Any national labeling requirements will apply only until harmonised EU requirements are in place. Meanwhile, EU Member States must notify the Commission of any new technical implementing measure(s), in accordance with Directive 98/34/EC for technical standards and regulations.

---

<sup>2</sup> <http://ec.europa.eu/environment/waste/batteries/pdf/faq.pdf>

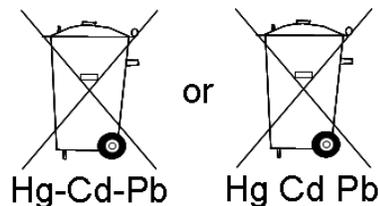
### 3. INDUSTRY STANDARDS

#### 3.1 Introduction

The following recommendations have been developed by the EPBA in cooperation with RECHARGE and DIGITALEUROPE to promote a standardised approach on marking related issues that are not clearly defined in the Batteries Directive. Use of these standards are therefore entirely voluntary and at the discretion of the “producer”.

#### 3.2 Multiple Chemical Symbols

In those cases where it is necessary to include more than one chemical symbol the format should be as indicated below. Dimensions of the separate collection symbol and the chemical symbols as required by the Directive should be followed.



#### 3.3 Button Cells

The dimensions of a very limited number of button cell batteries are such that the separate collection symbol should be marked on the cell according to a strict reading of the Batteries Directive’s marking requirements in Art. 21.4.

However this is not an effective method for informing consumers about separate collection for the following reasons:

- a. Button cells do not have a label on which the symbol could be printed since both its ends are designed to act as electrical contacts. Application of any substances such as inks, etc could insulate the contact between the battery and the appliance into which it is placed causing malfunction. As a result the symbol would have to be engraved into the metal and this would not be easily visible to the consumer and be contrary to Art. 21.6 of the Batteries Directive.
- b. According to the IEC standards button cells should display the following information on cell because of safety and performance issues:
  - polarity "+" symbol (safety),
  - designation to indicate compliance with IEC 60086-3As a result the available space for the separate collection symbol is restricted.

Therefore, the following practise is recommended:

Placing the separate collection symbol, measuring 1cm x 1cm, on the packaging of all button cells will provide consumers with information about their proper disposal visibly, legibly and indelibly.

### **3.4 Battery Packs**

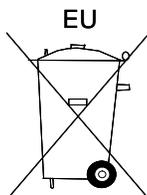
The Batteries Directive defines ‘battery pack’ as “any set of batteries or accumulators that are connected together and/or encapsulated within an outer casing so as to form a complete unit that the end user is not intended to split up or open.”

The marking requirements of Article 21.1 of the Batteries Directive 2006/66/EC include battery packs together with batteries and accumulators that have to be appropriately marked with the separate collection symbol. Since end users are not intended to come into contact with batteries inside a pack it is not necessary to place the separate collection mark on each individual cell inside the battery pack but instead to mark the pack according to the Directive’s requirements noted in section 1 above.

### **3.5 Qualification of Separate Collection Symbol**

The following recommendations have been developed for those producers wishing to advise non-EU markets that the separate collection symbol is relevant in the EU only.

- Location of the qualifier should be outside the boundaries of the symbol.
- Preferably the qualifier should be on top of the symbol. To avoid confusion, it should not be marked under the separate collection symbol because the Batteries Directive reserves that space for chemical symbols (see § 2.2. above).
- The qualifier could be used with the symbol either on battery label or on the battery’s packaging.
- The recommended qualifier is “EU” for European Union as shown in the following illustration:



### **3.6 Batteries Incorporated into Appliances**

Art. 11 of the Battery Directive requires that “manufacturers design appliances in such a way that waste batteries and accumulators can be readily removed.” However this requirement does not apply where “for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.” Finally the Battery Directive requires “appliances into which batteries and accumulators are incorporated shall be accompanied by instructions showing how they can be removed safely by either the end-user or by independent qualified professional”

#### **3.6.1 Applications Exempted from Ready Removability**

Batteries incorporated into appliances that are exempted from “readily removed” requirement of the Batteries Directive for safety, performance, medical or data integrity reasons (Article 11), need not be marked with the separate collection and chemical symbols since end users are not expected to dispose of the battery separately from the appliance. Such batteries would be separated from the appliance during the treatment phase of the appliance as required under the WEEE Directive 2012/19/EU. In particular, this exemption should also apply to button cells, memory back-up batteries, individual cells and battery packs when those batteries/packs are supplied embedded (\*) in the equipment.

(\*) where embedded means “intended to be replaced by professionals or not intended for replacement during the service life of the equipment.”

#### **3.6.2 Applications Designed for Ready Removability**

Marking of the separate collection and chemical symbols for batteries and accumulators that can be “readily removed” shall be as follows:

- Where the size of the battery or accumulator is such that following the symbol size conditions noted under 2.3.1 above the symbol would not be smaller than 0.5 cm x 0.5 cm, symbol(s) should be placed on the battery or accumulator.
- Where the size of the battery or accumulator is such that the symbol would be smaller than 0.5cm x 0.5cm, the battery or accumulator should not be marked but a symbol measuring 1cm x 1 cm shall be printed either: 1) on the packaging of the appliance; 2) inside the instructions/manual.

#### **3.6.3 Instructions for Ready Removability**

The Battery Directive requires that appliances in which batteries and accumulators are incorporated shall be accompanied by instructions on how those batteries and accumulators can be safely removed. Instructions may be made available to the consumer on a separate leaflet or printed on the packaging, or by other means.

## **4. BATTERY PERIPHERALS AND BATTERY RELATED PRODUCTS**

### **4.1 Introduction**

In addition to batteries, marking is sometimes legally required for products related to batteries, normally referred to as “battery peripherals”, which include, but may not necessarily be limited to cables and chargers.

### **4.2 Marking requirements for cables and wiring**

#### **4.2.1 RoHS**

Generally, from 3 January 2013 cables are within the scope of the EU legislation on the restriction on the use of hazardous substances (2011/65/EU) RoHS2 and should be CE marked.

According to Article 3 of RoHS, ‘cables’ means all cables with a rated voltage of less than 250 volts that serve as a connection or an extension to connect EEE to the electrical outlet or to connect two or more EEE to each other.

External cables that form part of another EEE because they are sold together or marketed/shipped for use with an EEE, e.g. power cords, must meet the material restrictions but do not need an individual CE marking and Declaration of Conformity if they are covered by the declaration of conformity (DoC) for the EEE and the EEE is CE marked.<sup>3</sup>

#### **4.2.2 WEEE**

Due to the fact that there are different views on whether or not cables fall under the scope of the WEEE Directive before 2018, this section is open for interpretation.

Cables that are used for the transfer of electric currents and electromagnetic fields fall within the scope of the EEE definition and as such need to be marked with the crossed out dustbin

However, cables that are components of another EEE (internal – permanently attached – or externally connected and removable, but sold together or marketed/shipped for use with the EEE) do not fall within the scope of the Directive. Cables placed on the market individually that are not part of another EEE are considered as EEE themselves<sup>4</sup>.

---

<sup>3</sup> See Guidance document on RoHS Directive, [http://ec.europa.eu/environment/waste/rohs\\_eee/pdf/faq.pdf](http://ec.europa.eu/environment/waste/rohs_eee/pdf/faq.pdf)

<sup>4</sup> See FAQ on Directive 2012/19/EU on WEEE, page 8,  
<http://ec.europa.eu/environment/waste/weee/pdf/faq.pdf>

#### **4.3.2 Low Voltage Directive**

Following requirements of Directive 2014/35/EU related to the making available on the market of electrical equipment designed for use within certain voltage limits, the Low Voltage Directive (LVD), electrical components that are intended to be incorporated into other equipment and for which a risk assessment can be undertaken such as - transformers and electrical motors, are covered as such by the Directive and must be CE marked. Cables do fall under the scope, according to the Commission's Guidance document of on the application of the LVD.<sup>5</sup>

### **4.3 Marking requirements for chargers**

#### **4.3.1 Low Voltage Directive**

Battery chargers are required to bear the CE mark under the scope of the Low Voltage Directive. The LVD applies to all electrical equipment designed for use with a voltage rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current. Voltage ratings refer to the voltage of the electrical input or output, not to voltages that may appear inside the equipment.

Battery operated equipment outside the voltage rating is obviously outside the scope of the LVD. Nevertheless, any accompanying battery-charger as well as equipment with integrated power supply unit within the voltage ranges of the Directive are in the scope of the LVD. This applies also in the case of battery operated equipment with supply voltage rating under 50 V AC and 75 V DC, for their accompanying power supply unit (e.g. Notebooks).

#### **4.3.2 WEEE**

Battery chargers fall within the scope of the WEEE Directive and should be marked with the crossed out dustbin, as well as with producer identification (Brand name) and marking that product has been placed on market after August 2005.

#### **4.3.3 ROHS**

Battery chargers fall within the scope of RoHS. It has been our understanding that this product was also within the scope of RoHS1 and can therefore not make use of the transition period which applies until 22 July 2019.

#### **4.3.4 EMC**

Battery chargers placed on the consumer market, and containing electronic components generating or sensitive to Electromagnetic disturbances, have to be compliant with the directive 2004/108/EC about Electromagnetic Compatibility (EMC). The CE marking is applicable on these products, according the cases described in the directive.

---

<sup>5</sup> See Guidance document on the LVD Directive  
[http://ec.europa.eu/enterprise/sectors/electrical/files/lvdgen\\_en.pdf](http://ec.europa.eu/enterprise/sectors/electrical/files/lvdgen_en.pdf)

#### **4.4 Marking requirements for Battery spacers**

##### **4.4.1 WEEE**

Battery spacers, also known as battery upsizeers or converters, fall within the scope of the WEEE Directive

##### **4.4.2 RoHS**

Battery spacers fall into the marking requirements of the RoHS 2 Directive; the text defines the products into its scope as “equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the (...) transfer (...) of such currents”

CE-marking will be required from 22 July 2019 should also be marked with the WEEE symbol crossed-out wheeled bin.

#### **4.5 Marking for portable battery charging stations**

In a similar way to other battery peripherals, portable charging stations should be CE marked. These devices transfer electric current, and therefore fall under the scope of the RoHS2 Directive and the WEEE Directive.

#### **4.6 Marking requirements in Medical Devices**

Batteries may fall in the scope of the Medical Device Directive (Directive 93/42/EEC) if they are specifically intended by the manufacturer to be used in conjunction with a medical device. In such case CE marking is required. For the case of hearing aid batteries, if the manufacturer declares in its technical files that the intended use of the battery is for hearing aids, CE marking is needed. On the other hand, if the batteries are classified in the manufacturer’s technical file as “multi-purpose” according to the Guidance Document on medical Devices<sup>6</sup>, CE marking is not required.

There is also the possibility for Member States, as competent authorities, to take the decision to qualify a certain product (e.g. battery) as a medical device or as an accessory to a medical device falling within the scope of the Medical Device Directive.

#### **4.7 Marking requirement for Electromagnetic Compatibility**

Batteries placed on the consumer market, and containing electronic components generating or sensitive to Electromagnetic disturbances, have to be compliant with the directive 2004/108/EC (EMC Directive).

---

<sup>6</sup> MEDDEV 2.1/1 Apr 94 1.1g

For further general information on marking guidelines, please contact:

**EPBA**  
Avenue Jules Bordet 142  
1140 Brussels  
Belgium  
Tel: +32 2 761 16 02  
Fax: +32 2 761 16 99  
Email: [epba@kelleneurope.com](mailto:epba@kelleneurope.com)

**RECHARGE aisbl**  
Ave. de Tervueren, 168 B-3.  
B-1150 Brussels.  
Belgium.  
Tel. + 32 2 777 05 60  
Fax + 32 2 777 05 65  
E-mail : [cchanson@rechargebatteries.org](mailto:cchanson@rechargebatteries.org)

## ANNEX I

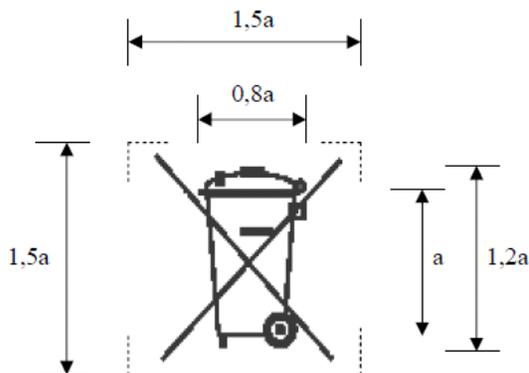
### MARKING DIMENSIONS ACCORDING TO EN 61429 AND EXAMPLES FOR SPECIFIC BATTERY SIZES

The following table has been derived using formula:  $a \geq 0.12 \sqrt{A}$

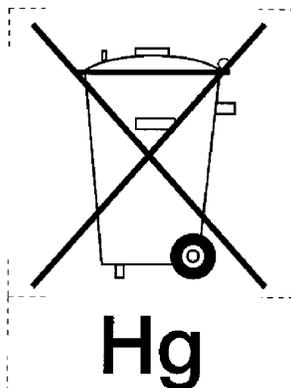
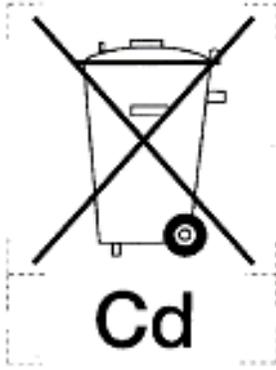
a = nominal symbol dimension  
A = half battery curved surface  
area (cylindrical) or area  
of largest side (prismatic)

Separate collection marking without collection symbol

Battery Size		Minimal "a" (in millimetres)	With chemical symbol (1,5a x 2a)  May be horizontally extended to banderole shape (in millimeters)	Without chemical symbol (1,5a x 1,5a)  May be horizontally extended to banderole shape (in millimeters)
ANSI	IEC code			
AA	R6	4,1	6,1 x 8,1	6,1 x 6,1
6F22	6LR61	4,0	6,0 x 8,0	6,0 x 6,0
C	R14	5,4	8,2 x 10,9	8,2 x 8,2
D	R20	6,9	10,3 x 13,8	10,3 x 10,3



*Separate collection marking with chemical symbol*



## ANNEX II CE marking requirements

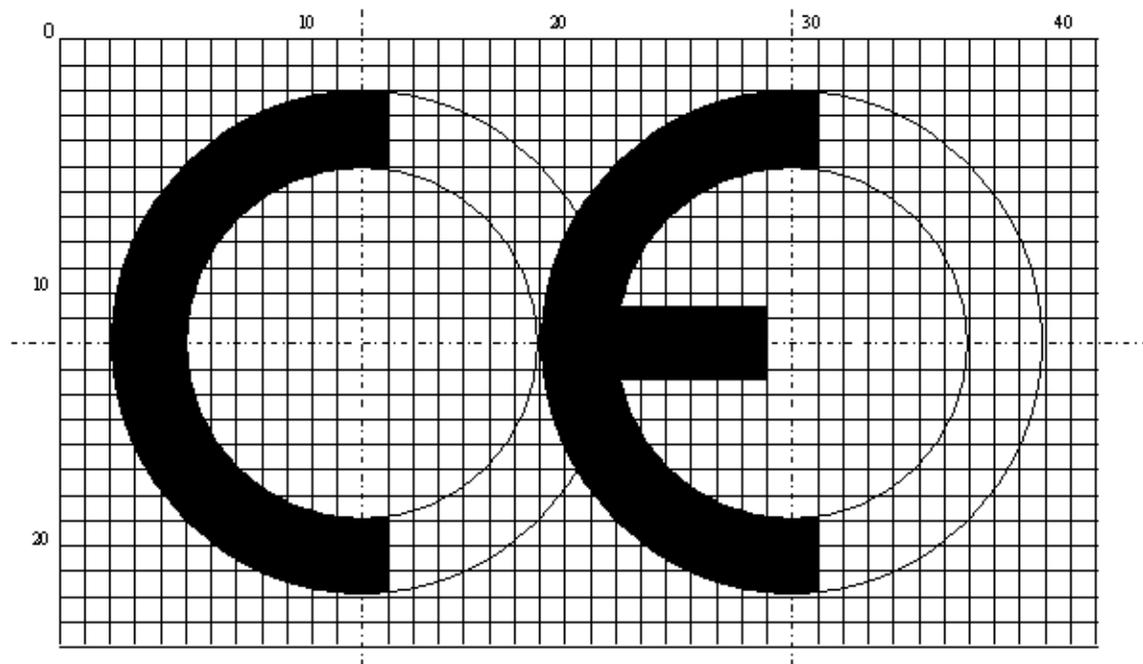
### General principles of the CE marking

According to the general requirements laid down in Regulation (EC) No 765/2008, governing the accreditation and market surveillance of products placed in the EU, a product is legally required to bear the CE mark before it is placed on the market. Only the manufacturer or his authorised representative established in the European Union are authorised to affix the "CE" marking.

Whilst the importer is not able to declare conformity to the Directive, he/ she needs to act with due care to ensure that clearly non-compliant products are not placed onto the market.

### Legal requirements

- The CE marking shall consist of the initials 'CE'
- If the CE marking is reduced or enlarged, the proportions given in the graduated drawing below 1 shall be respected
- Where specific legislation does not impose specific dimensions, the CE marking shall be at least 5 mm high



## ANNEX III Battery marking sizes

### MINIMUM REQUIREMENTS FOR SEPARATE COLLECTION MARK LOCATION

This document is intended to provide guidance on the location of the separate collection mark foreseen by the EU's Battery Directive. The document is not a legally binding interpretation of the Battery Directive, nor of any national implementing legislation

Zinc Carbon		Alkaline Manganese		Nickel Oxyhydroxide		Lithium-Manganese Dioxide		Lithium Carbon Monofluoride	
R20	On battery	LR20	On battery	ZR6	On battery	CR1025	On packaging	BR1225	On packaging
R14	On battery	LR14	On battery	ZR03	On packaging	CR1216	On packaging	BR2325	On packaging
R6	On battery	LR6	On battery			CR1220	On packaging	BR2330	On packaging
R03	On packaging	LR03	On packaging			CR1616	On packaging		
3R12	On battery	3LR12	On battery			CR1620	On packaging		
6F22	On battery	6LR61	On battery			CR1632	On packaging		
3R25	On battery	4LR61	On battery			CR2012	On packaging		
4R25	On battery	4LR25	On battery			CR2016	On packaging		
4R25-2A	On battery	2LR12	On battery			CR2016	On packaging		
6F90	On battery	LR820	On battery			CR2025	On packaging		
6F100	On battery	LR61	On packaging			CR2026	On packaging		
6R25	On battery	LR1	On packaging			CR2032	On packaging		
8R25	On battery	4LR44	On packaging			CR2032	On packaging		
		LR41	On packaging			CR2320	On packaging		
		LR43	On packaging			CR2430	On packaging		
		LR44	On packaging			CR2450	On packaging		
		LR50	On packaging			CR17345	On battery		
		LR52	On packaging			CR17345	On battery		
		LR54	On packaging			CRP2	On battery		
		LR54	On packaging			CRP2	On battery		
		LR55	On packaging			2CR5	On battery		
		LR60	On packaging			2CR5	On battery		
		LR9	On packaging			2CR1/3N	On battery		
		none (stack)	On battery			CR11108	On packaging		
		L522MJ	On packaging			CR2	On packaging		
		LR1016	On packaging			CRV-3	On battery		
		LR828	On packaging			CR123A	On battery		
		10F15	On packaging			CR1/3N	On packaging		
		LRV08	On packaging						
		Lantern batteries	On battery						
		10A	On packaging						
		11A	On packaging						
		23A	On packaging						
		27A	On packaging						

**Silver Oxide**

-/SR1116SW	On packaging
-/SR1116W	On packaging
SR1136SW	On packaging
-/SR1156S	On packaging
-/SR416SW	On packaging
-/SR512SW	On packaging
-/SR610SW	On packaging
-/SR614SW	On packaging
-/SR712SW	On packaging
-/SR714SW	On packaging
-/SR731SW	On packaging
4SR44	On packaging
SR41/SR736SW	On packaging
SR41/SR736W	On packaging
SR41/SR936SW	On packaging
SR42	On packaging
SR42/SR1136SW	On packaging
SR42/SR1136W	On packaging
SR43	On packaging
SR43/SR1142SW	On packaging
SR43/SR1142W	On packaging
SR44	On packaging
PR70	On packaging
PR675	On packaging
9V Zn/Air	On battery
SR44/SR1154W	On packaging
SR45/SR936SW	On packaging

SR48	On packaging
SR48	On packaging
SR48/SR754SW	On packaging
SR48/SR754W	On packaging
SR54/SR1130SW	On packaging
SR54/SR1130W	On packaging
SR54	On packaging
SR55/SR1120SW	On packaging
SR55/SR1120W	On packaging
SR57/SR726W	On packaging
SR57/SR927SW	On packaging
SR57/SR927W	On packaging
SR58/SR721SW	On packaging
SR58/SR721W	On packaging
SR59/SR726SW	On packaging
SR60/SR621SW	On packaging
SR62/SR516SW	On packaging
SR626	On packaging
SR63/SR521SW	On packaging
SR64/SR527SW	On packaging
SR65/SR616SW	On packaging
SR66/SR626SW	On packaging
SR67/SR716SW	On packaging
SR67	On packaging
SR68	On packaging
SR69/SR920SW	On packaging
SR69/SR920W	On packaging
4SR44	On packaging

**Lithium Iron Disulfide**

FR6	On battery
FR03	On packaging

**Nickel Metal Hydride**

HR20	On battery
HR14	On battery
HR6	On battery
HR03	On packaging
9V HR	On battery