

**BS 8567:2012**

*Incorporating Corrigenda Nos. 1 and 2*



**BSI Standards Publication**

# **Specification for outdoor electricity meter cupboards**

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## Foreword

### Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 July 2012. It was prepared by Technical Committee PEL/13, *Electricity Meters*. A list of organizations represented on this committee can be obtained on request to its secretary.

### Information about this document

The start and finish of text introduced or altered by Corrigenda No. 1 and No. 2 are indicated in the text by tags **[C<sub>1</sub>]** **[C<sub>1</sub>]** and **[C<sub>2</sub>]** **[C<sub>2</sub>]**.

### Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

### Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

## Introduction

Outdoor meter cupboards for the installation of electricity service terminations and metering equipment were introduced in the late 1960s.

The specification for such cupboards has hitherto been published by the Electricity Association/Energy Networks Association (ENA) as their Technical Specification 12-3.

The gas industry has recently created a British Standard for its gas installation cupboards (BS 8499) and this combined with the imminent introduction of smart electricity meters has prompted the electricity industry to revise and update TS 12-3 and publish it as a British Standard.

## 1 Scope

This British Standard specifies requirements for outdoor electricity meter cupboards. It is intended to accommodate the Electricity Supply Industry's service termination and metering equipment, in particular cut-outs, single and polyphase meters, isolators and communication equipment.

It is also applicable to the following types of meter cupboards:

- a) built-in;
- b) surface-mounted.

This British Standard also specifies requirements for the design, material and composition of the meter board.

It is not applicable to multiple service metering installations which are installed in the same housing or security shrouds intended to provide additional protection to meter installations.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 410-1, *Test sieves – Technical requirements and testing – Part 1: Test sieves of metal wire cloth*

BS 3532, *Method of specifying unsaturated polyester resin systems*

BS 4781:1990, *Specification for pressure-sensitive adhesive plastics labels for permanent use*

BS 7371-12, *Coatings on metal fasteners – Part 12: Requirements for imperial fasteners*

BS EN 312:2010, *Particleboards – Specifications*

Text deleted.

BS EN 10088-2:2005, *Stainless steels – Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

BS EN 14020, *Reinforcements – Specification for textile glass rovings*

BS EN ISO 178, *Plastics – Determination of flexural properties*

BS EN ISO 179-1:2001, *Plastics – Determination of Charpy impact properties – Part 1: Non-instrumented impact test*

BS EN ISO 295:2004, *Plastics – Compression moulding of test specimens of thermosetting materials*

BS EN ISO 1183-1:2004, *Plastics – Methods for determining the density of non-cellular plastics – Part 1: Immersion method, liquid pycnometer method and titration method*

### 3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

- 3.1 distribution network operator**  
company, licensed by Ofgem, which distributes energy to the customer
- 3.2 knockout**  
section of material which can be removed under pressure to leave a hole
- 3.3 meter**  
instrument designed to measure, store, display and communicate the quantity of electricity that has passed through it
- 3.4 meter cupboards**
  - 3.4.1 built-in meter cupboard**  
purpose-made meter cupboard, fitted with a meter board, for inseting into a building wall, normally during the construction of the wall
  - 3.4.2 surface-mounted meter cupboard**  
purpose-designed meter cupboard fitted with a meter board and intended for attaching to the outside face of an existing wall
- 3.5 meter installation**  
installation that could comprise of energy meter(s), isolation device, communications equipment, switching devices and associated interconnection cables
- 3.6 service position**  
distribution network operators incoming service termination
- 3.7 service termination equipment**  
service cable, cut-out, associated connector blocks, cable covers

### 4 Dimensions and features

#### 4.1 General

The meter cupboard and door shall be designed to enclose the service termination and meter installation and shall:

- a) allow the fitting, operation and replacement of any service termination or meter installation; and
- b) provide unrestricted access, once the meter is installed, to enable:
  - 1) the removal and replacement of the cut-out fuse;
  - 2) commissioning to be undertaken;
  - 3) the operation of any prepayment mechanism by the consumer;
  - 4) the meter register to be easily read;

- 5) safety inspections and maintenance activities, including the replacement of any associated equipment or batteries, without the need to remove the meter.

*NOTE A meter cupboard conforming to this standard can be expected to meet these objectives.*

The meter cupboard shall be designed to allow for left-hand opening or designed to allow for right-hand opening. For all designs, the hinging arrangement shall be substantially concealed when the door is in the closed position.

## 4.2 Security and weather resistance

### COMMENTARY ON 4.2

*A meter cupboard conforming to this British Standard is deemed to protect the meter installation and distribution termination equipment against the ingress of moisture and accidental damage.*

**4.2.1** The meter cupboard shall be designed and manufactured such:

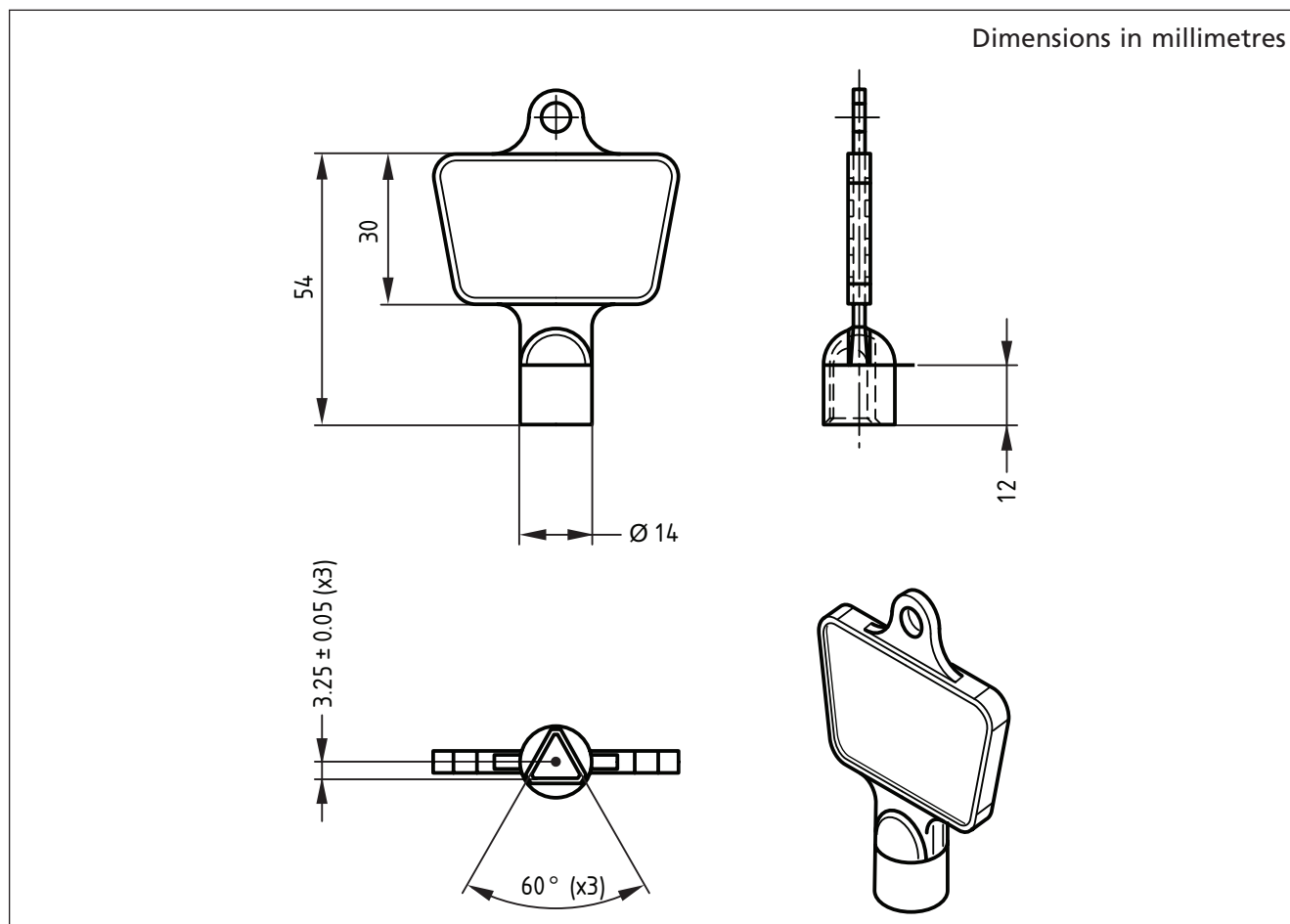
- a) as to prevent warping of the door; and
- b) that the latch is secure when locked.

*NOTE Provision may be made for the fitting of a cord or strap to prevent the door opening beyond an angle of 100° when specified by the purchaser. The cord or strap should be designed for easy release and fitting.*

**4.2.2** To prevent unauthorized access to the meter installation, the meter cupboard shall be supplied with:

- a) a door, as appropriate;
- b) a lock, conforming to 7.2; and
- c) a key manufactured from polypropylene, with the dimensions given in Figure 1.

Figure 1 Meter cupboard key



### 4.3 General features

**4.3.1** The wall thickness of the meter cupboard and door shall be not less than 2.5 mm at any point, except in designated knockout areas.

**4.3.2** The meter cupboard door shall be removable and replaceable.

### 4.4 Cable entries

Access for cable entries shall be provided by means of knockouts let into the cupboard as shown in Figure 2 to Figure 5, or by other suitable means.

*NOTE* Attention is drawn to the Building Regulations [1, 2, 3].

### 4.5 Provision for fixing of equipment

#### 4.5.1 Material

The board material of medium density chipboard shall conform to any of Type P2 to Type P7 in BS EN 312:2010.

#### 4.5.2 Fixing of meter board

Provision shall be made for fixing, and possible subsequent replacement of, a meter board to the rear wall by means of M5 x 20 mm countersunk headed screws. Separation between the rear wall of the cupboard and the meter board shall not exceed 3 mm.

*NOTE 1* The preferred fixing positions are shown in Figure 2 to Figure 5.

*NOTE 2 Alternative means for fixing a meter board in a cupboard are subject to agreement between the purchaser and the supplier.*

The meter board shall be 12 mm thick and fit the meter cupboard.

*NOTE 3 When required, provisions should be made for fixing a cut-out in small and narrow cupboards in those situations where the service cable enters the cupboard through a knockout in the bottom architrave without causing damage to the service cable by excessive bending. A minimum bending radius for the service cable of 125 mm should be assumed. An inclined flat surface should be provided for mounting the cut-out, which should be not less than 220 mm long by 140 mm wide.*

#### 4.6 Built-in cupboard

In addition to the requirements in 4.1 to 4.5, the minimum dimensions of the meter cupboard shall conform to Figure 2 to Figure 5.