

Specification for

Straight concrete and clayware cable covers

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The preparation of this British Standard was entrusted by the Cement Gypsum Aggregates and Quarry Products Standards Committee (CAB/-) to Technical Committee CAB/13, upon which the following bodies were represented:

- Association of Metropolitan Authorities
- British Ceramic Research Association
- British Precast Concrete Federation Ltd
- British Standards Society
- Cement Makers' Federation
- Department of Energy, Electricity Division
- Electricity Supply Industry in England and Wales
- Institution of Civil Engineers
- National Federation of Roofing Contractors
- National Federation of Terrazzo-mosaic Specialists
- North Wales Slate Quarries Association
- Royal Institute of British Architects
- Royal Institution of Chartered Surveyors

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Foreword

This revision of this British Standard has been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee. This revision supersedes BS 2484:1961, which is withdrawn.

In this revision, the earlier imperial measures, with their metric equivalents, have been replaced throughout by metric units. Radius covers are not now included in the scope of this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for straight cable covers that carry a warning of the presence of underground services, e.g. electricity, telephone, gas, oil, and are manufactured from clayware (i.e. burnt clay) or from reinforced or unreinforced concrete.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Materials

2.1 Concrete

2.1.1 Cement. The binder shall comprise one of the following:

- hydraulic cement that is an active hydraulic binder formed by grinding clinker and complying with BS 12, BS 1370 or BS 4027;
- hydraulic binder, manufactured by a controlled process in which Portland cement clinker or Portland cement is combined in specified proportions with a latent hydraulic binder consisting of pulverized-fuel ash or granulated blastfurnace slag, complying with BS 146, BS 4246 or BS 6588 according to the latent hydraulic binder used;
- hydraulic binder, manufactured in the concrete mixer by combining Portland cement complying with BS 12 with a latent hydraulic binder consisting of pulverized-fuel ash complying with BS 3892-1 or ground granulated blastfurnace slag¹⁾ complying with the proportions and properties given in BS 146, BS 4246 or BS 6588 according to the latent hydraulic binder used.

2.1.2 Aggregates. The size of aggregates shall not exceed 10 mm nominal. They shall comply with the requirements of one of the following British Standards:

- BS 882, except for the grading requirements;
- NOTE The manufacturer may modify the gradings to suit his manufacturing process.
- BS 1047;
 - BS 3797.

NOTE The size used should be appropriate to the sections of the cover.

2.1.3 Water. Mixing water for concrete shall be clean and free from harmful matter in such quantities as would affect the properties of the concrete in the plastic or hardened state.

NOTE See BS 3148 for test methods and notes on the suitability of waters for concrete.

2.1.4 Pigments. Any pigments used shall comply with the requirements of BS 1014.

2.1.5 Admixtures. Any admixtures used shall comply with the requirements of BS 5075.

The total chloride content of the concrete mix arising from the aggregate together with that from any admixtures and any other source shall not exceed the limits given in Table 1, expressed as a percentage relationship between chloride ion and mass of cement in the mix.

Table 1 — Maximum total chloride content

Type or use of concrete	Maximum total chloride content expressed as percentage of chloride ion by mass of cement
	%
Steam-cured structural concrete	0.1
Concrete made with cement complying with BS 4027	0.2
Concrete containing embedded metal and made with cement complying with BS 12, BS 146 or combinations with slag or pulverized-fuel ash	0.40 for 95 % of test results with no result greater than 0.50
NOTE Marine aggregates and some inland aggregates contain chlorides. Both should be selected carefully. Wherever possible, the total chloride content should be calculated from the mix proportions and the measured chloride content of each of the constituents.	

2.1.6 Type of reinforcement. The reinforcement shall comply with the requirements of one of the following British Standards:

- BS 4449;
- BS 4461;
- BS 4482;
- BS 4483.

2.1.7 Location of reinforcement. The location of the reinforcement shall be as follows:

- for covers of nominal width up to and including 180 mm, two bars arranged longitudinally, one placed 25^{+5}_{-0} mm from each edge;
- for covers of nominal width 230 mm and over, three bars arranged longitudinally, one with its axis within 5 mm of the centre line, the others 25^{+5}_{-0} mm from each edge;
- for covers of nominal length 455 mm, two bars transversely;

¹⁾ A British Standard for granulated blastfurnace slag is in preparation. Until its publication, granulated blastfurnace slag in accordance with Agrément Certificate 82/1023 is suitable.