NOTE: If the PME earthing facility is considered for use, see also BS 7375.

704.1 Scope

704.1.1 The particular requirements of this section apply to temporary installations for construction and demolition sites during the period of the construction or demolition work, including, for example, the following:

(i) Construction work of new buildings
(ii) Repair, alteration, extension or demolition of existing buildings or parts of existing buildings
(iii) Engineering works
(iv) Earthworks
(v) Work of similar nature.

The requirements apply to fixed and movable installations.

The regulations do not apply to installations in administrative locations of construction sites (e.g. offices, cloakrooms, meeting rooms, canteens, restaurants, dormitories, toilets), where the general requirements of Parts 1 to 6 apply.

704.1.2 For special situations, further particular requirements apply, e.g. Section 706 for conducting locations with restricted movement.

704.3 Supplies

704.313 Equipment shall be identified with and be compatible with the particular supply from which it is energized and shall contain only components connected to one and the same installation, except for control or signalling circuits and inputs from standby supplies.

704.4 Protection for safety

704.41 Protection against electric shock

704.410.3 General requirements

704.410.3.5 The protective measures of obstacles and placing out of reach (Section 417) are not permitted.

704.410.3.6 The protective measures of non-conducting location (Regulation 418.1) and earth-free local equipotential bonding (Regulation 418.2) are not permitted.

704.410.3.10 A circuit supplying a socket-outlet with a rated current up to and including 32 A and any other circuit supplying hand-held electrical equipment with rated current up to and including 32 A shall be protected by:

(i) reduced low voltage (Regulation 411.8), or
(ii) automatic disconnection of supply (Section 411) with additional protection provided by an RCD having the characteristics specified in Regulation 415.1.1, or
(iii) electrical separation of circuits (Section 413), each socket-outlet and item of hand-held electrical equipment being supplied by an individual transformer or by a separate winding of a transformer, or
(iv) SELV or PELV (Section 414).

Where electrical separation is used special attention should be paid to the requirements of Regulation 413.3.4.

NOTE 1: The reduced low voltage system is strongly preferred for the supply to portable handlamps for general use and portable hand tools and local lighting up to 2 kW.

NOTE 2: The SELV system is strongly preferred for portable handlamps in confined or damp locations.

704.411 Protective measure: Automatic disconnection of supply
704.411.3.1 A PME earthing facility shall not be used for the means of earthing for an installation falling within the scope of this section unless all extraneous-conductive-parts are reliably connected to the main earthing terminal in accordance with Regulation 411.3.1.2.

NOTE: If the PME earthing facility is considered for use, see also BS 7375.

704.411.3.2 Automatic disconnection in case of a fault

704.411.3.2.1 For any circuit supplying one or more socket-outlets with a rated current exceeding 32A, Regulations 411.3.2.5 and 411.3.2.6 are not applicable. For any circuit supplying one or more socket-outlets with a rated current exceeding 32A, an RCD having a rated residual operating current not exceeding 500 mA shall be provided to automatically interrupt the supply to the line conductors of a circuit or equipment in the event of a fault of negligible impedance between a line conductor and an exposed-conductive-part or a protective conductor in the circuit or equipment within the disconnection time required in Regulation 411.3.2.3 or 411.3.2.4 as appropriate.

704.414 Protective measure: Extra-low voltage provided by SELV or PELV

704.414.4 Requirements for SELV and PELV circuits

704.414.4.5 Where SELV or PELV is used, whatever the nominal voltage, basic protection shall be provided by:

(i) basic insulation complying with Regulation 416.1, or
(ii) barriers or enclosures complying with Regulation 416.2.

704.5 Selection and erection of equipment

704.51 Common rules

704.511.1 All assemblies on construction and demolition sites for the distribution of electricity shall be in compliance with the requirements of BS EN 61439-4.

A plug or socket-outlet with a rated current equal to or greater than 16 A shall comply with the requirements of BS EN 60309-2.

704.52 Wiring systems

704.522.8.10 Cable shall not be installed across a site road or a walkway unless adequate protection of the cable against mechanical damage is provided.

704.522.8.11 For reduced low voltage systems, low temperature 3182/3/4/5A thermoplastic cable (BS 6004) or equivalent flexible cable shall be used. For applications exceeding reduced low voltage, flexible cable shall be H07RN-F (BS EN 50525-2-21) type or equivalent heavy duty flexible cable.

704.53 Switchgear and controlgear

704.537.2.2 Devices for isolation

Each Assembly for Construction Sites (ACS) shall incorporate suitable devices for the switching and isolation of the incoming supply.

A device for isolating the incoming supply shall be suitable for securing in the off position (see Regulation 537.2.1.5), for example, by padlock or location of the device inside a lockable enclosure.

Current-using equipment shall be supplied by ACSs, each ACS comprising:

(i) overcurrent protective devices, and
(ii) devices affording fault protection, and
(iii) socket-outlets, if required.

Safety and standby supplies shall be connected by means of devices arranged to prevent interconnection of the different supplies.