

- 5.3.4 For guidance on the earthing and ECCs, BS 7430 shall be referred to.
- 5.3.5 Where conduit and trunking are used, a high standard of workmanship in installation is essential. Joints shall be made such that their current-carrying capacity is not less than that of the conduit itself. Joints shall also have the same properties, as regards to insulation, mechanical strength and protection, as those of the wiring system or conduit of which they are part.
- 5.3.6 All ECC shall be covered with Green & Yellow PVC insulation and terminated with purpose made lugs or fixings.
- 5.3.7 Where associated with circuits, all ECCs shall be labelled at their termination points with circuit identification numbers.
- 5.3.8 All circuit ECCs shall run alongside the associated phase and neutral conductor.
- 5.3.9 Gas pipes, oil pipes, metallic conduit, support wires or other flexible metallic parts, or constructional parts, shall not be used as an ECC.
- 5.3.10 ECC shall be suitably protected against mechanical and chemical deterioration and electrodynamic effects.
- 5.3.11 Where two ECCs are used, the ends of the ECC shall be terminated independently of each other at all connection points throughout the circuit, the distribution boards, junction boxes and socket outlets. This requires an accessory to be provided with two separate earth terminal.
- 5.3.12 Where the cable incorporates metallic armoring, this should be clamped to the cable gland. The main earth conductors should be so placed so that the metallic cable sheaths can be reliable and readily connected to it by bonds made of to the cable gland.
- 5.3.13 Earthing conductors shall be accessible for the connection of any detachable earthing devices used with the electrical equipment.
- 5.3.14 It is essential for the safety of personnel and plant that an earth system shall remain effective throughout the life of the plant. It is difficult in many cases to make a check of continuity after installation; the system should therefore be robust and protected from mechanical damage and corrosion where necessary.

5.4 EARTH LEAKAGE PROTECTION

- 5.4.1 The earth leakage protection shall be suitably designed and incorporated in each and every consumer installation (BS EN 61140, IEC 61140).