

AUTHORISATION: Signature**Date**

Temporary Supply Arrangements On Site

Before setting up on site the arrangements, for providing safe temporary electrical supplies on site, which are appropriate for each phase of the works throughout the duration of the contract, need to be planned.

At site setup arrangements should include the provision of reduced voltage transformer units adjacent to the main or local distribution unit which in turn feed out reduced voltage supplies to the areas where power will be needed. BS EN 6039, 4363, 5486 and 7375 cover the technical specifications for plugs, socket outlets, distribution units etc. All Transformers Units and Outlet Units should have outlets that are switched through miniature circuit breakers.

It is strongly recommended that the above system be adopted for all site work and that a clause requiring its use be included in any appropriate contract specification.

Plugs: Socket Outlets: Couplers

It is recommended that all plugs, socket outlets and couplers are provided to BS EN 60309.

System Voltage

The most acceptable reduced voltage compromise for site work is 110volt single or three phase, so that no part of the installation is at more than 55volt or 65volt respectively to earth. It is also good practice to use either 25 volt or 50volt supplies for hand lamps.

Cables

For all site huts, offices, drying rooms and welfare facilities normal domestic voltage supplies and equipment are acceptable. BS 7671 should be adhered to in relation to these areas.

Other than supplies for welding purposes, cables carrying a voltage to earth in excess of 65volt should have continuous metal armour or a sheath, which has been effectively earthed. Where trailing cables are concerned, this earthing should be in addition to the normal cable protective conductor.

In view of the rough conditions on site all cables should be sheathed overall.

Buried cables shall be of a type incorporating an armour or metal sheath or both or be of a PVC insulated concentric type. Such cable shall be marked with suitable cable covers and be buried at a sufficient depth to avoid their being damaged by any disturbance of the ground. All cable routes shall be marked as accurately as possible on site plans and records kept in the site electrical register.

Where cables have to be suspended across access, transit or transport routes, highly visible goal post arrangements should be installed. Where cables are suspended 3m or more, a catenary wire will need to be used to provide support the cable. In open areas the cables should be suspended no lower than 6metres from the ground. If it is unavoidable for cables to lay on the ground, this practice should only be allowed for as short a time as possible and the cable should be physically protected from damage. Consideration should also be given as to whether additional RCB or other protection is appropriate.