

Site Intake Assembly for a Temporary Builders Supply Designed for a Southern Region Project

Temporary Builders Supplies for construction sites present some unique challenges for electricity suppliers, meter operators, electrical contractors and building contractors.

- Provision has to be made for temporary supply cables to be terminated in a secure and robust manner, in strict accordance with the requirements of different electricity suppliers.
- Most electricity suppliers will not guarantee the integrity of the supply earth and will only provide construction sites with a TT supply, necessitating the addition of an all-insulated RCD to protect the overall installation. The main enclosures upstream of the RCD also need to be all-insulated.
- Meter operators require a secure housing for their meter and a sealable compartment to house their current transformers (a CT chamber).



Site Intake Assembly, 1250A, Southern Region

Blakley Electrics introduced combined CT Chambers and RCDs a number of years ago. Initially these were rated at 200A / 400A but the range has now been expanded to include versions rated at 800A, 1250A and 1600A. These assemblies can either be supplied in wall mounting format (requiring a suitable wall / room to be found on site) or, more commonly, they can be supplied fitted into a robust, GRP ISIA housing, which can be positioned anywhere on the site without any further protection required.

Different electricity suppliers require different configurations and the image below shows a free-standing 1250A Insulated Site Intake Assembly designed to terminate, meter and protect an 800kVA Temporary Builders Supply installed in the Southern Region. The assembly is fitted with incoming terminals, which are punched for 2 hole fixing lugs. The incoming terminals are designed to accept one or two bunched wavecon cables per phase. A hard wood clamp is fitted in the extension box beneath the CT chamber to secure the incoming cables. Terminations with 4 hole fixings can also be incorporated, as can arrangements to terminate 3 no. bunched wavecon cables per phase.

The CT chamber (main compartment on the left hand side) is sealable and incorporates removable links and shelves for the CTs. The electricity meter can be mounted on to the door of the CT chamber (there is a minimum distance of 150mm from the door of the CT chamber to the back of the door of the outer cabinet). The meter and CTs are provided and fitted by others.

The outgoing cables feeding the site terminate in the MCCB / RCD chamber, which is on the right hand side of the assembly. A steel extension box is fitted to the underside of the MCCB / RCD chamber allowing the glanding and termination of large, 4 core, steel wire armoured cables. An aluminium gland plate is fitted, in case outgoing single cables are used.

Please see over the page for dimensions, etc.

