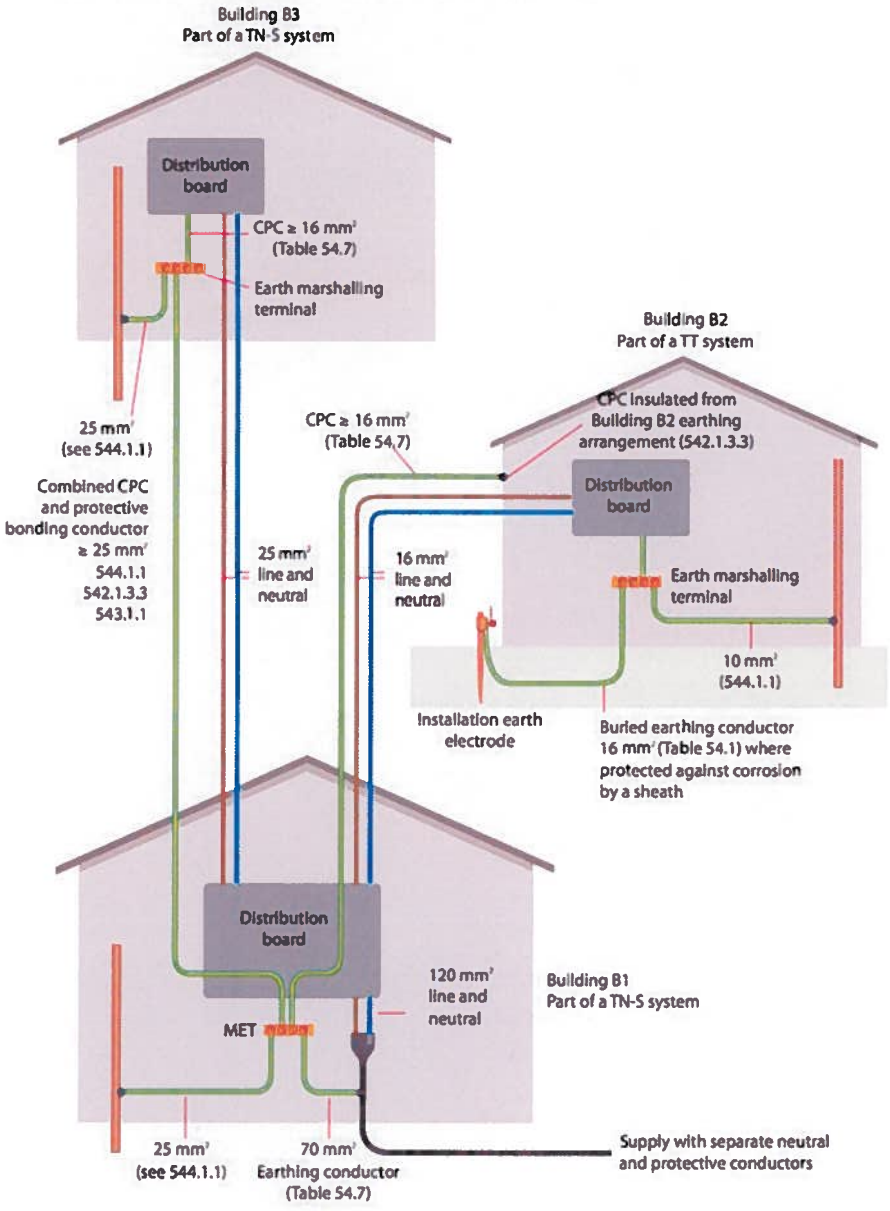
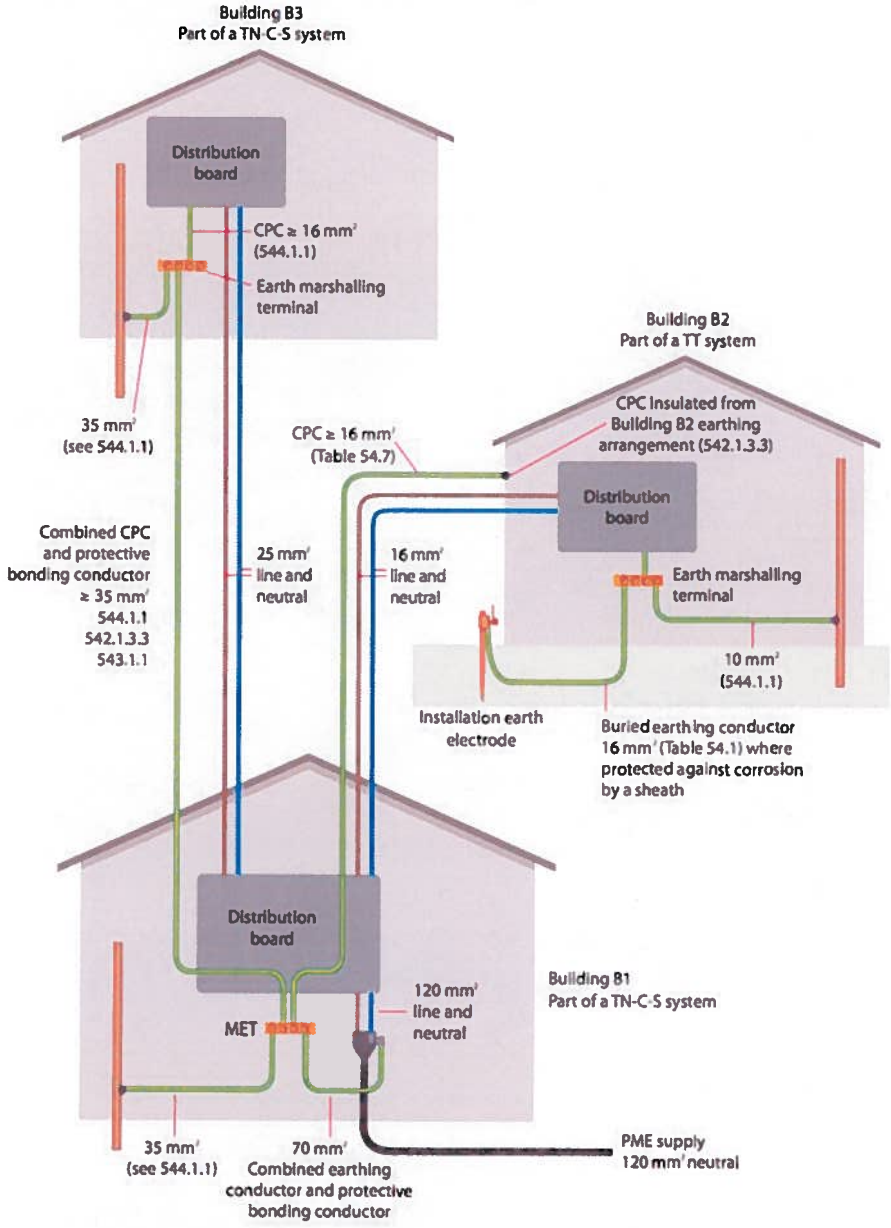
In the examples shown in Figures 5.14 and 5.15, the distribution CPC (cable armouring) has been insulated from the earthing arrangement of building B2 by means of an insulated cable gland. This effectively provides for the two earthing arrangements to be considered simultaneously inaccessible, thereby obviating the need to apply
411.3.1.1 Regulation 411.3.1.1 which requires the CPC and the earthing arrangement to be connected together where they are simultaneously accessible, in order to prevent the associated risk of an electric shock due to the potential difference between the two points. However, the armouring would be required to be earthed in building B1.

▼ **Figure 5.14** A three-building complex – system type is TN-S



▼ **Figure 5.15** A three-building complex – system type is TN-C-S



542.1.3.3 Where a protective conductor connection is to be provided between the earthing arrangement of building B2 and that of buildings B1 and B3, then the protective conductor common to the two installations would be required by Regulation 542.1.3.3 to be capable of carrying the maximum fault current likely to flow through it. As a consequence, the magnitude and duration of the fault current would have to be calculated and, by using Equation (3.1) in section 3.2, the minimum csa required for the conductor would have to be determined.

For an installation which is fed from a supply to which PME conditions apply, but which forms part of a TT system as in building B2, these conditions do not apply to that installation provided the PME earthing has not been used to earth the installation.