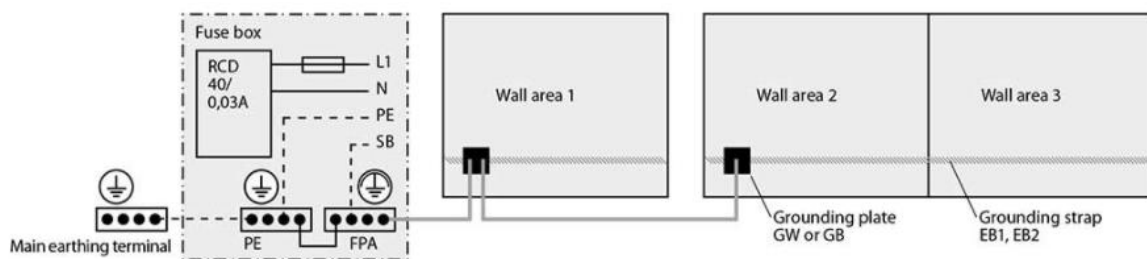


# FAQ | Grounding instructions

Large shielding measures with shielding materials are no electrical equipment but „new conductive parts“ according to IEC 826-03-03 or IEC 195-06-11 and thereby a new method of DIN VDE 0100-100:2009-06. By connecting the material(s) to the potential equalization they are inherent part of the electrical system. Generally accepted rules of technology have to be respected.

**The state of the technology differentiates between protective equipotential bonding and functional equipotential bonding (FEB).** The protective equipotential bonding (green/yellow cable) is a protective measure and ensures that, in the event of a fault, sufficient fault current flows to operate the disconnection device (e.g. line circuit breaker). **The functional equipotential bonding (transparent cable) has the function to „reduce the emission of low-frequency electrical fields“, i.e. prevents from leaking electrical field.** Installation of a functional equipotential bonding is as follows:



- **Grounding/earthing measures are only permitted in TN-S, TT and IT networks. Grounding measures must never be executed in network forms with combined PEN-wiring!**
- **A leakage/fault circuit breaker with  $\leq 30$  mA must be installed!**
- DIN EN 62305-3 (VDE 185-305-3:2006-10) applies to buildings with outer lightning protection system.

## Instructions on proper grounding sequence

- The FEB-balancing circuit has to be connected **directly to the FEB-busbar with a 4 mm<sup>2</sup> cable** in the electric circuit distributor (fuse box).
- In exceptional cases, the FEB-balancing circuit can be connected to a „**suitable protective earth conductor or balancing line**“. This exemption clause is important to make earthing possible without the need for making modifications to the fuse box.
- Grounding with a **2,5 mm<sup>2</sup> cable at a protective conductor** in the electric installation.
- Grounding with our **grounding plug GP** by screwing in the power socket. Our grounding plug must be installed by a licenced electrician!
- Metallic pipe systems or detached grounding rods which are not included in the potential equalization of the building are of limited suitability. It is nevertheless possible to use them in network forms with combined PEN-wiring. Please be sure to follow all local laws and standards.