Installation procedure for Ground-Connection-Set

Grounding procedures

In compliance with DIN/VDE instructions all shielded areas should be grounded by a licensed electrician. All the following procedures apply:
Precaution against dangerous currents to prevent electrical accidents according to DIN 57100 / VDE 0100 part 410 and part 450. Grounding procedures according to DIN 57100 / VDE 0100 part 410 and part 450. Visual inspection and verification testing according to DIN 57100 / VDE 0100 part 410, paragraph 4 and 5, and EMC (electromagnetic compatibility) according to VDE 0100. In all shielded areas / shielded rooms a personal protection circuit-breaker should be installed. Always switch off power supply before starting to perform shielding work / before application of shielding paint. For grounding always use YSHIELD Ground-Connection-Set ESK.

Warning: Like all electrical products and installations EMR-Shielding Products can and do pose a risk to consumer safety if improperly handled. YSHIELD therefore disclaims all responsibility for damages to persons and material due to improper handling and installation of YSHIELD products.

1) Install ground connection plate in a place that is readily accessible, but not openly visible. Accessibility is necessary for visual control of ground connection. Mark location of plate and holes.

2) Drill four holes (6 millimeter in diameter) and insert wall plugs / screw anchors.

3) Apply one coat of shielding paint to area where the ground connection plate and grounding tape will be mounted. Allow ample time to dry.

4) Attach grounding tape to wall, starting from ground connection plate region. Important: to ensure proper grounding, strap needs to be applied in one piece, without interruptions, and needs to be applied to all discontinuous shielded walls. Best to use one Ground-Connection-Set per room. Proceed by covering grounding tape and entire wall with another coat of shielding paint. After paint is dry, mount ground connection plate to wall with fleece covering of plate pointing towards the wall. Tighten screws to ensure good connection between fleece of plate and paint coat.

5) Mask plate and apply top coat, e.g. white latex paint. For details and to choose proper top coat type, refer to “Handling and processing instructions sheet” of the respective shielding paint.

6) Crimp enclosed cable (6mm²) into cable socket. Securely fasten cable socket (with cable attached) to ground connection plate.

7) Connect cable to ground securely. E.g. use enclosed clip to connect cable to blank / bare heating pipe, or connect to grounding bar in outlet or fuse box.

Important note about conductive paint and the National Electric Code:
The is nothing in the NEC which prohibits painting your walls with conductive paint. However, because this product does NOT carry a UL listing, some electrical inspectors, by virtue of being the “Authority Having Jurisdiction” can require the homeowner to hire an electrical engineer to certify that the product is safe to connect to the electrical ground. They can also require that a licensed electrician perform the ground connection. If your application requires an electrical inspection AFTER installation, you should check with your local inspector BEFORE you proceed to avoid any surprises.