

Specification Sheet No

TDS
65

Description

EARTHING TAPE FOR ESD
INSTALLATIONS

Date

OCT
2023

TECHNICAL DATA SHEET

Common use areas

Electronics manufacturing (wafer fabrication, product assembly, inspection, and storage), laboratories and cleanrooms, also healthcare facilities including operating theatres, anaesthetising areas, intensive-care units and radiology departments, server rooms, the chemical industry & battery plants.

Conductance to earth

Installing an earth system is a prerequisite for all Polyflor ESD ranges. This gives the end user the ability to test to earth. It ensures the conductance of the installed floor is to a known earth via a predetermined and controlled path.

The choice of material used for the earth system can be brass, copper, or stainless steel and should be nominally 40-50mm wide and 0.1 – 0.2mm thick. The width and gauge are governed by the performance standard for products such as Polyflor ROF.

- ❖ Brass tape is sold by weight (kgs) and is usually 20lm per kg. *(For installations where the required maximum electrical resistance level is 1×10^9 Ohms)*
- ❖ The stainless-steel tape is sold by weight (kgs) and is usually 10lm per kg. *(For installations where the required maximum electrical resistance level is 5×10^4 Ohms)*



The tape is designed to be fixed to an absorbent subfloor using an approved contact adhesive.

Conductive adhesive is trowelled over the top of the tape taking care not to catch the foil with the trowel as it can rip or tear the foil.

The use of at least two connections to earth is recommended; if the first is disconnected or damaged, the second is a security back-up.

Conductive foil must be connected to the building's main earth connection to operate correctly. This connection must be made by a suitably qualified electrical engineer. Agree suitable earthing connection points in the areas to receive the flooring with the Electrical Engineer before installing the flooring.

SPECIALIST FLOORING & WALL PROTECTION PARTNER

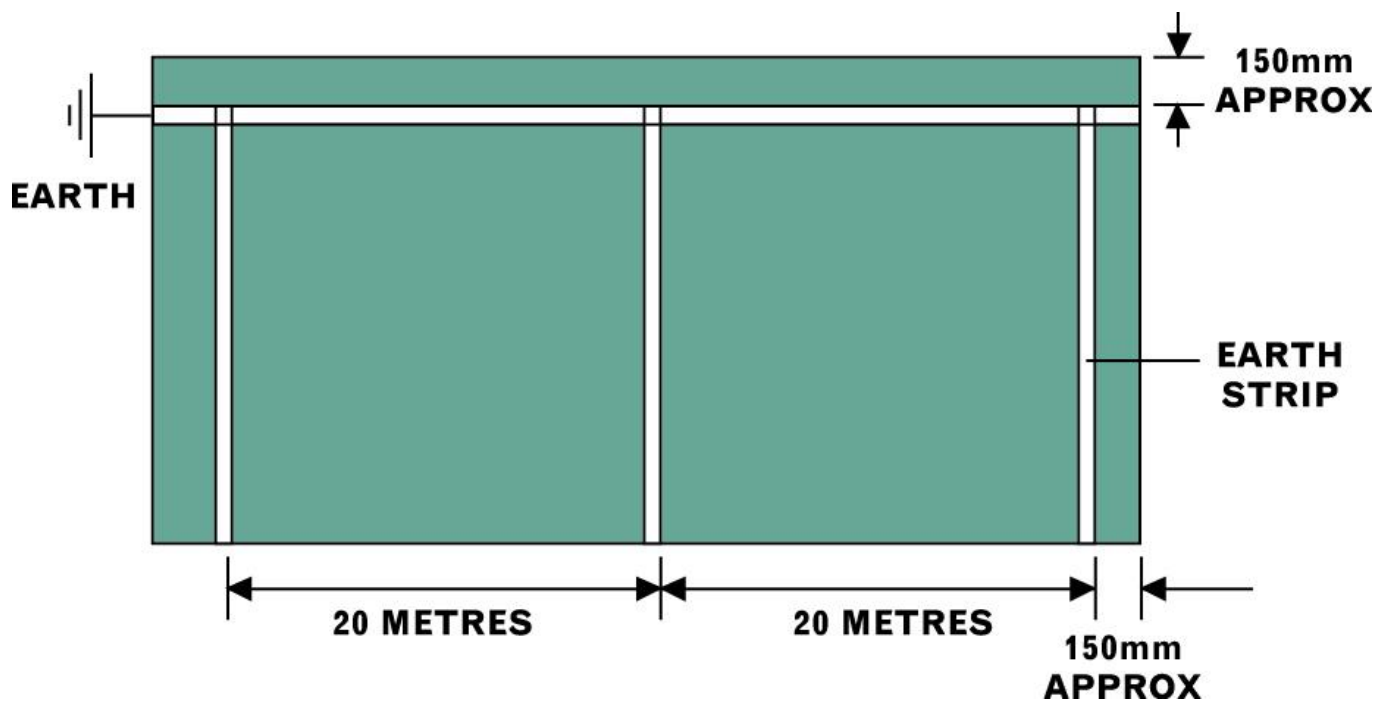
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Polyflor Static Dissipative (SD) range, OHMega EC and Polyflor EC (or where the Maximum electrical resistance level is $< 1 \times 10^9$ Ohms)

The earth strip is laid 150mm from one side of the room, in the same direction as the vinyl sheets are to be laid. This strip is connected to a known earth.

A second strip is laid at 90° to the first, 150mm from the edge and running full width across the room.

Further strips are laid at 20-meter intervals as determined by the size of the room.



Conductive ROF and Polyflor EC to JSP 482 Standard (or where the Maximum electrical resistance level is 5×10^4 Ohms)

With this type of flooring, a Stainless-Steel earth grid using the correct size strip (50mm wide, 0.2mm thick) is preferred.

The strips should be laid to form 600mm square grid across the floor, the perimeter strips being 150mm from the wall.

At least 2 Earth points should be connected at suitable locations.

Confirmation of the layout of the grid with the end user is important as there are variations in the requirements for some military specifications.

