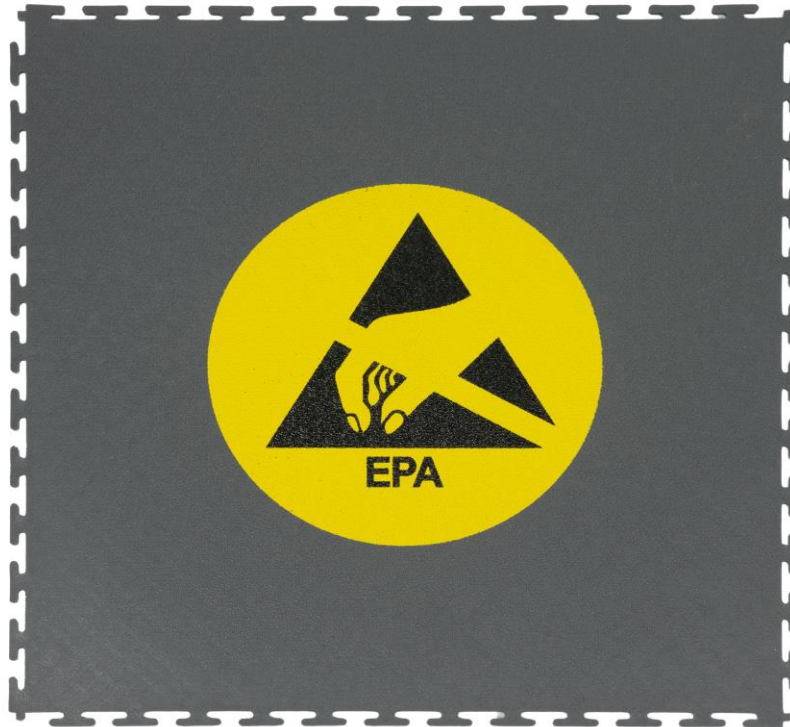


**STW41490XXX**  
**Permanent ESD-safe PVC Interlocking Floor Tiles**



These interlocking floor tiles are made of PVC and during the molding process metal particles are injected. That way a very homogenic and durable conductive effect is generated, lasting the full lifetime of the product, considering wear and tear, unless correctly maintained by cleaning with antistatic floor cleaner.

This is much different than chemically manipulated PVC floor tiles, that will loose their antistatic or conductive effect within 5-8 years, or even sooner when not properly maintained.

The advantages of these ESD floor tiles are, that the investment is much lower than ESD epoxy flooring systems and also the ESD interlocking floor tiles can be removed after some time of use and moved to a new facility when the need for a larger or other location is necessary. No loss of investment.

Also epoxy flooring systems need their maintenance and need to be repaired by partial or fully re-coating and area or complete floor after time of use. Next to that rubber or vinyl floor matting systems are very expensive and always need to be glued to the concrete base floor. Expensive and also not re-moveable.

The thickness of 6,5mm ensures the integrity of the floor tile remains properly conductive, where a damaged epoxy floor cannot guarantee the correct value ESD safety at all points measured during audit. In case a tile has been damaged too much, one can easily replace one, repairing the whole floor so to say.

Next to this, these ESD floor tiles do provide a damping effect related to noise or sound produced on the work floor. And it also solves the problem of cold feet complaints from standing on a cold, concrete floor.

Of course the top surface has an anti-slip finish and is dull instead of shiny. The grey color sort of hides dust marking created by waking or use of castors moving dust all over the work floor.

All in all many reasons to choose for a StaticTec permanently ESD-safe floor tile!

## Properties & Specifications:

Composition:	PVC tiles are manufactured from tough injection moulded PVC compound. Metal fiber content of 10%
ESD properties:	antistatic dissipative: $10^2\Omega$ - $10^6\Omega$
Size:	500x500x6,5mm / net floor value 490x490x6,5mm
Weight:	1.7 kg. Per unit, packed per 10 in carton
Wear:	PVC tiles have been tested by the Tetrapod method and after 3,000,000 cycles there was no visible change in the surface texture.
Fire and cigarettes:	passes the BS4790 1972 Hot Metal Nut test, but like all PVC materials cigarette ends when put out on the floor will leave a brown mark.
Spread of flames:	average maximum flame front distance: 21.7cm average critical radiant flux: 9.1kW/m <sup>2</sup> average smoke development: 434.7% min average maximum light attenuation: 52.3%
Electrical Resistance:	passess BS3187/1959 testing method
Chemical resistance:	good resistance to most chemicals and tested specifically were: 95% Ethanol, tallow, mineral oil, vegetable oil, hydrofluoric acid, sodium hydroxide. There was no significant colour change on any test piece. If you have a chemical that you are worried about, please contact us.
Indentation:	passes the Residual Indentation BS3261 Appendix E Test.
Static Propensity:	recorded no measurable body voltage when being tested under DD68/1980.1
Noise Reduction:	the weight of each tile with a density of 1380- 1465 kg/m <sup>3</sup> ensures a high level of noise reduction.
Maintenance:	PVC tiles resist oil and chemical attack and are rot proof. Nonetheless, it is wise to remove spillages as soon as possible. General maintenance such as sweeping, damp mopping or the use of a cylindrical scrubber combined vacuum machine for a dry washing. An emulsion dressing may be used.
Technical details:	density: 1.38 -1.46 tensile strength kg/cm <sup>2</sup> : 80 elongation rate %: 280 hardness (shore A): 85-92 tear(ing) strength kg/cm: 30

## We hereby certify that our products;

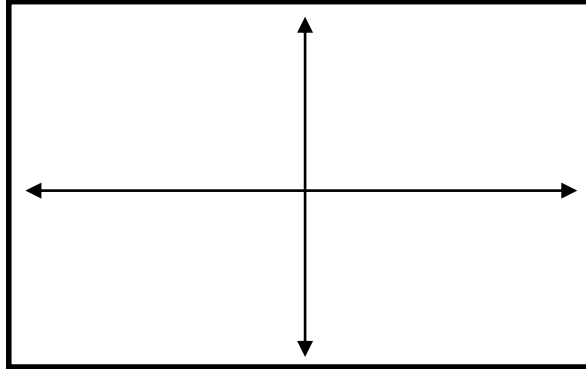
are compliant with IPC regulations, IEC 61340-5-1-ESD and ANSI/ESD S541

are compliant with all requirement and exemption set by the European RoHS 2.0, Directive 2011/65/EU & the European Delegated Directive (EU) 2015/863.

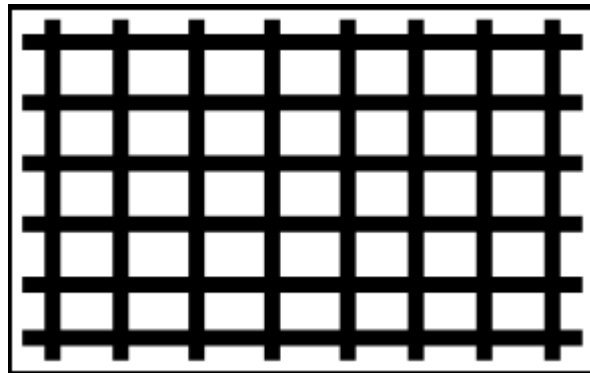
are compliant with the related requirements of European Union Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

**Installation instructions:**

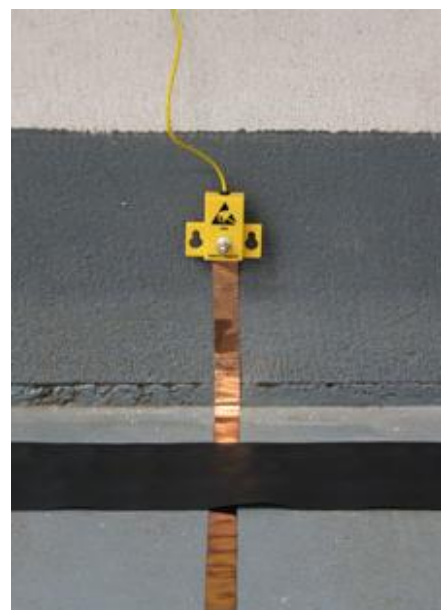
- 1- Calculate the number of ESD floor tiles by measuring the room and divide width and length by 49cms.
- 2- Draw a line through the centre of the room in X as well Y direction



- 3- Apply a matrix of black conductive tubing, resulting in the following:



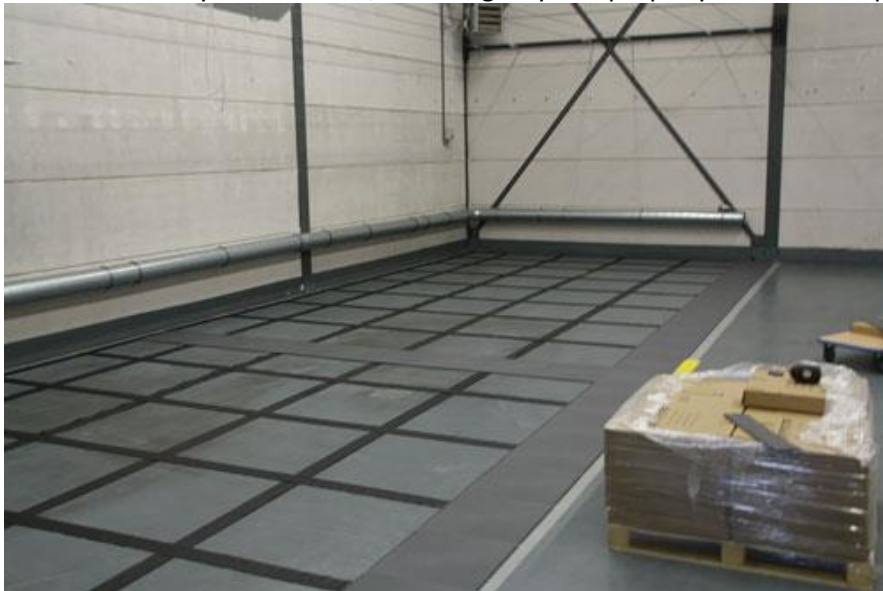
- 4- Then apply the 1M $\Omega$  Earth Bonding Points, specially designed for ESD flooring, with the 2mtr. copper strip, which is self-adhesive. And preferably connect it to a clean grounds connection, ensuring no interference from other electric sources.



5- Then start installation of the tiles along the marked X and Y lines on the floor:



6- First copy the X and Y axis by a line of tiles, this will give you a properly outlined and parallel lay-out:



7- Then keep working from the centre line, outwards towards the sides of the room:



8- Step by step you will fill up all spaces, until the floor is complete:



9- These are the tools used during installation: Use a rubber hammer instead of a hard metal or plastic version; prevent damage to the tiles and also to yourself.



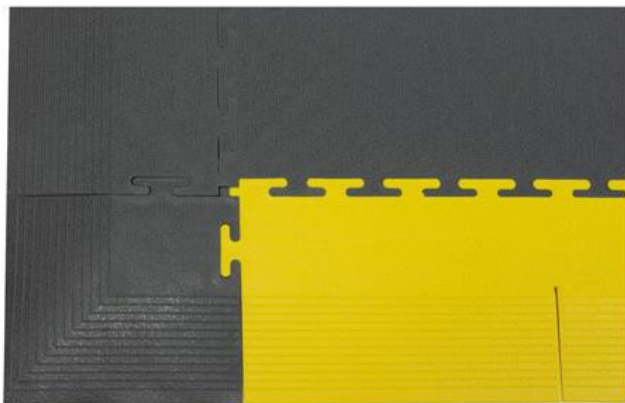
10- Finish the sides by cutting the tiles to desired size by using the large floor tile cutter. This specially designed flooring cutter will cut the PVC tiles very clean and without burr formation:



11- Then finish the job by measuring the conductivity on several points, by using a surface resistance meter, this procedure will have to be repeated every quarter, following IPC regulations. If a measurement is not good, the floor has to be cleaned using an antistatic floor cleaner.



**Available items:**



Corner piece and edges in ESD grey and non-ESD yellow and full size ESD tiles with and without ESD logo.

**Order as follows:**

Item #	Description
STW41490100	StaticTec ESD PVC floor tile, 490x490x6,5mm, dark grey, structured, anti-slip surface, permanent ESD safe
STW41490101	StaticTec ESD PVC floor tile, sloped edge, 110x490x6,5mm, dark grey, structured, anti-slip surface, ESD safe
STW41490102	StaticTec ESD PVC floor tile, sloped corner, 110x110x6,5mm, dark grey, structured, anti-slip surface, ESD safe
STW41490104	StaticTec ESD PVC floor tile WITH ESD LOGO, 490x490x6,5mm, dark grey, structured, anti-slip surface, ESD safe
STW41490201	StaticTec PVC floor tile, sloped edge, 110x490x6,5mm, YELLOW, structured, anti-slip surface, not ESD safe
STW41490645	StaticTec Cutter System for ESD PVC floor tiles, 645mm cutting length
STW41490650	StaticTec Spare Blade for Tiles Cutter System, 645mm cutting length
STP37100150	StaticTec Conductive Tubing 80µm, 100mm width, 150mt Roll, color black (for ESD flooring)

For assistance and advice, feel free to contact your supplier.

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