



INSTALLATION

This guide has been designed to guide you step by step through the installation process of the Ecotile E500 product range. We have compiled the manual as a benchmark to the best of our ability. Please note, however, that each project involves individual challenges which cannot be taken into account at this point

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WHAT TO CONSIDER BEFORE INSTALLATION



1.1. Considerations

The following questionnaire was designed to help Ecotile employees find the appropriate flooring product for each project. When speaking to the Ecotile technical team, you may be asked any of the following questions.

PROJECT:		START DATE:		FINISH DATE:	
TECHNICAL FACT FINDER					
1. Do fork trucks or pallet trucks roll over your existing floor or over the area where the new floor is required?	YES / NO – If yes, which type of fork truck? <input type="checkbox"/> Electric / Gas / Diesel / Manual <input type="checkbox"/> Aisle Stacker / Bendi Truck <input type="checkbox"/> Maximum load carried : _____ <input type="checkbox"/> Three or four wheels? <input type="checkbox"/> What type of wheels?				
2. Are chemicals or solvents used?	YES / NO If yes, which chemicals or solvents? _____				
3. Will there be any extreme temperatures or direct sunlight in the area?	YES / NO	If yes, the floor will require adhesive			
4. Do you require the floor to have a specific fire rating?	YES / NO				
5. Do you require a specific anti-slip flooring?	YES / NO				
6. Do you require the floor to be ESD	YES / NO				
7. What is the existing floor finish?					
8. Floor Condition	GOOD / FLAT & SMOOTH?		DAMAGED?		POOR?

1.1. Considerations

Age of Building			
How many floor levels?			
Adhesives REQUIRED?			
How will you be cleaning the floor?	ROTARY	HAND MOP	OTHER
Do you need access to the sub-floor?	YES / NO		
Drains, Manholes?	YES / NO		
Is the existing floor contaminated	YES / NO		
Does the project require edges and ramps?	YES / NO		
Is it feasible to close the area down?	YES / NO		
What will the floor be used for?			

1.2. Checklist

The following factors affect the installation process and should be taken into account.

1 Direct Sunlight

Direct sunlight can cause areas of the tiles to heat up and expand at a different rate to the rest of the floor. This will cause the edges of the tiles to curl up and/or push other tiles out of shape.

If the area has roller doors, large windows, skylights or southern facing bays, then we strongly recommend that the tiles are glued down. This will stop the tiles from losing shape.



1.2. Checklist

2 Temperature

- Please ensure that the floor is not subject to severe temperature fluctuations ($\leq 15 \pm C$). These temperature fluctuations can lead to a strong expansion and shrinking of the tiles. Please also note that ovens and catalytic convertors radiate heat that can expand the floor.
- To counteract this, we recommend you leave a 5 mm expansion gap between walls and fixed objects. In cold rooms (below $15 \pm C$), the floor should first be left to acclimatise for 48 hours, before it is fitted.

3 Existing Floor

- **Carpet** - We generally advise against installation on carpets. However, if this is not to be avoided, please use a polyethylene film between the substrate and the tiles.
- **Concrete Floors** - Installation on an existing concrete floor is problem-free. If the tiles have to be glued, ensure the paint is removed so that the glue can adhere to the ground correctly.

4 Tyre Marks

- Rubber tyres will stain almost every type of floor including bare concrete, painted and vinyl flooring. The stain is a chemical reaction and will not damage the tiles or impact on their durability..
- The stain is caused by a component used within the manufacture of car tyres called '6PPD' (phenaline diamine). 6PPD is an anti-oxidant and is added to rubber products to resist environmental attack by ozone and Ultraviolet light. It also has other beneficial effects in the moulding of rubber itself.
- Because the stain is a dark grey / green it is far less obvious on darker colours and is almost indistinguishable from the colour of our Dark Grey and Graphite tiles. It is also less obvious in the black and green colours. Light grey, yellow, white and red should be avoided.

1.2. Checklist

5 Reach Trucks, Aisle Stacker Trucks & Ride On Electric Pallet Trucks

- Most 3 & 4 wheeled forklifts with rubber tyres pose no threat to Ecotile, but we recommend caution or further investigation with the following types of trucks.

- 3 wheel electric trucks with a single rear drive wheel (especially nylon wheels)
- Reach trucks & aisle stackers with small, hard wheels.
- Trucks with extremely high loads & small wheels.

- The above vehicles are damaging to most floors including epoxy and concrete. To avoid any issues with Ecotile, the floor should be glued down in the areas vehicles move.



1.2. Checklist

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Chemical Resistance

- PVC offers excellent resistance to most chemicals in general, but caution should be taken with solvent based chemicals – especially if they are used as a degreaser or thinner.
- Petrochemicals including petrol and diesel can damage the elastomer in the tiles if they are left for extended periods of time. Fuel spillages should be wiped up quickly.

Health & Safety dictates that spillages should be cleaned up quickly. Minor spills are unlikely to damage Ecotile. The following points are designed for applications where there is potential for long term exposure to the chemicals.

- **Check the chemical's packaging** – if it comes in a flexible plastic (especially if the packaging is marked with a PVC symbol) you can rest assured the tiles will be fine.
- **If the chemicals are packaged in a rigid thick walled plastic container**, be cautious. We recommend testing the chemical on a small area.
- **If the chemical is packaged in a metal container**, caution is strongly advised. The chemical is packaged in metal for a reason (probably because the chemical will attack plastics such as PVC).

If in doubt, ask for the Ecotile chemical resistance chart and/or test the chemical on a tile for 48 hours to see how the tile reacts.

1.2. Checklist

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Damaged Floors

- Ecotile is designed to be installed over damp, uneven and damaged floors. The 7mm & 10mm versions can be laid over a tamped concrete finish. The 6mm & 5mm tiles require a smoother substrate.
- Only large holes and cracks will need to be repaired.

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Additional Points To Consider:

- **Static Shocks** - Ecotile is an insulative surface, so there is potential for people to build up static whilst walking on the floor. This can be overcome by the use of an anti-static floor polish.
- **Under Floor Heating** – To install over under floor heating, you must first allow the tiles the tiles to acclimatise in the room, whilst the heating is on.
- **External Applications** – E500 is not suitable for outdoor use, however we do manufacture an outdoor flooring range which you can find on our website.
- **Welding** – You can perform simple welding, but the surface finish of the tile is damaged by sparks and charges.

INSTALLATION
STEP BY STEP



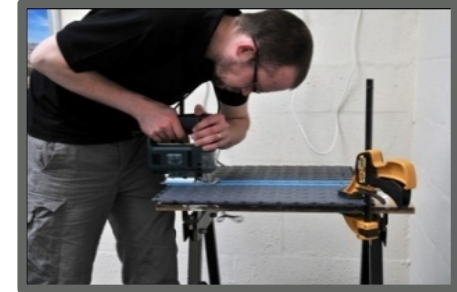
2.1. Tools & Equipment



Alignment

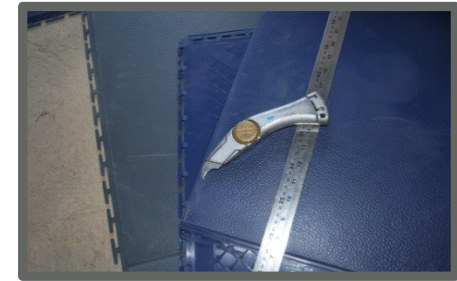
In order to have a problem free installation, it is important that the first tiles are laid along a straight line - regardless of the walls angle. To keep the tiles square to each other, you can use:

- Chalk line
- Line Laser
- Angle



Tools

Use a rubber mallet to tap the joints together. Use black tape around the handle, or wear gloves to avoid skin discomfort.



Cutting

Ecotile can be cut using several methods, a lot will depend on personal preference, experience and the tools you have available.

You can cut the tiles easier when they are warm.

These are the tools that our installation team recommend.:

- Magnum Shear Guillotine – Available to hire
- Stanley knife with concave blades – **Wear cut proof gloves.**
- Electric Jig Saw with a medium or rough wood blade
- Table or Band saw with a timber blade.



2.2. Preparation

1 Temperature

Please do not lay the tiles as soon as you receive them. Before starting installation, the tiles must acclimatize to the ambient room temperature. We recommend you leave the tiles out for at least 24 hours. If you want to speed up the process, split the tiles into bundles of 4-5 and spread them across the room. Tiles that aren't left to acclimatise might expand or shrink during the installation process.



2 Preparing The Substrate

Please clean the substrate lightly and free it from dust and stones by sweeping or using a vacuum. If you are worried about cracks and holes, smooth them over with a filler.

If the floor needs to be glued, remove the existing screed, coats, or paint to ensure adhesion. Please calculate with an adhesive consumption between 5-10L per 10m².



2.3. Installation



1. Find the centre of the room (or as close as possible) using a tape measure.



2. Make small black markings along the centre lines of the room (as if you're going to form a cross in the centre).



3. Pluck a chalk line along the edge of your markings to make the cross easier to follow.



4. The joints of the first tile should meet up with the centre chalk line.

2.3. Installation



5. Lay the tiles along the chalk line, making sure they are aligned. This way, the tiles should remain straight throughout installation.



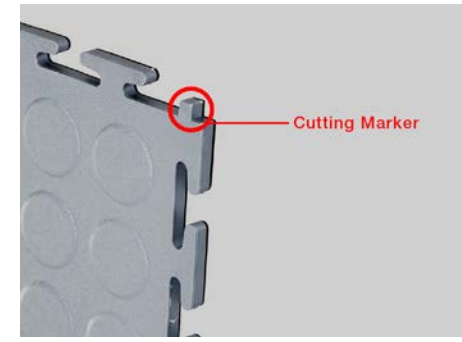
6. Install tiles in incremental steps and work around the centre in a circle to fill the remaining space.



7. Where cuts need to be made, turn the tile upside down and push against the wall. Slide it slightly to one side to reveal the cut marker on the tile underneath.



8. Mark the tile where it meets the cut marker below. Do the same on the other side.



2.3. Installation



9. You can use an upside down tile as a cutting mat. Lay the tile down, and align a metal rule with the marks you previously made.



10. Score the tile several times with a concave blade. After a while you should be able to pick it up and bend it back and forth until it snaps.



11. Alternatively, you can use a guillotine to make cuts. Once they are cut, they should fit perfectly, leaving a 5mm expansion gap between the tile and the wall

2.5. How To Install ESD Flooring

Equipment

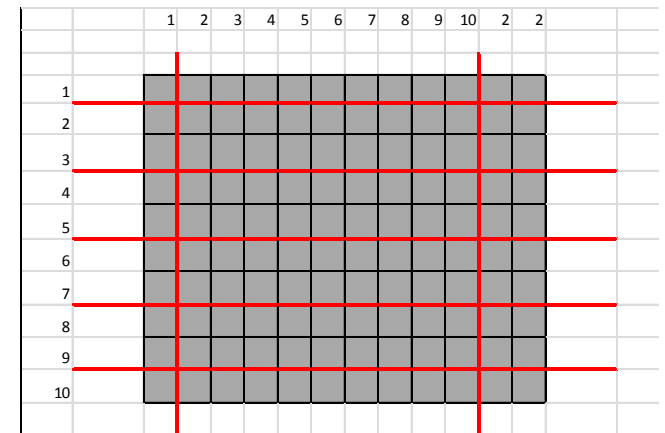
Please check that you have ordered or received all the necessary equipment. The Ecotile ESD system requires grounding tape & a grounding kit for **every 60m²**.

- Grounding Plug
- Grounding Cord 1M Ω Resistor
- Tile With Grounding Stud



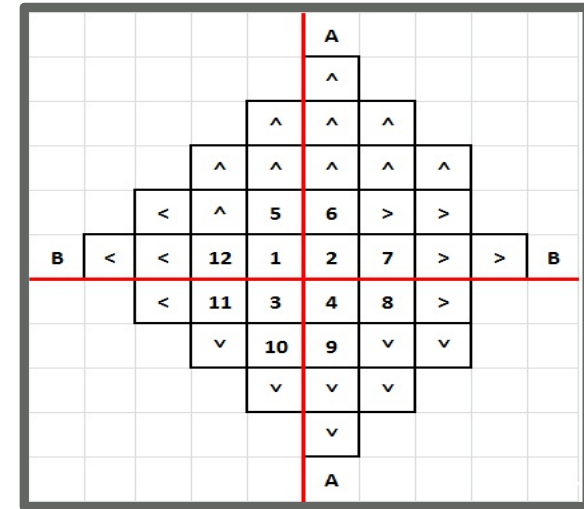
To achieve complete ESD, the tiles need to be grounded. This is achieved by laying a grid of black conductive tape under the dove tail joints of two tiles so that it is in contact with every tile in one direction and 5m centres in the opposite direction (see Picture).

Place the grounding point in the corners of the room or along the wall to avoid creating a trip hazard.



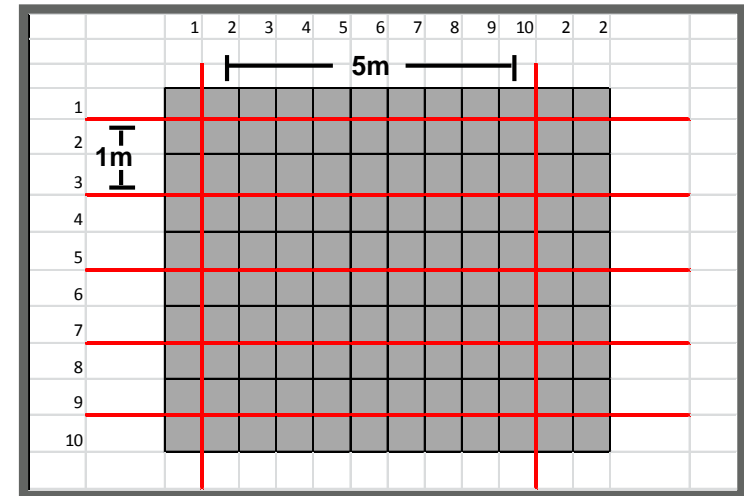
2.6. Installing ESD Flooring

- 1 Start from as close to the center of the room as possible.
- 2 Snap a chalk line or use a laser to create lines A-A & B-B.



- 3 Lay the grounding tape (shown in red) The tape should be laid to run under the joints of every tile in at least one direction. Vertical lines should be placed through the middle of the joints every 5m.

- 4 Install the tiles as normal, ensuring that the grounding points are fitted (one every 60-80m²). It is important that the grounding tape is connected to the studded grounding tile.



2.6. Finalising Your ESD Flooring

5 Ensure that you clean the floor after installation to ensure the correct values are recorded in conductivity tests.



If the existing floor has already been grounded, insulation of the floor is necessary. If you are unsure about using Ecotile's ESD system, please contact our customer service team.

AFTER INSTALLATION
CARING FOR YOUR FLOOR

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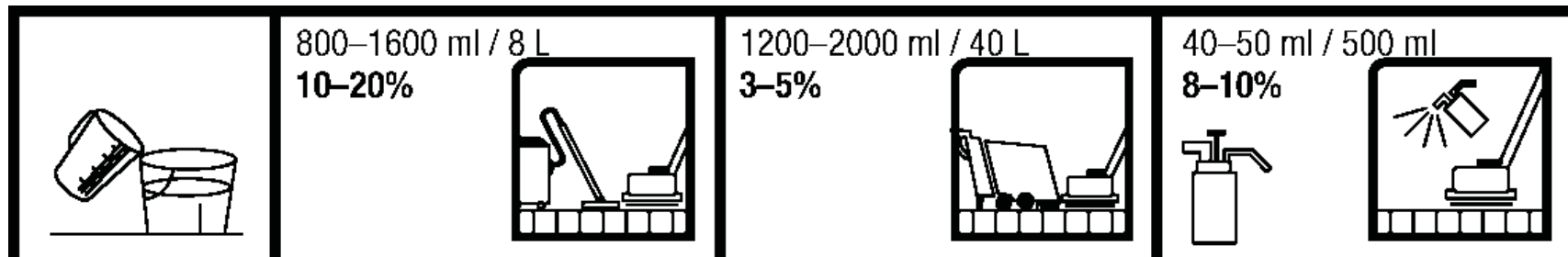
3.1. Cleaning & Care

Maintaining Ecotile is often simple and cost effective. To ensure your floor stays as clean as possible, use ramps at entrances and doors. Ramps prevent distribution of dirt from outside. We recommend you prepare a cleaning schedule to ensure regular cleaning.

3.1.1. Cleaning the E500/5 | E500/6 | E500/7 | E500/10

After Installation

After installation or heavy contamination, we recommend a deep or heavy clean. You can use Avmor Heavy Duty Floor Stripper. Dilute the cleaner (as shown below) and allow the mixture to stand for 10 minutes. Clean the floor thoroughly with a wet mop or scrubber. Then go over the floor again with clean water to remove the cleaning solution.

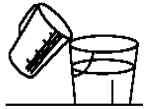
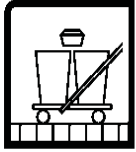
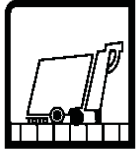


3.1. Cleaning & Care

Frequent Cleaning

Sweep the floor frequently to remove dust and other dirt. Stains can often be removed by damp wiping. You can clean the floor manually, or in large areas we recommend you use a rotary scrubber. If you use a rotary scrubber, limit the machine to a maximum speed of 440rpm.

- Clean the floor with a PH neutral detergent (40:1)
- Remove oil and chemicals as quick as possible.

	40–200 ml / 8 L 0,5–2,5%		200–1000 ml / 40 L 0,5–2,5%	
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Our Products

We sell a Neutral cleaning solutions perfect for Ecotile. We also sell EVO stubborn stain wipes which are great at removing oil, grease, ink and tar from the tiles.

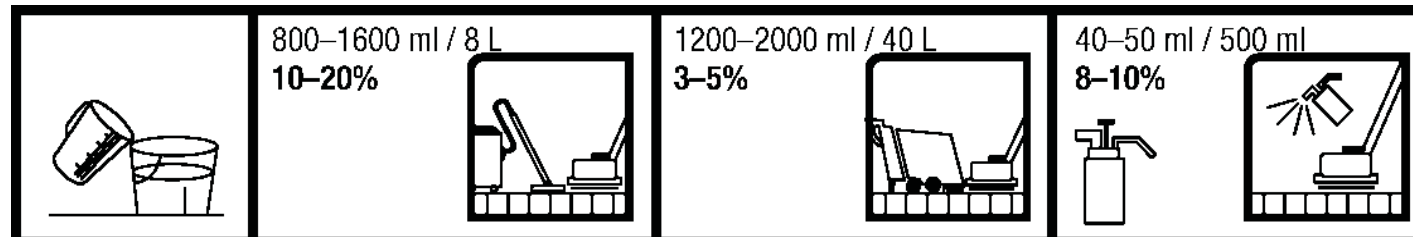
3.1. Cleaning & Care

3.1.2. Cleaning the ESD systems E500 / 7 / ESD E500 / 5 / ESD

Please note that Ecotile ESD flooring must be maintained regularly to ensure consistent performance.

Initial in depth cleaning

After installation we recommend a deep clean using Statguard ESD-Floor Stripper (item no. 45.400). Please dilute the cleaner according to the instructions below, and allow the mixture to stand for 10 minutes. Thoroughly clean the floor with a floor cleaner and remove the dirty cleaning solution with a damp mop. Then rinse or wipe the floor with clean water to remove the last remains of the cleaning solution.



3.2. Sealant

Ecotile does not require a sealant, however there are some advantages to sealing your floor.

Printed/Coloured Tiles

To prevent discolouring of printed tiles and bright colour tiles, we recommend the use of a PU sealant. (Anticolour)

Anti Slip

To strengthen the non slip properties of the floor, we recommend you use an Anti-Slip sealant.

ESD Tiles

To seal ESD flooring, you should use Statgaurd Floor Finish. The seal is applied undiluted 2-3 times. The seal can strengthen the ESD properties of the floor.

We can provide all of the products above.

Please contact us if you have any questions about sealants and cleaning solvents.

**TIPS
AND TRICKS**

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4.1. General Information

Ecotile has implemented an extensive quality control procedure into the manufacturing process and is ISO9001 certified. We do our utmost to ensure you don't have any issues with your floor. Please keep in mind the following:

Batch Colours

Although we aim to match PVC batches using RAL colours, it is not always possible to guarantee a 100% colour match in every tile. In most cases, a single order is shipped from one batch so there is no colour difference. However, if you re-order tiles, we can not guarantee the tiles we send you will be a 100% colour match to your previous tiles (if they are made from a different batch).

Injection Moulding Flash

Our manufacturing process is monitored carefully and has strict quality control guidelines. On Occasion, the injection moulding machine can leave an imprint in the middle of the tile that does not appear immediately. This doesn't happen very often, but we can't control when it does happen and sometimes damaged tiles slip through. Please check that the tiles are acceptable when the tiles are delivered

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