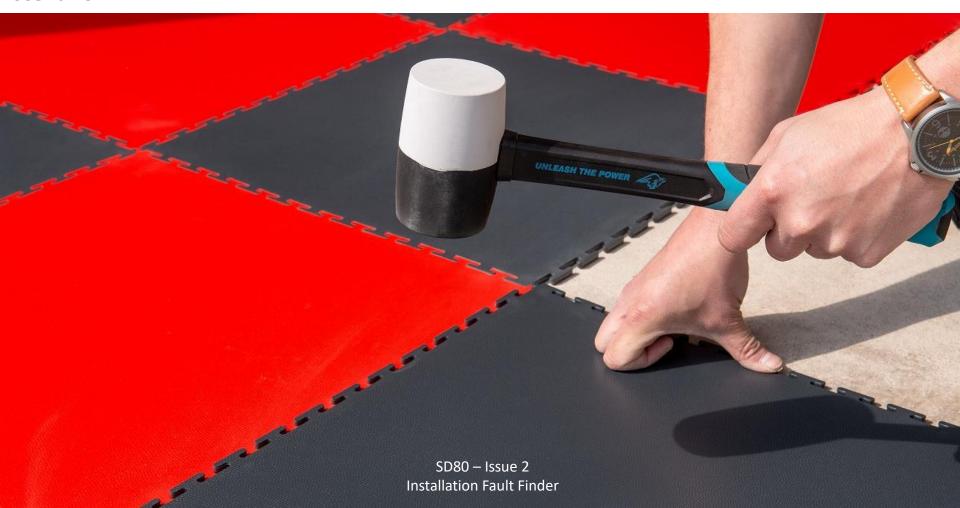


ECOTILE INSTALLATION FAULT FINDER

This document helps identify installation faults and provides our recommended solutions in each scenario.



TILES LIFTING/RIPPLING



If the tiles are lifting or rippling carefully go through each page until you find a solution. For any other issues, go to page 3

Check	Explanation	Solution
Is there a 5mm gap between the tiles and any walls/fixed points to allow for expansion?	Ecotile needs room to expand as the temperature changes. If expansion is restricted the tiles cannot move freely enough which forces them to push against each other. This could make the tiles lift at the corners and the interlocking joints. If the tiles were installed when cold and/or have not been allowed to acclimatise sufficiently you could end up with a smaller expansion gap than originally planned.	Disconnect the surrounding tiles from an area with lifting tiles to give them room to expand. Leave a square (approx. 3 tiles by 3 tiles) as shown in the diagram below. Allow them to settle for 2-3 hours. Remove tiles from this area Does this section of tiles now sit flat?
		If so, it is likely that there is an insufficient expansion gap around the floor that is preventing the floor from moving. Ensure that there is a 5mm expansion gap between the tiles and any fixed point. If the tiles do not sit flat, proceed to the next page.

CHECK 2



Check	Explanation	Solution
Is the area exposed to heat from direct sunlight or another external source like a radiator, heat panel or a catalytic converter? (low to the ground performance cars like Porches can get extremely hot underneath)	If a specific area of the floor gets warmer than the rest, the tiles will expand at different rates. Because the rest of the floor isn't expanding as quickly, the tiles are forced together which can cause rippling and/or lifting joints. Additional note: The operating temperature of Ecotile is 15°C - 35°C.	To stop the floor from lifting, we recommend that you use an Ecotile approved adhesive. Follow the Ecotile Gluing Guidelines which you can find on our website and apply the adhesive to the affected area to stop the tiles from moving during expansion.

CHECK 3

Check	Explanation	Solution
Was the floor exposed to heat from a fuel spill?	A hot fuel spill will damage the tile permanently.	We recommend that you replace the affected tiles.

CHECK 4



Check	Explanation	Solution
Do the tiles lift/or ripple where your vehicles move over the floor?	Ecotile is available in three different thicknesses. The thickness of tile you require for vehicle movement depends on how heavy the vehicle is and how many wheels the weight is distributed through. To give an example, we suggest using the 7mm tile for a 5 tonne truck with four wheels, however if the 5 tonne truck has 3 wheels then we would recommend using our 10mm tile. Refer to the chart on the right for more information.	It may not be necessary to replace the floor with 10mm tiles. Usually the most practical solution is to glue the floor down. GUIDE: WHICH TILE TO USE WHEN

CHECK 5



Check	Explanation	Solution
The floor has been glued down but the tiles are still lifting. An Ecotile approved adhesive was used.	If the glue has failed, the tiles will continue lifting. In most cases, adhesive fails when the substrate is not strong enough or intact. If the substrate underneath did not provide a suitable surface for the tiles to adhere to then they may still lift. The glue could also fail due to a defective batch or a badly mixed adhesive.	If you are certain that the substrate is suitable, you may have used a defective glue or a faulty batch. You should try to apply the glue again with a different batch of adhesive. If that doesn't work you may need to repair the substrate before it can be glued.

OTHER INSTALLATION FAULTS



If you are experiencing an issue other than lifting tiles, please check the following:

Issue	Explanation	Solution
Are the tiles denting? Or are vehicles leaving imprints in the floor?	High point loads (a lot of weight distributed over a small area) can leave indentations in Ecotile. Examples of high point loads	If the dents are being caused by a vehicle and it is practical to do so, we recommend replacing the wheels of the vehicle with larger ones and/or replace tyres with softer ones. Please refer to the vehicle/spec chart on page 4. The easiest and most common solution to prevent dents is to
	include vehicle jacks, motorcycle stands and heavy vehicles with small wheels.	lay something on the tiles that helps spread the weight over a larger area. This can be as simple as a piece of scrap wood, however if you are looking for a cleaner finish invest in custom size Durbar plates.
Issue	Explanation	Solution
Ramps do not fit together.	We changed the way we manufacture ramps in early 2020. Our new ramps do not fit together with our old style ramps so if you are adding to an existing floor it is likely that you will need to replace the old ramps with new ones too.	If you are adding to an existing floor it is likely that you will need to replace the old ramps with new ones, however we may still be able to provide you with the old style ramps. Please contact us for more information.



Issue	Explanation	Solution
Are tyre marks and stains appearing where a vehicle has been left still for a few hours?	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. The staining is dark grey / green in appearance and will show within 4 to 5 hours of the tyre sitting on the tile. The stain cannot be removed as it is a chemical reaction between the 6PPD and the surface it is in contact with.	Because the stain in a dark grey / green it is far less obvious in the darker colours and is almost indistinguishable from the colour of our Graphite tiles (which also happens to be the smartest and most popular colour). This is also mentioned in our terms and conditions of sale and installation guidelines. If you still want to incorporate brighter colours into your floor, you could try the following: • Use black or graphite tiles where tyres will sit. • Use Durbar plates under wheels.



Issue	Explanation	Solution
The tiles don't click together (the interlocking joints are too big or do not align).	There could be a number of reasons why the interlocking joints do not fit together. This could be an installation fault but could also be a manufacturer's fault. In some cases (if you are adding additional tiles to an existing Ecotile floor) it is because the tiles were produced from a different batch of material or perhaps the tile you purchased is not not compatible with the rest of the floor. It is also important to allow the new tiles to acclimatise to the temperature of the existing floor.	In most cases, it is easy to tell if a tile is under stress and/or is stretching to connect with the rest of the floor. This can happen if insufficient expansion space was used or the floor was not laid straight/square. The easiest way to tell if there is a fault with the tiles is to isolate two tiles and try to connect them together on their own (after acclimatisation). If they fit together fine but when connected to the rest of the floor they don't, then there is likely an installation fault. If the tiles do not fit together when isolated, there could be a fault with your tiles. Please contact Ecotile directly to resolve this issue.



Issue	Explanation	Solution
Interlocking joints raised or damaged.	Installation fault or Manufacturers fault.	Usually this is caused by a small object under the tiles or the substrate being uneven. If you have checked under the tiles and for installation faults and can't find any issues, you may have a faulty tile or a batch mismatch. Please contact Ecotile with your order number so we can refer back to your batch numbers.
Tiles hard and brittle and/or joints are breaking off easily.	The room is too cold or tiles have not acclimatised. Please refer to our temperature installation guidelines which can be found on our website.	