



INSTALLATION INSTRUCTIONS to make your life easier!

INDEX:

1. PREPARATION
2. USE OF TERRAM/MEMBRANE
3. TO STAGGER OR NOT TO STAGGER
4. PATHWAYS 2 SLABS WIDE
5. SPACING THE SLABS
6. DIFFERENT INSTALLATION METHODS
7. FITTING SLABS IN SHELTERS, BARNs, OR BESIDE FENCES OR WALLS
8. SLOPES
9. SAWING THE SLABS
10. FINISHING OFF
11. TOPPING/FILLING
12. ADDING MORE SLABS LATER
13. REMOVING AND RE-LAYING SLABS
14. SCRAPING/MAINTENANCE
15. LIMITATIONS
 - i. SMALL AREAS ON VERY WET GROUND
 - ii. NARROW RUNS OF SLABS FOR VEHICLES

1. PREPARATION

It's a good idea to do a bit of planning and preparation before your slabs arrive. Laying and interlinking the slabs is very simple, but there are a few hard and fast rules governed by physics which are important to know, as having to lift and re-lay slabs because you made a mistake is a lot of additional effort.

Also, please remember to order your topping, if the area is to be for animal use. Quarried (not recycled) sharp sand is ideal. Otherwise, soaked wood pellet bedding, used bedding, soil, compost etc are all good alternatives to create the ESSENTIAL tread layer on top of the MUDCONTROL slabs.

If the area is ONLY going to be used for human and vehicle traffic, then the topping layer isn't necessary, but filling the holes with sand will definitely make the whole area bed in quickly and securely.

First, make sure the ground is as even as possible, by flattening out any high points and removing any big stones. The more levelled out you can get the area, the better the final result will be. Chain harrowing or raking the ground is ideal if it's lumpy or rutted, and any dips or holes should be filled with soil, coarse sand, pea gravel, wood chip, muck heap contents, etc. to get it even. The slabs are small enough to cope with undulations, but not with lumps and ruts which would cause them to rock back and forth, preventing them from interconnecting and bedding in level. We don't recommend using a whacker plate or a roller, as the slabs need to be able to bed into the surface they are laid onto.



The top of this photo shows an example of rough ground that should be levelled before installing MUDCONTROL slabs, whilst the bottom is fine for slab laying.

2. USE OF TERRAM/MEMBRANE

If the area where you are laying the slabs is very wet, or you are on heavy clay soil for example, mud/slop will be carried onto the slabs and can ooze up through the holes and need scraping off. For most customers that's okay, they don't mind an inch of mud on a rock solid base, compared to wellie-sucking deep mud.

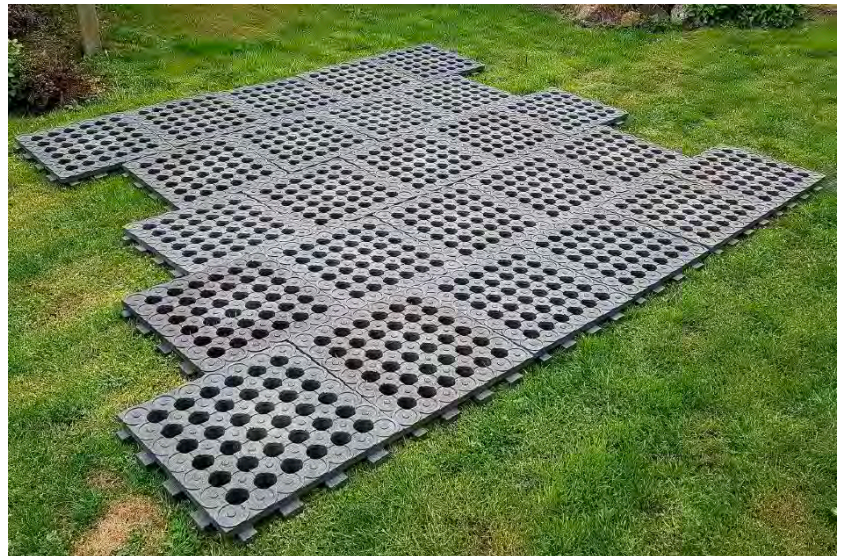
However, if you want to discourage this from happening, or if it's very important that NO vegetation comes up through the holes, then a water permeable Terram or geotextile membrane (3.5oz with a 15cm overlap is recommended) can be laid under the slabs. No other substructure is required, the slabs act as the sub-base and base in one on their own (unless the area is intended for regular HGV traffic, in which case please contact us for additional installation guidance).

The vast majority of our customers haven't used a membrane under their slabs, and nor have we in our trial areas (since 2017, on heavy clay).

3. TO STAGGER OR NOT TO STAGGER?

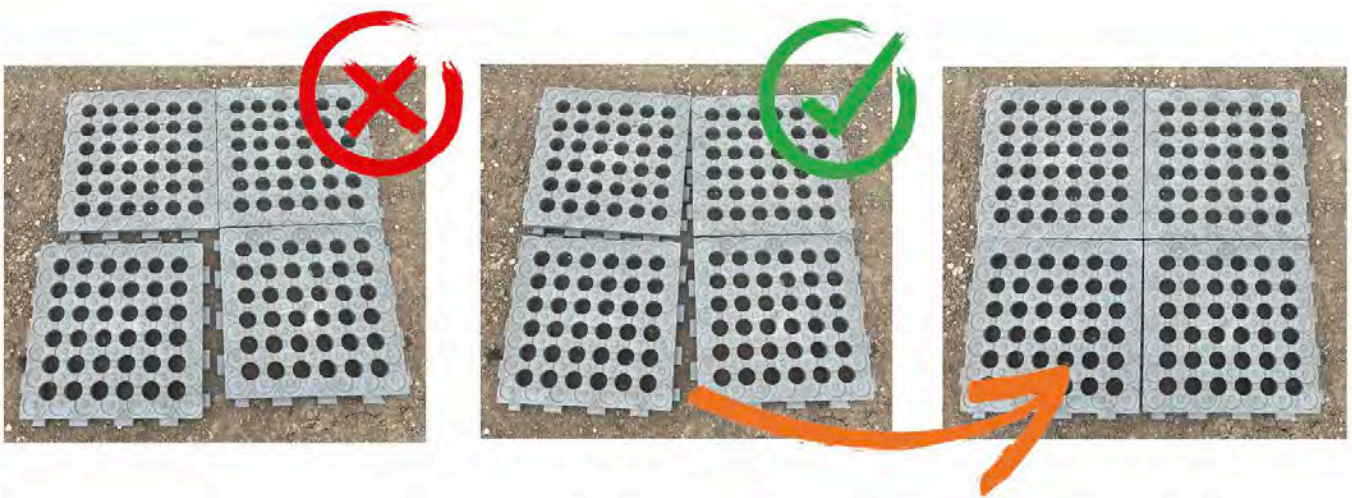
VERY IMPORTANT: Decide whether you are going to stagger the slabs (offset them like bricks) or not.

On the left is the grid-style layout and on the right, the staggered/offset layout.



If you lay the slabs staggered/offset then the area will be stronger (because there will be less flex overall, as you won't have 4 corners meeting at 1 point.) However, this is not always necessary – it depends on the soil type, on how wet it gets, and on whether it is going to have heavy traffic over the area.

If you are laying a large-ish area, or one which won't have vehicles going across it, then installing the slabs grid-style is an option. The advantage of this is that you can then easily add on to the slabbed area in ANY direction in future. If you stagger the slabs, you can only add onto the straight edges, not the staggered ones. If you want to extend the staggered sides you'll need to lift the whole lot and start again, as you would need to open the right angled joint between adjacent slabs to let the corner tab of the next one in, which is impossible to do once the slabs are bedded in securely.



In high-traffic gateways it's best to stagger them across the direction of travel, as demonstrated in this photo, as wheels running down long straight joints between the slabs can lead to movement. Staggering the joints down the run of slabs prevents this.

4. PATHWAYS 2 SLABS WIDE

If you are doing a pathway two slabs wide then it's VERY important that you stagger them so you don't have a straight middle line between the rows, as this can gradually dip with use (as people and/or animals continuously walk down the middle) and 'unzip'.



The exception to this is pathways which are two slabs wide and intended primarily for use by wheelchairs and other narrow mobility aids, ATVs etc., as the load would usually be spread across both slabs evenly, rather than down the middle join.



Offsetting the slabs isn't necessary on a single slab wide pathway. You can curve it slightly too if that helps.



5. SPACING THE SLABS

Lay down the first row of MUDCONTROL slabs across the full length of the area to be covered and interlink them, allowing a slight expansion gap between each one (don't jam them up really tightly together, but make sure the tabs are interlinked and the gap is 3-5mm).

TOO CLOSE TOGETHER

IDEALLY POSITIONED

TOO FAR APART, TABS
MUST CONNECT



When laying the MUDCONTROL slabs, a crowbar or shovel can give helpful leverage – but do not apply too much force. The slabs should fit loosely together to avoid high tensions during extreme hot or cold weather. Please leave an expansion gap of approx. 3–5mm between each slab in each direction, as each slab can expand 2mm per 10 degrees Centigrade temperature rise, so this must be taken into account to prevent the slabbed area from potentially buckling upwards in places if they were all jammed up too tightly together and it gets very hot.

6. DIFFERENT INSTALLATION METHODS

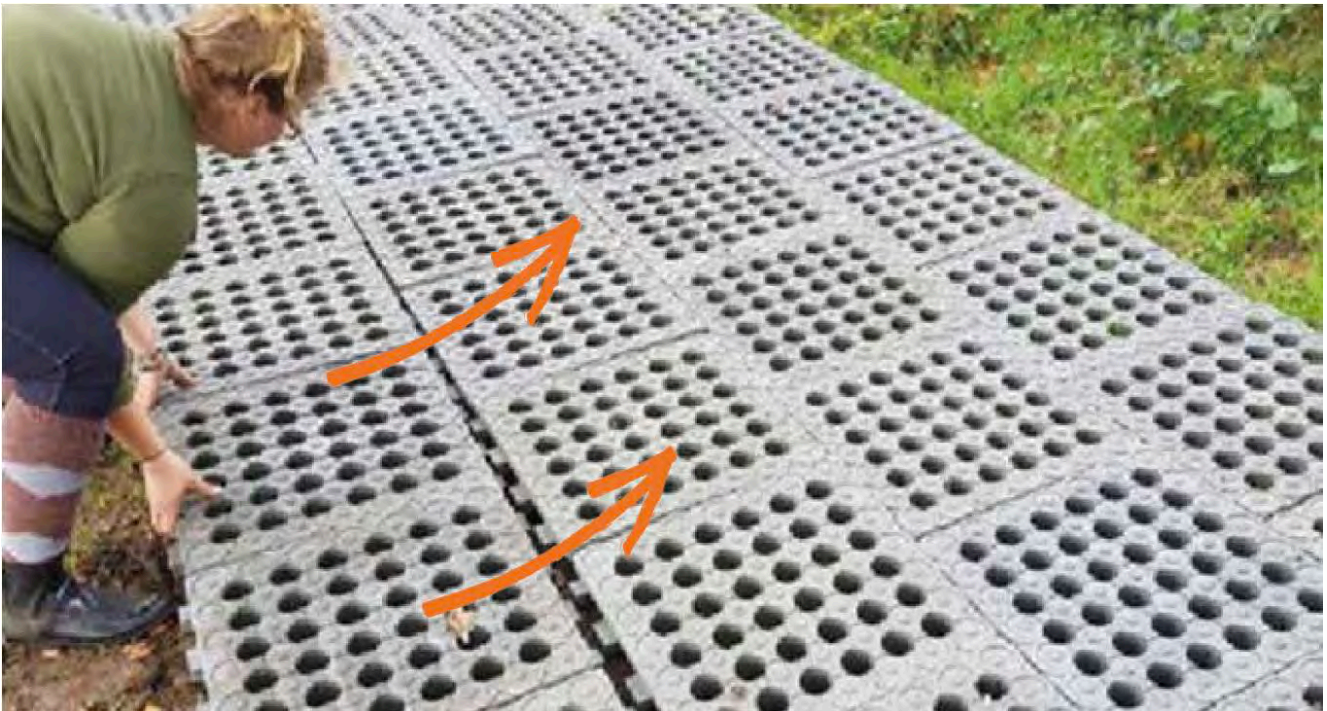
Method 1:

When laying on soft ground, or if you have a few people to help:

Lay down the second row of slabs close to the first row.

The two rows will then need to be pushed up together so the tabs interlink but aren't jammed up together (please remember to allow a small expansion gap, as explained above).

Lay the next row down, and then push that one up to join with the second row, and so on.



Method 2:

When laying on hard, dry ground, or if you are working alone and don't have multiple people to help push a row at a time up to the previously laid slabs: add one slab at a time to the existing area, by slightly opening the right angled joint between the previous slab and the row above, pushing the new slab in, then closing the gap, as shown in this photo.



It's a good idea to keep adding rows on from alternate ends (start at the far left with 1 row, the far right with the next row, and so on, as otherwise you can tend to keep drifting slightly in one direction as you go, as we've discovered).

Method 3:

If you are laying slabs on very deep sticky ground, sliding/wiggling them into place can be very difficult, and you'll make a new deep hole in the mud with every step you take! You can rake each small area before you lay the next slab on it, and then straddle that area, but it's tough work. Or, this video shows one way of getting the area level enough to join rows of slabs on to previous slabs, and keeping them all together in a line, with a board (needs 2 people).

<https://youtu.be/V5oGKZIC9os>

Method 4:

If you intend to create a riding arena with our slabs, the slabs should be laid open side up. Find out more information [HERE](#).



7. FITTING SLABS IN SHELTERS, BARN, OR BESIDE FENCES OR WALLS

When fitting slabs inside an existing building or against existing fencing, please allow room for expansion when temperatures get very hot, by leaving an expansion gap of 5cm between the slabs and any solid structure such as a wall or fence post.

8. SLOPES

When laying the slabs across a slope, staggering them so that they can't move apart down the slope is recommended, like so (orange arrows show direction of slope):



Another option is to add battens, as on a horsebox or trailer ramp. These can be screwed down onto the slabs at intervals, using stainless steel screws (suitable thick screws, long enough to go right through the batten and the slab) so that if a hoof starts to slip it would be stopped completely after a certain distance. On a steep slope we would do this about every 30cm, for example. The battens would need periodic checking to ensure that none of the screws had moved.

9. SAWING SLABS

MUDCONTROL slabs are easily cut with circular saws, bench saws, panel saws or jig saws. Other power tools may also be appropriate (but not chain saws). A hand saw is another option. Moving the blade smoothly and swiftly through the plastic before it starts to melt is recommended. Ideally please lay a sheet down to collect the 'shavings' and then put them in the recycling, as they won't biodegrade, unlike woodshavings.

Please have a look at these videos:

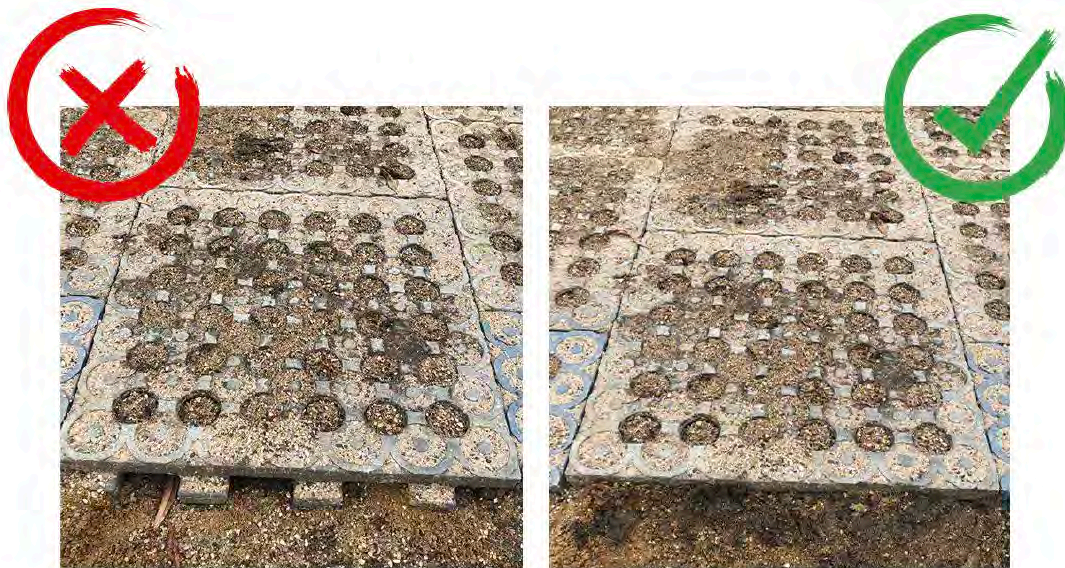
Skill saw: <https://www.youtube.com/watch?v=9KQXe8mYXPg>

and

Hand saw: <https://www.youtube.com/watch?v=QVf1xIYnSg>

10. FINISHING OFF

It is best to cover exposed locating tabs on the outer edges to avoid damage from movement over the leading edge, this can be done with soil, sand or a similar medium.



Ideally a substrate like sharp sand should be used to fill in the holes in the slabs, to enable the whole area to knit together more quickly, and to level the slabs out if it's uneven and any are rocking back and forth. Even after installation, substrate can be used to fill gaps and dips by using a leverage action, like this:

<https://www.youtube.com/watch?v=g-xcV7dOQzo>

11. TOPPING/FILLING

We very strongly recommend, especially for areas trafficked by animals, applying a top layer of 5-10 cm of sand, wood pellets, bark mulch/wood chip, bedding or a similar medium. This will give extra traction, and help to prevent a hoof from sliding further if they have a silly moment. The slip-resistant pattern moulded into the slabs is enough for human foot traffic and for vehicles, but for hooved animals the topping layer is very strongly recommended, and for shod horses we believe it is absolutely essential.

A bulk bag of sand is usually enough to cover around 25-35 square metres of slabs, but of course it depends whether they were laid when the ground was soft (so mud would squidge up and fill the holes, reducing the amount of sand needed) or hard (when more topping would be required).

If you don't want to use any of these suggested toppings around haying/feeding areas then rubber grass/stable mats can be used on top of the MUDCONTROL slabs instead of sand, for example.

ANIMAL USE

Please allow any Animals/Livestock time to acclimatise to any changes in ground surfaces. If you have pigs, sheep, goats, miniature horses, miniature donkeys (any animal with very small hooves) it's very important that the holes are kept filled and generously overtopped with pea gravel or sharp sand to prevent any injuries from very small hooves going down into the holes.



12. ADDING MORE SLABS LATER

You can easily join more slabs to an existing area, as long as it's along a straight edge. Thoroughly clear out the gaps between the tabs on the outside edge with a hoof pick or similar tool, so that the tabs on the new slabs can push in easily, rake/ scrape the area so that the level is the same (so they can connect easily) and add new slabs on.

If you want to add slabs along a staggered edge you will need to lift them all and start again, as it's impossible to open the right angled joint between 3 slabs to get the tab of the next one in, if they are all bedded in securely.



13. REMOVING AND RE-LAYING SLABS

Care should be taken when lifting the slabs, so that you don't break the tabs. The best way is by carefully levering up the leading edge by about 10-15cm (4-6 inches) with a crowbar, spade, rag fork etc, ideally using a fence post or something similar as a fulcrum. Lever up a whole row at a time, then pull the slabs in the lifted row away from the next row horizontally.

Lifting the slabs by more than 15 degrees or trying to wiggle them out one slab at a time can easily cause undue stress on the locating tabs and cause them to break, which will not generally be covered by the manufacturer's warranty.

Pull that row away from the next row, pick up the mud-filled slabs and bash them together to let the mud drop out, or drop them one at a time on a stack of slabs to empty them of mud (be careful - they get very heavy when filled with mud).



14. SCRAPING/MAINTENANCE

Please be aware that in cases of extremely waterlogged ground and where liquid mud is on the surface, the mud will come up through the holes in the slabs, this is normal and unavoidable. You will need to scrape this off the surface. The same is true of mud carried onto the surface by traffic. The slabs will still provide a stable platform and stop you sinking down into the mud. In time, the drainage under the slabs should improve and there will be less and less mud oozing upwards. Poo-picking the area regularly is advised if it has animals on it.

If using machinery to scrape/brush the slabs, please be very careful not to catch the edge of a slab and pull them up.

Maintaining the topping layer is important, and even more so on sloping areas as any hard sloping surface can easily become a ski slope, especially with slippery mud on it. Used bedding, wood chip, sand, wood pellet bedding (pre-soaked, as it can lift the slabs when expanding!) all work for this. As a guideline, ideally you don't want to be able to see the pattern clearly on top of the slabs, it's best if it's covered by topping if the area is for animal use - we top ours up every couple of years.

15. LIMITATIONS

i. SMALL AREAS ON VERY WET/DEEP GROUND

If you are laying slabs on heavy clay, marshy ground, peaty soil etc, please bear in mind that the slabs all support one another. If the area is only for human foot traffic then you can get away with laying small areas, or even just with single slabs as stepping stones. But if you are putting heavy animals or vehicles on the area, the slabs need to be supported by adjacent slabs, and square or rectangular areas (where the vast majority of the slabs are supported on 3 or 4 sides) will be most successful.

Doing narrow short tracks (a star shape around a feeder for example), or a very small area for horses on deep heavy ground is unlikely to work well - you need a larger area of slabs for a successful 'raft' on that sort of ground - it's just physics, as we've discovered.

Laying them when it's firm(ish) so they can bed in level helps the stability of the area. Laying them on poached uneven ground is the worst case scenario as they will be difficult to interlink successfully, and will rock back and forth on the high points, which is to be avoided.

2. NARROW RUNS OF SLABS FOR VEHICLES

Single runs of slabs the axle width apart for vehicles are also unlikely to work, because if the ground is very soft then the end slabs will move as the vehicle's weight goes onto them, and the rest of the row can be forced to buckle at that point. So you would need to do either a full width track like so:



Or, a 'ladder' design with cross-struts of slabs to stabilise the parallel runs, which can work FOR LIGHT TRAFFIC ONLY.

Please go to the [YouTube Channel](#) for helpful videos.

We hope we've covered all topics here, but please don't hesitate to contact us if you have any questions at all. We are usually available on our mobiles, or we reply to Facebook messages as soon as we see them.

Thank you.

Kerry and James
Mudcontrol Ltd