

#### INTRODUCTION

Any area of ground subject to pedestrian, animal or vehicular traffic is subject to erosion of some description, prevention of which requires some sort of surface reinforcement.

Traditionally, this has been done using Concrete, Tarmac or Block Paving. If a reinforcement system of some description is omitted, rutted, boggy, slippery and unsightly conditions occur which can be dangerous for all means of traffic. Traditional solutions are not environmentally friendly and contribute to the growing problem of urban hot spots which cause concern to the ozone layer and carry the necessity for the implementation of extra drainage systems.

These problems apply not just to traffic areas but parking areas, temporary access routes and roof tops, all of which are contributing to rising temperatures and increasing flood risk zones.

The solution to all these problems is to use a porous surface which will retain water for gradual release to the drainage systems and will also absorb heat much more and reduce the hot spots now seen so damaging to our environment.

Another benefit of using porous surfaces is that they can greatly enhance the appearance of any area particularly when filled with decorative stone or plant growing medium for grass or sedum.

## THE RITE - PAVE SOLUTION

Rite-Pave reinforcement systems are designed for long term use, providing a porous substrate support system which holds earth, grass or gravel.

This permeable coarse will significantly reduce heat reflection and help the Sustainable Urban Drainage Systems (SUDS).

Manufactured from 100% Recycled HDPE, Rite-Pave products are designed to easily join together to form a structure that can handle thermal expansion within itself. The design is also perfect for supporting healthy grass growth within the cell which keeps the finished installation looking good.





# KEY BENEFITS

- Environmentally friendly manufactured from 100% recycled materials helping keep waste plastics from landfill
- High load bearing capacity up to 350 tons/m2
- Ability to withstand thermal expansion
- Anti slip top surface with raised pimples
- Excellent laying rates, upto 120m2 per man hour
- Suitable for a wide range of applications
- Cost effective solution to traditional surfacing methods
- Tried and tested in Europe for many years
- Fully supports grass growth
- Prevents compaction of Earth or Gravel infill which assists better drainage
- Suitable for use as a slope stabilisation product
- Easily transported and handled using less fuel can contain over 1500sqm per vehicle
- Easily cut, can be laid by D.I.Y. enthusiasts and professionals alike no specialist tools required to lay product
- Can be used with a variety of infill materials such as gravel, stones, grass, bark chippings, sand and rubber crumb.

# **COMMON APPLICATIONS**

Carparking areas both temporary and permanent • River Side Towpaths • Embankment Stabilisation • Residential Driveways • Golf Course Pathways • Caravan Hardstandings • Garden Shed Hardstandings • Emergency Access Routes • Helicopter Landing Pads • Cycle Routes • Stables, Paddocks and Riding Arenas • Farm Access Routes, and other Agricultural Uses • Aircraft Parking

### TECHNICAL SPECIFICATION

| ı |                                 |             |             |
|---|---------------------------------|-------------|-------------|
|   |                                 | UNITS       |             |
|   | CODE                            |             | C528        |
|   | MATERIAL                        |             | MDPE        |
|   | COLOUR                          |             | BLACK       |
|   | MODULE SIZE                     | MMS         | 500 X 500   |
|   | MODULE DEPTH                    | MMS         | 40          |
|   | MODULES PER SQUARE METER        |             | 4           |
|   | WEIGHT PER MODULE               | KGS         | 1.4         |
|   | CELL SIZE                       | MMS         | 70 X 70     |
|   | CELLS PER SQUARE METER          |             | 196         |
|   | MIM'M WALL THICKNESS            | MMS         | 3.2         |
|   | AVAILABLE AREA FOR INFIL        | %           | 90          |
|   | LOAD CAPACITY                   | TE/M2       | 350         |
|   | AXLE WEIGHT                     | TE          | 14          |
|   | TEMPERATURE RANGE               | CENTIGRADE  | -50 TO + 65 |
|   | INSTALLATION TIME               | M2 PER HOUR | 120         |
|   | LINEAR EXPANSION RATE           | MMS/METER/C | 0.061       |
|   | MAX INCLINE GRADIENT UNDER LOAD | DEGREES     | 11          |
|   | MIN RADIUS TO GROUND CONTOUR    | METERS      | 5.1         |
|   | METERS PER PALLET               | M2          | 56          |
|   |                                 |             |             |

#### **INSTALLATION GUIDELINES**

The following instructions are intended as a guide only, in general, the same preparation procedures used in the construction of footpaths, driveways, and access routes using traditional surfacing methods also apply to cellular systems such as Rite Pave. The guidelines below assume that a sub base is to be used beneath the paving system.

1. The area to be reinforced should be marked out and excavated to the following depths depending on application. Remember to add the depth of the cell to the below figures if the finished result is to remain flush with the surrounding

| Project                     | Typical depth |
|-----------------------------|---------------|
| Patios, Garden Paths        | 75-100mm      |
| Driveways, public footpaths | 100-150mm     |
| Heavy uses                  | 150-225mm     |
| Highways                    | 150mm +       |

- 2. With the full area excavated you can now proceed to install the sub base material, compact the entire area to be as level as possible using either a vibrating plate, or for larger areas a vibrating roller.
- 3. A thin 40mm layer of sharpsand/ soil mix can now be applied to the surface of the sub base this is used to level out any imperfections or hollows within the surface of the sub base, and if the area is to be grassed over it provides an ideal environment for grass root survival and growth.
- 4. Once the whole area is completely level, you can then proceed to interlock and lay the paving modules. Any that need cutting should be measured and cut prior to installation and where possible cut in such a way to leave complete cells along the outer area edge. With the area completely laid and positioned correctly, the whole area can be lightly compacted ensuring they remain flat and level.
- 5. The area can then be back filled with the medium to be used. If using gravel, we recommend 10mm or less gravel as this allows better filling of the chambers, if the area is to be grassed, we would recommend using a 70/30 rootzone mixture which is essentially a mixture of quality topsoil and sharpsand. This prevents the hard compaction of topsoil alone which can limit grass growth. Initially the cells should be filled to approximately 10mm below the top surface of the module, this will protect the young seedlings during early establishment. The whole area can then be seeded and watered in.

Another point worthy of mention is that an optional weed suppressant membrane can be used on top of the sub base prior to the sand being installed this prevents weed growth and provides the grass seed with a better chance of survival but allows for natural drainage of rain water to the ground beneath.













