

FirmaGround65

Easy to handle, quick to install

Manufactured from recycled plastic

recyclable at end of use

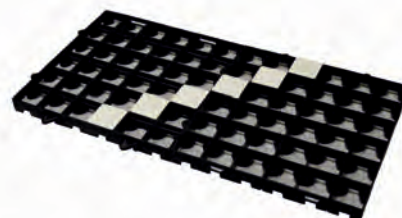


The grid is specially designed to allow water to drain away, whilst pockets at the base retain a small amount, preventing grass from getting waterlogged or dying through lack of water.

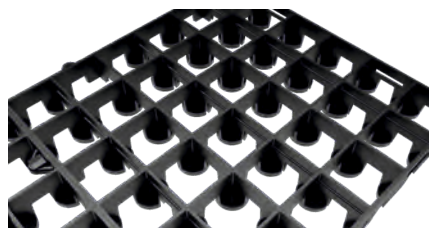


Ideal for :

**carparks & hardstandings
footpaths & verges
pedestrian areas
bridge abutments
access roads**



Easily installed (see overleaf)



**Demarcation blocks available -
used to delineate parking bays
Forming arrows for traffic flow
Stock colour - white
other colours available to order**

PRODUCT DATA

NOMINAL SIZE

500 x 500 x 68

COVERAGE RATE

4

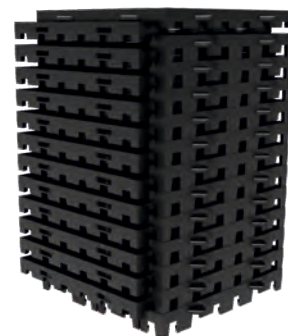
UNIT WEIGHT

INFILTRATION RATE

RUN OFF COEFFICIENT RANGE

INFILL SURFACE AREA

COMPRESSIVE STRENGTH (filled)



MADE IN UK TO ISO9001 QUALITY STANDARDS

FirmGround65 Installation Instructions

Drainage

Will the site drain sufficiently well as it is ?

If not install the required extra drainage.

If any slope exceeds 6% , please contact us for further advice.

Subgrade

Excavate existing soils until you get down to ground capable of withstanding the loads to be imposed.

Fit a geotextile membrane if required as per the manufacturers instructions

Then fill with a suitable grade of free-draining crushed stone and then compact it well, leaving the top at the required level as per the architectural drawings.

Compact the subgrade with either a vibrating roller or vibrating plate, making good soft spots with suitable material.

NB provide a minimal (1:30 - 1:100) fall to the drainage collection system.

For Gravel Infill

Put a layer of sharp sand down sufficient to blind the crushed stone - usually between 10mm & 30mm.

Fit another layer of geotextile, overlapping the joints by 200mm.

Then install the Firmground as below.

Fill the FirmGround with aggregate whose size should not exceed 15mm and should ideally not be below 6mm (typically 10mm single sized crushed rock). The use of an angular gravel rather than a river washed rounded gravel will aid compaction and prevent migration from the units.

For Grass Infill

Lay approx. 30 - 40mm of good quality rootzone mix of sharp sand & loamy soil.

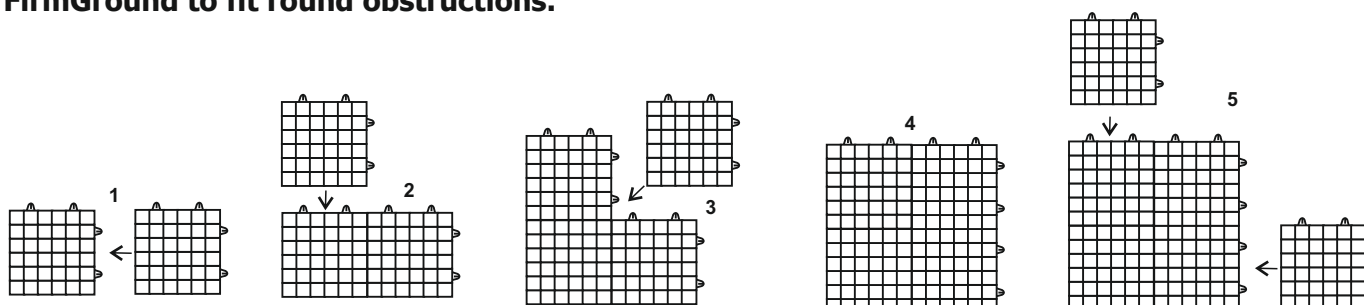
Then install the Firmground as below

A good quality topsoil should be used to infill the units to the top and allowed to settle; grass seeding followed immediately by a top dressing of a good quality fertiliser should ensure adequate grass growth.

Seeded areas should be regularly watered for a period of 6 weeks following installation

Laying the FirmGround

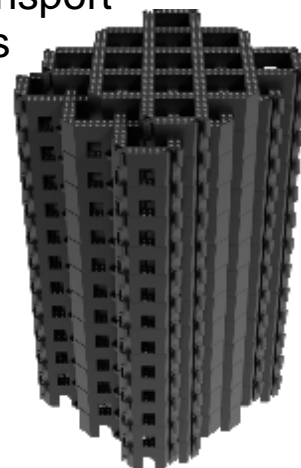
Start in one corner and fan out from there as below. Use a hand or power saw to cut the FirmGround to fit round obstructions.



FirmaGround Heavy Duty



Interlocks on the pallet
to minimise transport
& storage costs



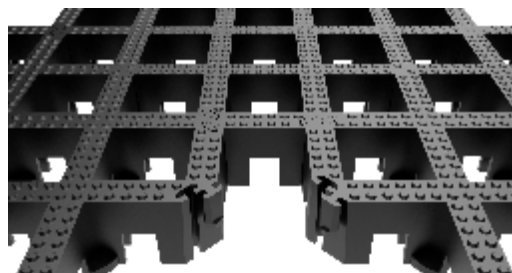
Specially designed to allow water to drain away whilst special pockets retain some water. This prevents grass from getting waterlogged and helps prevent grass from dying through lack of water.

Gravel-Filled



* Ideal for
carparks
hardstandings
footpaths & verges
pedestrian areas
bridge abutments
access roads

Easily Fitted with interlocking Catches



PRODUCT DATA

NOMINAL SIZE
COVERAGE RATE
UNIT WEIGHT

INFILTRATION RATE(Gravel-filled)

RUN OFF COEFFICIENT RANGE

INFILL SURFACE AREA

COMPRESSIVE STRENGTH(unfilled)

FirmGroundHeavy

500 x 500 x 80mm (+0/-3%)

4 blocks / sq.m.

3.9 kg (15.6kg/sq.m.)

> 250cm/hour

0.05 - 0.4

> 55%

>3000 KN / m2

Made in UK from recycled polyethylene

FirmGroundHeavy Installation Instructions

Subgrade

Excavate to formation level as indicated on the drawing, providing a minimal (1:30 - 1:100) fall to the drainage collection system. Compact subgrade, using either a vibrating roller or vibrating plate, making good soft spots with suitable material.

For Attenuation Systems

If the exposed subgrade surface displays hollows and/or sharp protrusions (and is therefore unsuitable for the direct installation of the geomembrane) then the specified geotextile should be incorporated above and beneath the geomembrane, to afford protection.

Installation of the specified geomembrane system must be by an approved welding technique, with the benefit of a comprehensive on-site CQA (Control Quality Assurance) procedure. Install the specified AquaCrate drainage network in accordance with the detail design.

For Infiltration Systems

Lay the specified geotextile, overlapping the joints by 200mm, ensuring that sufficient geotextile protrudes beyond the anticipated wearing course level to allow final trimming.

Sub-base

Use granular material (crushed gravel, rock or concrete) as specified, which must be sound, clean, non friable and free from clay or other deleterious matter. Install the designed depth of sub-base as specified, in layers not greater than 200mm thick, (taking care not to puncture the underlying membrane within the Attenuation System). Compact each layer in turn with a vibratory plate, type DVP 75/22" plate, or suitable roller. Overlay the sub-base with the specified geotextile, overlapping the joints by 200mm.

Bedding Layer (if required)

Lay, screed and compact to level, a 30mm depth of appropriate bedding layer material (sharp sand). The requirement for, and selection of, the bedding layer material is entirely dependant upon the application and design criteria of the specific project. For grass reinforcement mix the bedding layer 4:1 with a good quality top soil to ensure good root growth.

Wearing Course

FirmGroundHeavy should be laid such that each modular unit slots into its neighbouring units. Once a fully interlocked matrix has been formed, then the specified rootzone/grass seed infill material or natural aggregate should be used to infill each cell such that a continuous, permanently porous, high load bearing structure is thereby created.

For Sand Bed

A good quality compacted silica sharp sand should be used approximately 30mm thickness after compaction.

For Gravel Fill

Aggregate size should not exceed 15mm and should ideally not be below 6mm (typically 10mm single sized crushed rock). The use of an angular gravel rather than a river washed rounded gravel will aid compaction and prevent migration from the units.

For Grass Fill

A good quality topsoil should be used to infill the units to the top and allowed to settle; grass seeding followed immediately by a top dressing of a good quality fertiliser should ensure adequate grass growth.

Seeded areas should be regularly watered for a period of 6 weeks following installation