

MetroPave Installation Guide

Installation guide

Finished surface, grass or gravel
Grid
Grid bedding material
Geotextile layer - non woven
Free draining sub-base 50 570mm
Geogrid
Sub-soil

Excavation

1 Excavate the area to the required depth as decided in the sub-base design section. If required install the edging restraint such as kerbing or concrete edging.

For systems where attenuation is required, lay a sealed geomembrane. No seal membrane is needed where infiltration is used. Place in sub-base being careful not to split membrane or dislodge the geotextiles. The sub-base needs to be porous, free draining and stable. Ideally it would be a Type 3 aggregate. Standard sub-base material is unsuitable due to the amount of fines within it stopping the water draining.

Geogrid

2 Once the excavated area is sufficiently leveled and high spots removed, we recommend installing a geogrid to improve the stability of the ground and reduce the risk of uneven settlement.

Free draining sub-base

3 Lay, screed and compact to level your sub-base, making sure to compact in layers ideally less than 150mm thick. Selection of the material to make the sub base should

have been decided in the design section.

Geotextile

4 Once the sub-base has been laid and leveled, a geomembrane sheet should be installed as a separation layer. This stops the bedding layer from migrating or being washed away and causing sinkage or settlement.

Bedding

5 The bedding layer will differ depending on whether you require a gravel or grass finish.

a. Gravel finish,

The bedding layer should be a compacted 30mm layer of 5mm grit or sharp sand (we recommend using 5mm grit for heavier duty use)

b. Grass finish,

Mix either 5mm grit or sharp sand at a ratio 4:1 with a good quality top soil to ensure good root growth and lay a compacted 30mm layer.

Reinforcement layer

6 Once the area is compacted and prepared, lay the first layer of grids along the longest straight edge to align (if against kerbs or solid edging, leave a 15-25mm expansion gap).

a. MetroPave & MetroPave Plus- grids will come on pallets as groups of 4, grids can be installed individually or connected together as groups of 4 to speed up installation. Grids can be cut with a hand saw or circular saw to fit the required area.

b. MetroPave HGV- lay the HGV grid starting in the corner, laying the first grid with the side with the exposed 2 feet face out should help with locating the grids. Grids can be cut with a circular saw to fit around obstructions or edges.

Standing on the existing grids while laying them will help avoid disturbing the bedding layer and causing subsidence.

Infill

7 The selected infill material should be specified on a project specific basis dependent upon the application and design requirements.

For Gravel infill:

Fill the grids with 5-15mm angular gravel (rounded gravel or pea shingle is not recommended as it will migrate out of the grids during use) use a vibrating plate to compact the infill to a suitable level.

For Grass infill:

Fill the grids with a good quality friable top soil or 60/40 root zone or preferably a blended high quality free-draining sandy loam. Scrape off any over fill so the top edge of the grid is visible.

Area should not be trafficked until the grass has established (Typically 8 weeks)

Suggested grass mixes:

General Parking:

- 50% Perennial ryegrass
- 20% Slender creeping red fescue
- 25% Strong creeping red fescue
- 5% Browntop bentgrass

Access ways:

- 20% Slender creeping red fescue
- 20% Chewings fescue
- 30% Hard fescue
- 25% Strong creeping red fescue
- 5% Browntop bentgrass

Verges:

- 35% Smooth stalked meadow grass
- 30% Slender creeping red fescue
- 25% Perennial ryegrass
- 10% Browntop bentgrass

Maintenance

For Grass Fill: Once the grass has established itself and traffic allowed back onto the area a normal grass maintenance regime can be introduced (mowing etc).

For Gravel Fill: Occasional sweeping of any overspill back into the units is all that is required for most areas that have been installed correctly. If gravel infill appears to be settling, check that the geotextile is installed beneath the sand to prevent migration & top up as required.

Breakages; If isolated breakages occur (miss use, wheel spinning etc) these individual units can be removed and replaced by removing the fill, levering up the locking pins from the affected & immediately adjacent units and removing any broken units. Smooth out the bedding to suit and replacement units can be levered into

position and locked back into place. Replace the in-fill to blend the unit into the surrounding surface.

Installation Speeds

The following speeds are given as a guide only.

- **MetroPave**

100m² per person per hour

- **MetroPave Plus**

110m² per person per hour

- **MetroPave HGV**

450m² per day with a 3 person team

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