

INDUSTRIAL STORMWATER CODE OF PRACTICE FACT SHEET

3. Permeable pavement with a lined and drained sub-base

Permeable paving surfaces enable water to pass through the paving materials.

Grading a development site to allow impervious areas to drain onto a permeable pavement reduces surface run-off and slowly filters suspended solids from entering the stormwater system.

Impervious to pervious areas on a site are only permitted to a maximum ratio of 2:1.

For example a site could have 100m² of impervious pavement graded so that it drains onto an area of permeable pavement of 50m².

Permeable pavers are suitable for smaller lots with fewer car spaces and where there is effectively no room available to construct a raingarden. The pavers should only be constructed on dedicated car parking areas where heavy vehicles will not damage the permeable pavement.

Pavers are not suitable for areas which deal with large amounts of fats, oils and greases. These sites need to be treated with an oil and grease separator, baffled pit or proprietary Gross Pollutant Trap capable of capturing oil/grease followed by treatment in a raingarden.

Permeable pavers will need to be maintained like every other treatment device.

Maintenance may involve vacuuming the surface of the pavers to remove sediment and unblock the pavers. If the sub-base has not been adequately laid maintenance may include the need to lift the pavers and bedding layer, remove and replace the geotextile layer and relay the pavers.

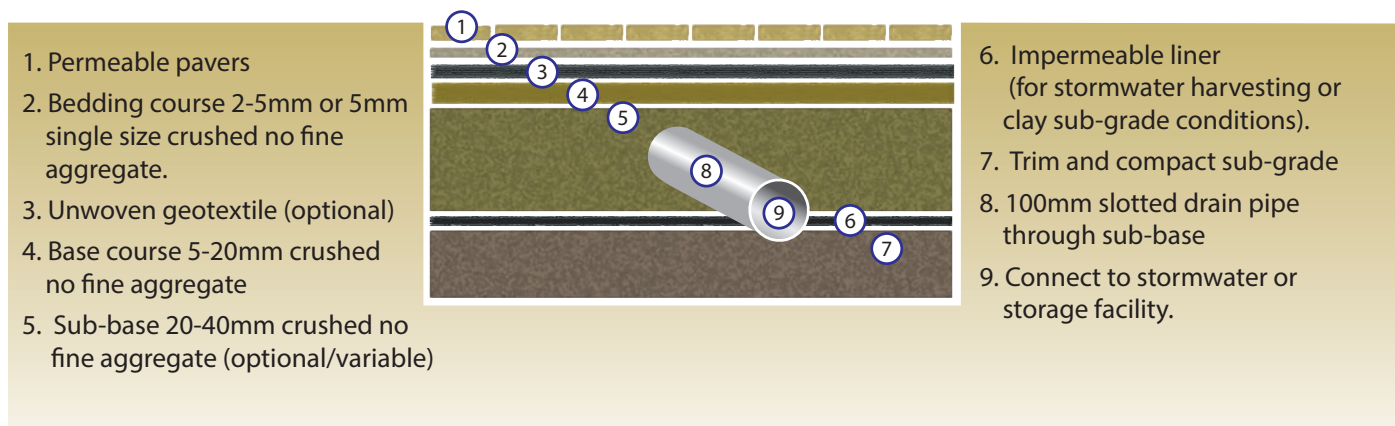
While typical cross sections are provided in this fact sheet, the depth and composition of the pavement must be designed by a Civil or Geotechnical Engineer.

Design Criteria

1. Only use on smaller lots where there is no room available to construct a raingarden.
2. Only use in dedicated parking bays where heavy vehicles won't cause damage (unless designed to accept heavy vehicle loading).
3. Permeable and porous pavements are to be lined and include subsoil drainage which is to be connected into the stormwater system.
4. Maximum impervious to pervious areas for a porous or permeable pavement is to be 2:1.
5. Permeable and porous pavements are to be designed by a Civil or Geotechnical Engineer taking into account the very low bearing strengths and design criteria.
6. Permeable pavers must be of an approved design for vehicle movements.



Lined permeable paving



NOTES:

1. While this image provides typical cross sections, the depth and composition of the pavement must be designed by a Civil or Geotechnical Engineer.
2. An impermeable liner is required as reactive stiff clays are likely to be found on sites in Hume.
3. The thickness of the gravel media must be specified as determined by a Civil or Geotechnical Engineer.