



Installation Details

Before undertaking a permeable pavement installation, it's important to choose the construction detail that's appropriate for your soil type and design requirements.

Determining the on-site underlying soil type (clay, silt, sand) is the first step in choosing the construction detail that's appropriate for your project. Although the surface infiltration rates of EP Henry's ECO Line of permeable pavers are extremely high, the infiltration rates of the underlying soils determine how quickly captured water will infiltrate into the ground.

Ideally, the quantity of water that enters a permeable paver system should infiltrate/exfiltrate your permeable paver system within 24-48 hours. However, it's possible that your underlying soils can not absorb water rapidly enough due to the composition of the soil. In cases where your soil cannot absorb the water received in a given precipitation event within 24-48 hours, conveyance movement via drainage pipes to additional storage or infiltration areas may be appropriate.

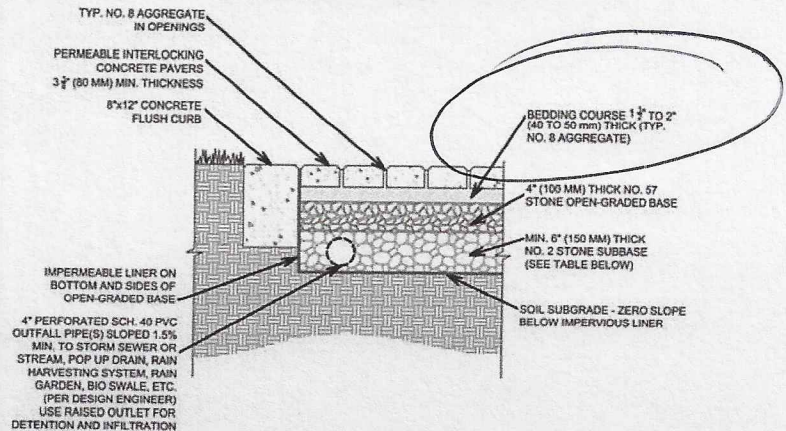
In basic terms, clay can absorb the least amount of water, and sand can absorb the most. It is important to note that when using the Partial or No Infiltration construction details, a drainage pipe is specified which must have positive flow away from the aggregate base. This drainage pipe can be directed to auxiliary on-site infiltration trenches, rain gardens, bio-swales, detention basins, or nearby storm pipes. Municipal approval is required for any stormwater "tie-ins."

Definitions

Infiltration: The penetration of water through the ground surface into the subsoil

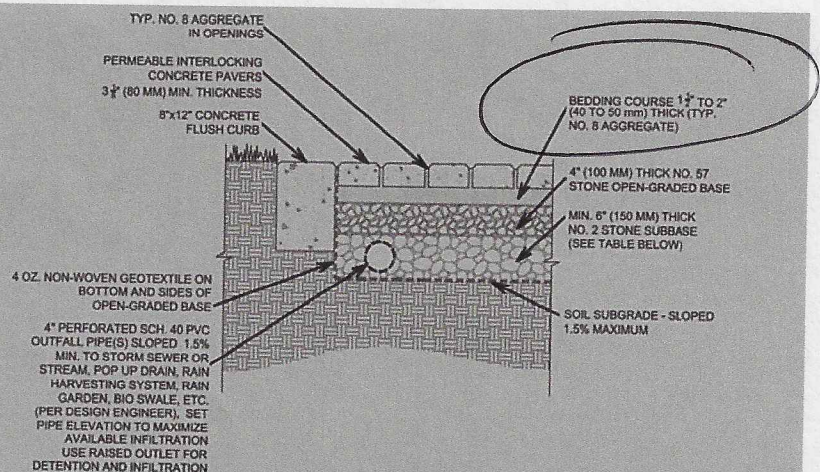
Exfiltration: Loss of water from a drainage/permeable pavement system into the surrounding soil

Note: The following represent several common details for EP Henry's line of permeable pavers.



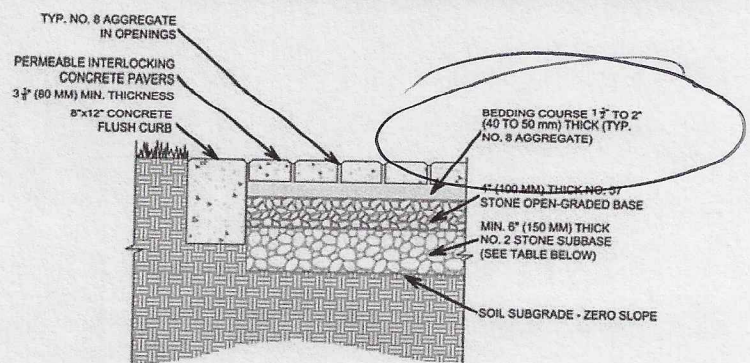
NO INFILTRATION

If your soils have high clay content, you are constructing over bedrock, a high water table, or environmental hot spots, the No Infiltration option is appropriate.



PARTIAL INFILTRATION

If your soils are of medium texture, with roughly equal portions of sand, silt, and a little less clay, the Partial Infiltration construction detail would be appropriate.



FULL INFILTRATION

If your soils are very sandy, with no clay and very few fine particles, the Full Infiltration construction detail would be appropriate.

Note: 2 3/8\" (60MM) thick pavers may be used in pedestrian applications. No. 2 stone subbase thickness varies with design. Consult ICP's permeable interlocking concrete pavement manual for charts.

For more information, details, and LEED information, please visit ephenryecocenter.com.



Marshalls

Creating Better Spaces

INSTALLATION DETAILS FOR STANDARD BLOCK PAVING

General Information

On delivery, the product should be inspected. If there are any issues, please report them immediately and do not commence installation.

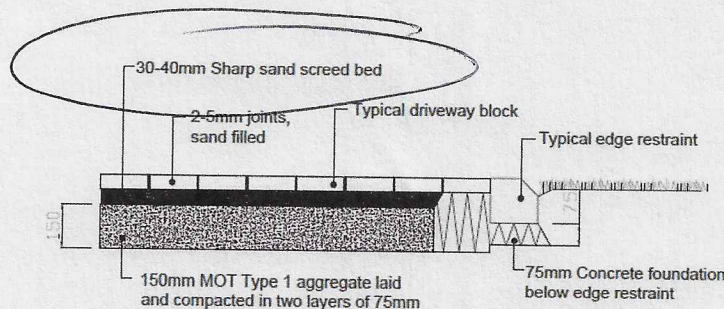
Before installation commences a certain amount of sorting of the product may be required to ensure consistency of colour, texture and dimensional tolerance.

Health and Safety Information

Safe working practices should be employed at all times during the construction process and all necessary Personal Protective Equipment (PPE) should be worn.

Pavement Design

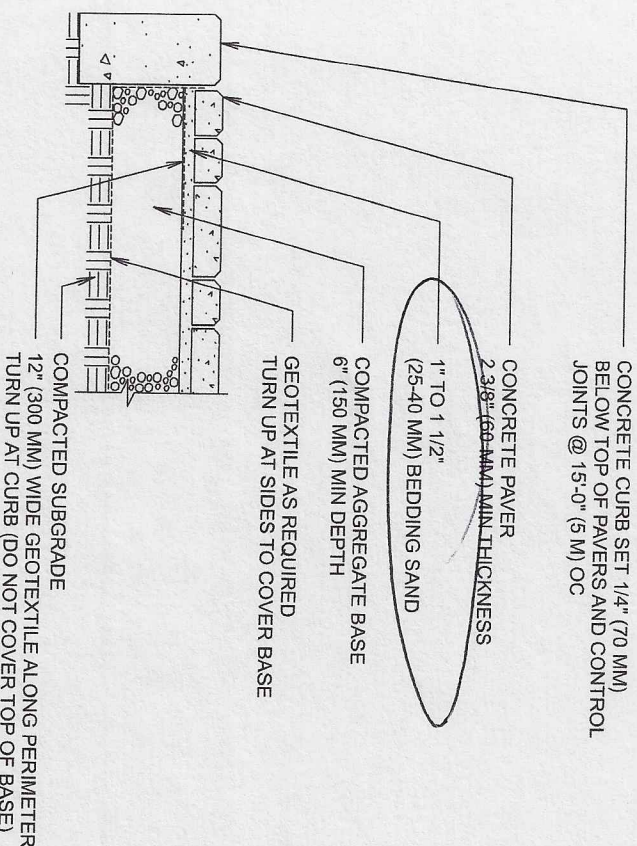
For most domestic applications a sub-base of 150mm should prove to be sufficient. However the paving design must be based upon the prevalent ground conditions and type and frequency of anticipated loads.



6 Typical section through a driveway constructed in accordance with Marshalls Register Installation Procedures
D02 Scale 1:20 @ A3

Excavation

To allow the block paving to be installed correctly, a certain amount of excavation is usually required. The depth of this excavation will be the thickness of the required sub-base plus the laying course sand and the blocks. An extremely important factor to consider when working out the depth of excavation is that the finished surface



- NOTES:
1. THICKNESS OF AGGREGATE BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES.
 2. CONCRETE PAVERS SHOULD BE PLACED ON A CEMENT TREATED BASE IF SOIL IS EXTREMELY WEAK OR CONSTANTLY SATURATED. PAVERS CAN BE OVERLAID OR INLAID ON EXISTING ASPHALT OR CONCRETE DRIVEWAYS.
 3. CONSULT ICP TECH SPEC 2 FOR GUIDELINES ON SPECIFICATIONS FOR BASE MATERIALS, SUBGRADE SOIL AND BASE COMPACTION.
 4. PLASTIC, STEEL, ALUMINUM OR PRECAST CONCRETE, EDGING MAY BE USED.