



Permeable Pavers
Specification Guide
and
Installation Details



Permapave Permeable Pavers

Guide to Specification

PART ONE – GENERAL

1.1 SCOPE OF WORK

Supply materials, labor, transportation, services and equipment necessary to supply and install Permapave permeable pavers as indicated on drawings and specified herein.

1.2 PERFORMANCE REQUIREMENTS

1. Permeability to be not less than 5 gallons per minute per square foot.

2. Water absorption into paver to be zero in accordance with ASTM C-293

3. Static coefficient of friction ASTM C-1028

(a) Wet: 0.50 -0.60

(b) Dry: 0.60 - 0.70

4. Bulk density of paver to be the amount specified for the paver type and size selected (bulk density of pavers varies with type and size of stone selected).

1.3 QUALITY ASSURANCE

A. Manufacturer must be a company licensed to manufacture Permapave permeable pavers, utilizing approved manufacturing equipment and processes.

B. Installation must be by a contractor with more than 1 years experience in placing permeable pavers on projects of similar nature or dollar cost.

C. Installation contractor shall conform to all local, state/provincial licensing and bonding requirements.

1.4 SUBMITTALS

A. Submit installation instructions as recommended by manufacturer.

B. Submit full size sample sets of Permapave™ units to indicate color, shape, stone type and size selected. Stone type and paver color will be selected by Architect / Engineer / Landscape Architect / Owner from available product range.

C. Submit test results for compliance to specifications herein.

D. Indicate layout pattern, and relationship of paving joints to fixtures and project formed details.

E. Submit two copies of written instructions for recommended maintenance.



1.5 PROJECT CONDITIONS

- A. Do not install pavers in heavy rain or snowfall
- B. Do not install pavers over frozen base materials

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Packaging and Shipping: Permapave Pavers to be stretch wrapped in rows, banded on pallets and delivered in original unopened packaging with legible manufacturer identification, including size, quantity, and manufacturing date.

1.7 WARRANTY

- A. Manufacturer / installer shall warrant the installed system for a period of ten years from the date of substantial completion against failure of workmanship and materials.

1.8 MAINTENANCE

- A. Extra Materials: Deliver supply of maintenance materials to owner. Furnish maintenance materials from the same lot of materials installed, and enclosed in protective packaging with appropriate identifying labels.

1. Supply not less than 1 percent of total product installed as maintenance stock.

PART TWO – PRODUCTS

2.1 PERMEABLE PAVERS

- A. Manufacturers

1. Acceptable Manufacturer

Manufacturer Licensed to manufacture permeable pavers using the Permapave technology.

2. Drawings and installation specifications are based on propriety literature from the owners of the Permapave technology.

2.2 MANUFACTURED UNITS

- A. Pavers

Sizes: 12" x 12" (actual)

16" x 16" (actual)

8" x 8" (actual)

8" x 4" (actual)

Face: With beveled edges

Finish: Natural stone surface

Color: Color selected from manufacturers available stone colors. Paver surfaces are sealed.



2.3 FABRICATION

A. Manufactured according to methodology related to the Pemapave™ technology.

2.4 SUBGRADE

A. All sub grade material shall be fines free, and will, wherever practical, be washed to remove dust and foreign material.

PART THREE - EXECUTION

3.1 EXAMINATION

- A. Verify that sub grade preparation including compacted density conform with the specifications.
- B. Verify that aggregate base materials, thickness, compaction, and elevations conform with specifications.
- C. Verify location, type, installation and elevation of edge restraints required for the installation.
- D. Verify that base is dry, uniform, even and ready to support pavers and imposed or anticipated vehicular loads.

3.2 INSTALLATION

- A. Spread a bedding layer of 25 mm of fines free (no dust or undersize particles) 5-10 mm stone over the sub grade. Once spread, the screened bedding mix should not be disturbed. Do not use bedding mix to fill depressions in base surface.
- B. Ensure that pavers are free of foreign materials before installation.
- C. Lay pavers from permanent edge restraint in the pattern as shown on the drawings. Use string lines to keep paving joints straight.
- D. Use Brick Saw fitted with a diamond blade fitted with continuous water feed to cut pavers.
- E. Lay pavers on prepared surface. Make gaps between pavers (grout strips) uniform by inserting spacers between the pavers.
- F. Set pavers hand tight but do not use hammer to adjust pavers. Secure and level pavers using appropriate plate vibrator (cover plate with rubber or like to avoid damage to pavers). Trafficable areas should receive 4 passes with the plate compactor.
- G. Apply specified grouting mixture with trowel, ensuring exposed surfaces are protected from spillage. Overfill joints and iron in mixture with pointing tool.