



Specification Guide and Installation Overview

PART ONE – GENERAL

1.1 SCOPE OF WORK

Provide materials, labor, transportation, services and equipment necessary to supply and install Xeripave[®] or Xeribrix[™] as indicated on drawings and specified herein.

1.2 PERFORMANCE REQUIREMENTS

A. Infiltration (flow through rate) not to be less than 50 gallons per minute per square foot.

B. Water absorption into paver to be zero in accordance with ASTM C-140.

C. Static coefficient of friction ASTM C-1028:

(a) Wet: minimum of 0.69

(b) Dry: minimum of 0.80

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

E. Paver must have a minimum internal void capacity of 33 percent or greater.

F. Paver must have a minimum compressive strength of 1,500 p.s.i. as per ASTM C-140-10.

G. Paver must have a minimum flexural strength of 250 p.s.i. as per ASTM C67.

H. Pavers must be freeze-thaw resistant as per ASTM C1262-98

1.3 QUALITY ASSURANCE

A. Manufacturer must be a company licensed to manufacture Xeripave[®] or Xeribrix[™], utilizing approved manufacturing equipment, materials and processes.

B. Installation must be by a contractor with more than one year of experience or considered certified 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. If required, submit full size sample sets of Xeripave^{® Super} Pervious units to indicate color, shape, stone type and size selected. Stone type and paver color will be selected by Specifier / Owner from available product range.

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

D. Submit two copies of written installation 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 subgrade or base materials.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Packaging and Shipping: Xeripave® or Xeribrix™ Pavers to be stretch-wrapped in layers banded on pallets and delivered in original unopened packaging with legible manufacturer identification, including size and quantity.

B. Full pallet of pavers is not to be stacked more than two high. Half pallets can be stacked up to four high.

1.7 WARRANTY

A. Manufacturer / installer shall warrant the installed system against failure of workmanship and materials. See manufacturer's standard warranty.

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.

(i). If requested, supply not less than one percent of total product installed as maintenance stock.

PART TWO – PRODUCTS

2.1 SUPER PERVIOUS PAVERS

A. Pervious Pavers

(i). Super Pervious Pavers are to be manufactured with a natural, colored aggregate bonded together with a clear, high-strength polymer heat treated in a manufacturing facility. Polymers must not be an acrylic, epoxy or aromatic system nor use polyester in the formulation.

(ii). Super Pervious Pavers must have a internal void capacity greater than 33 percent and allow a minimum infiltration of 50 gallon per minute per square foot through the surface of the paver.

B. Manufacturers

(i). Acceptable Manufacturer

Manufacturer must have three or more years of experience making Super Pervious Pavers or be licensed to manufacture by a company that has three or more years of experience making Super Pervious Pavers.

(ii). Drawings and installation specifications are based on proprietary literature from owners of the Xeripave® technology.

2.2 MANUFACTURED UNITS

A. Unit Sizes

(i). SP Pavers (Square)

11.81 x 11.81 x 1.97in (300mm x 300mm x 50mm)

15.75 x 15.75 x 1.97in (400mm x 400mm x 50mm)

11.81 x 11.81 x 3.94in (300mm x 300mm x 90mm)

(ii). XeriBrix™ Pavers (Rectangular)

4.5 x 9 x 2.38in (115mm x 230mm x 60.45mm)

Face: With radius edges

Finish: Natural stone surface

Color: Color selected from manufacturer's available stone colors.

2.3 FABRICATION

A. Manufactured according to methodology related to the Xeripave® technology.

2.4 SUB-BASE, BASE AND BEDDING LAYERS

A. All sub-base, base, and bedding material shall be free of fines, 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 to the specifications.

B. Verify that aggregate base materials, thickness, compaction and elevations conform to 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 (see also Xeripave® Installation Guide for more information)

A. If required by certified design professional or site engineer, sub-base is comprised of three (3) parts:

(i). **Sub-base ASTM No.2** (if required or installation is vehicular) at a depth sufficient to facilitate infiltration amount to be determined by design professional, of 1.5" (37mm) to 3" (75mm) crushed free draining hard aggregate.

(ii). **Sub-base ASTM No.57**, use a minimum of 4" (100mm) thick layer of #57 (1 1/2" or 37.5mm to 1/2" or 12.5mm) clean crushed aggregate free of fines. Compact No.57 aggregate in 2" lifts.

(iii). Spread a bedding layer of 2" (50mm) of non-compacted **ASTM No.8** (1/2" or 12.5mm to No. 16 or 1.16mm), (no dust or undersized particles) over the base layer. Do not use bedding mix to fill depressions in base surface. Do not compact unless within a 4' distance from a transition to or from a ridged vehicular surface to flexible paver surface or if the entire area is a vehicular installation. Then light compaction of bedding layer is optional or can be done at paver bedding step.

(iv). No joint sand or joint aggregate is required. No polymeric sand is to be used with a Xeripave® or Xeribrix™ installation.

(v). Sand is not an acceptable base or bedding layer in a Xeripave® or Xeribrix™ installation.

B. Install Xeripave® or Xeribrix™ starting from the lowest point of slope and working toward highest.

C. Ensure that pavers are free of foreign materials before installation.

D. Lay pavers from permanent edge restraint in the pattern as shown in the drawings. Use string lines to keep paving joints straight.

E. Use masonry saw fitted with a continuous rim diamond blade and continuous water feed to cut pavers.

F. Lay pavers on prepared surface fitting tightly adjacent to each paver by using the “click and drop method”.

G. Set pavers hand tight, but do not use hammer to adjust pavers. Secure and level pavers using appropriate plate vibrator (cover plate with rubber mat or place a thin (min 3/8”) sheet of Plywood on surface to avoid damage to pavers). Trafficable areas should receive enough passes to adequately bed pavers.

See Xeripave Installation Guidelines, or contact manufacturer for more information.