perk E pave™

ECO friendly porous paving made with recycled tires

A FLEXIBLE POROUS PAVING

DEFINITION

A. Flexible Porous Paving: Paving system comprised of combination of three components: recycled passenger car tires, aggregate, and urethane binder that provides a strong, pervious, yet flexible paving.

INSTALLER QUALIFICATIONS

A. Flexible Porous Paving installer shall be required to be familiar with installation procedures and to have attended the Manufacturer installation training program.
B. Flexible Porous Paving installer shall employ no less than two Manufacturer-trained Flexible Porous Paving technicians on staff who directly oversee and perform the installations during all Flexible Porous Paving placement.

PROJECT CONDITIONS

A. Protect stored rubber and aggregate from moisture by covering material with sheet plastic. Binder to be stored within a temperature range of 45 to 90 degrees F.
B. Avoid placing pervious paving if rain, snow, or frost is forecast within 24 hours. Protect fresh paving from moisture and freezing.
C. Base aggregate shall be a clean #57 stone.

FLEXIBLE POROUS PAVING

A. Stone: Triple-washed and dried coarse aggregate (1/4 to 3/8 inch) per ASTM C 33. Bagged in 50 lb. quantity.
B. Nominal maximum aggregate size shall not exceed 1/3 of the specified paving thickness.
C. Rubber: Recycled passenger tires ground to 1/4" nominal with wire remnants removed.
D. Binding agent: urethane liquid prepolymer based upon DiphenylmethaneDiisocyanate.
E. Mix Design: Using materials mix ratio as acceptable by the Manufacturer for the intended application.
F. The volume by weight of aggregate shall be as required by the Manufacturer for the intended application.
G. Forms shall be clean and free of debris of any kind, rust, and hardened concrete and make use of a Bio-diesel or vegetable oil as a form release.

EXECUTION

A. Prepare subgrade as specified in the contract documents or as directed by the Engineer. Porous Flexible Paving has a thickness of 1.5", over Clean Coarse Aggregate (#57 stone)

with 95% compaction per AASHTO T-180, with an ideal thickness of 4 inches over stabilized sub-base,

B. Construct subgrade to ensure that the required paving thickness is obtained in all locations.
C. Keep all traffic off subgrade during construction to the maximum extent practical.
D. Apply form release agent to the temporary form face which will be in contact with pervious paving, immediately before placing paving.
E. Protect previously placed paving from damage.
F. Apply liquid urethane bonding agent to face of surfaces when adhesion is desired

MIXING

A. Mix on site in compliance with Manufacturer's written specifications.

PLACING AND FINISHING PAVING

A. Do not place Flexible Porous Paving on frozen or wet subgrade or subbase.
B. Deposit Flexible Porous Paving either directly onto the subgrade or subbase by wheelbarrow or by material handler onto the subgrade or subbase, unless otherwise specified.
C. Deposit Flexible Porous Paving between the forms to an approximately uniform height.
D. Spread the pervious paving uniformly to the required elevation and screed to achieve a uniform flat surface.

FINAL SURFACE TEXTURE

A. Final surface of pervious paving shall be smoothed with bull float and magnesium hand floats coated with a form release film.

EDGING

A. When permanent forms are not used, bevel the edge of the top surface to a 45^0 slope

CURING

A. Completely cover the paving surface with a minimum 4 mil thick polyethylene sheet if rain or sprinklers are imminent.
B. Cure paving for a minimum of 24 uninterrupted hours, unless otherwise specified.

HOT- AND COLD-WEATHER CONSTRUCTION

A. When hot weather is anticipated up to 95 degrees Fahrenheit, no special procedures are necessary.
B. In cold weather when temperatures may fall below freezing utilize a fan to maintain airflow over the paving to speed up the curing process.