Stormwater Best Management at Pascone Park Restoration



BRONX RIVER WATERSHED INITIATIVE PROJECT #2008-0117-005

Funded by New York State Office of the Attorney General

Porous Pavement:

Replacing impervious pavement with porous pavement allows stormwater to infiltrate into the ground, thus preventing runoff from carrying pollutants into waterbodies. There are many types of porous pavement including porous asphalt, porous concrete, interlocking pavers (water infiltrates between pavers, material between pavers may be gravel or grass), Filterpave (made from recycled glass), and Flexi-Pave (made from recycled tires).

Porous Asphalt Driveway: (3)

The porous section of driveway was installed Porous asphalt was in September 2010. chosen for the driveable surface because it is one of the least expensive porous products, and it can withstand heavy vehicle traffic. Areas closest to the inner and outer curbs of the traffic circle were expected to fill more readily with grass clippings and soil, so asphalt was installed as an 8 ft diameter ring within the existing driveway. There is a top layer of porous asphalt which contains no fine particles, over a layer of broken stone. Water carrying grease, oil and motor fluids infiltrates through this ring and is prevented from reaching the Sprain Brook. This driveway material is suitable for use in residential driveways and parking lots.

Porous Flexi-Pave Walkway: (4)

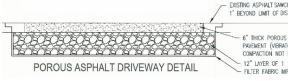
The existing impervious asphalt walkway was removed and replaced with a 90 ft long X 4 ft wide Flexi-Pave path in September 2010. Flexi-Pave is a somewhat costly product made from recycled tires, which yields the added benefit of reducing the stockpiles of There is a layer of Flexi-Pave used tires. HD2000 over a layer of broken stone. Infiltration of water through the walkway is even more rapid than through the adjacent Flexi-Pave HD2000 withstand light vehicle traffic (up to 5 mph), and resists freeze/thaw damage due to the rubber content which allows expansion and This material is suitable for contraction. residential driveways and walkways.

For more information about Porous Pavement, please go to:

 $\underline{http://www.esf.edu/ere/endreny/GICalculator/PermaPaveIntro.html}$

http://savetherain.us/green-infrastructure/porous-pavement/

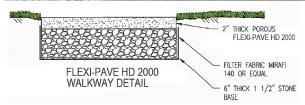




Porous Asphalt Specifications:

http://www.dot.state.mn.us/materials/bituminousdocs/ Special Provisions/2009/Porous%20Pavement/Porous PVMT.pdf





Flexi-Pave Specifications:

Please see next page of this document.





GENERAL SPECIFICATIONS



HD 2000 (2"- 50 mm)

HD1500 (11/2" - 37.5 mm)

HD1000 (1" - 25 mm)

PRODUCT DESCRIPTION: A constructional paving material that is dynamic in its physical construction which is mixed directly on the installation site. Available for use after 24 hours which results in a extremely porous, heavy duty, flexible paving system designed for low speed applications with pedestrian and vehicular use.

The constructional paving material is made from Recycled <u>Passenger Tires</u> and <u>Aggregate</u> bound together with K.B. Industries, proprietary binding agent: **XFP75**

FEATURES:

- Flexible
- Extremely Porous
- Dynamic in physical form
- Diffuses water force
- Impact Absorbing Surface
- Slip resistant
- Resistant to Freeze / Thaw
- Dissipates Mechanical "Shock"
- Non-Flammable
- Non-Toxic
- Resistant to Harmful Contaminents

BENEFITS:

- Does not crack. Even with root intrusion/preventing trip hazards.
- Storm Water Management (BMP's) Allowing Groundwater recharge.
- Heavy objects will not make indentations when removed.
- Erosion control uses (i.e. Embakements, Swales, etc.)
- Reduces injuries to joggers and walkers.
- Exceeds ADA requirements / Reduces slip and fall hazards.
- Reduces maintenance costs.
- Resistant to snow plow damage.
- Does not burn without the use of an extreme accelerent.
- Can be installed bodies of open water (i.e. "Wetlands, etc.")
- Transmission Fluid, , Brake Fluid, Gasoline Diesel, Hydraulic Fluid, Salt Water,
 Oil, Chlorine, Ozone, Bromine, Muriatic Acid, Other hostile materials...

INSTALLATION: KBI Flexi®-Pave can be installed from 45°F degree to 95°F degree temperatures. **Important:** When curing... the temperature should not fall below 35°F.

QUALIFIED INSTALLATION: KBI Flexi®-Pave can only be installed by K.B. Industries, Inc., "CERTIFIED INSTALLERS" having the: "KBI CERTIFICATION NUMBER" (This number can be requested at any time from K.B. Industries Inc., for verification.)

RECOMMENDED SUBSTRATE: <u>HD2000</u> is installed over a minimum of 4" (100mm) of compacted crushed concrete or similar aggregate to a density of 95% minimum. The sizing of the stone and base soil will directly represent the desired "Curve Number" (percolation rate) required. <u>HD1500 & HD1000</u> are designed to be installed over existing engineered pavements (i.e. concrete or asphalt). This process is called an "over-pour" installation. (*The porosity rate of HD2000, HD1500 & HD1000 material thickness only is 4000 inches per hour or 100 meters per hour.*)

MATERIAL SAFETY INFORMATION: MSDS information is available upon request.

KBI Flexi®-Process products are manufactured by KB Industries, Inc. Data is based on facts that we believe to be accurate but all recommendations are made without warranty since conditions of use are beyond KB Industries Inc control. We do not assume any liability except what is expressly noted in warranty certificate if Certified Technicians install the products. We do not assume any liability from injury resulting from use. Liability, if any, is limited to replacement of products.

USAGE GUIDELINES: All KBI Flexi®-Pave, including HDX and HD products, are designed for vehicular traffic. Any implied warranty is voided by improper use. No Track Vehicles (metal or rubber), Forklifts (warehouse-var Reach), Man Lifts (booms or scissors), and/or dumpsters or roll-off containers