

ITEM 706.91

PERMEABLE RUBBER PAVEMENT

SQUARE YARD

GENERAL

The work under this item shall consist of furnishing, placing, and compacting permeable rubber pavement on a washed stone base over geotextile fabric at locations specified on the Plans or as required by the Engineer.

Work under this item shall be performed in accordance with the specifications of the manufacturer and/or the Plans.

MATERIALS

Permeable Rubber Pavement

Permeable rubber pavement shall be a hard material made from 50% recycled tires, 50% stone aggregate and a moisture cured urethane binding agent.

Acceptable manufacturers shall include the following, or an approved equal:

Flexi-Pave K.B. Industries, Inc.
28100 US Hwy. 19 North, Suite 410
Clearwater, FL 33761
Tel: (727) 723-3300, Fax: (727) 723-3600
<http://kbius.com/kbi-products/kbi-flexi-pave/>

Porous Pave
7011 B West Bee Cave Road
Austin, TX 78746
Tel: (512) 330-0796, Fax: (512) 330-0790
<https://www.porouspaveinc.com/>

Rubberway, Inc.
4000 Barranca Parkway, Suite 250
Irvine, CA 92604
Tel: (877) 288-0045
www.rubberway.com

Subbase

Stone shall conform to Item 156.057, Washed No. 57 Stone.

Color

Color for permeable rubber pavement shall be selected from the manufacturer's full range of color options during the shop drawing review process.

Submittals

Samples: Submit the following:

- Color chart representing full range of manufactures color options.
- Specified Labeled Sample, Project Specific 4" x 4" square in full thickness of color selected by Designer.
- Manufacturer's Technical Data Sheets on each product to be used.
- Installation Overview.

Shop Drawings: Project specific shop drawing shall include plan view cross section.

Contractor's Project References: Submit a list of successfully completed projects, including project name, location, and type of surfacing installed.

Close Out Submittals:

- Manufacturer standard product materials warranty / Signed by company officer with Corporate Seal.
- Standard labor warranty.
- Surface Care and Maintenance guide.

CONSTRUCTION METHODS

Subgrade Preparation

Prepare subgrade as specified in the Plans and Specifications.

Construct subgrade to ensure that the required paving thickness is obtained in all locations.

Keep all traffic off the subgrade during construction to the maximum extent practical. Regrade subgrade disturbed by delivery vehicles or other construction traffic as needed.

Compact the material added to obtain final subgrade elevation.

Subbase

Subbase shall be prepared in conformance with the alignments, grades and cross sections indicated on the Plans. The stone shall be placed in horizontal layers and each layer proof rolled to 90- 95% compaction (modified proctor) with a vibratory smooth drum roller.

Moisture content of the stone shall be 4-7% of dry weight to ensure no migration of fines during transport and installation.

Site Preparation

The Contractor shall strip all debris and organic matter from areas to be graded and shall haul this material off site for legal disposal.

The Contractor shall be responsible for placing and compacting approved base material in accordance with the Specifications.

The Contractor shall be responsible to have adjacent grass edged and removed from all areas receiving the synthetic surface.

Turn off any surrounding adjacent sprinklers 1 week prior to work being performed.

Examination

Do not begin installation until substrates have been properly laid and compacted according to manufacturer's instructions and approved by the Engineer.

Protect all surrounding areas to avoid damage to adjacent surfaces.

Placing Finished Paving

Installation of the permeable paving surface material shall take place only when there is proper environmental conditions and the temperature is 50 degrees F and rising. If, in the installer's opinion, the weather or climate conditions are harmful for proper surface installation, work will be delayed until conditions are agreeable.

The materials shall be prepared in a mechanical mixer until a homogenous mix is obtained.

Application to be monolithic, in one single layer to the specified depth, unless otherwise specified.

Install per manufacturer's installation instructions provided specific for the project. All joint work shall be troweled flush with the adjacent mat.

All cold dry seams shall be cut straight at an inward 45-degree angle and primed prior to commencing with subsequent work.

Edging

When curbs or steel edging are not used, temporary forms can be used and then bevel the edge of the top surface to a 45-degree angle. If concrete curbs are used prime the interior edges of concrete curbs with binding agent.

Protection

After work in this section is complete, the Contractor shall be responsible for protecting the permeable rubber pavement areas from damage and/or contamination with mud, dirt, grass cuttings, accumulation of foliage and debris. If the Engineer deems that the permeable rubber has become contaminated, the Contractor shall pressure wash and vacuum the pavement at their own expense.

No traffic or other trades shall be allowed on the surface following completion for ample cure time.

Other Trades: It shall be the responsibility of the general Contractor to protect the surface from damage before acceptance. Completely cover the paving surface with 4 mil thick polyethylene sheet, if necessary, until the project is completed.

Maintenance

The Contractor shall perform one cleaning of the permeable rubber pavement areas with a vacuum sweeper after 120 days and before 150 days after date of Substantial Completion/Provisional Acceptance.

METHOD OF MEASUREMENT

Permeable Rubber Pavement will be measured for payment by the square yard, complete in place.

BASIS OF PAYMENT

Permeable Rubber Pavement will be paid for at the Contract unit price per square yard, which price shall include all labor, material, equipment, and incidental costs required to complete the work. No separate payment will be made for shaping and compacting of the subgrade, furnishing and installing the permeable rubber pavement, pressure washing, and vacuum sweeping, but all costs in connection therewith shall be included in the Contract unit price bid.

Washed stone base course will be paid for separately under Item 156.057, Washed No. 57 Stone.

Non-woven geotextile fabric will be paid for separately under Item 698.3, Non-woven Geotextile Fabric.