



**SPECIAL PROVISION
FOR
PORTLAND CEMENT CONCRETE PAVERS**

**Johnson County
NHSN-006-7(86)--2R-52**

**Effective Date
February 20, 2018**

150360.01 DESCRIPTION.

A. Summary.

1. This special provision includes all labor, materials, equipment, and supervision required to furnish and install PCC Pavers.
2. This special provision includes the specifications for PCC Pavers, bituminous setting bed, modified asphalt adhesive, paver joint filler, concrete subbase preparation, concrete subbase priming, installation of bituminous setting bed, paver and joint filler installation.

B. Submittals.

1. Paver manufacturer's material test data certifying pavers comply with specification.
2. Paver samples representing actual size, shape, and color range.
3. Supplier's formulation for Neoprene-modified asphalt adhesive.

C. Site Disturbances.

1. Take precautions to insure equipment and vehicles do not disturb or damage existing site grading, walks, drives, utilities, plants, etc.
2. Repair and/or return to original condition any damage caused by negligence at no cost to the Contracting Authority.
3. Provide temporary barricades and warning lights as required for protection of project work and public safety.

150360.02 MATERIALS.

A. Concrete Pavers.

1. PCC Pavers.

As manufactured by a member of UNI-Group U.S.A.

- a. Borgert Products, Inc.; St. Joseph, MN (320) 363-4671.
- b. Barbour Pavers, Inc.; Independence, MO (816) 796-3344.
- c. Unilock, Inc.; Chicago, IL (708) 892-9191.
- d. Interlock Concrete Products, Inc.; Jordan, MN (612) 492-3636.
- e. Hessit Works, Inc.; Freedom, IN (812) 829-6246.

2. Compressive Strength.

Greater than 8000 psi.

3. Water Absorption.

Maximum of 5%; ASTM 936 and freeze-thaw testing per Section 8 of ASTM C-67.

4. Style and Size.

- a. Type 1 Style: Holland paver; size: 4 inches by 8 inches by 2 3/8 inches.
- b. Type 2 Style: Holland paver with center chamfer that creates a 4 inch by 4 inch appearance; size: 4 inches by 8 inches by 2 3/8 inches.

5. Colors.

- a. Paver colors will be selected by the Engineer.
- b. All selected paver colors will be standard manufacturer's colors.

6. Paving Patterns.

Paver color location and paving patterns will be provided by the Engineer.

B. Asphalt Primer.

Section 2303 of the Standard Specifications.; Flexible Pavement; Grade: MC-70.

C. Bituminous Setting Bed.

Section 2303 of the Standard Specifications. Flexible Pavement; 1/2 inch ST Base Mixture.

D. Neoprene-Modified Asphalt Adhesive.

Karnak Corp. #230-2% Neo-Asphalt or approved equivalent (manufacturer's phone number: 1-800-526-4236).

E. Joint Filler.

1. Sand shall be concrete sand or finer.
2. General fineness requirement: 95% to 100% passing the No. 8 sieve.
3. Submit sand gradation analysis for approval.

150360.03 CONSTRUCTION.

A. Preparation of Concrete Subbase.

1. Inspect PCC subslab to insure surface is clean and built in conformance with details.
2. Verify elevation difference between PCC subslab and adjacent finished PCC sidewalk surface to confirm concrete pavers can be installed flush with bordering PCC sidewalk.

B. Prime Concrete Slab.

1. Clean PCC subslab.
2. Prime PCC subslab surface with asphalt primer.

C. Placing Bituminous Setting Bed.

1. Prior to bituminous setting bed installation, install protective covering over adjacent PCC sidewalk pavement to avoid pavement staining and other surface damage.
2. Install the setting bed over the PCC subslab surface, place 1 inch deep control bars directly over the base.
 - a. If grade must be adjusted, set wood chocks under depth control bars to proper grade.
 - b. Set two bars parallel to each other, approximately 11 feet apart to serve as guides for striking board (12 feet long by 2 inch by 6 inch board).
 - c. The depth control bars must be set carefully to bring pavers, when laid, to proper grade.
3. Place some bituminous bed between parallel depth control bars. Pull this bed with the striking board over bars several times.
 - a. After each passage, shower low porous spots with fresh bituminous material to produce a smooth, firm, and even setting bed.
 - b. As soon as this initial panel is completed, advance the first board to the next position, in readiness for striking the next panel.
 - c. Carefully fill any depressions that remain after removing the depth control bars and wood chocks.
4. Roll the setting bed with a 600 pound, walk-behind, power roller to a nominal depth of 1 inch while still hot; adjust the thickness so that when the concrete pavers are placed, the top surface of the pavers will be at the required finished grade.
5. After the setting bed has cooled, apply a coating of 2% neoprene-modified asphalt adhesive by mopping, squeegeeing, or troweling over the top surface of the bituminous setting bed so as to provide a bond under the pavers; if the adhesive is troweled, the trowel shall be serrated with serrations not to exceed 1/16 inch.
6. **Limitations.**
Placement of the setting bed and application of the modified asphalt adhesive will comply with Article 2303.03, C, 4, c of the Standard Specifications.

D. Installation of Pavers.

1. After the modified asphalt adhesive is applied, carefully place the pavers by hand in straight courses with hand tight joints and uniform top surface.
2. Keep good alignment and the pattern shown on the plans.

E. Joint Treatment.

1. Hand tight joints shall be from 0 inch to maximum of 1/4 inch for concrete pavers.
2. Sweep dry sand into concrete paver joints.

F. Clean-Up.

1. Sweep excess sand from paved surfaces and remove from site.

2. Remove all excess materials and debris from site.

150360.04 METHOD OF MEASUREMENT.

The Engineer will measure the square foot surface area of the installed PCC Pavers.

150360.05 BASIS OF PAYMENT.

- A. Payment for PCC Pavers includes all labor, materials, equipment, and supervision required to furnish and install concrete pavers.
- B. Unit Price for PCC Pavers will include material and installation of pavers, bituminous setting bed, modified asphalt adhesive, and joint filler.