

526 ARCHITECTURAL PAVERS.

(REV 4-23-98) (FA 5-26-98) (1-01)

PAGE 657. The following new Section is added after Section 525:

**SECTION 526
ARCHITECTURAL PAVERS**

526-1 Description.

Furnish and install architectural pavers, bedding sand and joint sand in conformity with the lines, grades, dimensions and notes shown in the plans. Other necessary elements and pay items of this type of paving, such as edge restraints, base and subbase materials are not covered in this Section.

526-2 Materials.

526-2.1 General: Manufacture architectural pavers based on industry standards. Ensure that the pavers are consistent in color, size and appearance, have a minimum compressive strength of 8,000 psi [55 MPa], and that the average absorption will not exceed 5%. Ensure that the Architectural pavers are resistant to abrasion and to freeze-thaw cycles in accordance with ASTM C 936.

Architectural paver manufacturer, type, pattern, shape and /or color will be in accordance with plan details, when specified.

526-2.2 Architectural Pavers - Roadway: Provide architectural pavers having a minimum thickness of 3 1/8 inch [80 mm].

526-2.3 Architectural Pavers - Sidewalk: Provide architectural pavers having a minimum thickness of 2 3/8 inch [60 mm].

526-2.4 Bedding and Joint Sands: Provide clean, non-plastic bedding and joint sand, free from deleterious or foreign matter, natural or manufactured from crushed rock. Bedding sand may be used for joint sand. Do not use joint sand for bedding sand.

Grading requirements for bedding sand (according to ASTM C 33):

Sieve Size	Sieve Size	Percent Passing
3/8 inch	[9.5 mm]	100
No. 4	[4.75 mm]	95 to 100
No. 8	[2.36 mm]	85 to 100
No. 16	[1.18 mm]	50 to 85
No. 30	[0.600 mm]	25 to 60
No. 50	[0.300 mm]	10 to 30

Sieve Size	Sieve Size	Percent Passing
No. 100	[0.150 mm]	2 to 10

Grading requirements for joint sand (according to ASTM C 144):

Sieve Size	Sieve Size [mm]	Natural Sand Percent Passing	Manufactured Sand Percent Passing
No. 4	[4.75 mm]	100	100
No. 8	[2.36 mm]	95 to 100	95 to 100
No. 16	[1.18 mm]	70 to 100	70 to 100
No. 30	[0.600 mm]	40 to 75	40 to 75
No. 50	[0.300 mm]	10 to 35	20 to 40
No. 100	[0.150 mm]	2 to 15	10 to 25
No. 200	[0.075 mm]	0	0 to 10

A suitable grout, in thickness specified by the manufacturer and approved for use by the Architectural Paver manufacturer, may be substituted for either bedding sand, joint sand or both when specified in the plans and approved by the Engineer.

526-3 Construction Methods.

526-3.1 General:

526-3.1.1 Quality Assurance: Install the architectural pavers using a Contractor and crew with at least one year of experience in placing architectural pavers on projects of similar nature.

526-3.1.2 Submittals: Prior to beginning placement, furnish to the Engineer for approval full size samples of architectural pavers to indicate type, pattern, shape and color. Also submit a certified sieve analysis for gradation of the bedding sand and joint sand.

526-3.1.3 Mock-ups: Prior to beginning placement, install a 6 by 6 foot [2 by 2 meter] paver area following these Specifications. This area will be used to determine surcharge of the bedding sand layer, joint sizes, lines, laying patterns and colors of the job. This area will be adjacent to an edge treatment, incorporated into the work, and will be the standard from which the work will be judged.

526-3.1.4 Environmental Conditions: Cover stockpiled sands with waterproof covering to prevent exposure to rainfall. Do not install sand or architectural pavers during heavy rains or over wet substrata.

526-3.2 Prosecution of Work.

526-3.2.1 Installation: Install the architectural pavers in the following manner:

A. Spread the bedding sand evenly over the base course and screed to plan thickness, not to exceed a thickness of 1 1/2 inch [40 mm]. Do not disturb the screeded sand. Place sufficient sand to stay ahead of the laid architectural pavers. Do not use the bedding sand to fill depressions in the base course.

B. Lay architectural pavers in the pattern(s) shown in the plans and maintain straight pattern lines.

C. Joints between the architectural pavers, on average, will be between 1/16 to 3/16 inch [2 to 5 mm] wide.

D. Fill gaps at the edges of the paved area with cut or edge architectural pavers.

E. Use a low amplitude vibrator capable of 5,000 foot-pounds [22 kN] with 75-100 hz frequency to vibrate and compact architectural pavers into bedding sand.

F. Vibrate the architectural pavers, sweeping dry joint sand into the joints and vibrating, until the joints are full. Do not vibrate within 3 feet [1 m] of the unrestrained edges of the architectural pavers.

G. At the end of each day, all work within 3 feet [1 m] of laying face must be left fully compacted, with sand-filled joints.

H. Sweep off the excess sand.

I. Leave a final surface elevation of architectural pavers of 1/8 to 1/4 inch [3 mm to 6 mm] above adjacent drainage inlets, concrete collars or channels.

J. Do not permit the final surface elevations of the pavers to deviate more than 3/8 inch [10 mm] under a 10 feet [3 m] long straightedge.

526-4 Method of Measurement.

The quantity to be paid for will be the area in square yards [square meters] for Architectural Pavers, measured in place, completed and accepted. Measurement will be as specified in 9-1.3.1. No deduction will be made for the area(s) occupied by ornamental trees left within and any other areas occupied by manholes, inlets, drainage structures or by public utility appurtenances within the normal the area(s) of the architectural pavers.

526-5 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section, the quantity, determined as provided above, will be paid for at the contract unit price per square yard [square meter] for Architectural Pavers.

Payment shall be made under:

Item No. 526 - 1 Pavers, Architectural - per square yard.

Item No. 2526 - 1 Pavers, Architectural - per square meter.