



Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JOSÉ ABREU
SECRETARY

December 14, 2004

Mr. Donald Davis
Program Operations Engineer
Federal Highway Administration
545 John Knox Road
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 526
Proposed Specification: 5260000

Dear Mr. Davis:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Architectural Pavers.

This change was proposed by Jim Mills of the State Roadway Design Office to update paver requirements to agree with the revised Plans Preparation Manual.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or duane.brautigam@dot.state.fl.us.

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Signature on file

Duane F. Brautigam, P.E.
State Specifications Engineer

DFB/jf

Attachment

cc: General Counsel
Florida Transportation Builders' Assoc.
State Construction Engineer

**ARCHITECTURAL PAVERS.
(REV 10-19-04)**

SECTION 526 (Pages 595-597) is deleted and the following substituted:

**SECTION 526
ARCHITECTURAL PAVERS**

526-1 Description.

Furnish and install architectural pavers and bedding material manufactured to ASTM standards. 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: Architectural pavers shall meet the following requirements:

PROPOSED USE	ASTM C 902 (Brick Paver)	ASTM C 1272 (Brick Paver)	ASTM C 936 (Concrete Paver)
<i>Roadways</i>	<i>Do Not Use</i>	<i>X</i>	<i>Do Not Use</i>
Commercial Driveways	Do Not Use	X	X
<i>Sidewalks and Medians</i>	<i>X</i>	<i>Do Not Use</i>	<i>X</i>
Residential Driveways	X	Do Not Use	X
<i>Sidewalk</i>	<i>X</i>	<i>Do Not Use</i>	<i>X</i>
<i>Side-street crossing</i>	<i>X</i>	<i>Do Not Use</i>	<i>X</i>
<i>Roadway crossing</i>	<i>Do Not Use</i>	<i>X</i>	<i>Do Not Use</i>

Ensure that the pavers are consistent in color, size and appearance. Architectural paver manufacturer, type, pattern, shape and/or color will be in accordance with plan details, when specified.

526-2.2 Architectural Pavers - Roadway: *For installations on roadways and commercial driveways,* Provide architectural pavers having a minimum thickness of 3 1/8 inch [80 mm].

526-2.3 Architectural Pavers - Sidewalk: *For installations on sidewalks, medians and residential driveways,* 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.

Ensure the bedding sand meets the grading requirements of ASTM C 33 Standard Specification for Concrete Aggregate.

Ensure the joint sand meets the grading requirements of ASTM C 144 Standard Specification for Aggregate for Masonry Mortar.

Bedding sand may be used for joint sand. Do not use joint sand for bedding sand.

526-2.5 Bedding and Joint Grouts: 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 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.

526-3.1.2 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 material 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.

526-3.1.3 Environmental Conditions: Cover stockpiled materials with waterproof covering to prevent exposure to rainfall. Do not install bedding materials or architectural pavers during heavy rains or over wet substrata.

526-3.2 Installation: Install the architectural pavers in the following manner:

A. Spread the bedding material 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 bedding material. Ensure placement of sufficient bedding material to stay ahead of the laid architectural pavers. Do not use the bedding material 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. When utilizing bedding and joint sand:

1. Use a low amplitude vibrator capable of 5,000 foot-pounds [22 kN] with 7-100 Hz frequencies to vibrate and compact architectural pavers into bedding sand.

2. 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.

3. 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.

4. Sweep off the excess sand.

F. 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.

G. Do not permit the final surface elevations of the pavers to deviate more than 3/8 inch [10 mm] under a 10 ~~feet~~foot [3 m] long straightedge, *or more than 1/8 inch [3 mm] between adjacent pavers.*

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 and 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- 1-1 Pavers, Architectural (Roadway) - per square yard.
- Item No. 2526- 1-1 Pavers, Architectural (Roadway) - per square meter.
- Item No. 526- 1-2 Pavers, Architectural (Sidewalk) - per square yard.
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5260000
526, 2526 Items

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