ROYAL MODEL 186 SECTION 15440 PLUMBING FIXTURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Exposed urinal Flushometers for 3/4" (1.90cm) top spud urinals.

1.02 RELATED SECTIONS

A. Section 15010: Basic Mechanical Requirements.

B. Section 15050: Basic Mechanical Materials and Methods.

1.03 QUALITY ASSURANCE

A. Codes and Standards:

1. Americans with Disabilities Act (ADA).

INSERT NAME OF APPLICABLE CODE

2. [] Plumbing Code.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each Flushometer specified.
- B. Shop Drawings: Submit manufacturer's rough-in drawings indicating rough-in requirements, dimensions, required clearances, and methods of assembly of components and anchorages.
- C. Maintenance Data: Include manufacturer's maintenance data in Maintenance Manual as specified in Division 1.

1.05 DELIVERY, STORAGE AND HANDLING

A. Store Flushometers in manufacturer's original packaging. Do not store packages in such a manner that may cause damage to Flushometers.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Sloan Valve Company; Royal Model 186 Flushometer.

2.02 FIXTURES

- A. Flushometers: Quiet, exposed diaphragm type, urinal Flushometer, chrome plated, with metal oscillating non-hold-open handle, 3/4"(1.9cm) I.P.S. screwdriver Bak-Chek control stop with protective cap, adjustable tailpiece, vacuum breaker, flush connection and spud coupling for 3/4"(1.9 cm) top spud, spud flange, cover tube, set screw wall flange and sweat-solder adaptor. Valve body, cover, tailpiece and control stop shall conform with ASTM alloy classification for red and semi-red brasses. Valve shall conform with Federal Spec WW-P-541, Mil Spec V-29193, ANSI 112.19.6 and ASSE 1037. Valve must be non-externally adjustable to prevent installer from easily adjusting water volume delivery in violation of applicable water use laws and requirements. Handle shall conform to applicable ADA requirements.
- 1. Flush Cycle: 1.5 gallons(5.68 l) (Water Saver).

- 2. Centerline of Supply Above Fixture: 11-1/2 inches(29.21cm).
- 3. Variations from Standard Specifications (Options):
- **RETAIN APPLICABLE VARIATIONS BELOW**
- a. BG Bio-Gard Handle
- b. XYV Less Vacuum Breaker

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All plumbing work shall be installed in accordance with applicable codes and regulations.
- B. Flush all water supply lines prior to making connections.
- C. Install Flushometers in strict accordance with manufacturer's installation instructions and applicable codes and regulations.
- D. Do not use toothed tools when installing Flushometers.
- E. Comply with applicable requirements of the Americans with Disabilities Act (ADA) with respect to plumbing fixtures for the physically handicapped.
- F. Position of water supply must be in strict accordance with Flushometer manufacturer's installation instructions to assure proper alignment with Flushometer valve.

3.02 FIELD QUALITY CONTROL

- A. Test Flushometers to demonstrate proper operation upon completion of installation, after water supply has been turned on. Adjust, repair or replace malfunctioning units, then retest.
- B. Inspect each installed unit for damage. Replace damaged units.

3.03 ADJUSTING

A. Adjust control stop to meet flow rate required for proper cleansing of the fixture.

3.04 CLEANING

A. Do not use abrasive or chemical cleaners to clean Flushometers. Use only soap and water to clean Flushometers, then wipe dry with clean cloth or towel.

3.05 PROTECTION

A. While cleaning ceramic or glazed tile, protect Flushometers from any splattering of acids or cleaning fluids which can discolor or remove chrome plating.

Metric Conversions:

$$3/4$$
" = 1.90cm, 1" = 2.54cm, 1-1/4" = 5.71cm, 1-1/2" = 3.81cm, 1-3/4" = 4.44cm, 1-7/8" = 4.76cm,

$$2" = 5.08$$
cm, $2-1/16" = 5.23$ cm, $2-1/8" = 5.39$ cm, $2-1/4" = 5.71$ cm, $2-1/2" = 6.35$ cm, $2-3/4" = 6.98$ cm,

$$3'' = 7.62$$
cm, $4'' = 10.16$ cm, $4-3/4'' = 12.06$ cm, $5-1/4'' = 13.33$ cm, $5-5/16'' = 13.49$ cm,

$$6" = 15.24$$
cm, $6-1/2" = 16.51$ cm, $7-1/2" = 19.05$ cm, $8" = 20.32$ cm, $9-1/2" = 25.02$ cm, $9-3/4" = 25.66$ cm,

10'' = 25.4cm, 10-1/4'' = 26.03cm, 10-7/8'' = 27.62cm, 11-1/2'' = 29.25cm, 12'' = 30.48cm,

13" = 33.02cm, 13-3/8" = 33.97cm, 13-1/2" = 34.29cm, 13-3/4" = 34.92cm,

14" = 35.56cm, 14-1/2" = 36.82cm, 15-1/2" = 39.37, 16" = 40.64cm, 16-3/4" = 42.54cm,

17'' = 43.17cm, 17-1/4'' = 43.81cm, 17-1/2'' = 44.44cm, 19'' = 48.26, 19-1/4'' = 48.89cm,

20" = 50.79cm, 21-1/2" = 54.60cm, 22-1/2" = 57.15cm, 23" = 64.03cm, 24" = 60.86cm, 24-1/2" = 62.13cm,

27" = 74.19cm, 30" = 76.2cm, 34-3/8" = 92.92cm, 60" = 152.4cm, 72" = 182.88cm.