OPTIMA MODEL ESF-21
SECTION 15440
PLUMBING FIXTURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Sensor operated, lavatory/sink faucets.

1.02 RELATED SECTIONS

A. Section 15010: Basic Mechanical Requirements.

B. Section 15050: Basic Mechanical Materials and Methods.

C. Section 16010: Basic Electrical Requirements.

D. Section 16050: Basic Electrical 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.

3. National Electrical Code (NFPA 70).

1.04 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each faucet 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. Wiring Diagrams: Submit manufacturer's electrical requirements and wiring diagrams for power supply to units. Clearly differentiate between portions of wiring that are factory installed and field installed.

D. Maintenance Data: Include manufacturer's maintenance data in Maintenance Manual as specified in Division 1.

1.05 DELIVERY, STORAGE AND HANDLING

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

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Sloan Valve Company; Optima Model ESF-21 Sensor Operated Faucet, with Laminar Spray Head.

2.02 FIXTURES

A. Faucets (Deck Mount Application): Chrome plated, brass goose neck spout 2.5 GPM(9.46 l) Laminar Flow spray head equipped with solenoid operator, Optima sensor, chrome plated wall

cover plate and (4) tamper-proof screws (for 2-gang electrical box).

1. Variations from Standard Specifications (Options):

RETAIN APPLICABLE VARIATION BELOW

a. ELF-150-LLT - Sensor with 30 Second Time Out

2. Accessories:

** RETAIN APPLICABLE ACCESSORIES BELOW**

a. EL-154 - Transformer

b. 110-AF - Thermostatic Mixing Valve

3. Electrical Specifications:

a. Optima Sensor: 24V AC Input/24V AC Output

b. Solenoid Operator: 24V AC, 60 Hz.

c. Transformer: 120V AC Input/24V AC Output, Class II, UL Listed 48 V.A. (min.). One transformer serves up to three (3) Optima Lavatory/Sink Faucets.

PART 3 - EXECUTION

3.01 INSTALLATION

A. All plumbing work shall be installed in accordance with applicable codes and regulations.

B. All electrical work shall be installed in accordance with applicable codes and regulations.

C. Flush all water supply lines until water is clear before connecting solenoid to supply stops.

D. Install faucet systems in strict accordance with manufacturer's installation instructions and applicable codes and regulations.

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 faucets to demonstrate proper operation upon completion of installation, after water supply and electrical power have 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 range if required, in strict accordance with manufacturer's instructions.

3.04 CLEANING

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

3.05 PROTECTION

A. While cleaning ceramic or glazed tile, protect faucets 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" = 5.08cm, 2-1/16" = 5.23cm, 2-1/8" = 5.39cm, 2-1/4" = 5.71cm, 2-1/2" = 6.35cm, 2-3/4" = 6.98cm,

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

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

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.