

**OPTIMA MODEL ESF-31
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-31 Sensor Operated Faucet, with Laminar Spray Head.

2.02 FIXTURES

A. Faucets (Wall Mount Application): Chrome plated, brass goose neck spout and 2.5 GPM (9.46 l) Standard Laminar 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.

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.