

## SECTION 15885

### AIR CLEANING DEVICES

#### PART 1 - GENERAL

##### 1.01 SECTION INCLUDES

- A. Disposable, Extended Area Panel Filters.

##### 1.02 RELATED SECTIONS

- A. Section 01500 - Construction Facilities and Temporary Controls: Filters for temporary heating and ventilating.

##### 1.03 REFERENCES

- A. ARI 850 - Commercial and Industrial Air Filter Equipment.
- B. ASHRAE 52 - Method of Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter.
- C. MIL-STD-282 - Filter Units, Protective Clothing, Gas-Mask Components, and related Products: Performance-Test Methods.
- D. UL 900 - Test Performance of Air Filter Units.

##### 1.04 PERFORMANCE TOLERANCES

- A. Conform to ARI 850 Section 7.4.
- B. Dust Spot Efficiency: Plus or minus 5 percent.

##### 1.05 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate filter assembly and filter frames, dimensions, motor locations, and electrical characteristics and connection requirements.
- C. Product Data: Provide data on filter media, filter performance data, filter assembly and filter frames.

##### 1.06 OPERATION AND MAINTENANCE DATA

- A. Submit under provisions of Section 01600.
- B. Operation and Maintenance Data: Include instructions for operation, changing, and periodic cleaning.

##### 1.07 EXTRA MATERIALS

- A. Furnish under provisions of Section 01600.
- B. Refer to PART 3 - EXECUTION for replacement filter requirements.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

- A. Farr.
- B. Flanders.
- C. Eco-Air.
- D. American Air Filter.

### 2.02 DISPOSABLE, EXTENDED AREA PANEL FILTERS

- A. Media: UL 900 Class 2, pleated, lofted, non-woven, reinforced cotton and synthetic fabric; supported and bonded to wire grid.
  - 1. Frame: Beverage board.
  - 2. Nominal thickness: 2 inches or 1" as specified.
- B. Rating, ASHRAE 52:
  - 1. Dust Spot Efficiency: 25-30 percent.
  - 2. Weight Arrestance: 90-92 percent.
  - 3. Maximum Initial Resistance at 500 Fpm (2.54 M/sec) Face Velocity: 0.30 inch WG (75 Pa)
  - 4. Recommended Final Resistance: 0.9 inch WG (224 Pa)

## PART 3 - EXECUTION

### 3.01 INSTALLATION

- A. Install air cleaning devices in accordance with manufacturer's instructions.
- B. Prevent passage of unfiltered air around filters with felt, rubber, or neoprene gaskets.
- C. New filters shall be installed in air handling systems immediately before the systems are balanced by the approved balancing contractor. Air handling systems shall be balanced with clean filters.
- D. Do not operate fan system until filters (temporary or permanent) are in place. Once air handling systems are in operation and before substantial completion, provide filter replacement as required. Filters shall be replaced when their pressure drop (as measured by the approved balancing contractor) reaches the manufacturer's recommended changeout pressure drop. At the time of substantial completion, all air handling systems shall be provided with a new set of filters. After substantial completion, any air handling systems that are subjected to significant dust and debris as a result of continued construction shall be provided with filter changeouts as specified above and new filters shall be provided when construction is completed.

END OF SECTION