

1 General

1.1 REFERENCES

- .1 American National Standards Institute/National Fire Prevention Association (ANSI/NFPA)
 - .1 ANSI/NFPA 96, Ventilation Control and Fire Protection of Commercial Cooking Operations.
- .2 American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)
 - .1 ASHRAE 52.1, Gravimetric And Dust Spot for Testing Air-cleaning Devices Used in General Ventilation for Removing Particulate Matter.
 - .2 ASHRAE 52.2, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size.
 - .3 ASHRAE 145.1, Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media.
 - .4 ASHRAE 145.2, Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-115.10, Disposable Air Filters for the Removal of Particulate Matter from Ventilating Systems.
 - .2 CAN/CGSB-115.11, Filters, Air, High Efficiency, Disposable, Bag Type.
 - .3 CAN/CGSB-115.12, Filters, Air, Medium Efficiency, Disposable, Bag Type (Reaffirmed April 1985).
 - .4 CAN/CGSB-115.13, Filter Media, Automatic Roll.
 - .5 CAN/CGSB-115.14, High Efficiency Cartridge Type Supported Air Filters for the Removal of Particulate Matter from Ventilating Systems.
 - .6 CAN/CGSB-115.15, High Efficiency Rigid Type Air Filters for Removal of Particulate Matter from Ventilating Systems.
 - .7 CAN/CGSB-115.16, Activated Carbon for Odor Removal from Ventilating Systems.
 - .8 CAN/CGSB-115.18, Filter, Air, Extended Area Panel Type, Medium Efficiency.
 - .9 CAN/CGSB-115.20, Polarized Media Air Filter.
- .4 Underwriters Laboratories of Canada
 - .1 ULC -S111, "Fire Tests for Air Filter Units".

1.2 SHOP DRAWINGS AND PRODUCT DATA

- .1 Submit shop drawing and product data in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Indicate the following:
 - .1 Pressure Drop.
 - .2 Installation Procedures.

1.3 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 00 - Cleaning, and with the Waste Reduction Workplan.
- .2 Place materials defined as hazardous or toxic waste in designated containers.
- .3 Ensure emptied containers are sealed and stored safely for disposal away from children.

1.5 MAINTENANCE MATERIALS

- .1 Provide maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Furnish list of individual manufacturer's recommended spare parts for equipment such as frames and filters, addresses of suppliers, list of specialized tools necessary for adjusting, repairing or replacing for inclusion in operating manual.

1.6 EXTRA MATERIALS

- .1 Spare filters: in addition to filters to be installed immediately prior to acceptance by Departmental Representative, supply one (1) complete set of filters for each filter unit or filter bank in accordance with section 01 78 00 - Closeout Submittals.

2 Products

2.1 GENERAL

- .1 Media: suitable for air at 100% RH and air temperatures between minus 40 and 50°C.
- .2 Number of units, size and thickness of panels, overall dimensions of filter bank, configuration and capacities: as indicated.
- .3 Pressure drop when clean and dirty, sizes and thickness: as indicated on schedule.

2.2 ACCESSORIES

- .1 Holding frames: permanent "T" section construction of galvanized steel or same material as casing/hood, 1.6 mm thick, except where specified otherwise.
- .2 Seals: to ensure leakproof operation.
- .3 Blank-off plates: as required, to fit all openings and of same material as holding frames.
- .4 Access and servicing: through doors/panels on each side and/or from upstream face of filter bank.

2.3 RIGID, SUPPORTED FILTERS, 30-35 % EFFICIENCY

- .1 Media: disposable preformed fibrous glass, acrylic fibre cartridge.
- .2 Holding frame: galvanized steel with bracing.
- .3 Media support: welded wire grid.
- .4 Performance:
 - .1 Average atmospheric dust spot efficiency 30%.
 - .2 Average synthetic dust weight arrestance 90%.
- .5 Fire rated: to ULC -S111.

3 Execution

3.1 INSTALLATION GENERAL

- .1 Install in accordance with manufacturer's recommendations and with adequate space for access, maintenance and replacement.

END OF SECTION