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## 234100 PARTICULATE AIR FILTRATION

### Part 1 – GENERAL

#### 1.1 Description

A. This section details the guidelines and expectations for the design and install of HVAC units that require specialized air filtration on Johns Hopkins University Homewood Campus. Project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification and approval from the JHFRE Engineering and Energy Department, it is expected that these guidelines will govern the design and specifications.

#### 1.2 Submittals

N/A

#### 1.3 Quality Assurance

N/A

### Part 2 – PRODUCTS

2.1 If an air handler regularly brings in more than 50% outdoor air, it shall be supplied with filters with a Minimum Efficiency Reporting Value (MERV) of 8. These should be highly resistant to moisture.

2.2 Kitchens/food prep areas shall have two banks of disposable filters. The prefilter shall be the same type noted above in 2.1. The second filter bank shall also be moisture resistant with a MERV of 11 and an efficiency of 55 – 65%. Filters shall be a minimum of 2" thick.

2.3 All other air handlers shall have at least one filter bank with a minimum MERV of 8 and an efficiency of 25 – 30%. Filters shall be a minimum of 2" thick.

2.4 A differential pressure gage is required for each set of filter banks.

2.5 Manometer style gages shall be installed with integral leveling gage, 0 – 3" w.g., and accurate to within +/- 3% of full-scale range.

### Part 3 – EXECUTION

3.1 Upon substantial completion of the project, all of the filters in the building/construction area will be removed and replaced with new.

3.2 Angle filter system shall be used whenever possible.