2.0 PRODUCT REQUIREMENTS

2.1 Minimum Standards

2.1.1 Materials

All materials shall comply with the appropriate standards in Table 14-1 of the UPC.

All pipe and fittings shall be made from approved DWV materials and shall be installed in accordance with the requirements of Chapter 7 of the Uniform Plumbing Code entitled, Sanitary Drainage. In addition, all pipe and fittings shall be installed in accordance with the applicable IAPMO Installation Standard. [UPC 701.0]

2.2 Odor Control System Components

- 2.2.1 Inlet Connection The inlet for DWV odor control systems shall be connected at the tailpiece of the flushometer operated water closet using a listed tee. The tee shall immediately transition to the odor control riser using approved DWV pipe and fittings.
- 2.2.2 Riser The odor control riser shall be made from listed DWV pipe no smaller than 2-1/2 inch diameter. This minimum riser size was selected to adequately handle the required minimum odor control air flow rate. The riser height shall be a minimum of 6 feet as measured from the connection at the sanitary tee to the overhead connection at the odor control manifold. The minimum riser height was selected to adequately handle the maximum possible water rise generated during the flushometer flushing cycle.
- 2.2.3 Manifold The odor control manifold, including all horizontal piping within the odor control system, shall be 1/8" per foot horizontally sloped back to the last riser. The manifold shall be made from approved DWV material no smaller than the pipe size as determined by using Table 1 of this Installation Standard. No traps are permitted within the odor control piping system.

Note: The attached Figures 1 and 2 illustrate the basic configuration to be used for the design of any Odor Control System installed in accordance with this Installation Standard.

2.3 System Sizing

2.3.1 Minimum Inlet Flow Rate - The odor control system shall provide a minimum average air flow rate of 5 cfm at each inlet connection (tee).

2.3.2 Minimum Inlet Draft - The odor control system shall provide a minimum average draft of 1/4 inch WC (water column) as measured inside the inlet connection (tee), or a minimum of 0.10 inch of WC at the small perforations in the top rim of the water closet bowl.

2.4 Exhaust Fan

- 2.4.1 The exhaust fan shall be listed for installation in outdoor and wet locations and in conditioned air streams up to 140°F and shall comply with the applicable requirements of UL 1004.
- 2.4.2 The odor control system exhaust fan shall be installed in accordance with local building and electrical code requirements and shall comply with drainage venting termination requirements of the Uniform Plumbing Code.

2.5 System Testing

2.5.1 Measure the suction pressure at any perforation of the water closet rim. The minimum reading should be 0.10 inch of water column.

Note: For conditions other than those covered in Table 1 the exhaust manifold and the main exhaust riser to the odor control system exhaust fan shall be sized to maintain an average air velocity of 300 ± 50 feet per minute.

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