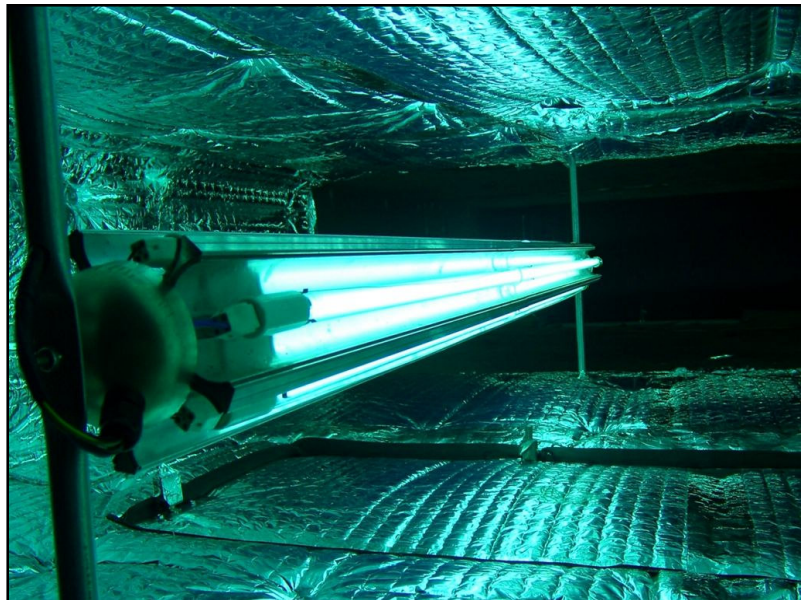

Client:

Ultraviolet and Indoor Air Quality
Index 15850
Page 1

AIR PURIFIER

Date :

1. BUILDING MATERIALS
2. ELECTRICAL ELEMENTS
3. INSTALLATION
4. UV LAMP
5. PERFORMANCE
6. WARRANTY



Outwardly projecting ultraviolet air purifier

1. BUILDING MATERIALS

1.1. Description: Sanuvox Air Purifier or equivalent.

1.1.1 An individual Array that will provide a barrier wall of germicidal UV energy that will treat 100% of the air that passes through it.

1.1.2 An Array will consist of an outwardly projecting air purifier to be used in an air duct supporting a longitudinal (parallel) airflow.

1.1.3 The overall diameter of the Array will not exceed 5.25 inches (18.4cm)

1.1.4 The lamp assemblies will be positioned so that a cylindrical Array of UV assemblies is obtained.

1.1.5 An aluminum cone (convex deflector element) mounted to the support, so that the airflow is directed over the UV lamp assemblies.

1.1.6 The cone diameter shall not exceed 3.5 inches (8.75cm).

1.1.7 The wire sets connecting the Array to the ballast box shall be constructed of 18Awg, 10-strand UL 1716 Teflon wire.

1.1.8 The aluminum ballast box shall consist of one ballast for each lamp, (see 3.3), a resettable hour accumulating counter, an LED "Lamp On" indicator for each lamp, an audible buzzer to indicate a "Lamp Out" condition.

2. ELECTRICAL ELEMENTS

2.1. The ballasts shall be instant start, solid state electronic type, 120 volts, high power factor, outdoor rated, maximum current 1.82 amp.

3. INSTALLATION

3.1. The Array is to be positioned within the air duct and will contain a plurality of UV lamp assemblies (5), each including a reflector having a generally parabolic inner surface and a UV lamp mounted to the

reflector so that the generally parabolic reflector inner surface reflects all the UV radiation emitted by the UV lamps in a radial direction.

- 3.2 The Array can be positioned either in the return side of the coil, or in the supply side of the coil.
- 3.3 The inside of the duct where the Array will be installed, must be lined with aluminum to reflect the UV intensity back into the duct. The aluminum must have a minimum coefficient of reflection of 85%. Either aluminum sheets or Reflectix Inc. part number XSBW3 Foil/Bubble or equivalent may be used.

4. UV LAMP

- 4.1. The Array will be available with UV lamp lengths of 40 inches, 50 inches, or 60 inches (100cm.,125cm.,150cm.).
- 4.2. The high intensity UVC lamps will be of the low-pressure (3.0 Torr) mercury laden argon-neon type that incorporates a getter assembly to reduce and control the mercury levels.
- 4.3. The getter assembly absorbs inner lamp contaminants, which would typically reduce output and have a bearing on overall lamp performance and life.
- 4.4. The UVC lamps are pure fused quartz, type 219 shell, properly doped with Titanium Oxide in order to filter out 99.99% of the 185 nm wavelength.

5. PERFORMANCE

- 5.1. The UV intensity for each individual lamp shall not be less than; 500 microwatts per/cm² at 36 inches for the 50 inch lamps; 620 microwatts per/cm² at 36 inches for the 60 inch lamps.

6. WARRANTY

- 6.1. The purifier will carry a 2 year warranty on parts, 12,000 hours on the UV lamps.