

Suggested Specification

TRI-PURE™ GSR GEL SEAL REPLACEABLE FILTER DUCTED HOOD

1.0 General

- 1.1 Filters shall be Tri-Pure™ GSR Gel Seal Replaceable Filter Ducted Hood as manufactured by Tri-Dim Filter Corporation.
- 1.2 The quantity, sizes and capacities shall be as scheduled or noted on the drawings or other supporting documents.

2.0 Construction

- 2.1 The Ducted Hood shall be manufactured from either .063" aluminum or 16-gauge 304 Stainless Steel (customer to specify) with all seams welded and sealed with silicone caulking. Each hood is pressure tested at 5.0" w.g. to insure there is no leakage.
- 2.2 Customer to specify one of the following:
 - 2.2.A The hood shall have an integral 5/8" of an inch perimeter flange that is constructed of the same material as the hood. The hood shall be designed to fit in a 1-1/2 inch gasketed Tee Grid System with Centerline dimensions of either 24" x 24" or 24" x 48".
 - 2.2.B The hood shall have a separate 5/8" Perimeter Flange/Knife Edge Assembly that is constructed of Type 304 Stainless Steel and is riveted and sealed inside the hood. The hood shall be designed to fit in a 1-1/2 inch gasketed Tee Grid System with Centerline dimensions of either 24" x 24" or 24" x 48".
 - 2.2.C The hood shall have a separate 5/8" or 1-1/2 inch Perimeter Flange Assembly (customer to specify) that is fabricated of Type 304 Stainless Steel and will be field installed by the installing contractor. After the hood is installed, the Perimeter Flange Assembly will be riveted and sealed in the hood and the perimeter of the flange will be sealed to the gypsum or hardboard ceiling.
- 2.3 The hood shall have either an 8 inch, 10 inch or 12 inch inlet collar (customer to specify) that is fabricated from either .040" aluminum (aluminum hood construction) or 20-gauge 304 Stainless Steel (stainless steel hood construction). The inlet collar shall be crimped and dimpled in order to easily and securely connect the flex duct. The inlet collar shall have a butterfly damper that is adjusted from room-side through an access port in the hood.
- 2.4 The hood shall be supplied with a perforated aluminum distribution plate on the downstream side of the inlet collar to distribute the air to the filter.
- 2.5 The hood shall be supplied with a protective grille fabricated of 22-gauge 304 Stainless Steel Perforated with a 40% open area. The protective grille shall either be flush mounted or extend 2 inches below the downstream side of the hood (customer to specify). The protective grille shall be held in place with stainless steel washer and acorn nuts.

- 2.6 The hood shall be supplied with a static pressure port for measuring the pressure drop across the filter and for sampling the upstream test challenge concentration.
- 2.7 The hood shall have a knife-edge on the downstream side to penetrate and seal into the gel filled channel located on the downstream side of the filter. The gel channel shall contain a two-part silicone gel and the knife-edge shall be designed so that it does not hit the bottom of the gel channel in the filter. The filter shall be held in place by turning four retainers in the hood 90° and the filters can be easily replaced from room-side.

OPTIONS:

- 2.8 The hood shall be supplied with 2 inch thick foil back insulation on the exterior of either the top of the hood or top and sides of the hood (customer to specify). The insulation shall have a rating of 25 flame spread, 50 fuel contained and 50 smoke developed when tested in accordance with ASTM-E84 and UL 723.
- 2.9 The hood shall be supplied with hanging tabs mounted on each corner of the hood. The hanging tabs shall be fabricated of .063" aluminum with a hole in the center.
- 2.10 The hood shall be supplied with an aerosol injection system to test the filters for leaks. The injection system shall consist of an injection port located in the knife-edge of the hood that releases the challenge aerosol on the upstream side of a solid distribution plate.