FIG. FC-4110-1  TYPE A, C, or D METAL-CASED, GASKET-SEALED FILTER

Continuous sheets of filter medium pleated back and forth over corrugated separators

Add callout "Adhesive bond between pack and integral case"

FIG. FC-4110-2  TYPE A WOOD CASE SEPARATOR FILTER

Nail or screw from each face

Rabbeted corner

Wood Corner Joint Detail

See attachment A (last page of this file) for new figure FC-4110-2 (new figure corrects wood corner joint detail and corrects how faceguard appears in figure)

Change gasket thickness to "3/16 in minimum"

change gasket width from 3/4in to 11/16in. (17mm) and add tolerance of +1/16in,-3/32in (+1.5mm, -2.5mm)
FIG. FC-4110-3  TYPE B MINIPLEAT FILTER

- Adhesive bond between filter pack and vertical support
- Minipleat packs
- Gel or gasket seal (gasket shown)
- Filter case vertical supports
- Faceguard (both faces of each pack)
- Adhesive bond between filter pack and integral case

FIG. FC-4110-4  TYPE C SEPARATORLESS FILTER

- 4 x 4 mesh faceguard
- Continuous sheet of formed filter medium
- Adhesive bond between filter pack and integral case
Abrupt deviations in filter medium, as defined by a maximum deviation of one-half the pleat to pleat distance along any 2-in. (50-mm) length of pleat fold, are not acceptable. When the panels are installed in the filter case, the top and bottom of the panels shall be sealed in a reservoir of potting adhesive at least $\frac{1}{16}$ in. (1.6 mm) deep.

The gasket shall be sealed to the filter case with an adhesive per FC-3150. The edge of the gasket shall not project beyond the outside of the case. If gasket material joints are required, they shall be notched or dovetailed and the edges glued in a manner that ensures no leakage. There shall be no more than four gasket joints per HEPA filter gasket-face. See Fig. FC-4110-1.

The seal shall be effected by means of a continuous knife-edge on the sealing surface of the holding case that mates into a continuous channel on the case of the HEPA filter. The channel shall be filled with a gelatinous compound per FC-3122 that conforms to the seal knife-edge. See Fig. FC-4142-1. Extraction clips may be included, on the opposite side of the gelatinous seal, to interface with the housing system for separation of the filter gelatinous seal from the knife-edge.

Separator material shall be capable of withstanding continuous service under all specified operating conditions without swelling, sagging, or melting.

Acid resistant separators coated in accordance with FC-3160 (b), shall meet the following tests after application of the coating to the separator:

(a) The coating shall meet or exceed a rating of 3A when tested using Method A of ASTM D3359.

(b) Off-gas volatiles, as determined by thermo-gravimetric analysis, shall not exceed 5% by weight when a 2-in. (50-mm) × 2-in. (50-mm) sample of the coated separator is subjected to temperatures from 68°F to 1,800°F (20°C to 1,000°C).

(c) The coated separator shall pass a flexibility test in accordance with FED-STD-141C, Method 6221.

A faceguard shall be installed on each face of the filter in such a manner that it shall not directly contact the gasket or create a leak path. The faceguard edges shall also be installed such that there are no wires or edges that create a medium puncture hazard or that project from the perimeter of the filter. Edges formed when slitting or shearing the faceguards shall be smoothed on both surfaces of the material before installation, or otherwise covered.
FIG. FC-4100-2  TYPE A WOOD CASE SEPARATOR FILTER

- Filter Case
- Separator
- Adhesive bond between filter pack and integral case
- Pleated back and forth over corrugated separators
- Gasket seal
- Continuous sheet of filter medium
- Faceguard
- Nail or screw from each face
- Representative rabbeted corner (other configurations acceptable)

Wood Corner Joint Detail