

Filters/Cleanroom

A cleanroom is an enclosed space which provides a dust-free controlled environment required in the manufacturing of precision devices. The airborne dust content of the enclosure is reduced to far lower levels than in conventional air-conditioned areas.

The dust content of a cleanroom is reduced and controlled by (1) filtering of air before entering the room, (2) circulating and filtering the air inside the room, (3) minimizing the generation of particulate matter from the operating personnel and their clothing, and (4) cleaning each item before it is brought into the room.

There are two basic designs of cleanrooms: conventional and laminar flow. The conventional room is an air-conditioned area in which super-clean air is distributed through one or more ceiling diffusers. In the laminar-flow room, filters occupy an entire wall or the entire ceiling, and air moves through the room, either horizontally or vertically. Filtration is provided in both types of rooms by HEPA (High Efficiency Particulate Air) filters that remove minimum 99.97% of all particles larger than 0.3 microns (0.000001 m).

When the environmental structure and its occupancy do not require sprinkler protection, these products may be used without creating such a need.

AstroCel II ceiling panel filter

The AstroCel II ceiling panel type filter units are supplied in various lengths and widths, manufactured to their customers specification. The filter pack has a maximum thickness of 4 in. (102 mm), lesser filter pack heights can be supplied. The filter pack consists of fiberglass media, glass ribbon or hot melt separator, flame retardant polyurethane potting compound and aluminum or stainless steel frame. The AstroCel II filter assemblies are sealed with either a silicone gel, urethane, neoprene or PVC gasket between the aluminum or stainless steel frame and the grid support system.

Example of AstroCel II ceiling panel filter product model number:
A-B-C-D-E-F-G-H-I-J-K

Number	Description	Material type/designation
A	Face Dimensions	Per customer specifications
B	Filter media	Fiberglass
C	Frame Style	Aluminum or stainless steel
D	Filter Pack Depth/Separator Type	4 in. maximum/glass ribbon or hot melt
E	Frame Sealant	2-part Polyurethane
F	Gasket Material	Silicone gel, urethane, neoprene, or PVC gasket
G	Gasket Location	None, upstream, downstream or both
H	Acceptance Level	Per customer specifications
I	Faceguard Material	Metal Per customer specifications
J	Faceguard Location	None, upstream, downstream or both
K	Center Divider	Per customer specifications if any

Company Name:	American Air Filter Manufacturing Sdn. Bhd.
Company Address:	Lot 6, Jalan Pengapit 15/19, Seksyen 15, 40000 Shah Alam, Darul Ehsan, Selangor, Malaysia
Company Website:	http://aafintl.com
New/Updated Product Listing:	No
Green Product:	No
Listing Country:	Malaysia
Certification Type:	FM Approved
Primary Class of Work:	4920-Air Handling Facilities