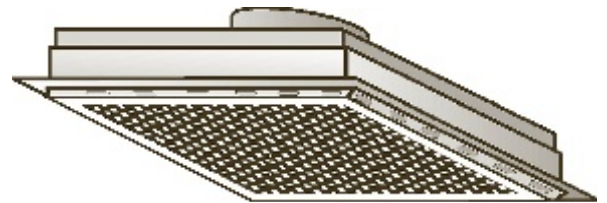
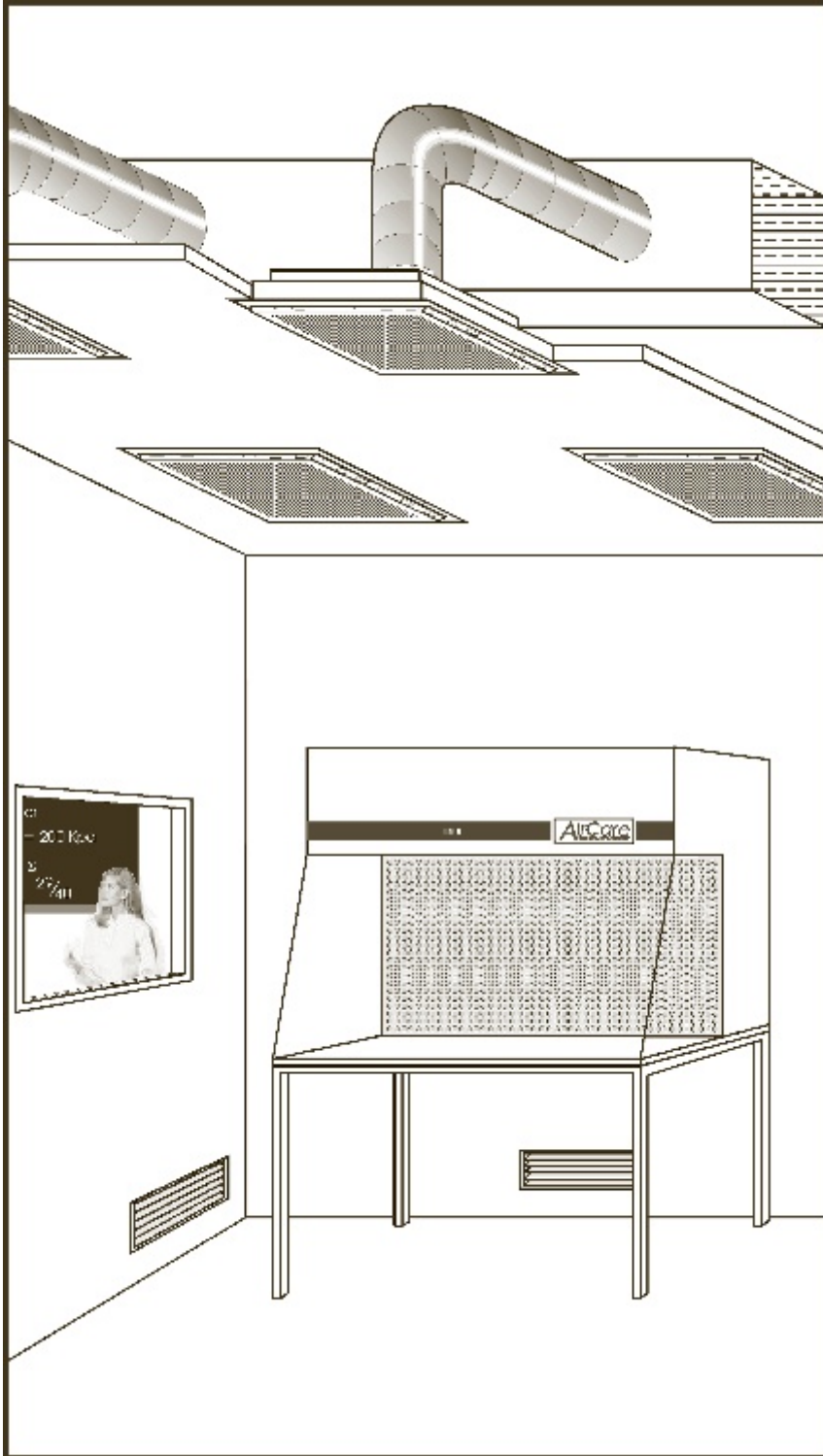

AirCare

Terminal Module



TM200 with Superflow™ diffuser

Features And Benefits:

- **Room-side replaceable filters**
- **High flow, low pressure drop**
- **Non-rust construction**
- **100% aerosol test port**
- **Air diffuser / HEPA guard**
- **New Zealand made and serviced**

Application

The *AirCare* range of Terminal Filter Modules is designed for ceiling installation in ducted air systems. They are easily installed in new cleanroom structures or in upgrades to existing cleanrooms. A range of sizes and airflow capacities mean they can be used in virtually any cleanroom application.

Technical Data

Model	Rated Airflow	Initial Pressure	Dimensions (LxWxH)	Spigot Size (mm)	Weight (Kg)
TM100	100	125	640x335x180	245	9
TM200	200	125	640x640x180	245	15.5
TM400	400	125	1250x640x180	345	26

General

Modules are usually supplied with standard room-side replaceable HEPA filters, which are pre-tested to stop 99.99% of all particles greater than 0.3 micron. Other efficiency ratings are available. The optional Superflow™ diffuser is recommended for improved cosmetic appearance and superior airflow characteristics in the cleanroom. Not only does it provide a uniform airflow pattern under the module but also allows airflow peripheral to the module to minimise turbulence and entrainment of air into the supply airstream.

Options

Special Terminal Modules can be made to order. Common options and specifications are as follows:

- Superflow™ diffuser • • SD
- Stainless steel construction • SS
- Thermal/acoustic insulation • IN
- Pressure (magnehelic) gauge • PG(X)*
- "Metal-free" filters • • MF
- Alternative air entry spigot dimensions and orientation • Specify
- Higher efficiency HEPA's • Specify

*Where X is in Pascals (Pa).

To specify a Terminal Module with options, append the codes to the part number with dashes. For example, for a TM400 with a Superflow™ diffuser, 250 Pa pressure gauge and side-entry spigot, order "TM400-SD-PG(250) with side-entry spigot".

Construction

The cleanroom side of an **AirCare** Terminal Module is constructed from powder-coated aluminium or optionally 316 stainless steel. HEPA filters are held in place with lock-down nuts. The module topside is constructed from powder coated galvanised steel and aluminium. The HEPA filtration media is microfine glass. A mini-pleat configuration is used to maximise media surface area with lower pressure drop. Each unit is also fitted with a 100% aerosol check point and

pressure test port. Optional Superflow™ diffusers are fitted with clips and safety straps and require no tools to remove.

Application Notes

- For lowest sound level, fans should be remote from the module and air supplied via acoustically lined ducting.
- Fans should be selected to provide rated supply air flow at a loaded filter pressure drop of 250 Pa plus pre-filter, duct and any other system losses.

Guide Specifications

1.0 General

- Supply modules shall be **AirCare** Terminal Modules with room-side replaceable filters manufactured by Air Care Technology Ltd.
- Module sizes and capacities shall be as scheduled on the drawings.

2.0 Module Construction

- The Cleanroom side of the module shall be constructed from Aluminium and powder-coated white.
- The module shall be fitted with a Superflow™ diffuser and safety straps.
- The module shall incorporate HEPA filters pre-tested to 99.99% efficiency against 0.3 micron particles.
- A filter gauge shall be provided to monitor the loading of the filter pressure loss.

3.0 Performance

- When supplied with the rated airflow, the module shall provide a uniform average velocity of 0.45m/s. All measurements shall fall within $\pm 20\%$ when tested in accordance with AS1807.3 test method.
- The Terminal Module supply air quality shall be class 3.5 or better under the module in a static state when tested in accordance with AS1807.8 test method.
- When determined in accordance with AS 1807.6, the aerosol penetration of the HEPA filter installation shall not exceed 0.01 percent.



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Related Products:

AirCare Mini-pleat HEPA Filters
Airefil P-Cell Filters
AirCare Fan Modules
AirCare Fan Filter Modules

Data Sheets:

E54120
 E54112
 E54107
 E54108