

# CAMGRID-GEL

## Modular ceiling gel-seal grid for cleanrooms



### ADVANTAGES

Simple modular design to quickly draw and realise the grid lay out for main cleanrooms geometry, local to total unidirectional airflow, or non-unidirectional airflow with blank panels, up to class ISO4.

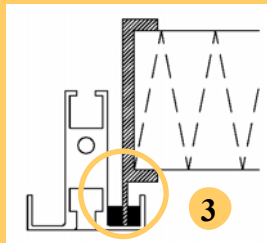
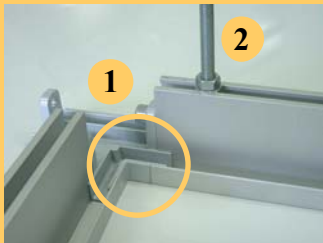
Lightweight and quick and easy to assemble on site

Filters installed very quickly and securely

No clamping device : no need of any tool

Filter airtight seal is immediately achieved

Filters are easily removable from roomside



Continuous channel (1) makes individual sealing for each filter.  
Hangers (2) for easy installation of the grid. Optimised channel size (3) to minimise gel consumption.

Camfil Farr CAMGRID-GEL modular ceiling grid combined with HEPA/ULPA MEGALAM panel filters is specifically designed to supply highly filtered air into cleanrooms via a pressurised plenum.

#### •Ideal to optimise filtration coverage

CAMGRID-GEL is modular designed with standard profile lengths based on the 4 most popular standard inter-axis sizes 300, 600, 900 and 1200mm in order to offer the ability to optimise simply filtration covering in most of cleanrooms. Nevertheless, tailor-made sizes are available on request.

#### •Maximum effective filtration area and low turbulence

CAMGRID-GEL profiles are designed with small width (50mm) to reduce dead zones in order to minimise air turbulence and increase effective filtration area of the ceiling.

#### •Easy to install

Combination of only 3 junctions types and lightweight aluminium profiles factory pre-cut, to be assembled by on site, CAMGRID-GEL is very easy to install.

#### •Immediate leak-free filter installation

Gel-seal offers the advantage of an immediate airtight filter mounting, without any clamping device, by using 19mm knife-edge Camfil Farr MEGALAM.

#### •Individual sealing of each filter

CAMGRID-GEL junctions maintain in every corner a continuous separated channel providing in this manner a real individual seal for each filter. Any filter (or blank panel) can be removed without affecting other filter seal.

#### •Free choice for HEPA/ULPA filter performances

CAMGRID-GEL is designed to fit with standard well-known Camfil Farr HEPA/ULPA MEGALAM knife-edge K19 series

Efficiencies H14, U15 or U16 according to EN1822

MD standard profile (H=81mm) or low pressure drop MG profile (H=128mm) for economical running by energy saving and increasing filter service life.

#### •Dispositions to receive essential accessories

CAMGRID-GEL makes provisions for installing different cleanroom essential accessories:

- Hangers by a top groove all along profiles

- Tear-drop lights or other accessories can be hooked by means of hammer-head screws in the roomside groove (hidden by a closing profile when not used)

- Sprinkler through cross junction

#### •Aesthetic and long lasting finish

Anodised aluminium profiles with grey epoxy-polyester painted junctions



Camfil Farr	Product Sheet FYA-0001-A
CAMGRID-GEL	
Camfil Farr clean air solutions	

## Profile



CAMGRID-GEL profile is made of extruded aluminium alloy. It has a reduced width (50 mm) in order to reduce turbulences and achieve a maximal effective filtered area.

Profiles are delivered factory pre-cut at the right dimension, ready to be assembled. Standard lengths are based on the most common grid inter-ax is 300, 600, 900 and 1200mm. They are assembled to junctions by screwing, airtightness is achieved with mastic.

Gel channel dimension is optimised in order to reduce gel consumption and keep a perfect leak tight sealing with 19mm knife-edge HEPA/ULPA panel filters MEGALAM K19.

It is equipped with a lower groove in which it is possible to hook, by means of a hammer-head screw, walls, tear-drop lamps, ionizers, and other objects that are to be assembled under the ceiling roomside.

## Junctions



Junctions are made of die-cast aluminium alloy, grey painted with an oven-backed epoxy painting. Only 3 types of junctions allows to realise ceiling with CAMGRID-GEL system.

Important point, all the junctions close the sealing channel in the angle, that offers the following advantages :

- economy : reducing gel consumption
- safety : each filter has a real individual gel sealing. Any filter (or blank panel) can be removed without affecting other filter seal.

The crosses are prepared for the passage of sprinklers and devices that can be applied afterwards, following the assembly of the filtering ceiling.

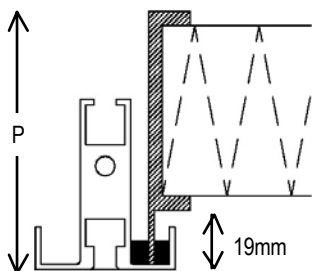
The cross has been approved by Factory Mutual for the assembly of sprinkler systems with the Flex Head flexible pipe.

## HEPA/ULPA filters

Camfil Farr CAMGRID-GEL fits standard MEGALAM anodised aluminium frame HEPA/ULPA panel with 19mm knife-edge.

Main advantages of Camfil Farr MEGALAM are :

- Guaranteed efficiency and leak free by individual EN1822 MPPS scanning and individual test report delivered in filter box
- Service cost saving by choosing long life and low pressure drop MEGALAM MG (126mm) type



Type	Dimensions (WxHxP) mm	Efficiency EN1822	Media Area m <sup>2</sup>	Airflow/Pressure Drop at 0.45m/s m <sup>3</sup> /h / Pa	Weight kg
MEGALAM MDA K19	570x570x81	H14	7.7	530/120	5
MEGALAM MDA K19	970x570x81	H14	12.0	800/120	6
MEGALAM MDA K19	1170x570x81	H14	16.2	1080/120	8
MEGALAM MDA K19	1170x1170x81	H14	34.0	2220/120	13
MEGALAM MDA K19	570x570x126	H14	13.9	530/70	7
MEGALAM MDA K19	970x570x126	H14	21.5	800/70	9
MEGALAM MDA K19	1170x570x126	H14	29.2	1080/70	12
MEGALAM MDA K19	1170x1170x126	H14	61.3	2220/70	21

Also available in efficiencies U15 and U16

## Specification

### • Application :

Small and medium size cleanrooms, ISO 8 to ISO 4, turbulent (with blank panels) or unidirectional airflow

### • Type :

Modular ceiling grid, gel seal

### • Construction :

Bars : extruded anodised aluminium profiles (white painted in option)

Junction : die-cast aluminium grey painted with varnishing in epoxy-polyester (white painted in option)

### • Assembling :

Quick and easy by screwing. Bars/junctions tightness is easily achieved with mastic.

### • Installation :

Bars are delivered ready to be assembled, already cut at the right length. Standard inter-ax is : 300, 600, 900, 1200mm.

### • Sealing

Urethane gel seal (to be ordered separately)

### • Filters (to be ordered separately)

Standard 19mm knife-edge MEGALAM H14, U15 or U16, MD(66mm) or MG(110mm) nominal sizes 270, 570, 870, 1170mm

### • Accessories

Tear drop light,