MARINE UV-C HOOD

ADVANTAGES

- Destroys grease particles in the extract air stream
- Reduces grease deposits within the ductwork
- Lowers risk of fires in the duct work
- Can be installed in existing ventilation systems
- FECON® grease filters – UL and NSF certified, flame retardant

marine
VIANEN
GALLEY VENTILATION

GB

DESCRIPTION

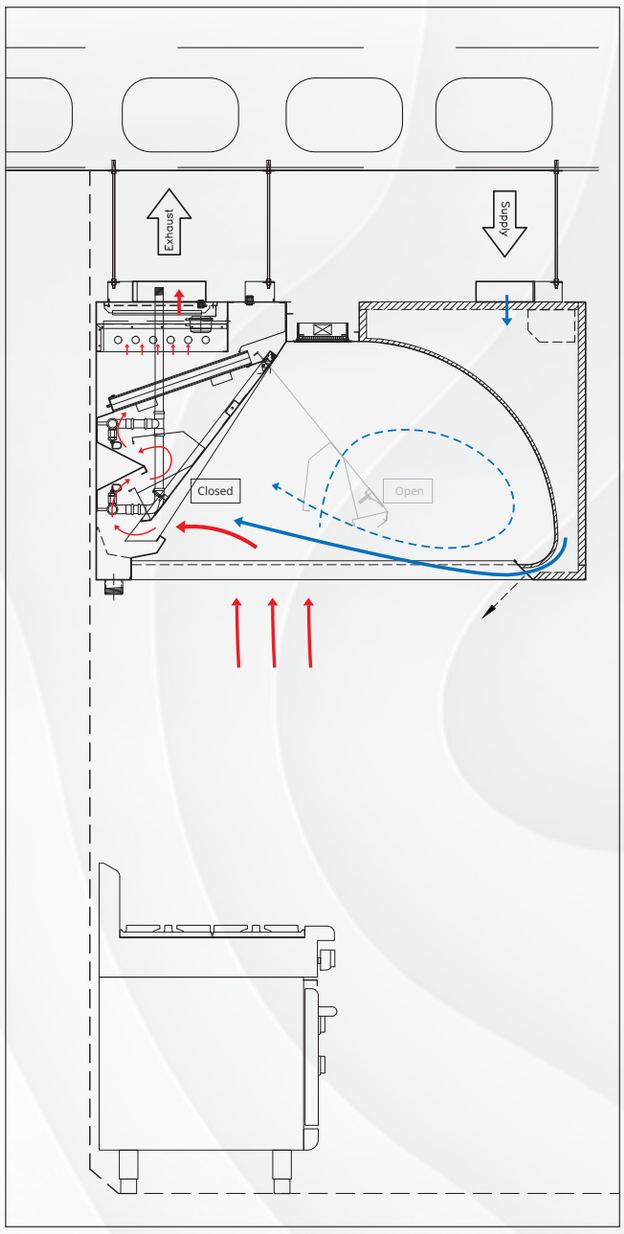
The Vianen UV-C system can be used in any Vianen hood or ceiling system and is suitable for all types of cooking equipment especially those that create high grease loads. The UV-C system generates ozone which breaks down grease particles reducing the build-up of grease deposits in the ductwork also helps to reduce some cooking odours that would otherwise be released into the surrounding area at the galley extract discharge point.

Please note that the UV-C system is not a deodoriser. All Vianen UV-C hoods are supplied with a dedicated Control Unit to ensure safe and simple operation of the system which requires very little maintenance and service. Vianen UV-C hoods are fitted with specially developed FECON® UV filters to prevent any leakage of UV light from within the hoods extract plenum. The UV-C system can be incorporated into any Vianen galley hood.

CONSTRUCTION

The Vianen UV-C system uses special UV-C light tubes for grease destruction and can reduce some odours. The tubes are mounted in a stainless steel patented enclosure with a hinged access door. This UV-C module is located behind the FECON® UV grease filters within the extract plenum. The safety design features ensure the safety of the galley staff and operatives are not exposed to UVc light. The UV-C Control Panel supplied with every UV system is a fully welded type 304 stainless steel unit, ultra-fine grain polished (320 grit) standard measurement 400 x 300 x 155mm with a sloping top and hinged access door which can only be opened with a security key.

A digital display provides information relating to the status of the system and any alarm condition. Using the UV-C system the hood has an extra exhaust pressure drop of 60 Pa.



The UV-C system incorporates:

- Three safety features;
- Has been subjected to extensive testing to ensure reliability;
- Components CE certified;
- Compact installation;
- Low maintenance costs.

Design considerations:

- The size and number of UV-C modules is dictated by the extract airflow rate (m3/h) through the hood and the overall size of the hood;
- The maximum temperature of the air passing over the modules is typically 45°C;
- To ensure complete oxidation a minimum reaction time of 2 seconds is required between the duct connection to the UV-C module and the extract system discharge point;
- Power requirement is 230/240 V 1 phase for a typical module with 6 UV-C tubes;
- The exhaust airstream pressure drop over a VIANEN hood incorporating UV-C modules and Fecon

UV-C Filters is only 160 Pa.

The UV-C system incorporates three safety features

- It is only possible to remove the Fecon UV-C filters from one set position of the filter housing which is marked with an arrow. At this position a pressure sensor is mounted to register whether the filter is properly installed. Should the filter be disturbed or removed from this position the sensor will immediately shut down the system;
- If any other filter is missing or has been in any way incorrectly installed a separate pressure sensor mounted within the hood extract plenum will detect a fall in pressure differential and shut down the system;
- The UV Control Unit will in all cases be linked to the ventilation extract fan to ensure the system only operates when the extract fan is running. Should the extract fan fail or stop the Control Unit will again immediately shut down the UV-C system.

Maintenance

The system requires very little maintenance or service. The UV-C lamps should be checked on a weekly basis and cleaned with a soft cloth and white spirit. Any lamp failure will be indicated at the Control Unit. The UV-C lamps have good efficiency for minimal 8,000 operating hours and the Control Unit features a lamp life countdown readout.

Warning

- Only suitably qualified personnel is allowed to work on the UV-C system;
- Direct and indirect exposure to UV light can impair eyesight and exposure to excessive quantities of Ozone can cause damage to the human respiratory organs;
- Ozone present in the extract air stream can cause damage to aluminum and any rubber seals that may be exposed to the exhaust air system.

Vianen Marine B.V.
Finse Golf 18, 3446 CK Woerden
P.O Box 163, 3440 AD Woerden, Holland

info@vianenkvs.nl
www.vianenkvs.com
Tel.: (+31) 348 41 63 00

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