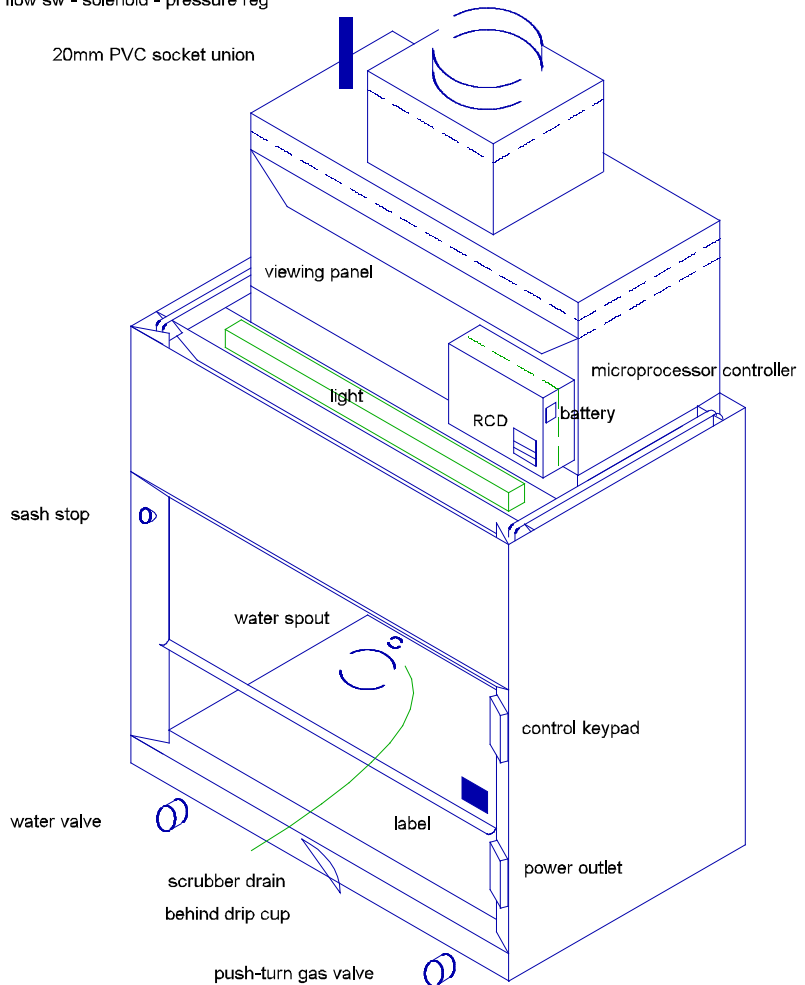


Installation Instructions

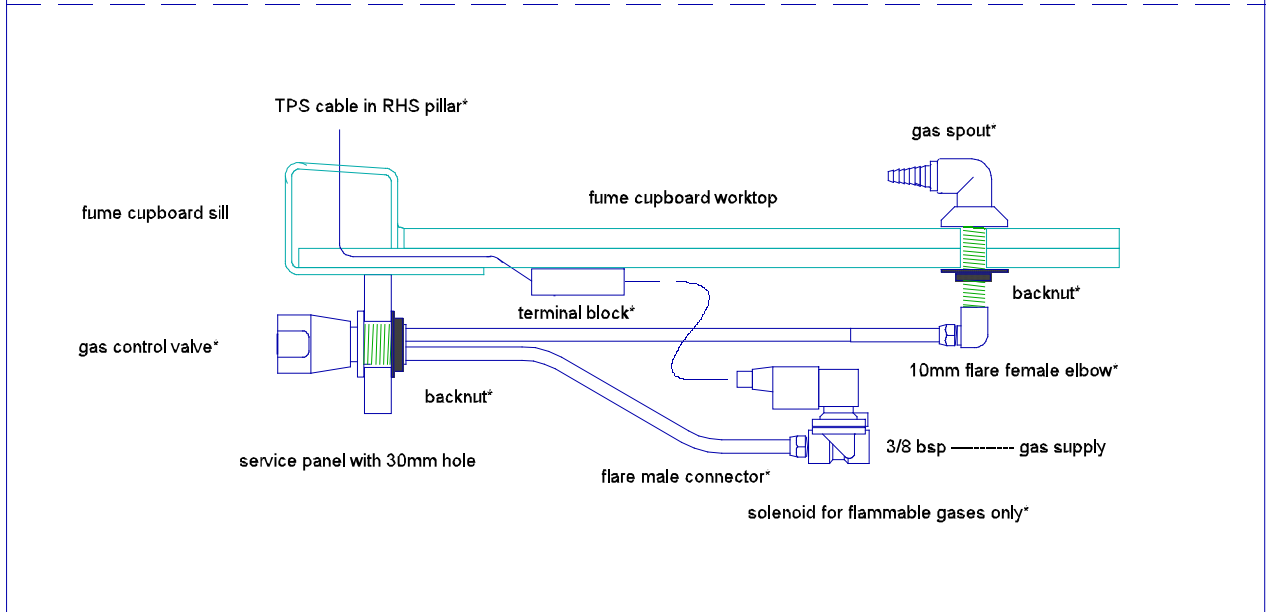
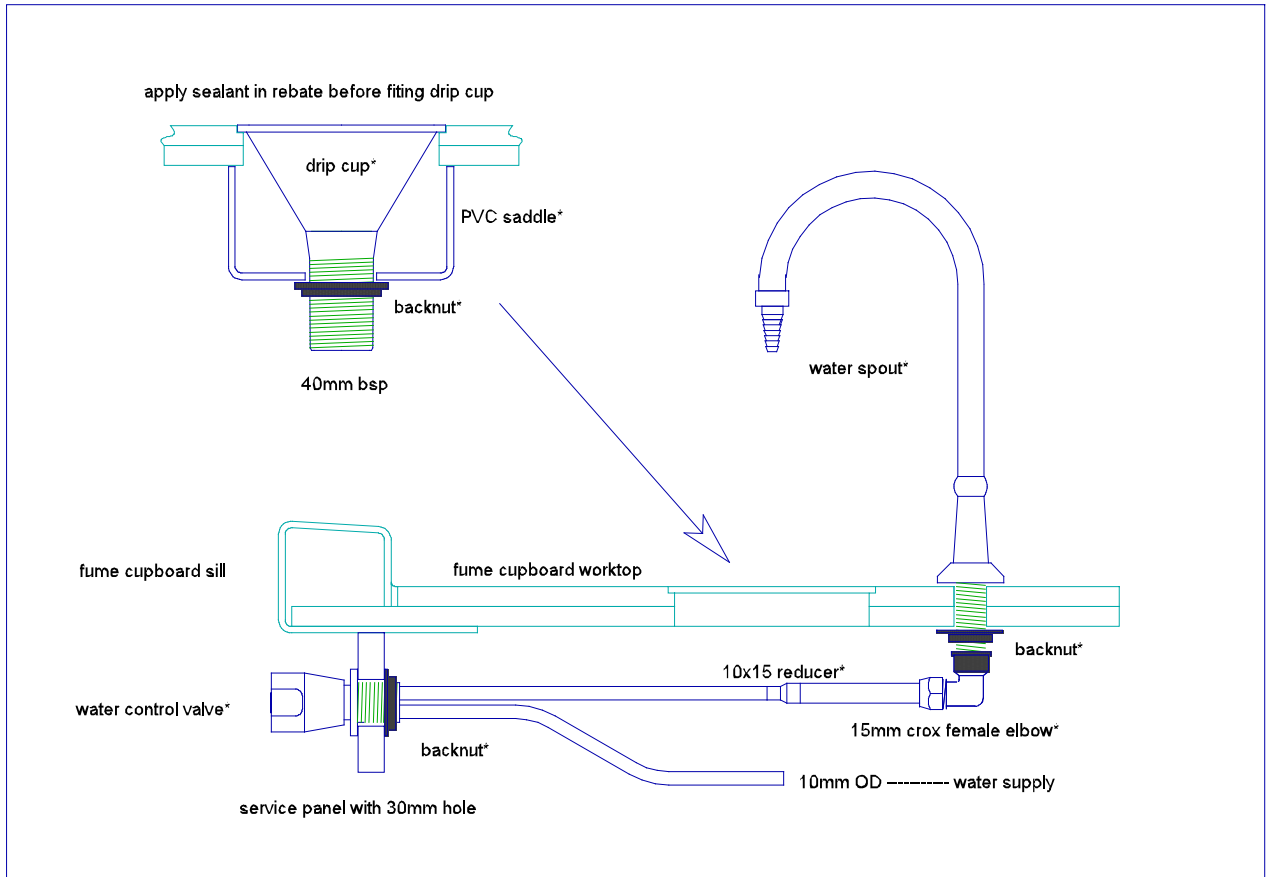
Fumeflush Fume Cupboard

ball valve - strainer - check - flow sw - solenoid - pressure reg



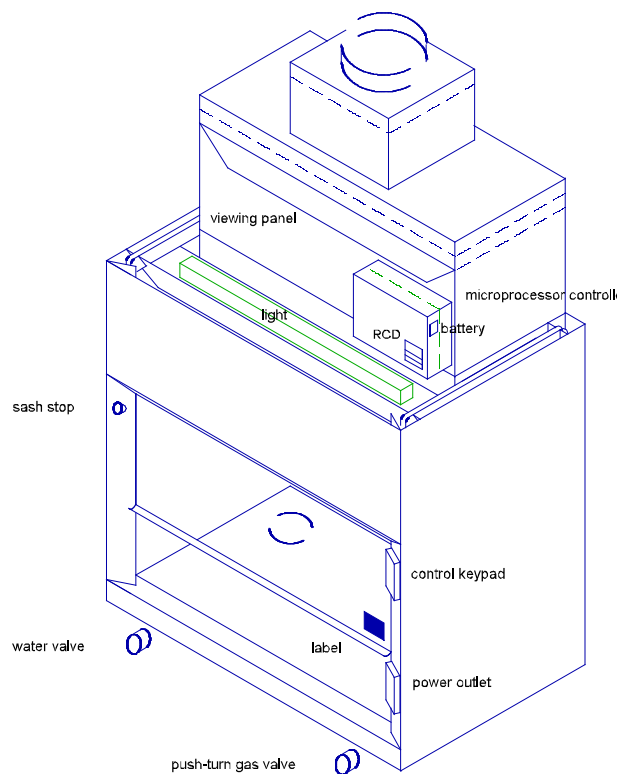
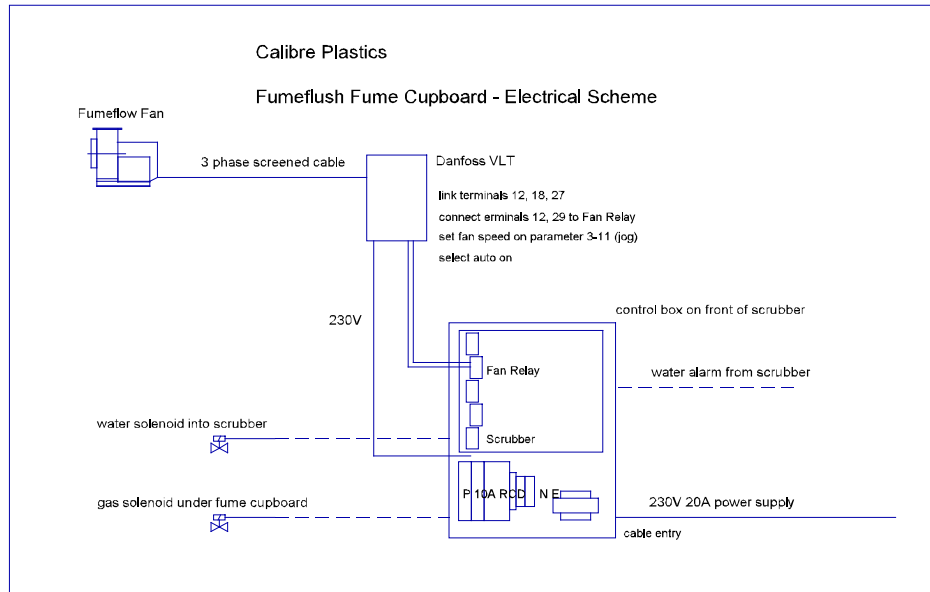
Plumbing Connections

1. Connect water control manifold (ball valve, solenoid valve, water sensor, pressure regulator) to inlet on top of scrubber using PVC socket union supplied.
2. Connect water supply to water control manifold.
3. Fit water taps and drip cup inside fume cupboard as diagram below. And connect water supply
4. Note there is a 50mm PVC drain socket behind the drip cup. Connect this drain socket and the drip cup to the drain.



* fittings supplied with fume cupboard

Electrical Connections for Fumeflush Fume Cupboard



Electrical Connections for Smoothflow Fume Cupboard

The control box is a grey plastic enclosure located on the front of the scrubber. Refer the diagram. The control box contains

- a local isolator,
- a 10A circuit breaker for the light and fan drive (Danfoss VLT),
- an RCD circuit breaker for the power socket
- a grey fuse holder (500mA)
- coloured strip connectors for Neutral and Earth
- a transformer
- a printed circuit board with a row of relays along the (left) side
- a pressure switch (in the lid)
- a 9v battery drawer

The Danfoss VLT requires a 230V single phase power supply, a signal pair from the controller, and a three phase shielded connection to the fan motor. (see diagram)
Mount the VLT in an accessible place for programming.

Provide and terminate a 230V 3 core cable $\geq 1\text{mm}^2$ from the VLT to the fume cupboard controller.

The fume cupboard controller has a cable entry at the right.

Terminate the VLT Neutral conductor at the blue terminal block

Terminate the VLT Earth conductor at the yellow/green terminal block

Terminate the VLT Active conductor at the 10A MCB

Link terminals **12, 18 & 27** of the Danfoss VLT.

Provide a signal pair from terminals **12 & 29** of the VLT to the **Fan Relay**

FAN The fan is located above the roof.

The fan has a 3 phase motor

Ensure the motor is configured in delta for 230V

Optionally provide a weatherproof isolating switch by the motor

Provide and terminate a 4 core shielded cable from the fan to the VSD output terminals.

Ground the cable shield either to the motor or the VSD but not both.

FUME CUPBOARD POWER SUPPLY

Required supply is 230V 50Hz, 20A

Provide and terminate a 3 core cable $\geq 2.5\text{mm}^2$ from the mains distribution board to the fume cupboard controller.

This circuit should be fused at 20A.

The fume cupboard controller has a cable entry at the front right.

Terminate the fan Neutral conductor at the blue terminal block

Terminate the fan Earth conductor at the yellow/green terminal block

Terminate the fan Active conductor at the isolator switch P (see diagram)

SCRUBBER

Connect the water solenoid to the controller **Scrubber relay** (see diagram)

Connect the scrubber water alarm to the controller water alarm input

CHECK Check that all screw terminals are tight

Check the air flow pilot tube is not kinked

Check that installation of the duct and fan is complete

Read the operating instructions before switching on the power.

Check the **fan rotation**.