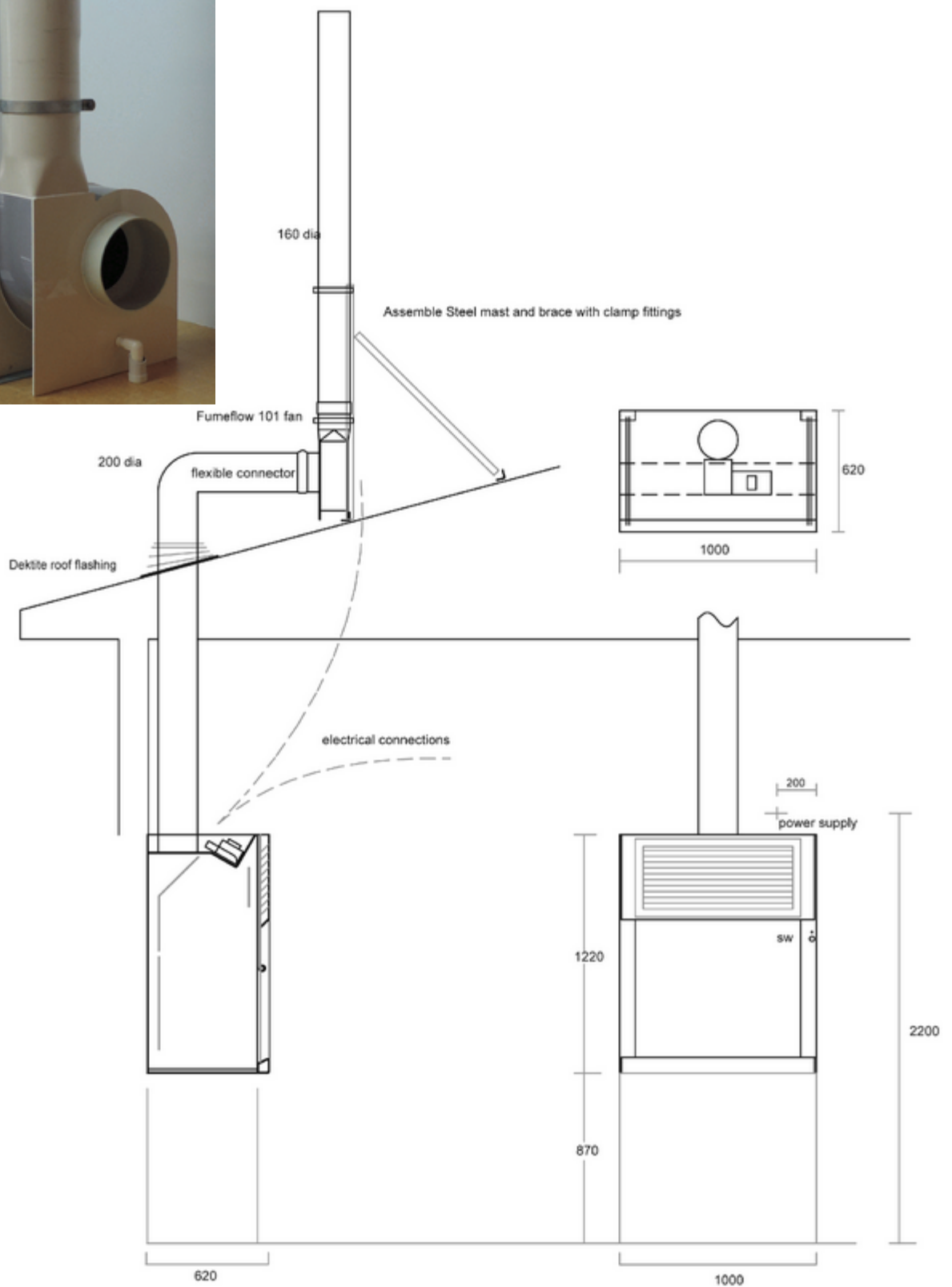


Installation Instructions

Student 101 Fume Cupboard

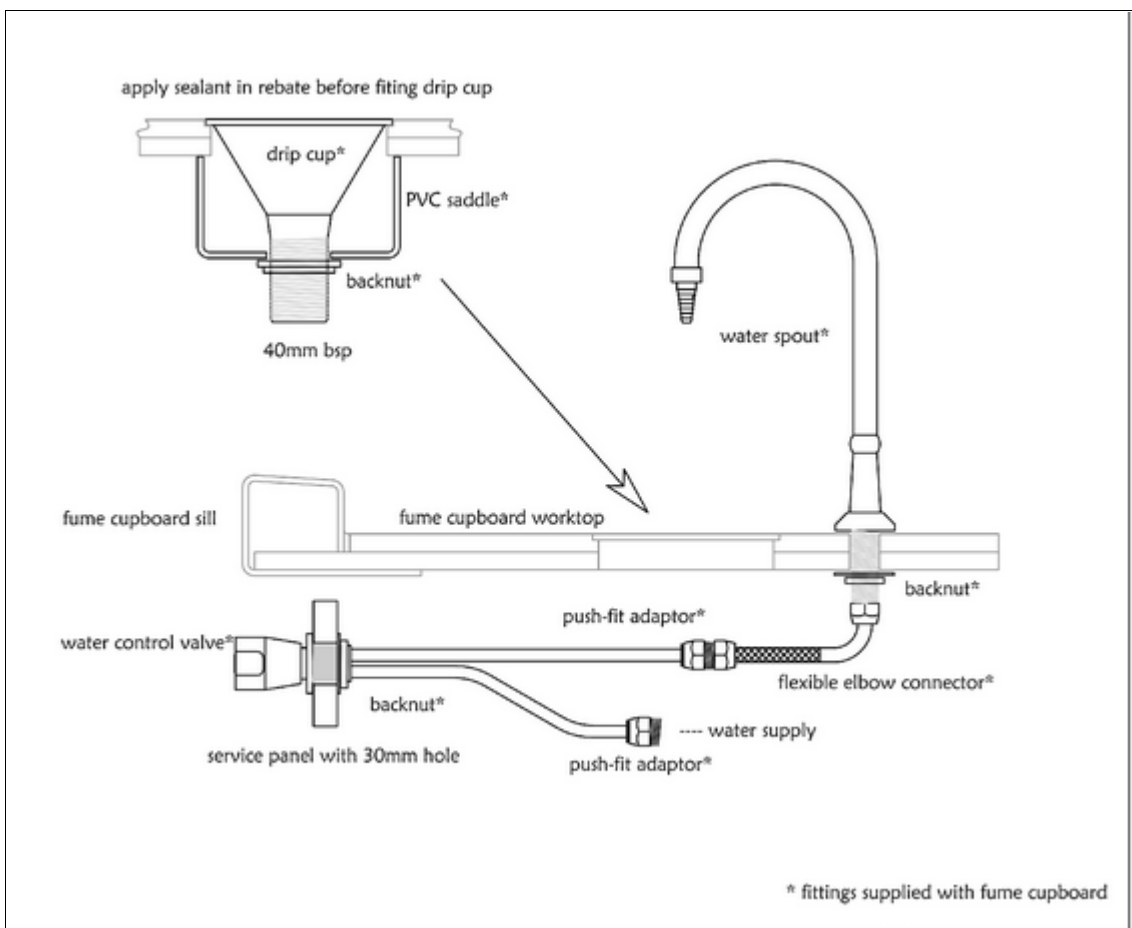
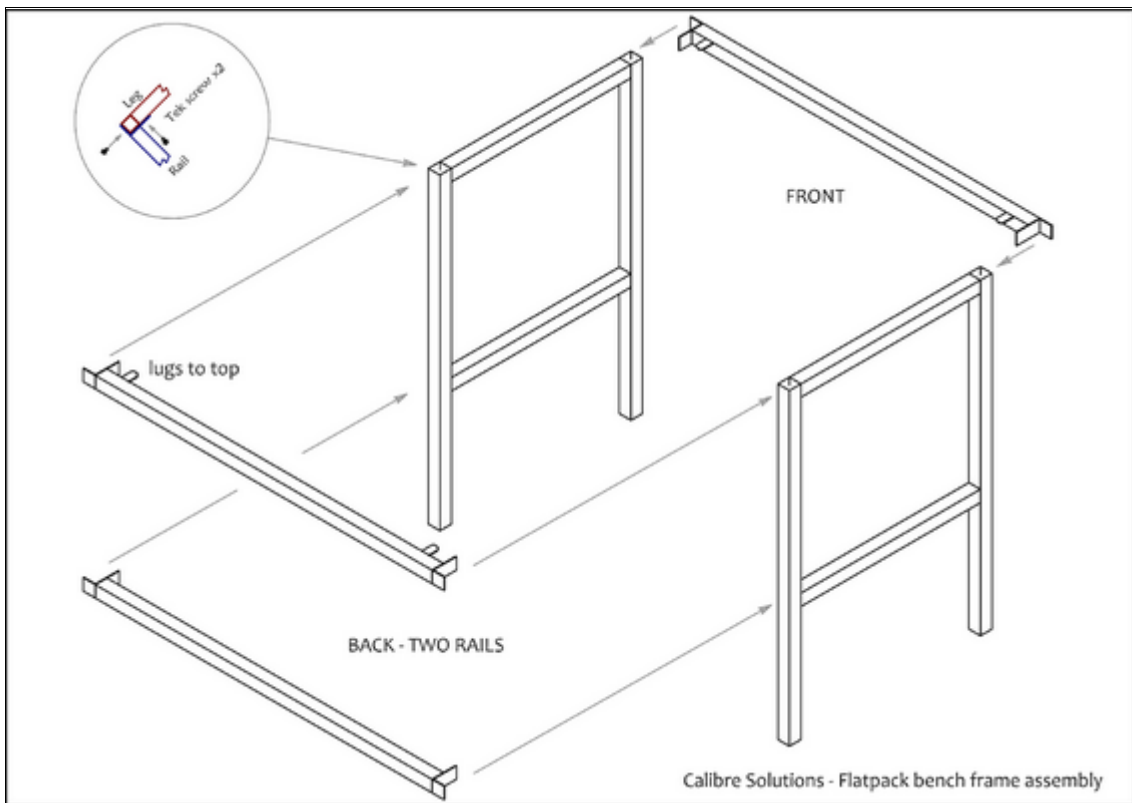
Refer drawing on next page

0. If your fume cupboard is supplied with a flatpack bench frame, see step 1. If your fume cupboard will be mounted on an existing bench, go to step 2.
1. (Optional bench frame) Assemble the bench frame (drawing page 3) by attaching the rails to the end trestles with tek screws. Set the bench frame in position. Check that the lower cross bar is at the rear. Adjust the feet for level and height (870mm) Place fume cupboard on bench frame. Align, and screw through lugs on frame into base of fume cupboard Maximum screw length 20mm! Go to Step 4.
2. Place fume cupboard on bench
If your fume cupboard has a water tap and drip cup, include step 3. See drawing page 3 for plumbing connections.
3. (Optional water tap and drain) If your fume cupboard has holes in the bottom for a water tap and drip cup, mark these holes on the under-bench. Move the fume cupboard out of the way to cut out the under-bench top, then replace the fume cupboard in position.
4. From the duct outlet on top of the fume cupboard, plumb up to the ceiling. Mark and cut 210mm dia hole through ceiling and roof for the exhaust duct.
5. Above the roof, locate a purlin within about 1 m above the hole. Place the fan with the inlet in line with the hole, and fix the steel fan bracket to the purlin. (See drawing). Fix the bracing base plate in line with the fan on the next purlin uphill. Slide the swivel end of the brace over the fan mast, and attach the other end of the brace to the base plate. Slide the swivel brace until the mast is vertical, and tighten the locking screws.
6. Fit the 150mm diameter flue pipe into the fan outlet. Adjust for vertical, and secure the duct clamp to the mast.
7. Temporarily hold 200mm pipe bend in line with fan inlet and roof penetration. Measure up from fume cupboard outlet to bend. Allow for sockets at each end. Cut 200mm dia duct to length. Ensure ends are cut square. De-burr edges.
8. Lower duct through roof. Fit the ceiling flange over the bottom end of the duct, and fit the duct to the fume cupboard outlet. Fix the flange to the ceiling with screws or adhesive.
9. Fit the "Dektite" flashing over the top end of the duct, and fix to the roof with sealant and screws or rivets.
10. Temporarily fit the bend to the riser duct. Measure from the socket of the bend to the fan inlet, allowing a gap of 80mm between the fan and duct for the flexible connector. Cut 200mm dia duct to length. Ensure ends are cut square. De-burr edges.
11. Fix the duct into the bend with PVC solvent cement, or hot-air welding, and connect the duct to the fan with the flexible connector. Fasten the stainless steel clamp bands.
12. Fit the trap to the fan drain.

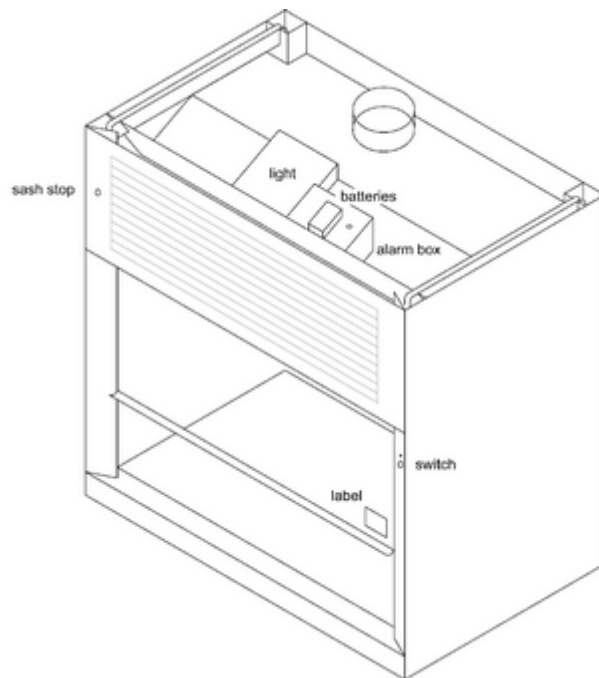


Calibre Solutions Ltd
Student 101 Typical Installation

Installation of Optional Accessories for Student 101



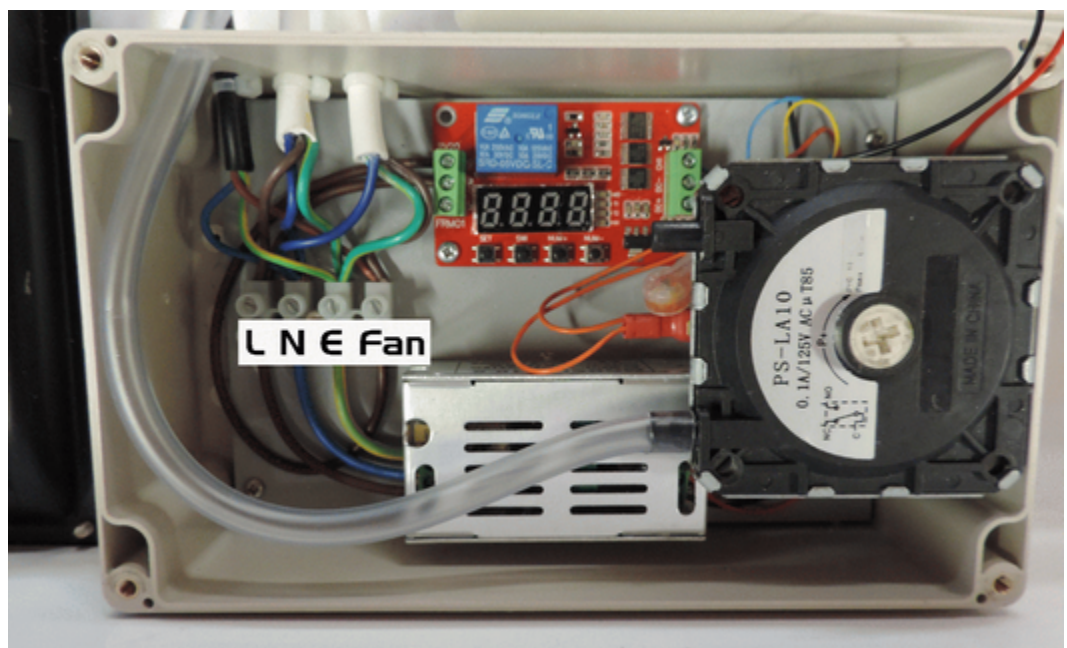
Electrical Connections for Student 101 Fume Cupboard



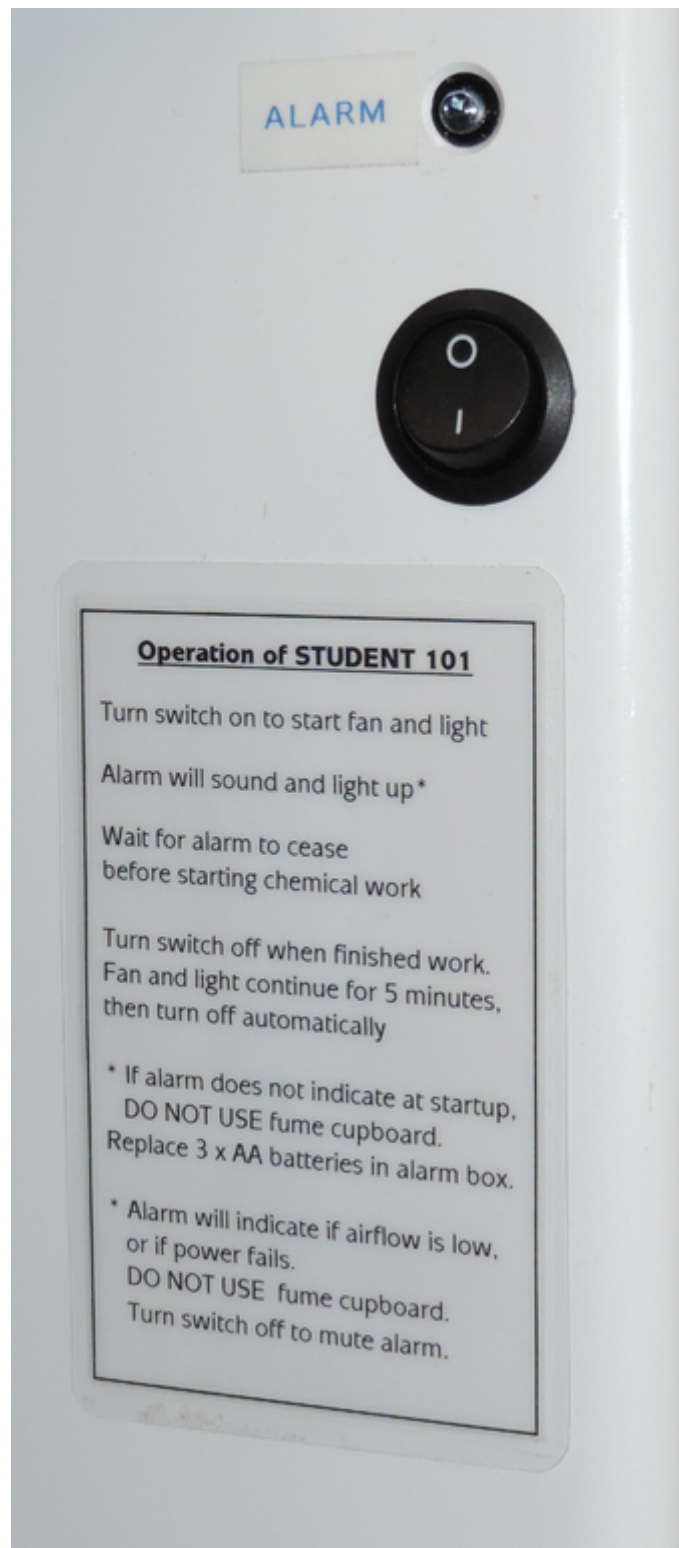
The alarm box is a grey plastic enclosure located on top of the fume chamber. Refer the diagram. The control box contains

- strip connectors for Line, Neutral, Earth, and Load (Fan and Light)
- a 5Vdc power supply,
- a delay off timer,
- a pressure switch

There is a smaller box for 3 x AA batteries on the lid.



Operating Instructions



COMMISSIONING

Refer the operating instructions
Turn the power on

Measure the airflow

Raise the sash to the maximum operating position (sash stop)
Measure the air velocity in the plane of the sash at six (6) positions

100+	100mm +	+100
100+	+ 100mm	+100

The average velocity (sash open) should be more than 0.5m/sec
Measure the airflow
Record the velocity measurements in a commissioning report.
Conduct a smoke test (AS 2243.8) and record the observations.

Adjust the airflow alarm sensor (pressure switch):

The pressure switch adjustment is seen through the hole in the alarm box lid
Adjust the white plastic cross-head screw clockwise to raise the set point (more sensitive) or anticlockwise to reduce the set point (less sensitive).

A practical guide:

Turn the set point up until the Airflow alarm sounds

If the alarm does not sound, replace the (3 x AA) batteries in the alarm box.

Turn the set-screw down until the alarm stops.

To check the alarm, pull the clear PVC pilot tube out of the duct.

The alarm should sound after 2-3 seconds.

Ensure the pilot tube is re-fitted in the duct.

