

# *Bench Type*

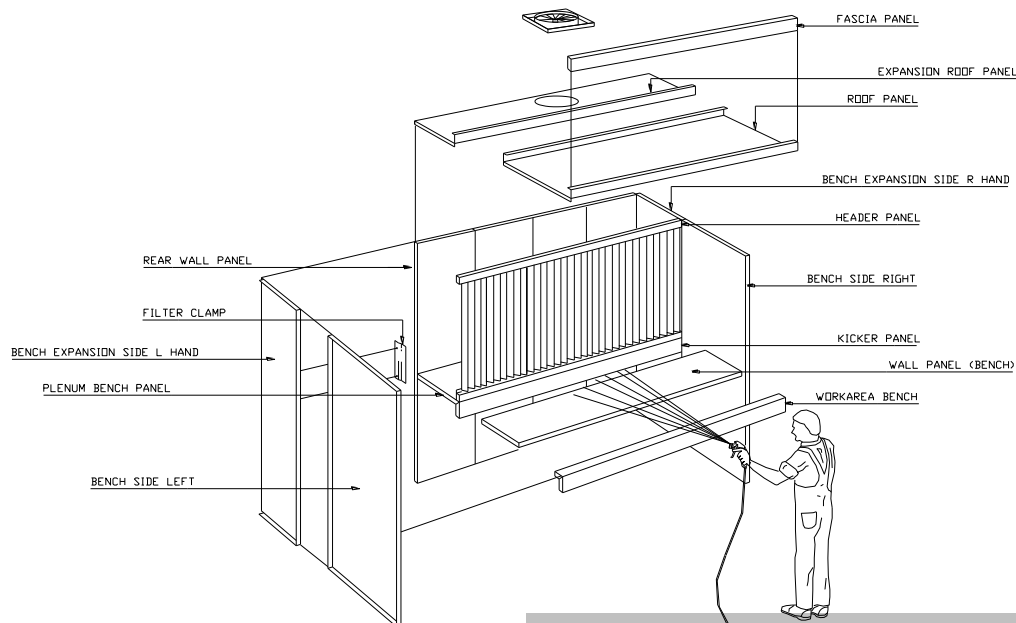
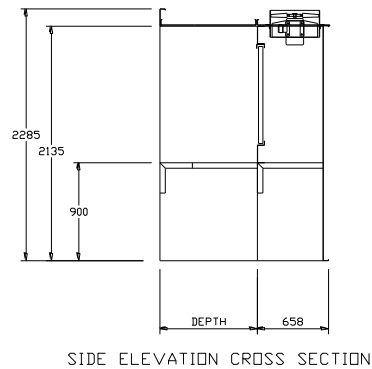
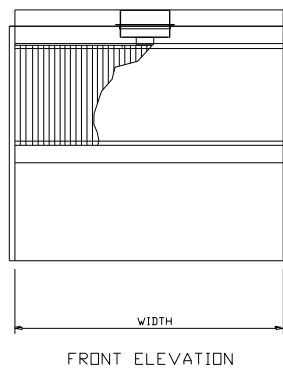
*Standard bench type spray booth assembly instructions*

## Introduction

With the assembly of a bench type dry filter spray booth we should begin by laying all of the components out and familiarising ourselves with the parts and checking them against the packing list. The area where the booth is to be assembled and installed should be cleared with the floor swept and free of any obstacles.

The kit form booth is assembled using primarily  $\frac{1}{4} \times \frac{1}{2}$  roofing bolts which are supplied with the kit a few pop rivets and tek screws may be required which are not supplied with the kit, you are also required to supply your own floor fixing anchors. The tools you will require for the assembly are a flat head screw driver a  $\frac{1}{4}$ " spanner, drill with suitable drill bits for the pop rivets and hex bit for the tek screws.

Note the following booth assembly example is for a BTDB89 (dry booth 2440mm wide x 2135mm high) although the quantity of panels and part numbers may vary to your kit the assembly techniques are the same.



**Product code specification**

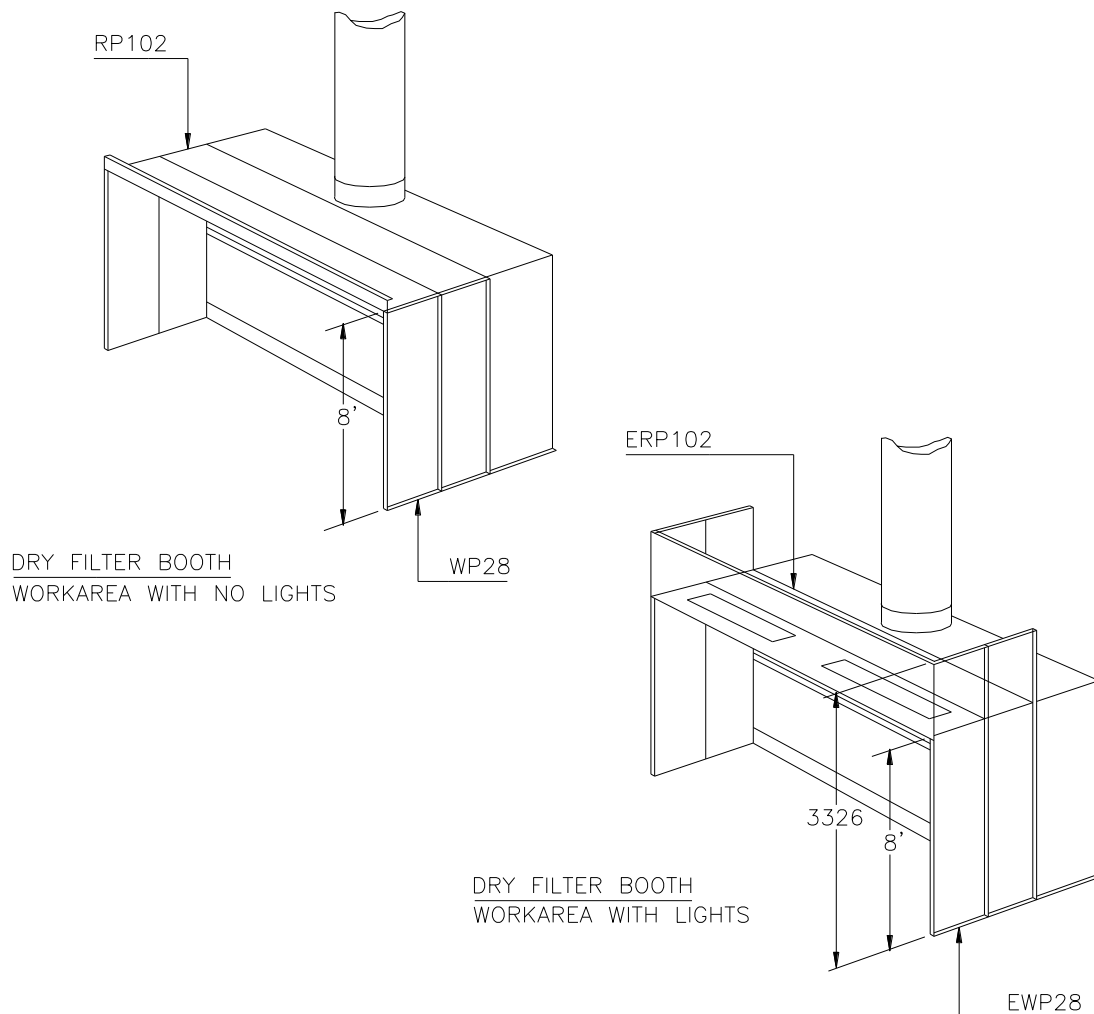
In general we use the initials of the panel type with the imperial width and height of the panel for the part number.

Example (1) wall panel 610mm x 2440mm = WP28

Example (2) roof panel 3050mm x 610mm = RP102

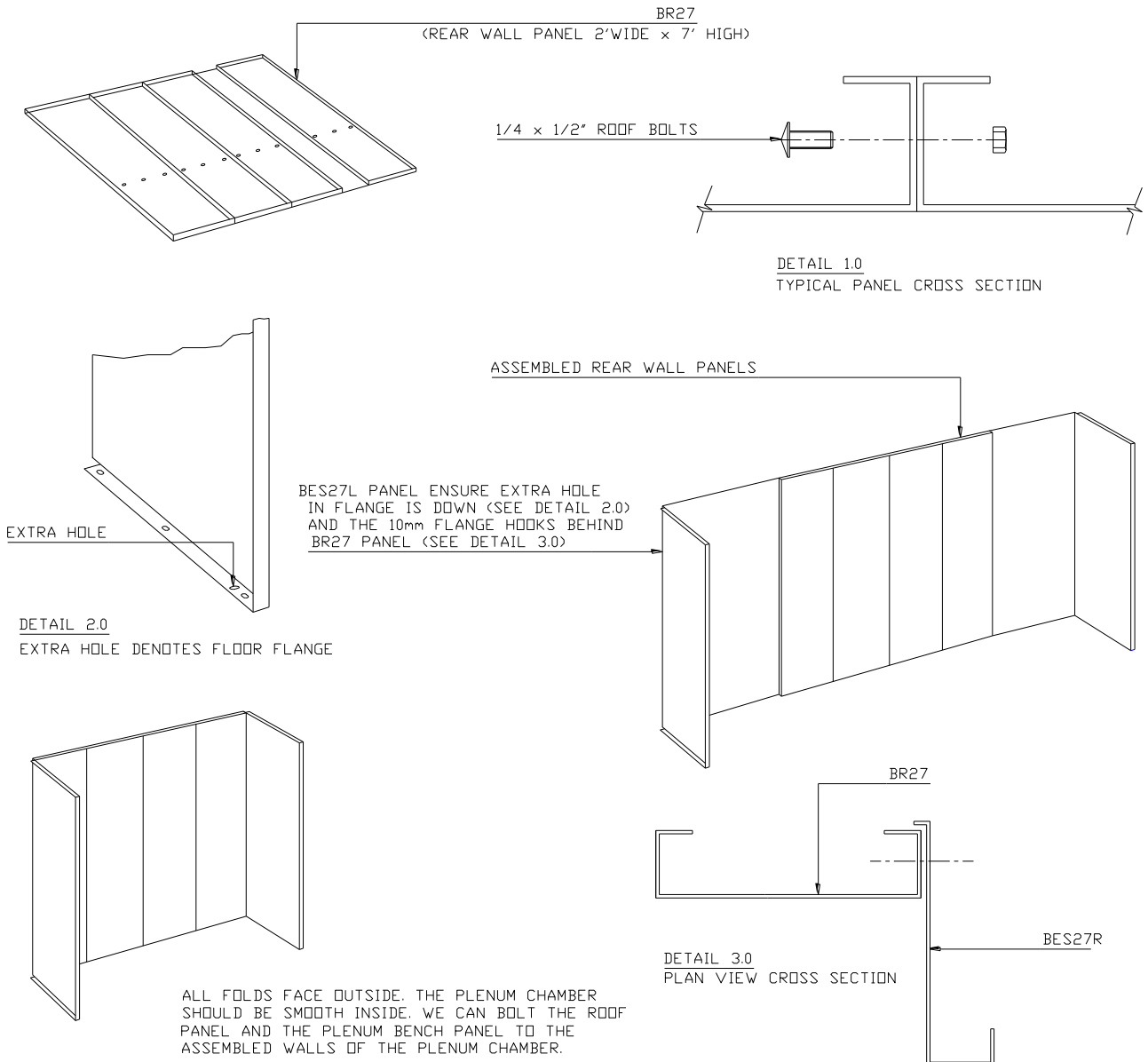
When a spray booth work area has lights the wall panels are required to be extended to keep the electrical light fittings 2.0mt away from the open face of the booth in this case we use extended wall panels.

Example (3) extended wall panel 610mm x 2440mm = EWP28



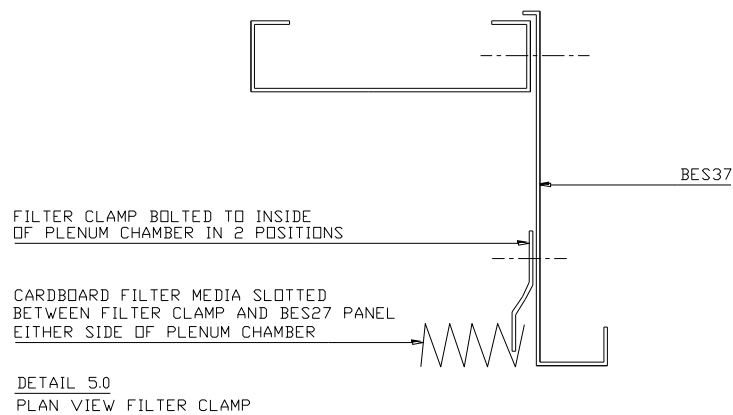
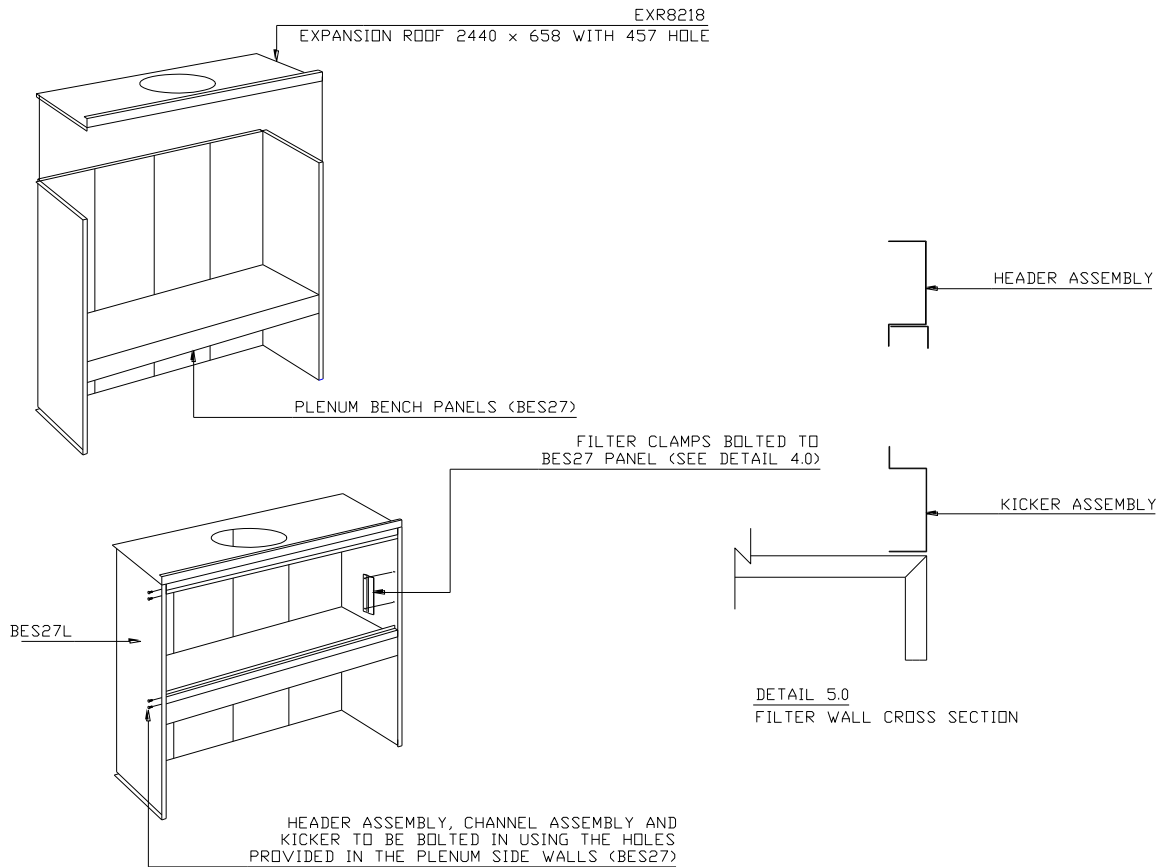
### Step (1)

To begin the assembly we start with the plenum chamber, lay the required number of wall panels face down (in this example we require 4 x BR27) note the extra hole at the base of each panel ensuring the extra hole punching is to the floor, bolt together (see detail 1.0). These panels make up the rear wall of the plenum chamber. Stand the assembled panels upright and bolt the plenum sides BES27L/R to the two end panels taking care to ensure the extra hole punching is to the floor (see detail 2).



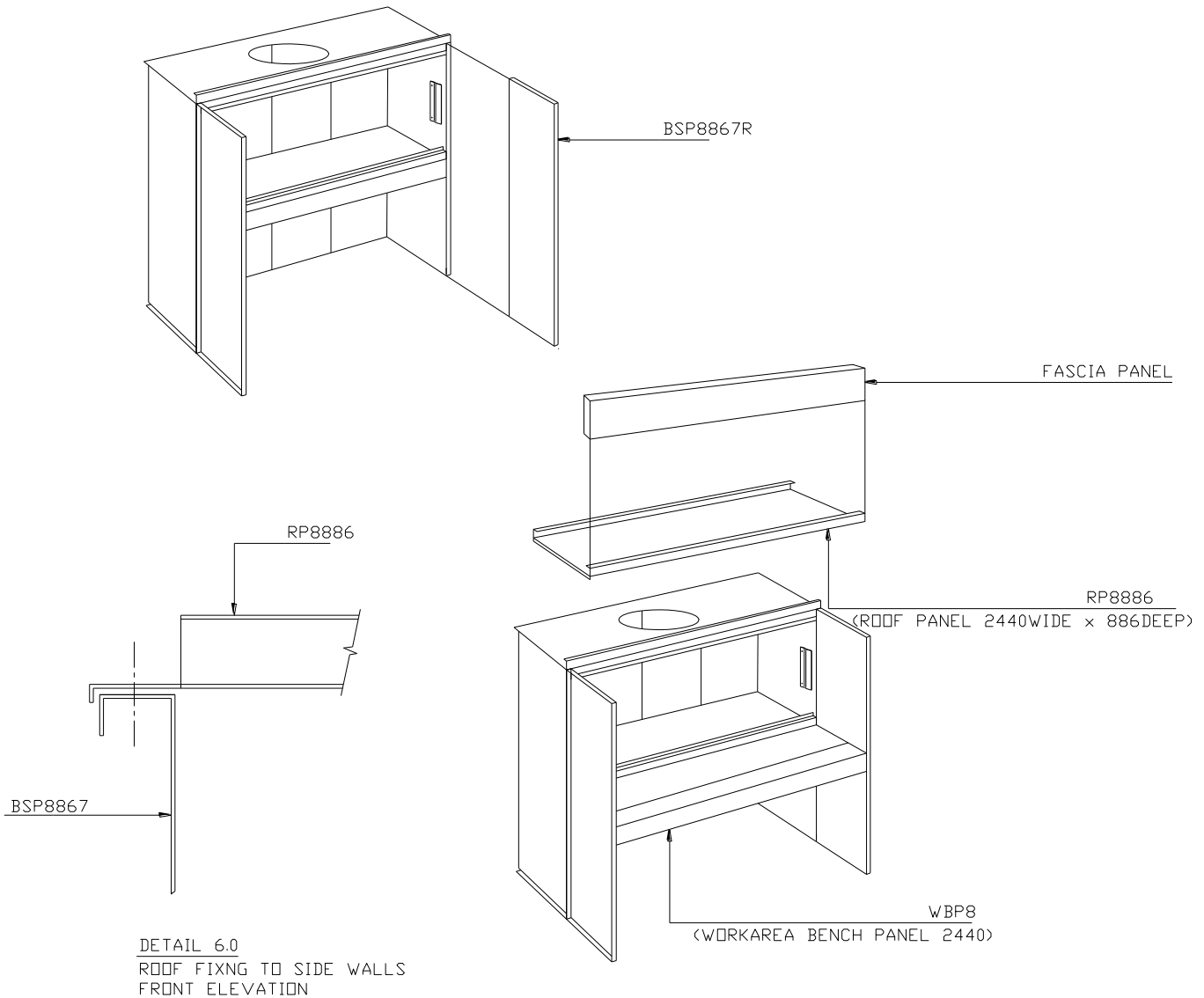
**Step (2)**

Bolt the plenum roof (EXR8218) to the top flange of the plenum walls tighten all nuts and bolts insert the plenum bench and bolt through provided holes. The plenum chamber should now be a semi rigid structure in which we can now install the filter wall (see detail 5.0) once this is complete the axial exhaust fan can be fitted refer to step 4 if you choose to fit the fan at this stage.



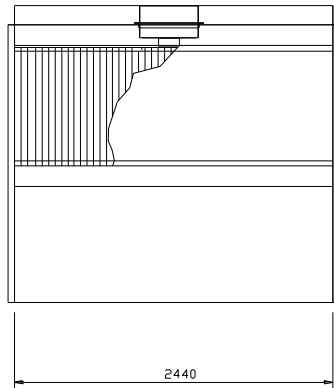
**Step (3)**

The work area panels can now be bolted to the plenum chamber. The roof panels can also be bolted to the wall panels and the fascia can be installed. If there are lights included then the booth will have extended wall panels and an extended fascia for which all the necessary holes are provided so the panels can bolt together.

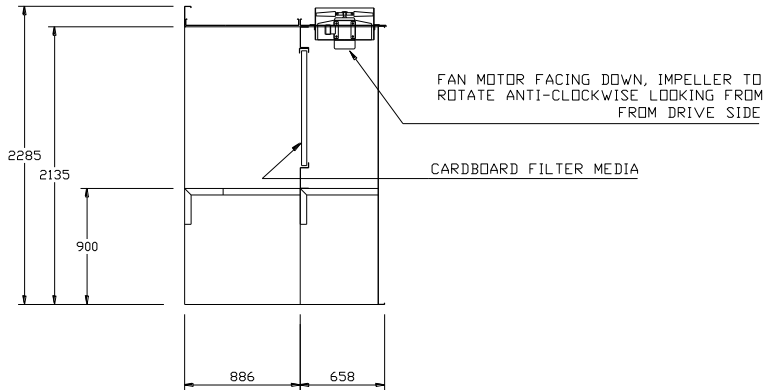


**Step (4)**

All of the work area panels should be securely bolted into position and fixed to the floor, the axial exhaust can now be installed. The motor should face down with fan located in the hole of the plenum chamber roof. Fix the fan in place with the supplied fixing bolts.



FRONT ELEVATION



SIDE ELEVATION-CROSS SECTION

## Control Cubicles - general

WE ADVISE THAT FOR A  
SPRAY BOOTH TO  
CONFORM TO Australian  
Standard (AS/NZ 4114) &  
OHSS,

IT IS RECOMMENDED  
THAT CONTROL BOXES  
SHOULD BE INSTALLED  
TO ALL SPRAYBOOTHS.



Control boxes are installed to a Spray Booth for **safety reasons**, they perform the following functions:

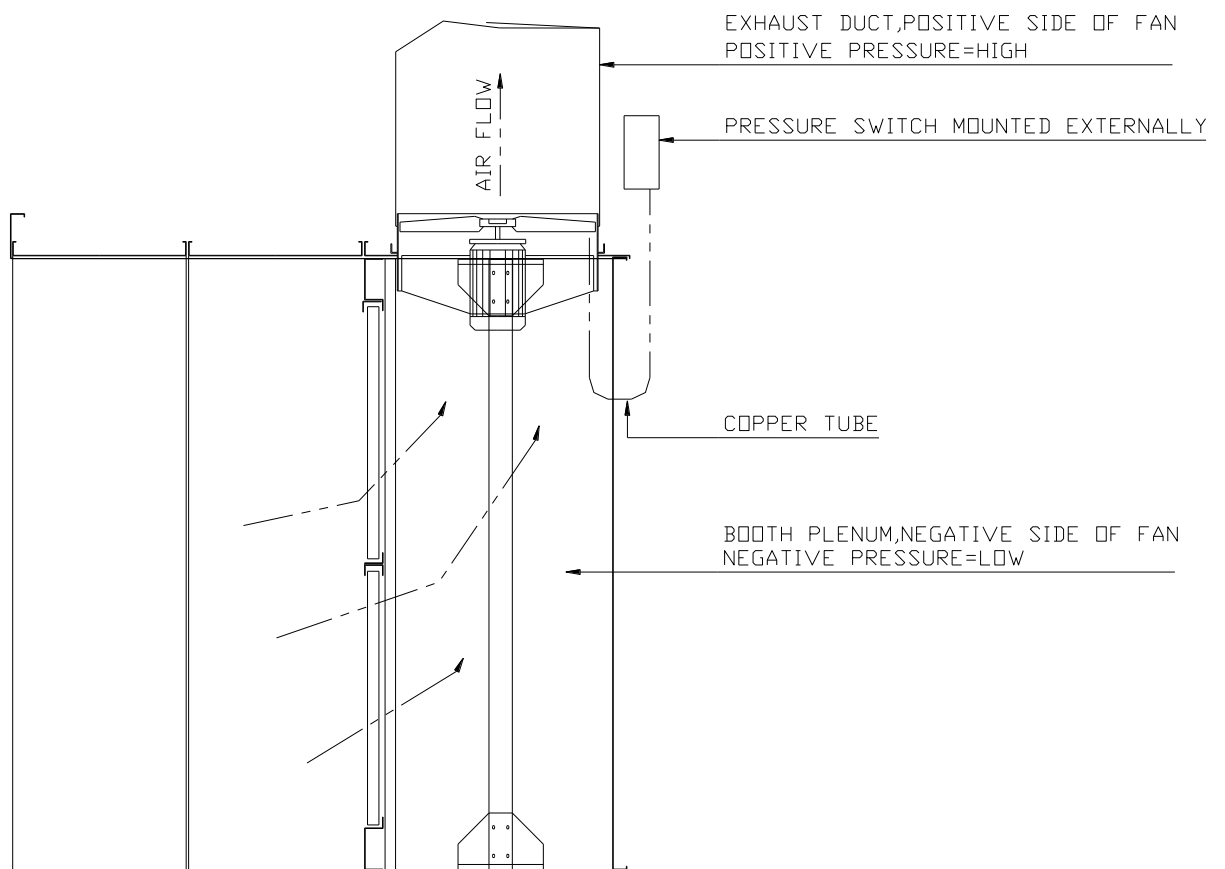
- An electrical solenoid connected into the booth's compressed air line stops the operator/painter from spraying any product inside of the booth until such time that the air flow / exhaust fan speed is high enough for any waste product to be removed from the workspace.
- Timers incorporated into the control panel will not allow the booth to be shut off until the exhaust fans have removed any over-spray and fumes that are still resident within the booth.
- When the booth is switched off the compressed air supply to the spray gun(s) is closed off stopping the painter from spraying. (as the air within the booth is being purged).
- All electrical supply's to the booth are also switched on & off via the control panel.



The pressure switch setup for the dry filter booth is shown below.

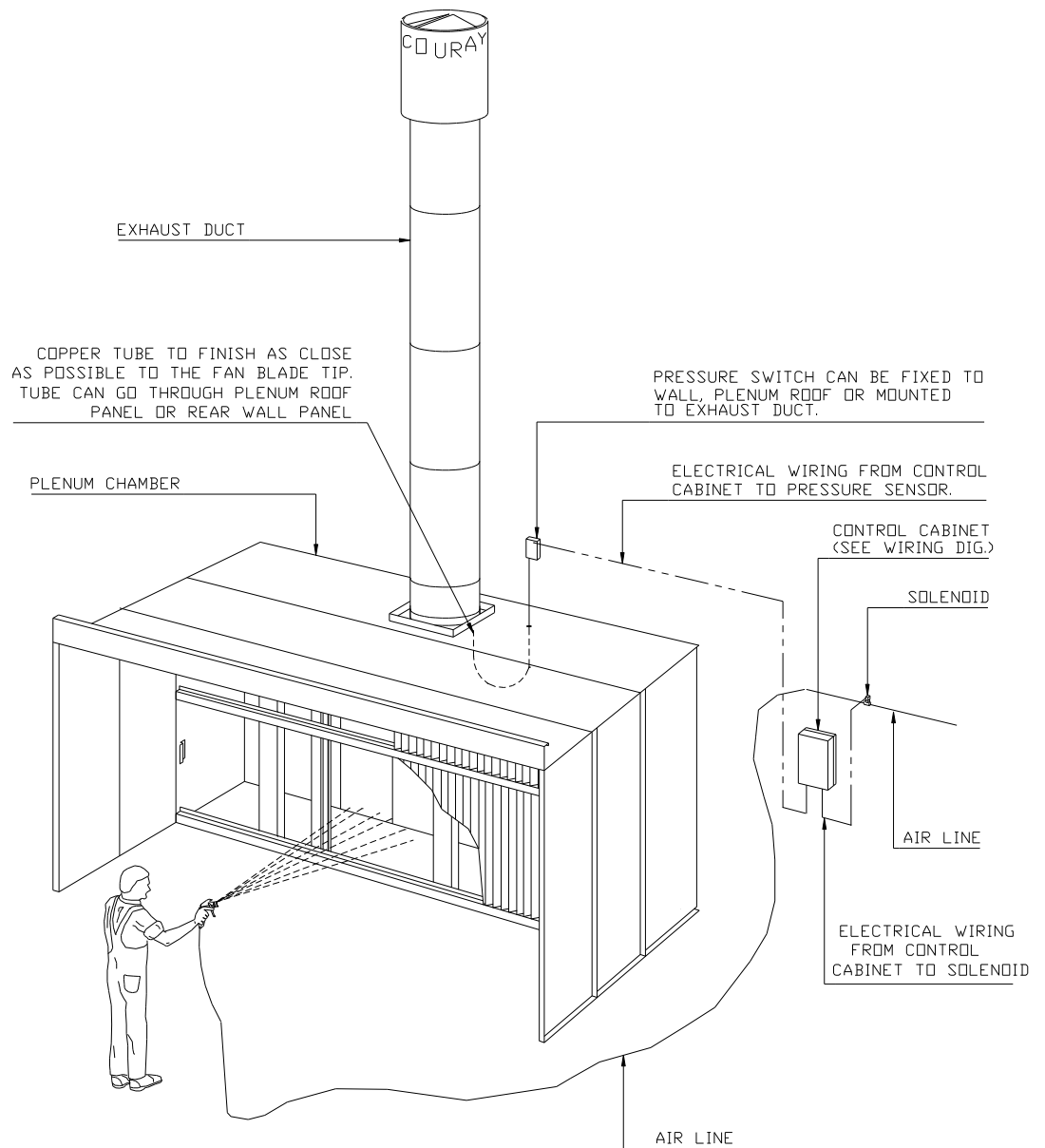
The pressure switch unit should be fixed as outlined in the instructions two different models may be used, with the high-low connections in different positions (typical model is AFS-222).

A copper tube (supplied by others) should run from the low connection to as close to the fan tip as possible on the negative side of the fan.

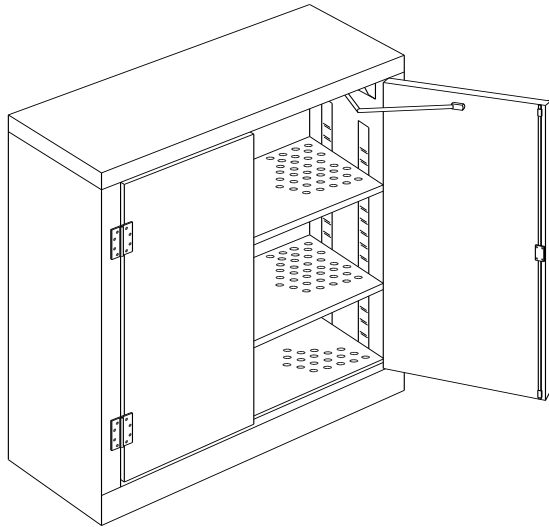


SIDE ELEVATION-CROSS SECTION

## Control Cubicles – layout (Dry Filter Booth)



## Paint Storage Cabinet – general



- Two sizes, each with a maximum capacity 250 litres.

### **Standard – 9 x 20 litre drums (PS180)**

O/A dimensions – 1567mmH x 1100mmW x 516mmD

### **Large – 12 x 20 litre drums (PS240)**

O/A dimensions – 1567mmH x 1450mmW x 516mmD

- Two height adjustable shelves.
- Self closing / latching (lockable) doors.
- Double sheetmetal skin walls throughout.
- Built to Work-Cover, EPA & Australian standards.
- All equipment is fully guaranteed against faulty materials and poor workmanship.

## **Open Face Dry Filter Spraybooth Operator Maintenance Schedule**

### **Equipment Required**

Torch	Safety glasses
Protective clothing	Safety helmet

### **Weekly or 38 hours of operation**

- **Inspect exhaust filters**
- Order replacement filter if required
- **Check switchboard and solenoid functions**
- Call service agent if malfunction occurs
- **Fill out weekly inspection report.**

### **Monthly or 152 hours of operation**

- **Remove and Inspect exhaust filters.**
- Order replacement filter if required.
- Clean down exhaust chamber and inspect duct and impellor before fitting filters.
- **Clean down spraybooth ceiling, walls and floors.**
- Remove stripcoat if applied.
- Brush-scrap down walls and sweep floor and dispose of contaminates.
- Recoat strip coat if required.
- **Inspect impellor.**
- Clean mesh cover.
- Check for missing impellor blades.
- Call service agent for repair if required.
- **Inspect exhaust ducting.**
- use torch to check internal wall of exhaust duct for paint build
- Call service agent if cleaning required
- Inspect outside duct above roofline (from the ground) is straight and guide cables are taught.
- Call service agent if cable tensioning is required.
- **Lights(if fitted)**
- Clean glass and replace any faulty tubes
- **Check switchboard and solenoid functions.**
- Call service agent if malfunction occurs.
- **Fill out monthly inspection report.**

**Monthly Inspection Report**

**Booth Serial Number**

**Weekly Inspection Performed by**

**Date**

<b>TASK</b>	<b>Accept</b>	<b>Order new</b>	<b>Replacement</b>
Inspect filter			
Switchboard functions			

**Weekly Inspection Performed by**

**Date**

<b>TASK</b>	<b>Accept</b>	<b>Order new</b>	<b>Replacement</b>
Inspect filter			
Switchboard functions			

**Weekly Inspection Performed by**

**Date**

<b>TASK</b>	<b>Accept</b>	<b>Order new</b>	<b>Replacement</b>
Inspect filter			
Switchboard functions			

**Monthly Inspection Performed by**

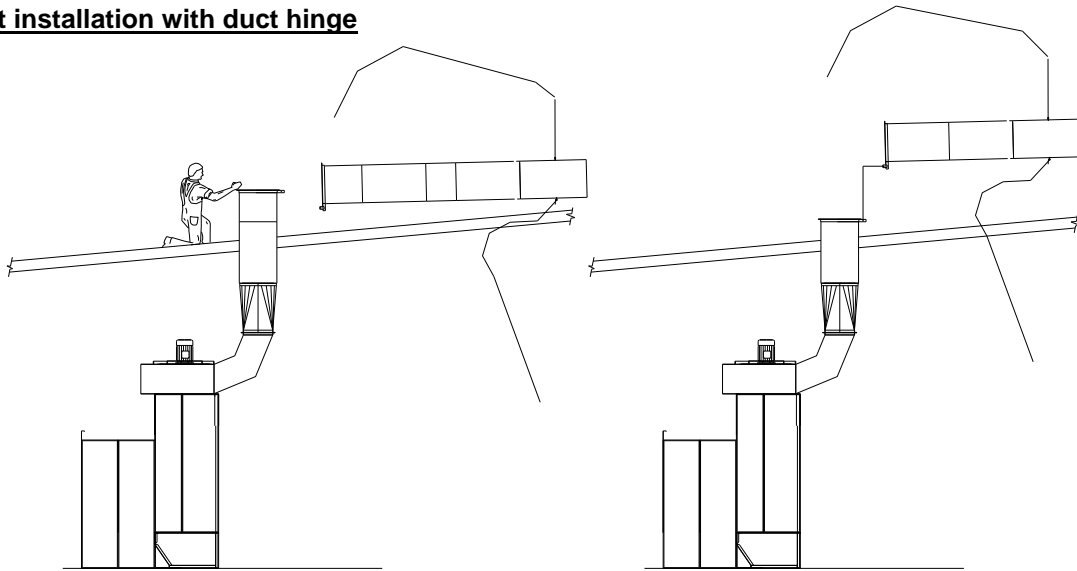
**Date**

<b>TASK</b>	<b>Accept</b>	<b>Order new</b>	<b>Replacement</b>
Inspect filter			
Switchboard functions			
Clean down booth			
Inspect impellor			
Inspect exhaust duct			
Inspect & clean lights			

**Replacement parts required**

Exhaust filter	Yes / No	Type	Quantity
Light tubes	Yes / No	Type	Quantity
Strip coat	Yes / No	Type	Quantity

**Duct installation with duct hinge**

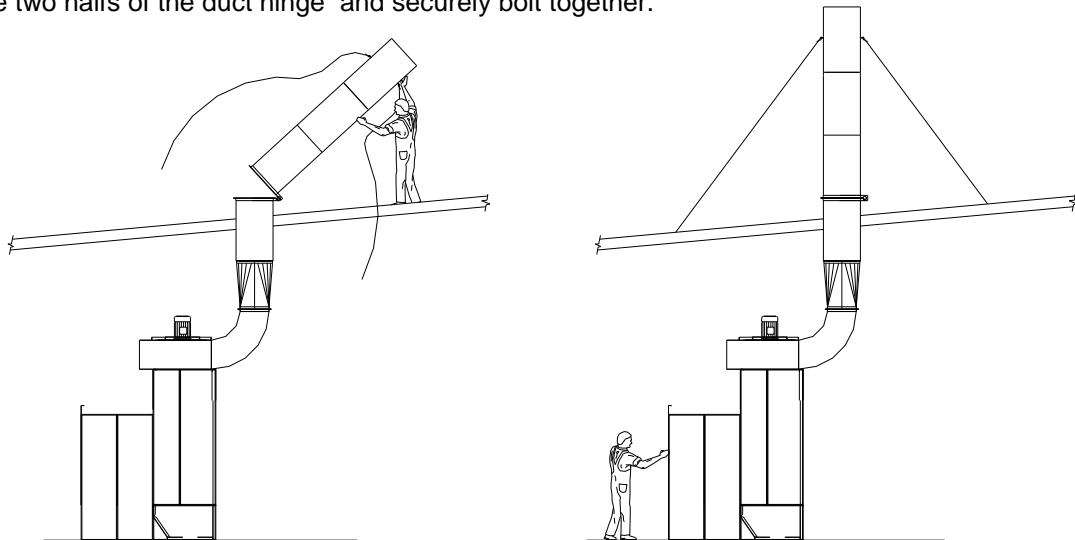


Step (1)

Once a section of duct work is penetrating through the roof the small end half of the duct hinge can be fixed to it (slip over end and knock over duct). The remaining lengths of duct and butterfly flap exhaust cowl (dry booth section only) can be riveted together. The big end half of the hinge can then be fitted to this completed section of the duct.

Required lengths of guide wires are to be threaded through the eye bolts provided in the cowl and clamp together as shown in detail 1.0 of duct assembly.

Align the two halves of the duct hinge and securely bolt together.



Step (2)

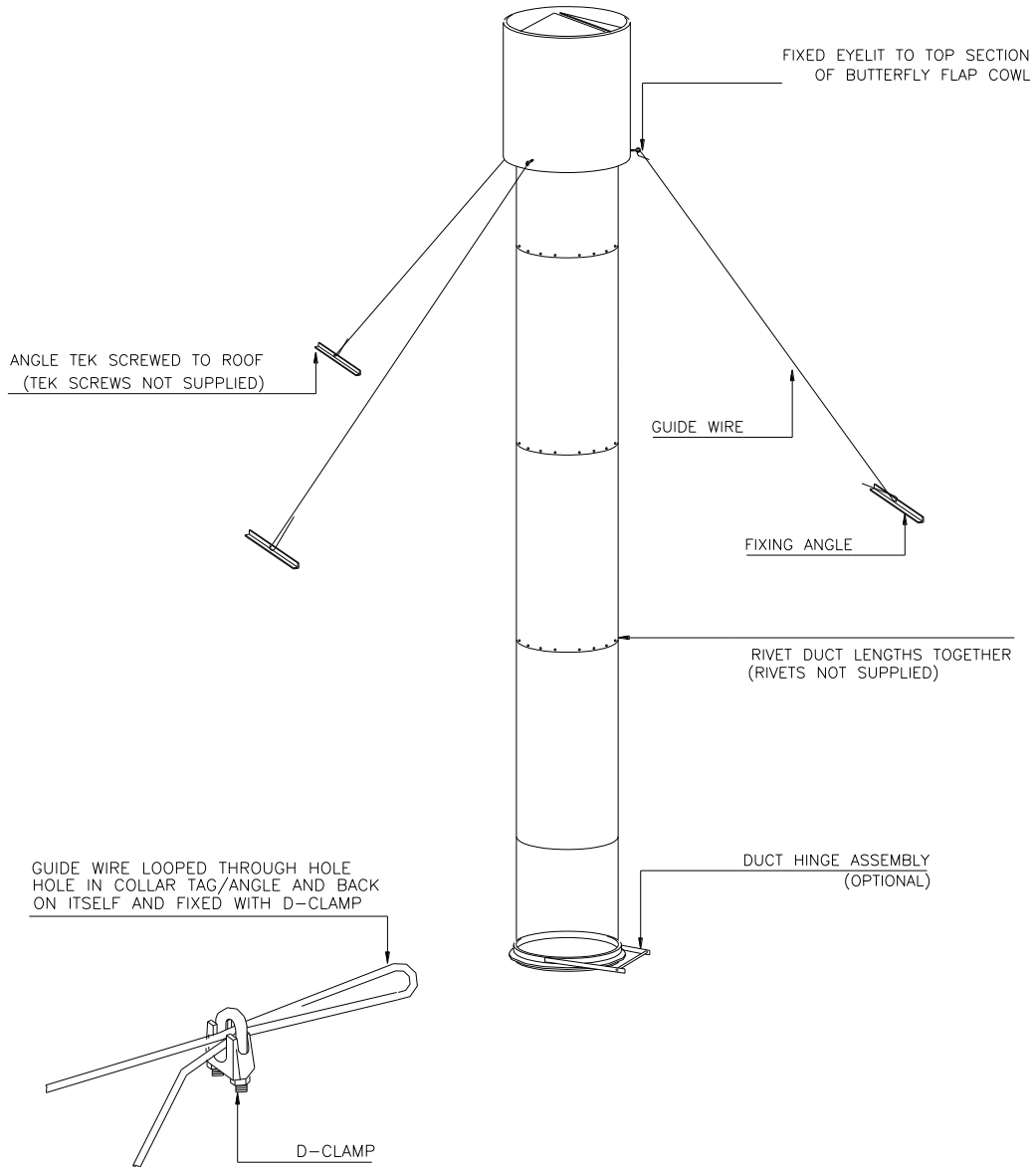
Slowly walk complete length of duct up using guide wires to hold steady, once fully erect guide wires should then be fixed to the roof fixing angles (supplied with guide wire kit) that have been secured to the roof in the appropriate position (should be fixed through both roof and purlin).

Site duct from a distance to ensure the duct is true and vertical. Tighten guide wires accordingly.

**General Assembly Duct**

We recommend duct assembly and installations be completed by a qualified roof plumber.

STANDARD EXHAUST DUCT ASSEMBLY  
DRY FILTER SPRAY BOOTH



DETAIL 1: D-CLAMP GUIDE WIRE FIXING

**Control cubical layout – Drybooth**

**Duct installation lock formed**

To reduce shipping costs ductwork can be dispatched unlocked if requested, please note the following procedure if your ductwork requires joining.

