PP Fume Hood Installation Steps Manual

I. Preliminary Preparation

- 1. Tool Preparation: Rubber mallet, screwdriver, electric drill, ruler, wrench, etc.
- 2. Material Inspection: Ensure all components are complete and undamaged (Upper back panel, lower back panel, left/right side panels, top panel, baffle clamp, baffle plate, sloped baffle plate, air collection hood, lamp tube, power cord, small sight window, glass sash, synchronous pulley, synchronous rod, counterweight for glass sash, fume hood front door panel, bumpers, etc.).

II. Installation Steps

(I) Back Panel Installation

1. Connect Back Panels:

- Align the buckle connection points of the upper and lower back panels. Tap lightly with a rubber mallet to ensure secure connection.
- Pre-drill holes at the connection point eyelets, then secure with screws to ensure the back panels are firmly connected.

2. Erect Back Panel Assembly:

- Erect the connected back panel assembly. Check its verticality and stability.
- Secure the back panel assembly to the installation location using screws around its perimeter, ensuring it is solid and does not wobble.

(II) Side Panel Installation

1. Install Left/Right Side Panels:

- Place the left and right side panels on each side of the back panel assembly, aligning the buckle positions to ensure a tight fit against the back panel.
- Secure the left and right side panels to the back panel using screws. Ensure screw tightness is moderate to avoid damaging the panels.

(III) Top Panel Installation

1. Remove Film & Position:

- o Identify the top panel, remove the protective film, and clean it.
- Place the top panel on the corresponding position at the top of the cabinet body, ensuring its edges align with the side panels and back panel.

2. Secure Top Panel:

 First, clear the holes at the connection points between the top panel and the side/back panels. Then secure with screws to ensure the top panel is firmly installed.

(IV) Baffle System Installation

1. Install Baffle Clamps:

- Install the baffle clamps at the designated eyelet positions on the back panel.
 Secure with screws to ensure baffle clamp stability.
- o Install baffle clamp screw caps to enhance their firmness.

2. Install Baffle Plate:

- Remove the outer edge screws of the baffle clamp. Insert the baffle plate into the corresponding position on the baffle clamp.
- Tighten the outer edge screws to securely fasten the baffle plate to the baffle clamp.

3. Install Sloped Baffle Plate:

- o Identify the sloped baffle plate. Align it with the corresponding buckle position below the baffle plate and snap it into place.
- Insert screws through the top eyelets and secure with screw caps to ensure the sloped baffle plate is firmly installed.

(V) Air Collection Hood Installation

1. Positioning & Securing:

- Using the center eyelet as a reference, position the air collection hood on the corresponding location at the top of the cabinet body.
- Ensure the inner edge margins of the air collection hood opening are not misaligned to guarantee a seal with the cabinet body.
- Secure the air collection hood to the top panel using screws and screw caps.
 Tighten the screws to ensure the hood is firmly installed.

(VI) Lamp Tube Installation

1. Secure Lamp Tube:

- Unpack the lamp tube. Fix the lamp tube brackets to the designated positions on the top panel.
- Then clip the lamp tube into the brackets. Use a ruler to adjust the lamp tube's center position to align with the centerline of the cabinet top.

2. Power Connection:

- Feed the lamp tube's power cord through the hole in the top panel to the top side. Ensure the power cord length is sufficient and undamaged.
- Plug the power connector into the lamp tube socket, ensuring the lamp tube can receive power normally.

(VII) Power Cord Routing

1. Move & Manage Power Cords:

- Take out the three power cords. Route them from the right side to the left side via the reinforcing ribs. Neaten the ends on both sides.
- According to the wiring instruction label, connect the power cords at the corresponding terminals. Ensure the power cord connections are correct and secure.

(VIII) Small Sight Window Installation

1. Positioning & Securing:

- Place the small sight window in the corresponding position below the top panel, ensuring accurate placement.
- First, pre-drill holes in the top panel using a drill bit. Then secure the small sight window to the top panel with screws. Ensure screw tightness is moderate to avoid damaging the small sight window.

(IX) Glass Sash Installation

1. Assemble Glass Sash:

 Clip the lamp tube brackets onto the glass sash. Then clip the pressure strips onto both sides of the glass. Note: the top ends of the handle sides should be 2mm shorter than the glass pressure strips on the sides to ensure the glass sash's aesthetics and safety.

2. Installation & Synchronous Belt Alignment:

 Install the assembled glass sash onto the cabinet body. While installing the glass sash, simultaneously align and clip in the synchronous belt to ensure its smooth operation.

(X) Synchronous Pulley & Rod Installation

1. Install Synchronous Pulleys:

- Assemble the synchronous pulleys and rods. Then punch through the pulley hole positions on the top panel and clip the pulleys into their corresponding positions.
- Secure the synchronous pulleys to the top panel using screws to ensure pulley stability.

2. Connect Synchronous Belt:

 After installing all synchronous pulleys, clip the synchronous belt onto the pulleys. Then thread the belt through the fixed position for the glass counterweight. Ensure the synchronous belt connection is correct and secure.

(XI) Glass Counterweight Installation

1. Adjust Glass Sash Level:

- Adjust the horizontal line of the glass sash via the synchronous belt to ensure smooth, unhindered lifting and lowering.
- Test the glass sash lifting/lowering function to ensure it operates flexibly, safely, and reliably.

(XII) Fume Hood Front Door Panel Installation

1. Secure Front Door Panel:

 Place the front door panel at the corresponding position on the front of the cabinet body. Align the holes and secure it to the cabinet body using screws.
 Ensure the front door panel is firmly installed with uniform gaps around the cabinet.

2. Adjust Glass Sash Spacing:

- Secure the area below the glass sash handle with bumpers, then fit over the screws to ensure the glass sash's stability.
- Adjust the distance from the top of the glass sash to the top of the cabinet to 25 cm, ensuring the installation height meets requirements.

3. Install Bumpers:

Install bumpers on the sides at the position of the glass sash handle. This
prevents the glass sash from colliding with the cabinet body during
operation, protecting its safety.

(XIII) Service Port Plug Installation

1. Install Service Port Plugs:

Install the service port plugs on both side panels at the designated positions.
 Ensure they are securely installed with uniform gaps against the cabinet body.

III. Post-Installation Inspection

1. Visual Inspection:

- Inspect the overall appearance of the fume hood. Ensure all components are securely installed with no looseness or detachment.
- Check that the cabinet surface is smooth and free from scratches, cracks, or other quality issues.

2. Functional Testing:

- Turn on the lamp tube to check if it lights normally, ensuring the lighting system works.
- Operate the glass sash to check if it lifts/lowers smoothly and if the synchronous belt is loose. Ensure the sash lifting/lowering function operates normally.
- Check the air collection hood's seal to ensure a tight connection to the cabinet body with no air leaks.
- Check if the front door panel opens/closes flexibly, ensuring convenient operation and a good seal.

3. Safety Check:

- Check that all power cord connections are secure, with no exposed wires, ensuring electrical safety.
- Check that the glass sash bumpers are correctly installed to ensure effective protection during operation.
- Check the stability of the fume hood to ensure it will not wobble or tip over during use.

IV. Precautions

- 1. During installation, strictly follow the steps in this manual. Do not arbitrarily change the installation sequence or methods.
- 2. When using tools, adhere to operational standards to avoid damaging components or causing personal injury.
- 3. Promptly clean up waste generated during installation to maintain a tidy work area.
- 4. After installation is complete, carefully inspect all parts of the fume hood to ensure they are securely installed and functioning normally before putting it into service.
- 5. When using the fume hood, strictly follow the operating procedures. Perform regular maintenance and upkeep to ensure long-term stable operation.