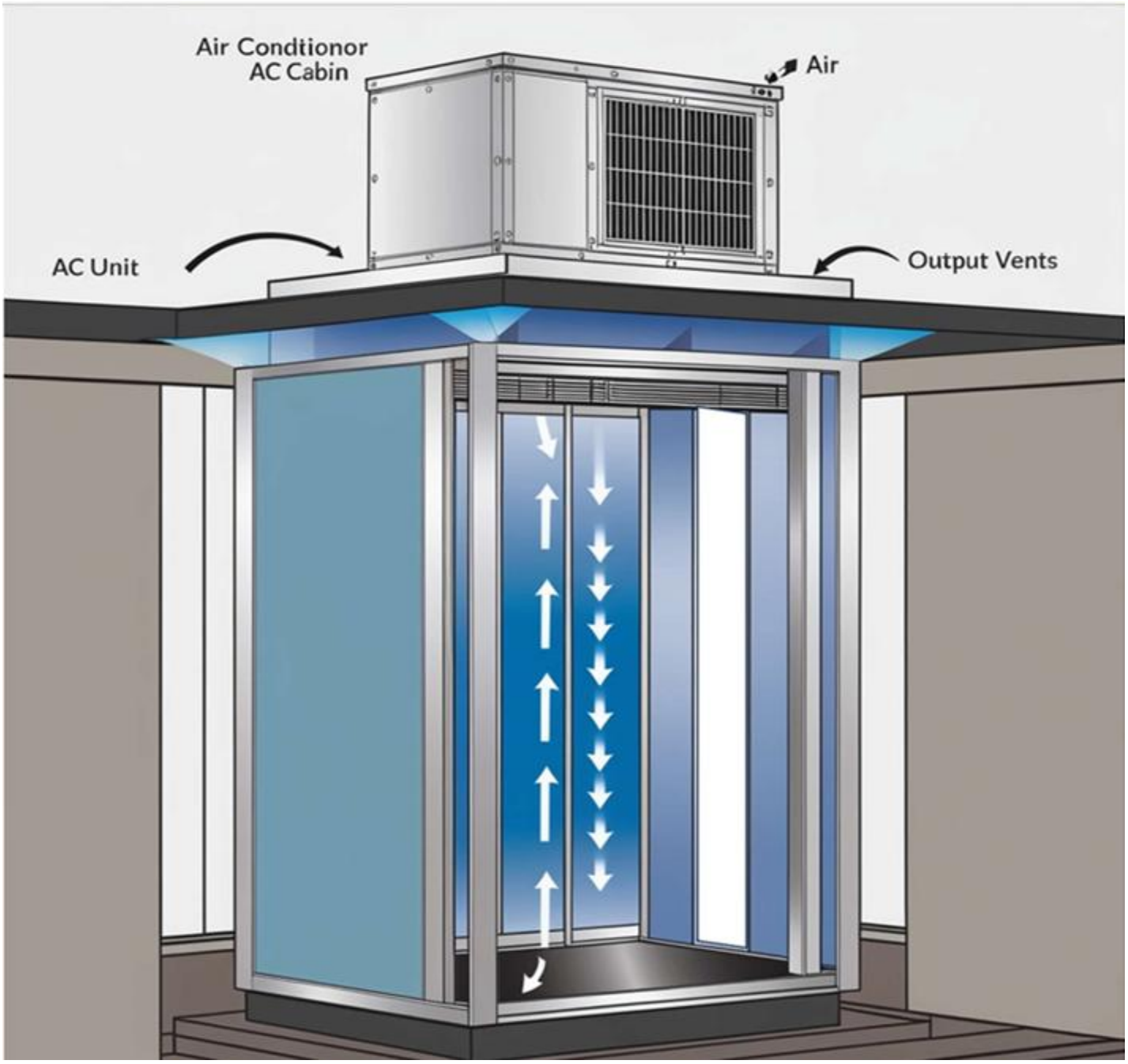
التميت ستار للمقاولات الفنية ش.ذ.م.م
Ultimate Star
Technical Contracting L.L.C

Elevator-Specific Air Conditioning Unit



About Us

Ultimate star technical contracting specializes in the design, supply, and installation of elevator-specific air conditioning systems for passenger lifts, panoramic elevators, hospital lifts, and MRL elevators.

Services Offered

- Elevator AC supply
- Elevator AC installation
- HVAC integration
- Maintenance & AMC
- Retrofit solutions

Instruction

Must read the instruction manual first

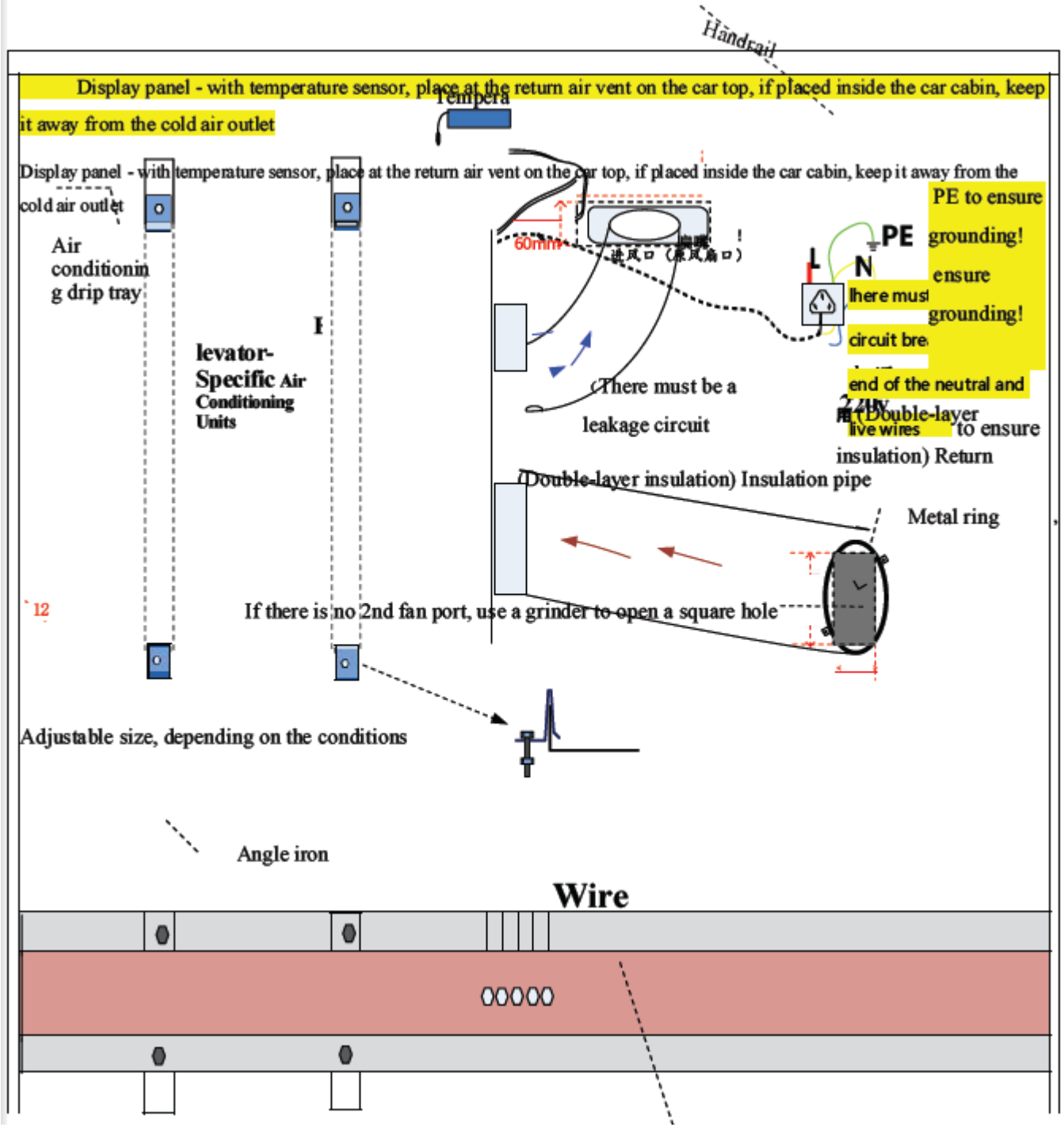
Warning: Safety Considerations:

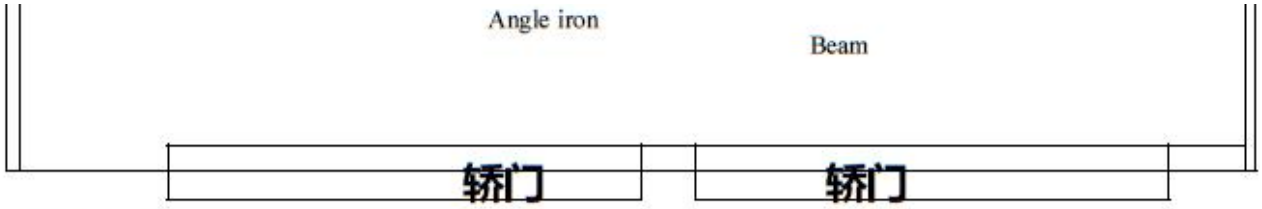
1. **When installing an air conditioning unit, you must carefully read and follow the detailed instructions in the manual.**
2. **The installation must be carried out by professional maintenance personnel with the appropriate certifications.**
3. **The accompanying power outlet must be grounded, with the ground wire connected to the car roof bottom line, and the mainframe and ground wire must be properly grounded.**
4. **Adjust the timer for automatic ON/OFF operation, and reset the timer after a power outage; or have the property management staff handle the ON/OFF operation.**
5. **When conditions allow, install a return air duct, and regularly clean the filters.**
6. **Before inserting the air outlet, the backside of the stainless-steel panel around the air outlet must be lined with thermal insulation cotton.**
7. **During the installation process, use the elevator's travel cable or lay a separate cable, and ensure there is a power cut-off switch to guarantee safety.**
8. **If a separate cable is required, ensure the cable quality and bundle it with the travel cable as per the requirements.**
9. **The elevator-specific air conditioning unit is specialized equipment, and improper installation may lead to elevator accidents. Installation and maintenance should be performed by elevator maintenance and refrigeration professionals. The company will not be responsible for any losses caused by improper user installation.**
10. **The air conditioning unit must be placed horizontally on the elevator car roof. Under no circumstances should the entire unit be tilted or inverted, as this may damage the air conditioner.**

Step 1: Installation and Fixing – Two Methods to Fix the Air Conditioner:

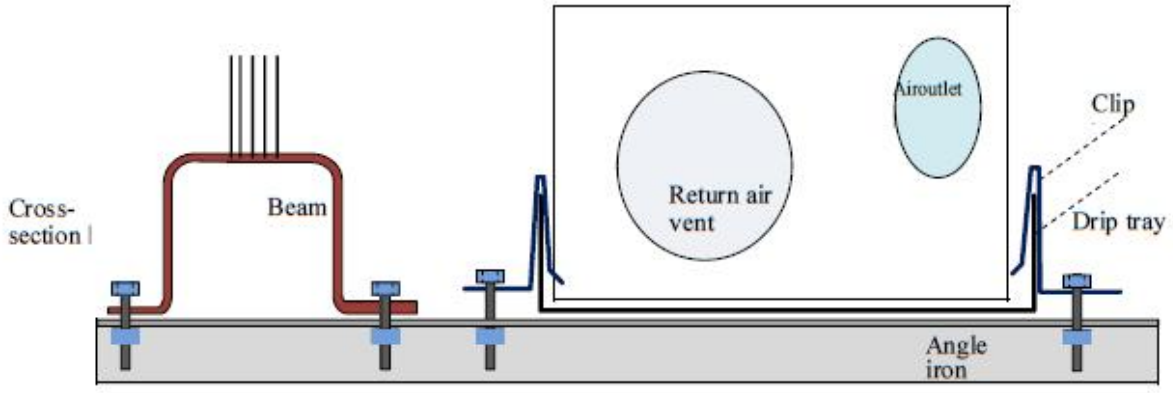
Method 1: Use angle iron brackets attached to a horizontal beam. Then place the air conditioner on top of the angle iron.

(If there is no horizontal beam, or the beam width is small and there is steel wire rope in the middle) Handrail



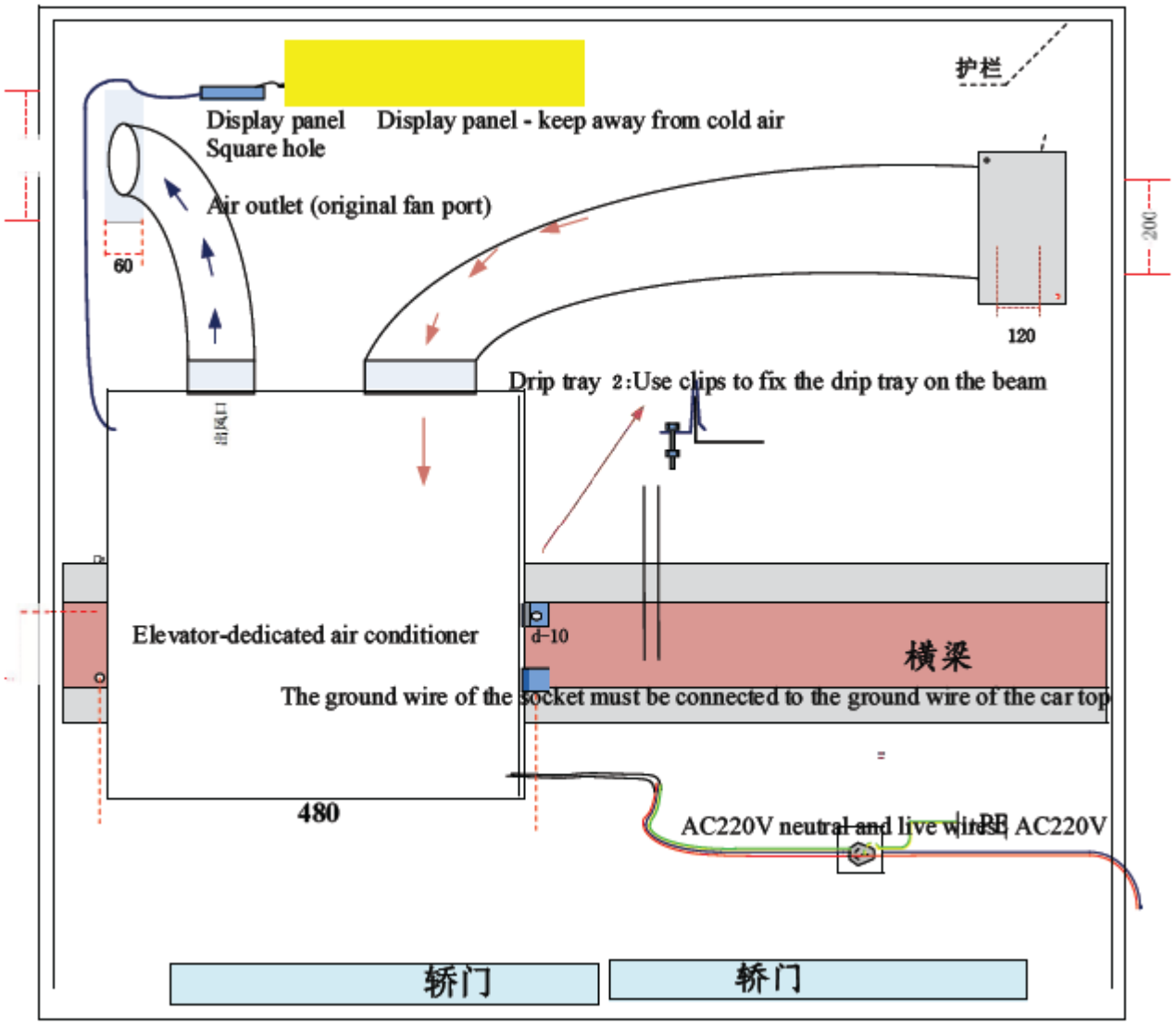


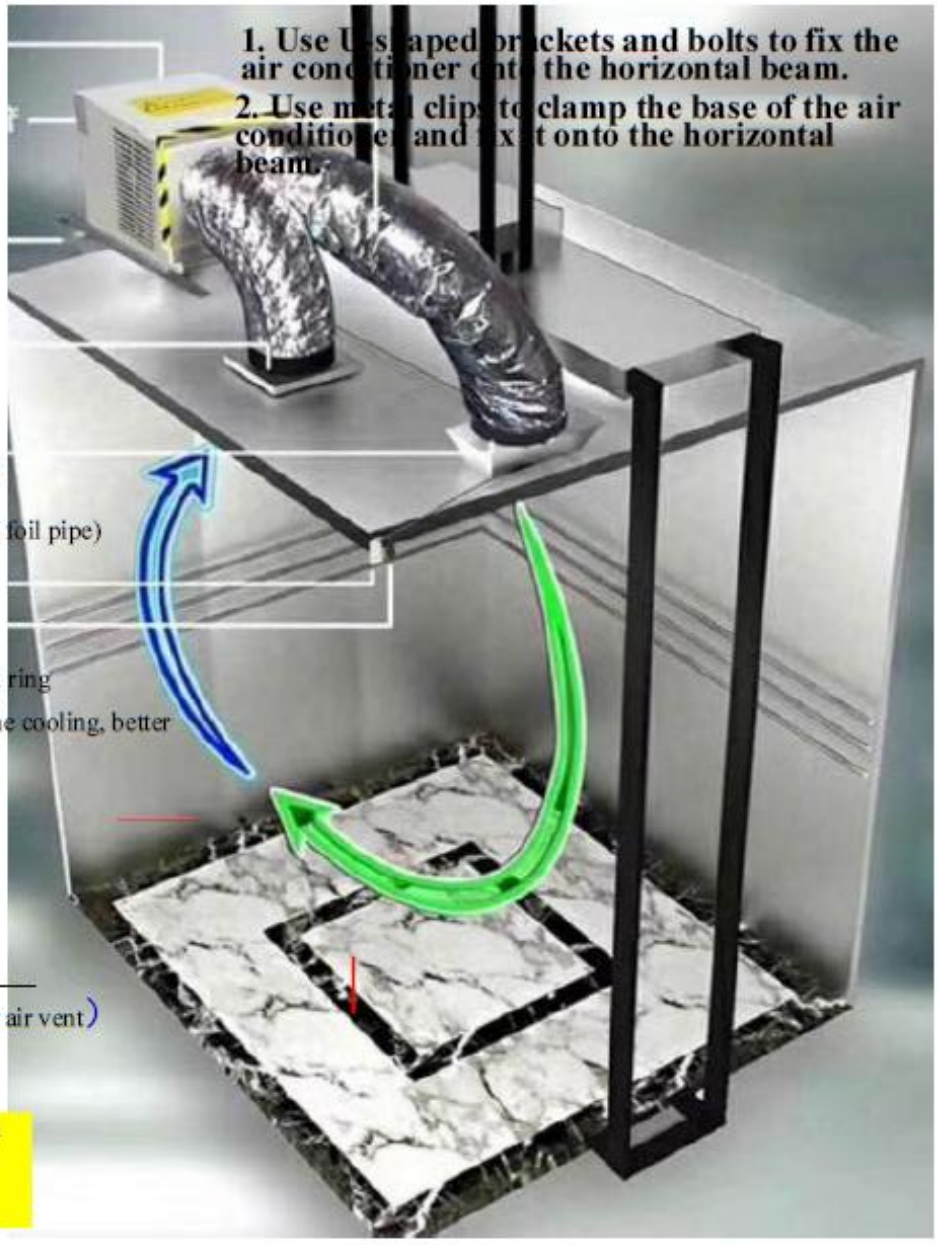
Mode 1 Reference photo:



Way 2: (If the car roof for the tin box ceiling double-layer structure, or car thick sound insulation effect is better, can be the air conditioning unit of the hard foam car tin, and then put the air conditioning unit inside the pearl cotton.

Make sure the air conditioner unit is leveled.


护栏
Display panel
Square hole
Display panel - keep away from cold air
Air outlet (original fan port)
60
200
120
Drip tray
2:Use clips to fix the drip tray on the beam
Elevator-dedicated air conditioner
d=10
横梁
The ground wire of the socket must be connected to the ground wire of the car top
480
AC220V neutral and live wires
PE
AC220V
轿门
轿门



Overall structural schematic diagram:
Insulation cotton pipe (with insulation)

Return air duct (single-layer aluminum foil pipe)

Air conditioning drip tray

Return air vent, clamp the round metal ring
(Absorb the cold air back, circulate the cooling, better effect)

Air outlet

Temperature display panel

(Inside the car cabin or at the return air vent)

Keep away from the air outlet, to avoid being blown by the cold air

01: If there are two fan outlets, one can be used as an air outlet, one as an air outlet, if not enough and conditions permit, you can

If it is not enough and the conditions permit, the return air outlet can be cut separately by the sander;

02: Make sure the air conditioner is placed horizontally.

03: The display board should be prevented from being blown directly by the cold air from the cold air outlet;

Step 2: Ductwork and Air Outlet Processing:

1. As shown in the image, first fix the air conditioner main unit onto the horizontal beam on the car ceiling. 2. Remove and take out the original fan from the fan outlet.
2. As shown in the image, first fix the air conditioner main unit onto the horizontal beam on the car ceiling. 4. Paste insulation around the fan opening wherever cold air may be blown.

Insert the flat-mouthed funnel into the original fan port, and then use insulation pipe to connect the air conditioner outlet and the flat-mouthed funnel.(Before inserting the flat-mouthed funnel, note the 3rd point - first paste the insulation cotton on the stainless steel surface where the air conditioning blows, to prevent condensation drips.) (Aim the air conditioning directly at the spacious gap and blow it into the car cabin, try to avoid blowing directly onto the stainless steel panel.)If the vent size is too small, use a cutting machine to enlarge the vent. After completion, use adhesive cotton to seal the gap between the funnel and the vent.

For the return air duct, it depends on the situation and requirements. If a return air duct is installed, it will make the air inside the car cabin circulate, enhancing the cooling effect. If it is a sightseeing elevator, since the shaft is relatively hot, a return air duct must be installed.If a return air duct needs to be installed, and if there is a second fan port, the second fan port can be used as the return air port; otherwise, a small hole of about 10 cm needs to be cut on the car top, and the return air duct needs to be covered and fixed with AB glue or screws.

4： Air conditioning air outlet duct bundling

5： Car top air outlet (flat nozzle)

Before inserting the air outlet, the areas around the ceiling air vents where cold air blows must be padded with cotton

6： Car top return air vent fixation: Fix the iron ring on the car top return air vent, with the single-layer aluminum foil duct mouth on the iron ring

Step 3: Remote Control Usage Instructions

After the air conditioner is turned off in cooling mode, when you turn it back on, you need to wait 3 minutes for the compressor to start up again.

(Style 1) Fig. 1

(Style 2) Fig. 2

(Style 3) Fig. 3

Timing function: (The air conditioner has 2 types of remote controls, please refer to the actual buttons which have the same functions as the ones shown in the images)

1. First, set the correct Beijing time on the unit:

Press the Beijing time (or clock) button, and then press the hour/minute buttons;

AM = morning; PM = afternoon.

If the remote control displays "time on", you must press the timer on or timer off button again to exit the timer function, then the remote control will display the Beijing time (as shown in Image 2).

2, press the timer on, and then press the hour/minute button; press the timer off, and then press the hour/minute button (as Figure 1 Figure 3)

If you use the timer on/off function, every time you use the remote control, you must exit the remote control from the timer on/off function and calibrate the Beijing time of the remote control, then reset the timer on/off function, and then reset the timer on/off function.

II. On/Off Button:Pressing this button can turn the unit on and off. Note that there is a 3-minute compressor protection start-up interval. After turning off, if you want to restart the compressor, you must wait for 3 minutes patiently for the compressor to start up.

III. Mode Selection Button: There are only 3 modes: cooling, heating, and ventilate. Any other modes will not respond.

Attachment 1: Instructions for the temperature display panel:

The display panel has only three modes: cooling (snowflake), fan, and heating. The compressor indicator light: when it is on, it indicates that the compressor has started.

(After the cooling is turned off, when restarting, the compressor will not start for 3 minutes.)

The timer light (Time): when it is on, it indicates that the compressor has started.

Attachment 2: Common troubleshooting methods for elevator air conditioners:

1) The air conditioner does not start:

Measure if there is 220V power supply? Is the power switch in the machine room turned off? Is the voltage higher than 240V or lower than 190V? Is the remote control set to timed start? Are the wire connections loose?

2) No cooling effect, but the fan is working, the compressor is not working.

Did you restart and the compressor is in the 3-minute waiting period? Is the set temperature close to the ambient temperature? Is it set to fan mode? Is the temperature sensor working properly?

3) Poor cooling effect, but the air conditioner is running normally.

Is the air return blocked or not smooth? Clean the dust filter at the air return; Is the air conditioner's heat dissipation good to ensure proper heat dissipation? Is the refrigerant insufficient?

4) Frequent starting and stopping of the compressor.

Is the power voltage stable? Is the air conditioner's condenser ventilation and heat dissipation good? Is the display panel temperature sensor blown by cold air?

5) The air conditioner runs normally for a period of time, then stops, and restarts with the above phenomena repeating.

Is the air conditioner's condenser ventilation and heat dissipation good?

Is the air conditioner's starting capacitor broken? Is the running current of the air conditioner's compressor too large?

6) Water droplets or dripping at the air outlet of the air conditioner

Is the air outlet insulated with thermal insulation cotton, and is the insulation in place? Is the air conditioner level?

Has the position of the air outlet or return air duct been moved? Is the air return filter too dirty?

7) Loud noise when the air conditioner is running.

Is the air conditioner fixed on the car beam? If placed on the iron sheet, there will be vibration noise; Are the fan blades of the air conditioner rubbing against something, and is the heat dissipation of the compressor good?

Performance Considerations:

- Efficient cabin cooling
- Controlled airflow distribution
- Reduced vibration
- Condensation management
- Optional sound insulation enhancement

Safety Notes:

- Follow elevator manufacturer roof load limits
- Use corrosion-resistant mounting hardware
- Ensure electrical compliance
- Keep maintenance access available
- Regularly inspect mounting stability

Maintenance Profile:

- Filter cleaning
- Drain tray inspection
- Fastener tightening
- Duct inspection
- Vibration monitoring

Critical Reminder:

Make sure the air conditioner unit is level for proper condensate drainage, balanced airflow, and reliable operation.

CONTACT US FOR A FREE QUOTE

Ultimatestar is a trusted provider of Elevator-Specific Air Conditioning Unit installation solutions in Dubai, delivering premium cooling systems designed to enhance passenger comfort, equipment performance, and cabin efficiency. We specialize in customized elevator air conditioning installations, high-performance cabin cooling units, and durable climate-control systems tailored for all types of elevators and escalators.

Our experienced technical team ensures precision installation, modern engineering, and seamless integration for every project, providing reliable cooling performance with long-lasting quality. Whether for passenger lifts, freight elevators, hospital lifts, or luxury elevators, we offer innovative air conditioning solutions that combine advanced technology with professional craftsmanship.

Contact our team today for a free consultation and cost estimate, and discover how our Elevator-Specific Air Conditioning Unit installation services can transform your elevator interiors with efficient, modern, and dependable cooling solutions.

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