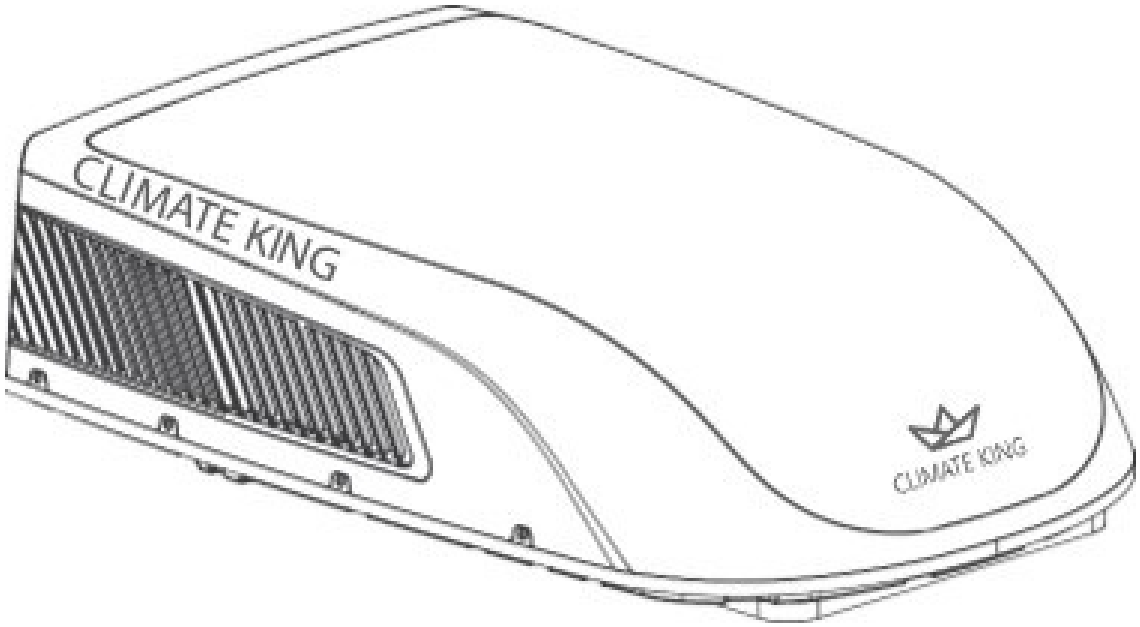
CLIMATE KING

USER MANUAL

Climate King Airdeck Pro
Flat Roof Airconditioner



Climate King BV

Oldenzaal, Nederland

www.climateking.nl

Know how it is installed

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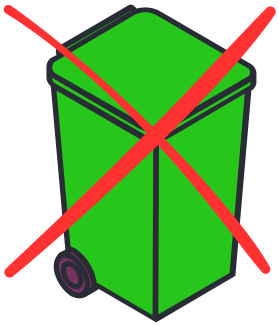
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- When refrigerant leaks or requires discharge during installation, maintenance, or disassembly, it should be handled by certified professionals or otherwise in compliance with local laws and regulations.

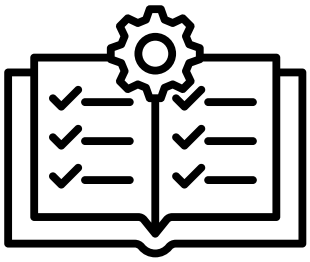


This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.
R32: 675

Appliance filled with flammable gas R32.

Before installing and using the appliance, read the owner's manual first.

Before install the appliance, read the installation manual first.



Before repairing the appliance, read the service manual first.

THE REFRIGERANT

- To realize the function of the unit, a special refrigerant circulates in the system. The used refrigerant is the fluoride R32, which is specially cleaned. The refrigerant is flammable and inodorous. Furthermore, it can lead to explosion under certain conditions. But the flammability of the refrigerant is very low. It can be ignited only by fire.
- Compared to common refrigerants, R32 is a nonpolluting refrigerant with no harm to the ozonosphere. The influence upon the greenhouse effect is also lower. R32 has got very good thermodynamic features which lead to a really high energy efficiency. The units therefore need a less filling.

WARNING :

- Appliance filled with flammable gas R32.
- Appliance shall be installed, operated and stored in a room with a floor area larger than 4 m2.
- The appliance shall be stored in a room without continuously operating ignition sources . (For example: open flames, an operating gas appliance or an operating electric heater.) The appliance shall be stored in a well ventilated area where the room size corresponds to the room area as specified for operation.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Ducts connected to an appliance shall not contain an ignition source.
- Keep any required ventilation openings clear of obstruction. Do not pierce or burn.
- Be aware that refrigerants may not contain an odour.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- Servicing shall be performed only as recommended by the manufacturer. Should repair be necessary, contact your nearest authorized Service Centre. Any repairs carried out by unqualified personnel may be dangerous.
- Compliance with national gas regulations shall be observed. Read specialist's manual.

INSTALLATION PRECAUTIONS

WARNING :

- Observe all governing codesand ordinances.
- Do not use damaged or nonstandard powercord.
- Be cautious during installation and maintenance. Prohibit incorrect operation to prevent electric shock, casualty and other accidents.
- Before turning on the unit, please open the horizontal louver of indoor unit by hand. Otherwise, the cool air can't be blownout and there will be condensate water on the horizontal louver.

Working temperature range:

- Suggested working temperature range: -5 ~ 46℃. (heating: -5 ~ 24℃ /Cooling: +18 ~ 46℃). Outdoor unit may stop operation, due to various kinds of protection within working temperature range.

Selection of Installation Location:

Basic requirement :

Installing the unit in the following places may cause malfunction. If it is unavoidable, please consult the local dealer:
1. The place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air.
2. The place with high-frequency devices (such as welding machine, medical equipment).
3. The place near coast area.
4. The place with oil or fumes in the air.
5. The place with sulfureted gas.
6. Other places with special circumstances.

Requirement of air conditioner:

1. Air inlet should be far away from obstacles and do not put any objects near air outlet. Otherwise, it will affect the radiation of heat-removal pipe.
2. Select a location wherethe noise and outflow air emitted by the outdoor unit will not affect neighborhood.
3. Please try your best to keep far away from fluorescent lamp.
4. The appliance shall not be installed in the laundry.

Requirements For Electric Connection :

Safety Precautions :

1. Must follow the electric safety regulations when installing the unit.
2. According to local safety regulations, use qualify power supply circuit.
3. For appliances with type Y attachment, the instructions shall contain the substance of the following. If the supply cord is damaged, it must be replaced by avoid a hazard.

4. Properly connect the live wire, neutral wire and grounding wire of power socket.
5. Be sure to cut off the power supply before proceeding any work related to electricity and safety.
6. Do not put through the power before installation.
7. The air conditioner is a Class I electrical appliance, It must be properly grounded with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
8. The grounding wire or green wire in air conditioner is grounding wire, which can't be used for other purposes.
9. The grounding resistance should comply with national electric safety regulations.
10. The appliance shall be installed in accordance with national wiring regulations
11. Specification of fuse on the main board: T15AH 250V; the maximum current passes through the fuse can't be more than 15A.

GETTING STARTED WITH YOUR NEW AIR CONDITIONING UNIT

Thank you for choosing Climate King Airdeck Pro

- This manual will supply you with all the information for installation, operation and maintenance. Take a few minutes to discover how to get the most out of your air conditioner. and economic operation from your new air conditioner.
- Please keep this manualwell for future reference.
- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- Including an air switch with suitable capacity, Air switch capacity: 10A.
- Air switch should be included magnet buckle and heating buckle function, it can protect the circuit-short and overload.

ELECTRICAL DATA

1. All wiring must be compliedwith local and national electrical codes. All wiring must be installed by qualified electricians. If you have any questionsabout the following instructions, contact a qualified electrician.

2. Check the available power supply and resolve any wiring problems BEFORE installing and operating this unit.

3. This air conditioner is designed to operate from a 220-240V AC, 50Hz, 1 Phase power supply.

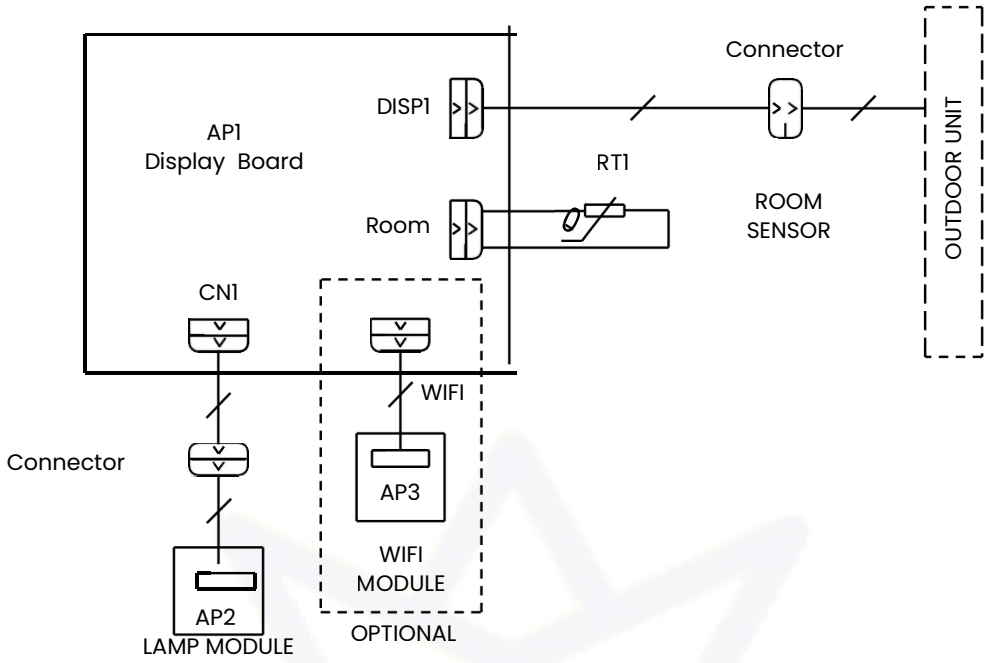
4. The wiring diagrams are located on the cover of the control box. The assembly unit wire diagrams are located on the ceiling panel.

5. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

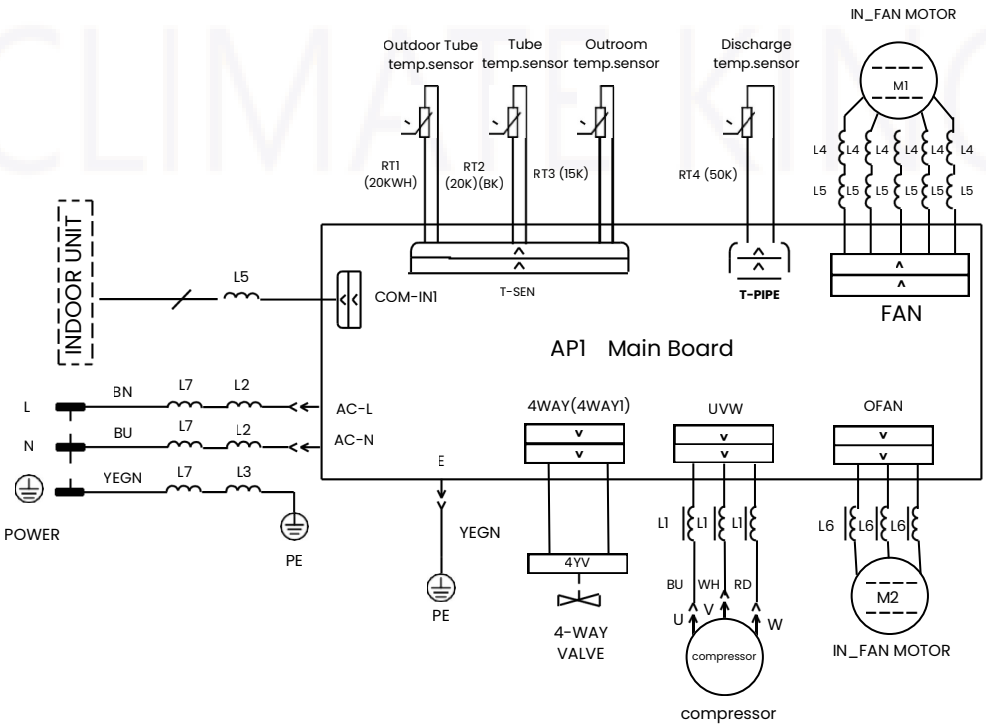
6. The Electric schematic diagram are subject to change without notice. Please refer to which one on the unit.

ELECTRIC DIAGRAM

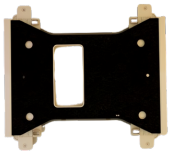
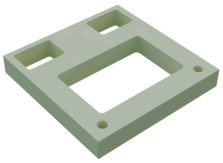
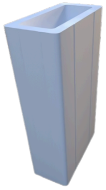
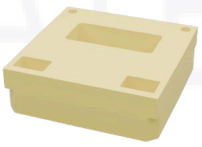
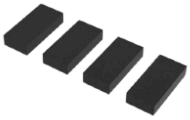
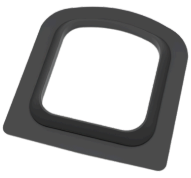
Inside Unit



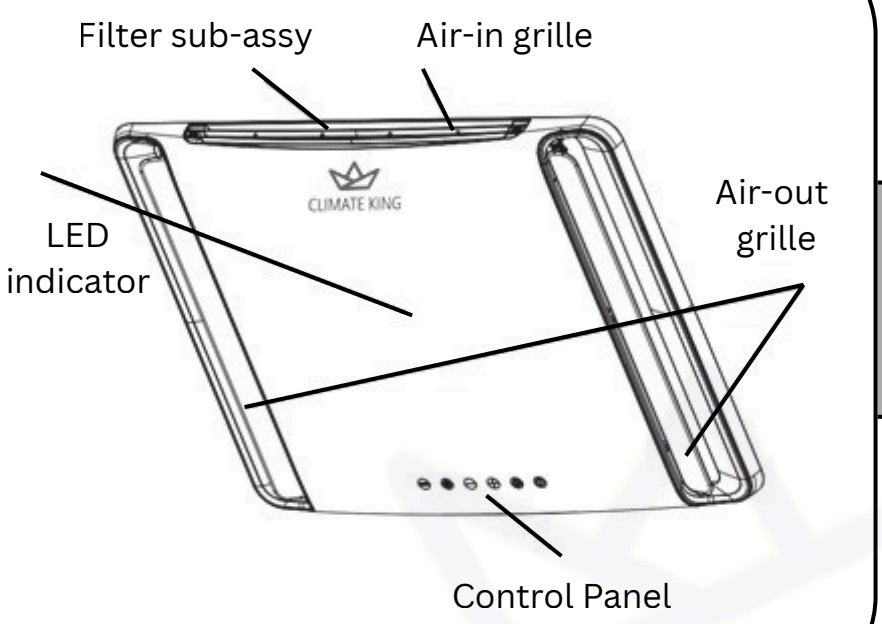
Outdoor Unit



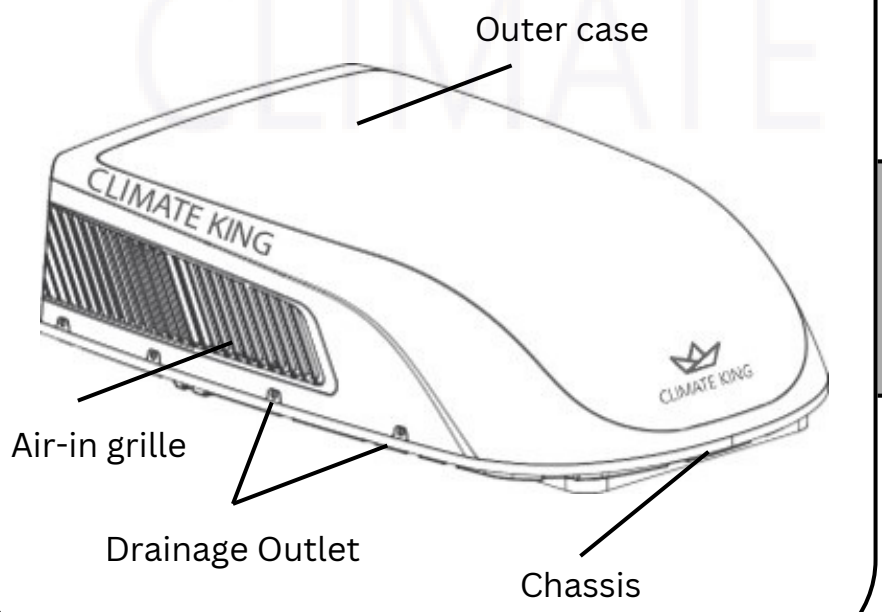
PACKING LIST

INSIDE PARTS		
 INSIDE PANEL	 AIR INTAKE PANEL	 BRACKETS
 CABLE TIES	 PIR PLATE 6 CM (OPTIONAL)	 THREADED ROD WITH DAMPERS
 AIR DUCT	 CABLE WRAP	
OUTSIDE PARTS		
 OUTSIDE UNIT	 PIR PLATE 13 CM	 PLASTIC PLATE
 ABS FLANGE	 X MOUNT BASE	 REMOTE CONTROL
 RUBBER PADS	 STICKY FOAMS	 EPDM COVER (OPTIONAL)

PARTS NAME



Indoor Unit



Outdoor Unit

Note : Actual product may be different from above graphics, please refer to actual products.

OPERATION OF WIRELESS REMOTE CONTROLLER

Buttons on remote controller

Introduction for icons on display screen

FAN AUTO	Set fan speed
	Send signal
Operation mode	Auto mode
Operation mode	Cool mode
Operation mode	Dry mode
Operation mode	Fan mode
Operation mode	Heat mode
	Sleep mode
	Light On/Off
	X-FAN function
	Indoor ambient temp.
	Clock
	Set temperature
WIFI	WiFi function
88:88	Set time
ONOFF	TIMER ON / TIMER OFF
	Up & down swing
	Child lock

ESSENTIAL GUIDE TO REMOTE CONTROL BUTTONS

NOTE :

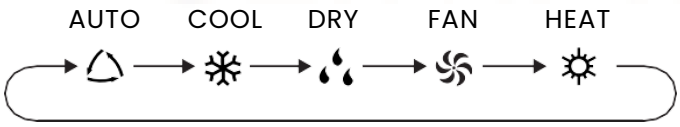
- This is a general use remote controller . It could be used for the air conditioner with multifunction. For the functions which the model doesn't have, if press the corresponding button on the remote controller, the unit will keep the original running status.
- After putting through the power, the air conditioner will give out a sound. Power indicator "⏻" is ON. After that, you can operate the air conditioner by using remote controller.
- Under on status, pressing the button on the remote controller, the signal icon "📶" on the display of remote controller will blink once and the air conditioner will give out a sound, which means the signal has been sent to the air conditioner.

POWER BUTTON

- Press this button to turn on the unit. Press this button again to turn off the unit.

MODE BUTTON

- Press this button to select your required operation mode.



- When selecting auto mode, air conditioner will operate automatically according to ambient temperature. Set temperature can't be adjusted and will not be displayed as well. Press "FAN" button can adjust fan speed.
- When selecting cool mode, air conditioner will operate under cool mode. Press "+" or "-" button to adjust set temperature. Press "FAN" button to adjust fan speed.
- When selecting dry mode, the air conditioner operates at low speed under dry mode. Under dry mode, fan speed can't be adjusted.
- When selecting fan mode, the air conditioner will only blow fan, no cooling and no heating. Press "FAN" button to adjust fan speed.
- When selecting heat mode, the air conditioner operates under heat mode. Press "+" or "-" button to adjust set temperature. Press "FAN" button to adjust fan speed.

NOTE :

- For preventing cold air, after starting up heat mode, indoor unit will delay 1 ~ 5 minutes to blow air (Actual delay time depends on indoor ambient temperature).
- Set temperature range from remote controller: 16 ~ 30℃ (61 - 86℉).
- This mode indicator is not availablefor some models.

FAN BUTTON

- This button is used for setting Fan Speed in the sequence that goes from AUTO, ▮ , ▮▮ , ▮▮▮ to ▮▮▮▮ , then back to Auto.

Note :

- Fan speed " ▮▮▮▮ is unavailable for some models, Fan speed " ▮▮▮ " is same as " ▮▮▮▮ " for some models.
- Under AUTO speed, air conditioner will select proper fan speed automatically according to factory default setting.
- AUTO speed is only available for some models.
- It's low fan speed under dry mode.
- X-FAN function: Holding fan speed button for 2s in cool or dry mode, the icon " ✾ " is displayed and the indoor fan will continue operation for a few minutes in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted. X-FAN is not available in auto, fan or heat mode.
- This function indicates that moisture on evaporator of indoor unit will be blowed after the unit is stopped to avoid mould.

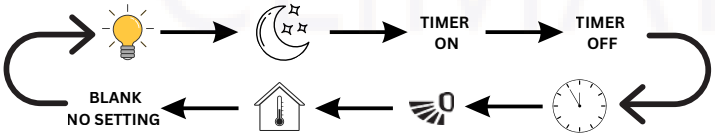
- Having set X-FAN function on: After turning off the unit by pressing " ⏻ " button, indoor fan will continue running for a few minutes at low speed. In this period, hold fan speed button for 2s to stop indoor fan directly. Having set X-FAN function off: After turning off the unit by pressing "⏻" button, the complete unit will be off directly.
- X-FAN functionis only available for some models.

+ / - BUTTON

- Press "+" or "-" button once increase or decrease set temperature 1℃ (℉). Holding"+" or "-" button, 2s later, set temperature on remote controller will change quickly. On releasing button after setting is finished, temperature indicator on indoor unit will change accordingly. (Temperature can' t be adjust- ed under auto mode)
- When setting TIMER ON, TIMER OFF or CLOCK, press "+" or "-" button to adjust time. (Refer to CLOCK, TIMER ON, TIMER OFF functions).

MENU BUTTON

- Press this button to select submenu function and then press "SET" button to set the function status of submenu. The submenu can be selected circularly as follows:



NOTE :

- Some menu's function may be unavailable under different models.

LIGHT FUNCTION :

- When selecting light function, light icon " " flashes for 5s; press "SET" button within 5s to turn off display light on indoor unit and " " icon on remote controller disappears. Press "SET" button again within 5s to turn on display light and " " icon is displayed.

SLEEP FUNCTION :

- When selecting sleep function, sleep icon " " flashes for 5s; press " SET " button within 5s to turn on sleep function ad " " icon is displayed on remote controller. Press " SET " button again within 5s to turn off sleep function and " " icon disappears.

UP & DOWN SWING FUNCTION :

- Not available for this unit.

AMBIENT TEMPERATURE DISPLAY FUNCTION :

- When selecting ambient temperature display function, icon " " flashes for 5s; press "SET" button within 5s to select ambient temperature display on or off. After setting , function on, the " " icon will be displayed on remote controller and you can see indoor ambient temperature on indoor unit's displayer for a few seconds.

TIMER ON FUNCTION :

- TIMER ON function can set the time for timer on. Under TIMER ON functionstatus, " " icon disappears and the word "ON" on remote controller blinks. Press "+" or "-" button to adjust TIMER ON setting. After each pressing "+" or "-" button , Hold "+" or "-" button, 2s later, the time will change quickly until reaching your required time. Press "SET" button to confirm it within 5S. The word "ON" will stop blinking. Cancel TIMER ON: Press "MENU" button to TIMER ON function and the characters "ON" flashes on the remote controller; press "SET" button until the characters "ON" disappears

TIMER OFF FUNCTION :

- TIMER OFF function can set the time for timer off. Under TIMER OFF function status," " icon disappears and the word "OFF" on remote controller blinks. Press "+" or "-" button to adjust TIMER OFF setting. After each pressing "+" or "-" button TIMER OFF setting will increase or decrease 1min. Hold "+" or "-" button, 2s later, the time will change quickly until reaching your required time, press "SET" button to confirm it within 5S. The word "OFF" will stop blinking.
- Cancel TIMER OFF: Press "MENU" button to TIMER OFF function and the characters "OFF" flashes on the remote controller; press "SET" button until the characters "OFF" disappears.

CLOCK FUNCTION :

- The CLOCK function can set and display clock time. Under CLOCK function status, "" icon on remote controller will blink. Press "+" or "-" button within 5s to set clock time. Each pressing of "+" or "-" button, clock time will increase or decrease 1 min. If hold "+" or "-" button , 2s later, time will change quickly. Release this button when reaching your required time, press "SET" button to confirm it within 5S. The "" icon will stop blinking.

LED BUTTON :

- Press this button can turn on or turn off the LED light on the panel.

TURBO BUTTON :

- Under COOL or HEAT mode, press this button to turn to quick COOL or quick HEAT mode.' ' icon is displayed on remote controller. If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temperature approaches the preset temperature as soon as possible.

Note :

- Fan speed " " is unavailable for some models, Fan speed " " is same as " " for some models.

Function introduction for combination buttons

CHILD LOCK FUNCTION :

- Press "+" and "-" simultaneously to turn on or turn off child lock function. When child lock function is on, " " icon is displayed on remote controller. If you operate the remote controller, the " " icon will blink three times without sending signal to the unit.

TEMPERATURE DISPLAY SWITCHOVER FUNCTION :

- Under OFF status, press "-" and "MODE" buttons simultaneously to switch temperature display between ℃ and ℉.

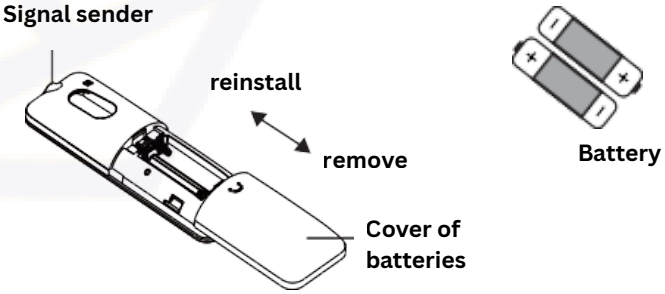
WIFI FUNCTION :

- Press "MODE" and "TURBO" button simultaneously to turn on or turn off WiFi function. When WiFi function is turned on, the "WiFi" icon will be displayed on remote controller;

Long press "MODE" and "TURBO" buttons simultaneously for 10s, remote controller will send WiFi reset code and then the WiFi function will be turned on. WiFi function is defaulted ON after energization of the remote controller.

Replacement of batteries in remote controller

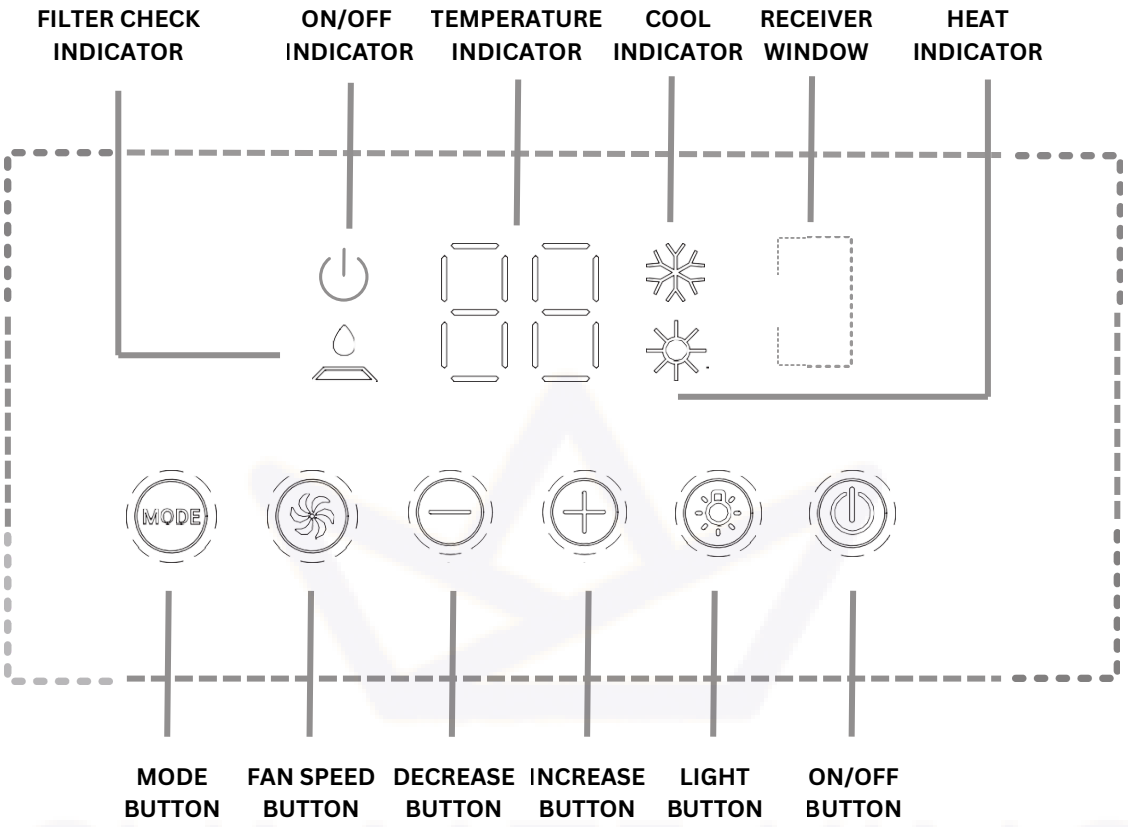
1. Press the back side of remote controller marked with " ", as shown in the fig, and then push out the cover of battery box along the arrow direction.
2. Replace two 7# (AAA 1.5V) dry batteries, and make sure the position of "+" polar and "-" polar are correct.
3. Reinstall the cover of battery box.



NOTICE :

- During operation, point the remote control signal sender at the receiving window on indoor unit.
- The distance between signal sender and receiving window should be no more than 8m, and there should be no obstacles between them.
- Signal may be interfered easily in the room where there is fluorescent lamp or wireless telephone; remote controller should be close to indoor unit during operation.
- Replace new batteries of the same model when replacement is required.
- When you don't use remote controller for a long time, please take out the batteries.
- If the display on remote controller is fuzzy or there's no display, please replace batteries.

CONTROL PANEL



ON/OFF button :
Operation starts when pressing this button, and stops when pressing this button again.

LIGHT button :
Press this button to turn on or turn off display light on indoor unit.

(+/-) button :
Press the + button to increase the set(operating) temperature of the unit, and press the - button to decrease the set(operating) temperature of the unit. the temperature setting range is from 16~30°C (61~86°F).

FAN SPEED button :
Select the fan speed LOW, MED, HIGH and TURBO (This function is applicable to partial of models) in sequence.

MODE button :
Select the operation mode, COOL, "FAN.

FILTER CHECK indicator :
This feature is a reminder of cleaning the air filter(normal maintenance) for more efficient operation. The light will turn on automatically after the fan works more than 250 hours If the light is on, turn off and power off the unit, take the air filter out and clean it, then reinstall the air filter, power on and turn on the unit, the light will still be on, press + button for 5s, the light will turn off.

INSTALLATION INSTRUCTIONS (OUTSIDE)

NOTE :

Outside unit must be placed in a certain Direction SO the Inside panel is not blowing on Window.
Blue Arrows represent air coming out & Red Arrows represent air going in.

STEP 1 - Cut Roof Opening

Cut a hole in the roof measuring 40 x 40 cm :
This is the foundational step, creating the precise opening in your roof structure. The exact dimensions of 40 x 40 cm are critical; they ensure a snug and proper fit for the air duct, cables, and other components that will pass from the outdoor unit to the indoor space. A clean, accurately sized cut is vital for effective sealing later and to maintain structural integrity around the penetration.

STEP 2 - Apply Flange

By applying the adhesive and securely pressing the flange into place, you establish the primary watertight barrier, preventing any water ingress through the roof penetration. This step requires careful attention to achieve a strong, continuous bond.

Step 3 - Cover Flange with Roofing Material

Cover the flange with Adhesive :
This step integrates the newly installed flange seamlessly into your existing roof membrane, or a new adhesive layer if the roof is being completely redone. You will apply additional roofing material (which is not part of the air conditioner package) over the flange, carefully adhering it to both the flange and the surrounding roof surface. This creates a continuous, uninterrupted waterproof layer, ensuring robust protection against rain, snow, and moisture, making the entire penetration watertight.

STEP 4 - Insert PIR Foam

Insert the PIR-foam piece into the flange :
Once the flange is securely in place and waterproofed, this foam insert is placed within the flange's opening. Its primary purpose is to eliminate "thermal bridging" – pathways where heat or cold can easily transfer between the inside and outside. By insulating this opening, it significantly contributes to the overall energy efficiency of your air conditioning system, preventing unwanted heat gain in summer or heat loss in winter.

Step 5 - Mount Plastic Plate

Stick the plastic mounting plate onto the flange using EPDM adhesive (apply adhesive to the flange, not on the plate) :
This durable plastic plate serves as the final, perfectly flat, and stable base directly beneath the outdoor unit. It's crucial for the long-term stability and level positioning of the heavy outdoor unit. The instruction to apply adhesive to the flange (which is already covered in EPDM) rather than the plastic plate ensures optimal adhesion to the EPDM surface, creating a reliable and durable bond that can withstand outdoor elements and the unit's weight.

STEP 6 - Attach Foam Strips to Outdoor Unit

Attach the square foam strip under the outdoor unit :
This square foam strip is designed to be adhered directly to the underside perimeter of the outdoor air conditioning unit. It serves a dual purpose: first, it creates an additional seal between the bottom of the unit and the plastic mounting plate, preventing any air or moisture from entering the roof penetration. Second, and equally important, it acts as a primary vibration dampener, absorbing much of the operational vibrations from the unit and reducing noise transmission to the building structure.

Step 7 - Place Rubber Pads

Attach the small square foam pads under the outdoor unit :
These smaller foam pads are strategically placed under specific contact points of the outdoor unit, typically near its feet or structural support areas. They provide localized cushioning and further enhance vibration isolation. Their inclusion ensures that any remaining micro-vibrations are absorbed, contributing to an even quieter operation and protecting the underlying roof surface from potential wear or damage caused by direct contact or movement.

STEP 8 - Place the rubber pads & Support Beam

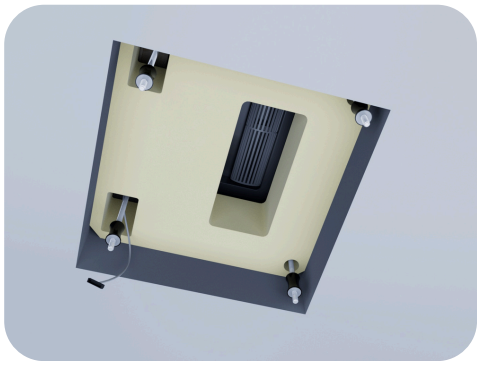
Place the rubber pads with the support beam on the roof : This assembly is critical for proper weight distribution and stability of the outdoor unit.This setup evenly distributes the weight of the outdoor unit over a larger area, preventing concentrated pressure points that could stress or damage the roof membrane. The rubber also offers an additional layer of anti-vibration and anti-slip properties, securing the unit's position.

Step 9 - Position Outdoor Unit & Route Cables

This is the final step to be performed on the roof. You'll position the outdoor unit precisely onto the plastic mounting plate; the outdoor unit should slide exactly into place. Ensure that square foam pads are placed under the outdoor unit, resting on the plastic mounting beam. As you position the outdoor unit, feed the power cable and communication cable indoors through the small square cut-outs in the PIR plate.

INSTALLATION INSTRUCTIONS (INSIDE)

Step 1 - Install Threaded Rods

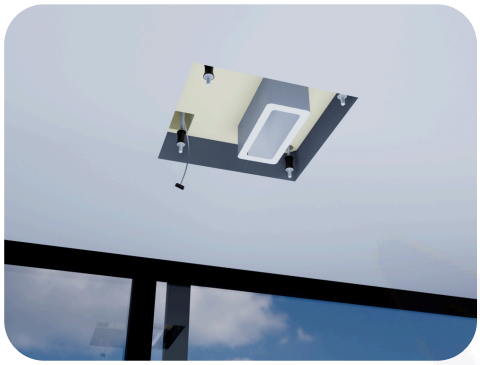


Insert the four threaded rods with vibration dampers through the holes and screw them into the outdoor unit. Do not screw them in more than 7 cm. If they're too long, shorten them : These threaded rods act as the main structural support, extending downwards from the outdoor unit (which is on the roof) into the building. The vibration dampers are crucial components that absorb vibrations generated by the outdoor unit, preventing them from transferring through the rods and creating noise inside. The 7 cm depth limit ensures you don't over-insert them, which could potentially interfere with internal components or cause structural issues. Shortening them if necessary ensures a flush and proper fit with the indoor components.

STEP 2 - Attach Air Duct & PIR Plate

Attach an expansion foam pad to the air duct and insert the duct through the PIR plate. Ensure it connects properly to the air outlet of the outdoor unit (look through the duct for alignment) :
The air duct is the conduit for conditioned air. The expansion foam pad ensures an airtight seal between the duct and the PIR insulation plate, preventing air leaks and maintaining thermal efficiency. When inserting the duct, it's vital to visually confirm it aligns perfectly with the outdoor unit's air outlet. This precise connection is critical for efficient airflow and to prevent air loss or condensation issues.

Step 3 - Adjust Duct Length & Add Foam



Shorten the duct so that it’s level with the ceiling finish, and attach an expansion foam pad to the bottom of the duct as well :
The air duct needs to be trimmed to match the exact height of your finished ceiling. This ensures a neat, flush appearance once the indoor unit is installed. Attaching an expansion foam pad to the bottom of the shortened duct creates another critical seal, this time between the duct and the indoor unit's air inlet, further preventing air leaks and ensuring proper insulation at the point of connection.

STEP 4 - Mount Metal Brackets

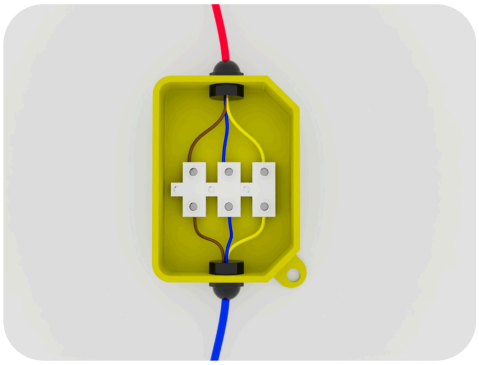
Mount the two metal brackets onto the threaded rods and tighten them with nuts, tighten until secure, but not too tight.:
These metal brackets are the primary mounting points for the indoor unit and its air inlet plate. They are secured to the threaded rods that extend from the outdoor unit. Tightening them with nuts creates a stable and robust foundation. The instruction to tighten "until secure, but not too tight" is important; over-tightening can strip threads, deform components, or transfer excessive vibrations, while under-tightening can lead to instability.

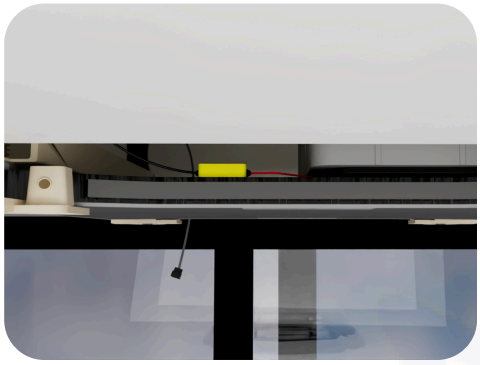
Step 5 -Secure Air Inlet Plate

Mount the air inlet plate and screw it onto the brackets. Ensure it fits seamlessly to the air duct. If the duct is too short, add foam spacers to extend it, placing an expansion foam pad between each spacer :
The air inlet plate is the direct interface between the air duct and the indoor unit. It's screwed onto the previously mounted metal brackets. A seamless fit to the air duct is crucial for efficient airflow and to prevent air leaks around the connection. If there's a gap because the duct was cut too short, foam spacers with expansion foam pads are used to bridge this gap, maintaining both the airtight seal and insulation.

STEP 6 - Connecting the power cable

Connect both wires inside a box, Connecting both cables inside the yellow box is a crucial step in setting up your system. Take your time to ensure each cable is properly seated and secured.





Step 7 -Placement of the Electrical Connection Box

After all electrical connections have been securely made, carefully place the electrical connection box directly on top of the air inlet panel. This action ensures that all wiring is neatly enclosed and protected, contributing to both the safety and the finished aesthetic of the air conditioning unit. It is a crucial step to manage and conceal the electrical components Even when the unit needs to be replaced, the electrical connection remains easily accessible.

STEP 8 - Placement Of Indoor Panel

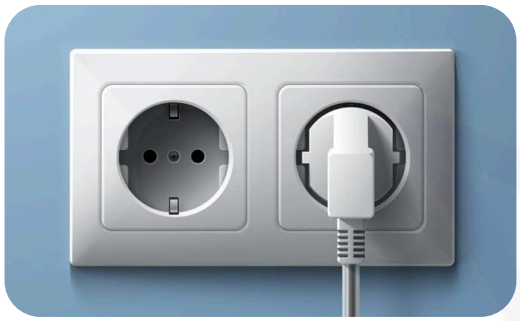
Carefully position the panel into the designated ceiling opening. A good connection on all sides is important for a neat finish and reliable operation.

Step 9 -Fasten Indoor Panel

Secure the indoor panel with four screws (insert them through the filter openings) :
Once positioned and the cable connected, the indoor panel needs to be firmly secured to the air inlet plate and brackets. The screws are strategically inserted through the filter openings, which provides easy access for installation and allows them to be hidden once the filters are in place, maintaining the unit's aesthetic.

STEP 10 - Insert Filters

Place the filters into the indoor panel, then click the cover over them by pressing once on both sides. The air filters are essential for maintaining indoor air quality and protecting the air conditioner's internal components from dirt and dust. These filters should be checked for contamination every month to ensure good airflow is maintained.



STEP 11 - Apply power to the air conditioning supply line.

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This is the final step to commission the air conditioning unit. After you've carefully checked that all installation steps have been correctly performed, all components are securely mounted, and all connections are stable, you can supply power to the air conditioner.

Step 12 - Operate Unit

Insert the batteries into the remote control and operate the unit. It can also be controlled via the app and the touch buttons on the panel :This is the final step to enable user control of the air conditioning unit. Installing batteries in the remote allows for wireless operation. The mention of app control and touch buttons highlights the multiple convenient ways the user can interact with their new system, offering flexibility in how they manage their indoor climate.

TROUBLESHOOTING GUIDE

- If you have problems with your airdeck pro air conditioner, check this guide before contacting your service representative.

TROUBLE	POSSIBLE CAUSE	SOLUTION
The unit can not start	The unit may not be connected to the power supply correctly.	Check the power supply of the vehicle and make sure it is provided correctly.
The unit can not cool the room	The outdoor unit is not level.	Mount the outdoor unit as level as possible from front to rear and side to side when the vehicle is parked. Make sure that the mounting of the air conditioner is correct and level.
	The temperature setting is too high.	Reset the remote control to a lower temperature setting.
	The air filter is dirty.	Remove and clean the filter.
	The room was already very hot before the unit was turned on.	Allow a sufficient amount of time for unit to cool the room.
The unit is making noise	The unit is click and gurgle.	These noise are normal during the operation of the unit.
The unit has water dripping inside	The basepan gasket has not been evenly compressed.	The nuts on the brackets of the indoor unit must be tightened evenly so that the foam rubber of the outdoor unit is firmly compressed.
The unit has ice or frost on the coils	The temperature is low inside.	Select FAN mode at HIGH fan speed.
	The filter is dirty.	Remove and clean the filter.

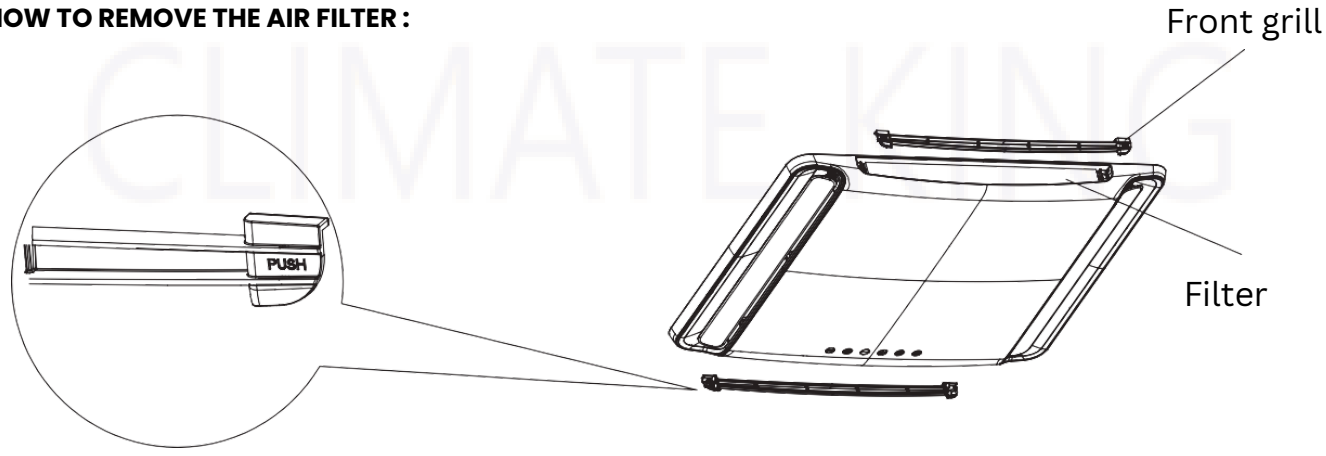
ERROR CODE

- When the air conditioner is abnormal, error codes (they can't disappear even after re-energization) will be displayed on the air conditioner: C*、E *、F*、H*、L*、P*、U*、J*、 e*（"*" represents numbers or letters）(except the functional display code introduced in the owners' manual. Please turn off the unit and contact appointed maintenance center.

NORMAL MAINTENANCE PROCEDURES

ACTIVETY	FREQUENCY
Remove the cover and wash the condenser coil	Twice a year
Clean the filter (More frequent cleaning may be necessary depending on the air quality)	When the air conditioner FILTER CHECK light on.

HOW TO REMOVE THE AIR FILTER :



Push both sides of the air intake grill on the positions marked with "PUSH". Open the air intake grill and then take out the healthy filter.

HOW TO CLEAN THE AIR FILTER :

- Wash away dust from the air filters with clean water or vacuum the filter with an electric household vacuum cleaner.

WARNING :

FAILURE TO FOLLOWING INSTRUCTIONS COULD RESULT IN SERIOUS PERSONAL INJURY

1. Don't touch the capacitor terminals without the electric discharge, the capacitor still may have the high voltage even though the power supply is turned off.
2. Be careful when you maintain the refrigeration system, which has the high internal pressure.
3. Do not block the filter and the indoor air inlet badly to prevent water leakage.

SPECIALIST'S MANUAL

Aptitude requirement for maintenance man (repairs should be done only be specialists).

A:
Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.

B:
Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

Safety preparation work :
The maximum refrigerant charge amount is shown on the following table a (Note: Please refer to the name plate for the charging quantity of R32).

Room area (m^2)	/	4	7	10	15
Maximum charge (kg)	<1.224	2.50	3.31	3.96	4.85

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

- **Work procedure**

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

- **General work area**

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material

- **Checking for presence of refrigerant**

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres.

- **Presence of fire extinguisher**

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

- **No ignition sources**

No person carrying out work in relationto a refrigeration system which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazardsor ignition risks. " NO Smoking " signs shall be displayed.

- **Ventilated area**

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

- **Checks to the refrigeration equipment**

Where electrical components are being changed,they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

→ The actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed;

→ The ventilation machinery and outletsare operating adequately and are not obstructed;

→ If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;

→ Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;

→ Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

- **Checks to electrical devices**

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

→ That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;

→ That no live electrical components and wiring are exposed while charging, recovering or purging the system;

→ That there is continuity of earth bonding.

Repairs to sealed components :

During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

- Ensure that the apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres.

Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE : 

The use of silicon sealantcan inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

Repair to intrinsically safe components :

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.

Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating.

Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

Cabling :

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

Detection of flammable refrigerants :

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

Leak detection methods :

The following leak detection methods are deemed acceptable for all refrigerant systems.

- Electronic leak detectors may be used to detect refrigerant leaks but, in the case of flammable refrigerants, the sensitivity may not be adequate, or may need recalibration. (Detection equipmentshall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
- Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed.

- Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.
- If a leak is suspected, all naked flamesshall be removed/extinguished.
- If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. For appliances containing flammable refrigerants, oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process

Removal and evacuation :

When breaking into the refrigerant circuit to make -repairs or for any other purpose – conventional procedures shall be used. However, for flammable refrigerants it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:

- Remove refrigerant;
- Purge the circuit with inert gas;
- Evacuate;
- Purge again with inert gas;
- Open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correctrecovery cylinders.
For appliances containing flammable refrigerants, the system shall be "flushed"with OFN to render the unit safe. This process may need to be repeated several times.
Compressed air or oxygen shall not be used for purging refrigerant systems.
For appliances containing flammable refrigerants, flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system.When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vitalif brazing operations on the pipe-work are to take place.
Ensure that the outlet for the vacuum pump is not close to any ignition sources and that ventilation is available.

Charging procedures :

In addition to conventional charging procedures, the following requirements shall be followed :
→ Ensure that contamination of different refrigerants does not occur when using charging equipment.
Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
→ Cylinders shall be kept upright.
→ Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
→ Label the system when charging is complete (if not already).
→ Extreme care shall be taken not to overfill the refrigeration system.
Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas.
The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

Decommissioning :

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipmentand all its detail. It is recommended good practice that all
refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required priorto re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

Decommissioning :

a). Become familiar with the equipment and its operation.
b). Isolate system electrically.
c). Before attempting the procedure, ensure that:

- Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- All personal protective equipment is available and being used correctly;
- The recovery process is supervised at all times by a competent person;
- Recovery equipment and cylinders conform to the appropriate standards.

d). Pump down refrigerant system, if possible.
e). If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
f). Make sure that cylinderis situated on the scales before recovery takes place.
g). Start the recovery machine and operate in accordance with manufacturer's instructions.
h). Do not overfill cylinders. (No more than 80 % volume liquid charge).
i). Do not exceed the maximum working pressure of the cylinder, even temporarily.
j). When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
k). Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

Labelling :

Equipment shall be labelled stating that it has been decommissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing flammable refrigerants, ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

Recovery :

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely !