



Shadow Carbon Heating Panel

Safety Instructions and Operation Manual

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Heat Outdoors
Unit 9, Stort Valley Industrial Estate
Stansted Road, Bishop's Stortford
Hertfordshire, United Kingdom
CM23 2TU

www.heat-outdoors.co.uk
01279 466500
info@heat-outdoors.co.uk

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1 | WARNING & PRECAUTION

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use!

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury. Save all warnings and instructions for future reference.



Warning

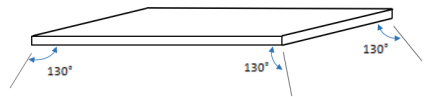
Do not mount those panels designed for ceiling only to wall !
Do not mount those panels designed for wall only to ceiling !
Or else it might cause over heat and burning.

Warning

Ceiling mounted panels must be higher than 1.8meters !
Wall mounted panels must be higher than 0.6meters.
Or else it might cause electric shock or burn.

Warning

Sensors with temperature detection, or temperature controller, should not be placed within the radiation range of 130 degrees of the ceiling heating plate, otherwise it will affect the actual temperature detection.



Warning

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.

Warning

Children of less than 3 years should be kept away unless continuously supervised.

Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.

Warning

Do not use the device in small rooms if persons are present who cannot leave the room independently and who are not under constant supervision.

Warning

Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present. Its dangerous to install close to curtains and other combustible materials.

- Remove all the protective films(both on the front and on the back) before using.
- Be sure the input voltage is between 220-240V, 50Hz, and power supply has been strictly in accordance with IEC, left is null wire and right is live wire, and also well grounded.
- The devices will draw more current than small appliances, so a separate 10A+ socket is required.
- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Set the device up in an upright and stable position.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly running water.
- Never insert any objects or limbs into the device.
- Do not cover or transport the device during operation.
- Do not sit on the device.
- This appliance is not a toy! Keep away from children and animals. Do not leave the device unattended during operation.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The electrical connection must correspond to the specifications in chapter Technical data.
- Insert the mains plug into a properly secured mains socket.
- Do not use the device when the socket or wire overloaded.
- Observe the device's power input, cable length and intended use when selecting extensions to the power cable. Completely unroll extension cables. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device,

- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. 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. Defective power cables pose a serious health risk.
- During the installation of the device observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical data chapter.
- Never drill into the heating device.
- Do not use the device in immediate proximity to curtains.
- Do not place the device on combustible ground.
- Do not transport the device during operation.
- Do not touch the surface during the device working to avoid burns.
- Allow the device to cool down before transport and / or maintenance work.
- Do not use this device near bathtubs, shower trays, swimming pools or other water containers. Risk of electric shock!
- The device must be placed where the switches and controllers cannot be touched by a person in a bathtub or shower.
- Do not use this device in a child-care centre and bathroom.

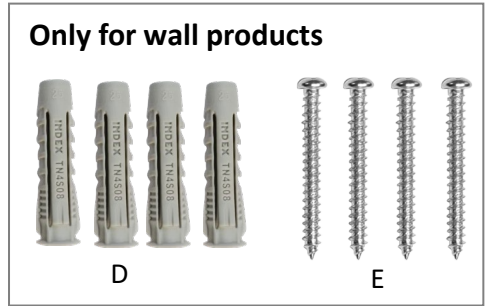
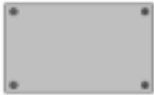
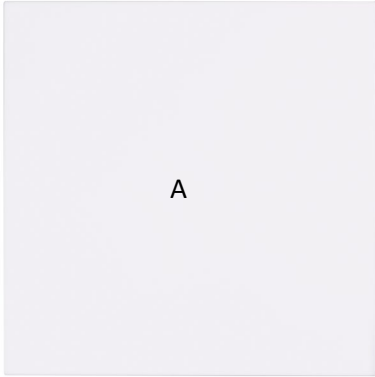
2 | FEATURES

- The device is designed to provide an efficient, comfortable and healthy heating system for any domestic users.
- These devices can reduce air circulation and help to maintain a clean, silent, dust free environment.
- A wide range of devices available in a huge choice of colors, sizes and

3 | TECHNICAL INFORMATION

Heating element	Carbon
Heating way	Far infrared heating
Input Voltage	220-240V/50Hz
Surface temperature	F series for wall : Mainly 85-95°C F series for ceiling : Mainly 90-105°C
Frame	Frameless
IP grade	IP54 (exclude plug)
Over heating protection	Yes
Power cord length	1.9m

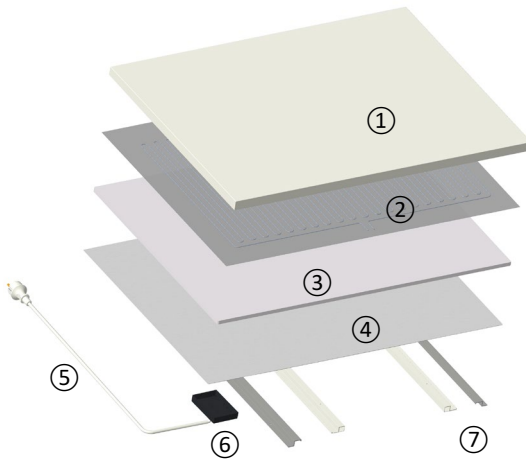
4 | SCOPE OF SUPPLY



(A) Heating Device x 1	(B) Drilling template x 1
(C) Manual x 1	
Wall mounting accessories:	
(D) Gray Dowels x 4	(E) Self-tapping Screws
Ceiling mounting accessories:	
(F) Metal Expansion Tubes x 4	(G) Screws x 4
(H) Spring Toggles x 4	(I) Washers x 4

- Tips:** 1. D and E are only for walling mounting, F,G,H and I are only for ceiling mounting.
 2. F and G are applied to concrete ceilings, whereas G,H and I are used on gypsum board ceilings.

5 | DEVICE STRUCTURE



Designation

- 1 Frameless shell
- 2 Heating element
- 3 Insulation layer
- 4 Rear metal sheet
- 5 Power cable
- 6 Junction box
- 7 Mounting bars

6 | INSTALLATION

Make sure remove all the protective films(both on the front and back)!

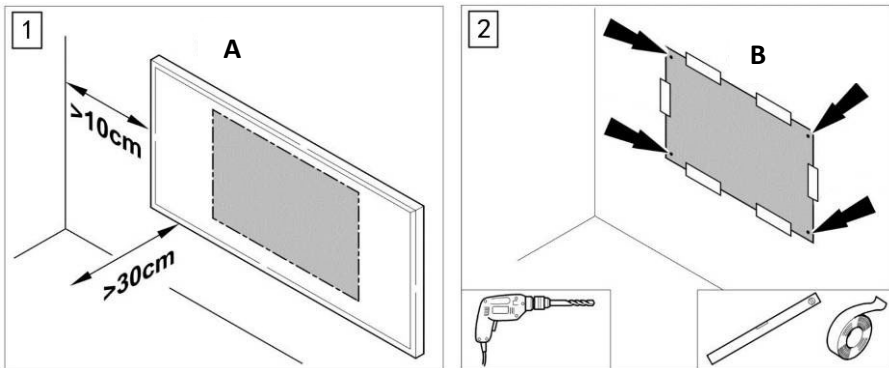
Instruction for Wall Mounting

IMPORTANT: this way is for wall mounting only!

1. Choose the mounting position, keep the required minimum distances.

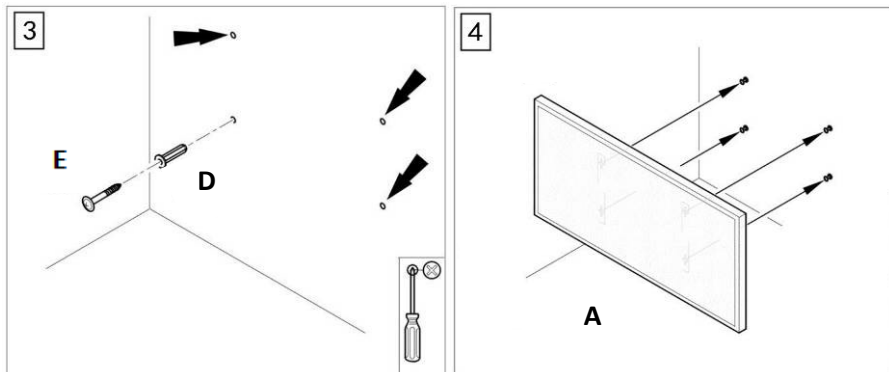
Distances required for device mounting	
front	Minimum 30cm
left	Minimum 10cm
right	Minimum 10cm
top	Minimum 50cm

2. Mark the positions for the bore holes onto the drilling template (B) if there are no existing marks. Stick the drilling template on the wall. Drill four 8mm holes, and Insert the grey dowels(D) into the holes

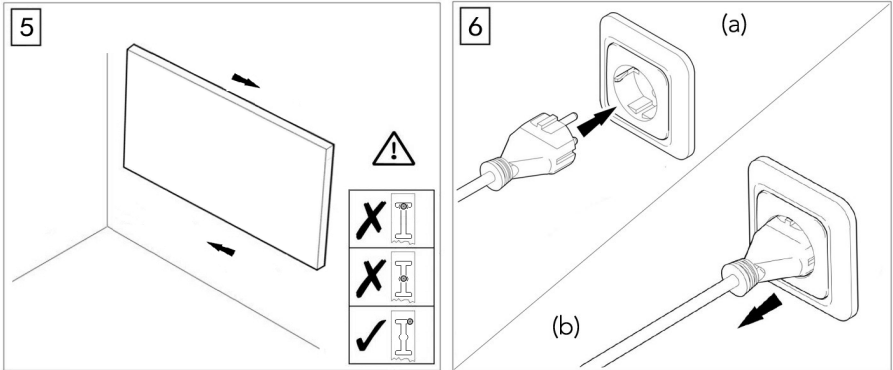


3. Insert the Self-tapping Screws(E) into the dowels and fasten the screws. The screws should protrude approx.0.5 cm from the dowels.

4. Hang the infrared heating device (A) in.



5. Slid the device to make the screws into the correct positions as showing in below drawing.
6. Plug in to start using the heating device .
Do pull out the plug when not in use.



Instruction for Ceiling Mounting

Before starting the installation, please make sure to determine the material of the ceiling. The following are the installation methods for **concrete ceilings** and **gypsum board ceilings**. Please choose and use appropriate accessories based on the specific situation.

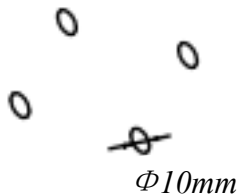
a. Concrete ceiling Installation

Step1:Determine the drilling position.

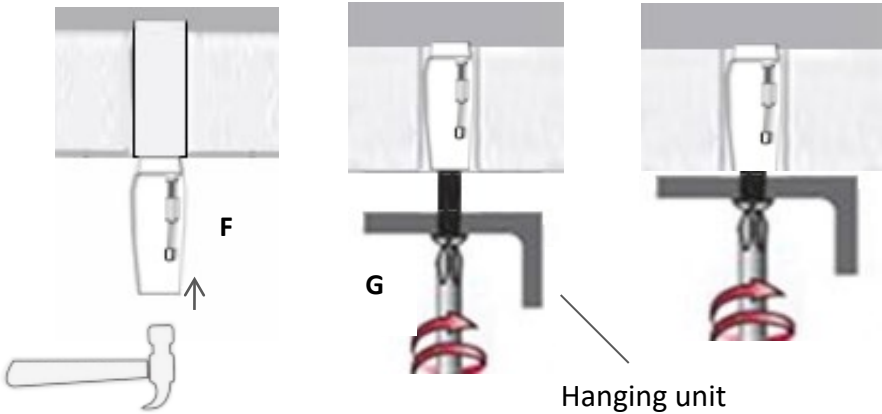
Step2:Drill four 10mm holes at the marked positions.



Excessive drilling diameter is strictly prohibited !



Step3: Insert the metal expansion tubes(F) into the drilled holes.



Step4: Thread screws(G) through the Hanging units holes, then tighten them into the tubes.

b. Gypsum Board Ceiling Installation:

Step1:Determine the drilling position.

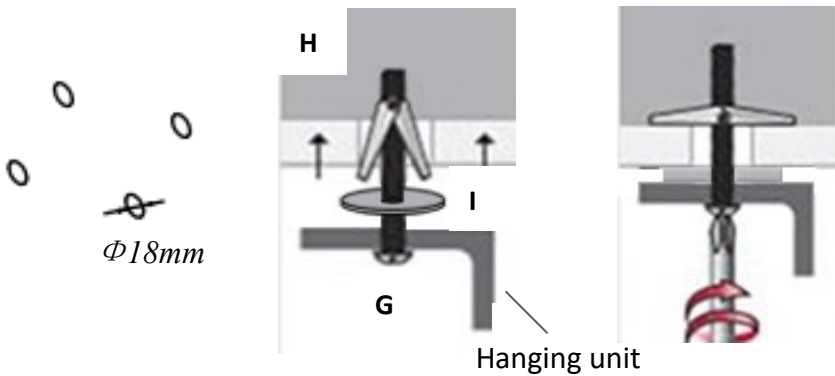
! 1. Please note that the spring toggles (H) are designed for gypsum boards or wooden ceilings with a thickness ranging from 9-18mm. It is forbidden to be used on gypsum board ceilings with a thicknesses less than 9mm.

2. For wooden ceilings exceeding 18mm in thickness, consider employing metal expansion tubes (F) or using your own carpentry nails, ensuring the carpentry nails meet or exceed M5*40mm in size.

Step 2: Drill four 18mm holes at the marked positions.

! Excessive drilling diameter is strictly prohibited !

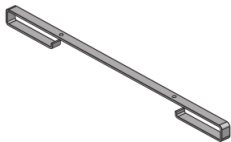
Step 3: Thread screws(G) through the Hanging units holes, washers(F) and spring toggles(H), and then insert the spring toggles(H) into the pre-drilled holes.



Step4: Tighten the screws.

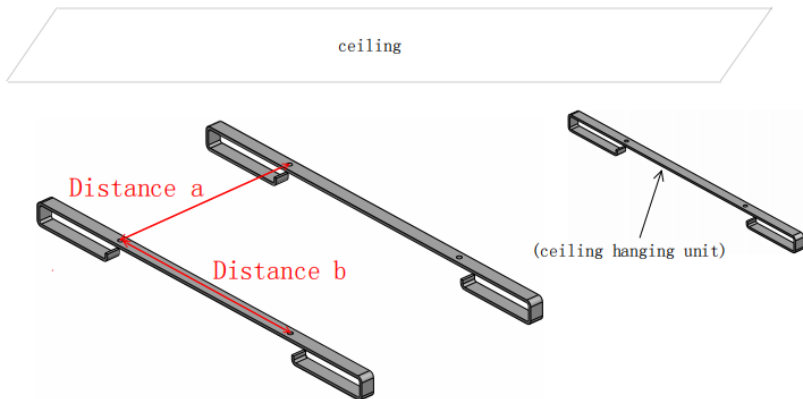
Instruction for Ceiling Mounting:

Only if below ceiling mounting sets included.



X 2 SETS

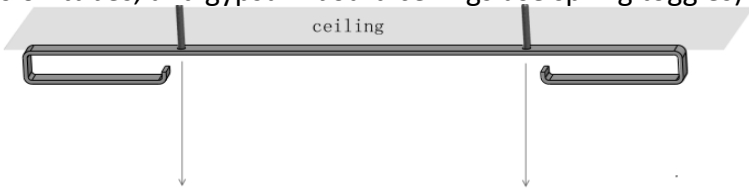
1. Measure and mark the correct distances "a" and "b" on the concrete ceiling where you want to install.



Panel Size/mm	Hole Distances of Screws/mm
Similar to 605*505 (or Diameter: 800)	a310*b240mm

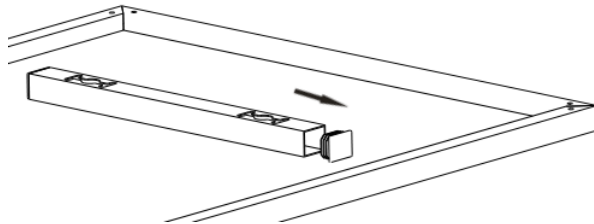
Similar to 705*605	a360*b240mm
Similar to 1005*605	a480*b240mm
Similar to 1205*755	a660*b390mm
Similar to 1205*905	a660*b470mm

2. Fix the hanging units to the ceiling. (Concrete ceilings use metal expansion tubes, and gypsum board ceilings use spring toggles)

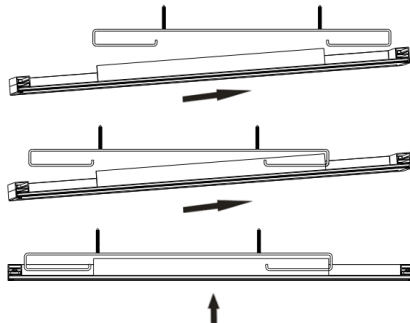


must be screwed to the end tightly

3. Take off all the four plastic caps from rear of the panel.

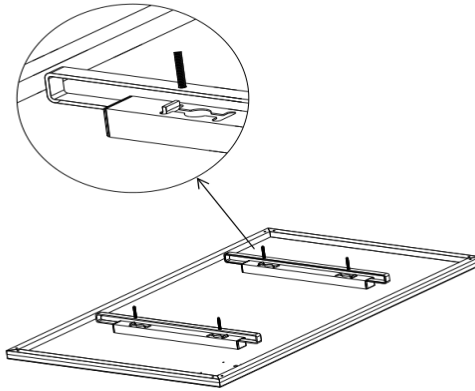


4. Slide the panel to make ceiling hanging units into one side of the panel rear bracket first, then push the whole panel close to ceiling and slide the panel back, to make the other end of the ceiling hanging unit enters the other side.





(View after mounting finished)



7 | TROUBLESHOOTING

Problem	Reason	Measure
It has noise when original charged with electricity	Due to the structure stress of the heat insulator.	It is a normal phenomenon. Don't worry about it.
The surface of the device was slightly raised.	Due to the thermal expansion of the surface material.	It is a normal phenomenon. Don't worry about it.
The surface of the heating device is slightly warm.	1. The voltage is low. 2. In a low-temperature environment.	1. Install a voltage regulator. 2. It is normal.

8 | MAINTENANCE & SERVICING

Activities required before starting maintenance



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Allow the device to cool down completely.



Warning of electrical voltage

Tasks which require the housing to be opened must only be carried out by authorized specialist companies.

Cleaning the device



Warning of electrical voltage

Never immerse the device in water!

Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Wipe the housing dry after cleaning.

9 | STORAGE

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- in an upright position where it is protected from dust and direct sunlight