

# ecostrad

INSTRUCTION MANUAL

## Ecostrad Opus Infrared Heating Panel



Ratings: 220 – 240 V, 50 Hz, Class I, IP54

**CE RoHS**

## Symbols



### **Warning**

This symbol indicates a hazard with an average risk level which, if not avoided, could result in serious injury or death.



### **Warning of electrical voltage**

This symbol indicates danger to the life and health of persons due to electrical voltage.



### **Do not cover**

This symbol located on the device indicates that it is prohibited to place objects (such as towels, clothes etc.) above or directly in front of the device. To avoid overheating and fire hazards, the device must not be covered.



### **Hot surface**

This symbol located on the device indicates that its surfaces are hot during and immediately after operation. Hot surfaces should not be touched: danger of burns.



### **Do not spray**

This symbol located on the device indicates that it is prohibited to spray the device.



### **Observe instructions in manual**

This symbol located on the device indicates that instructions in the operating manual must be observed when installing and using the device.

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## 1 | About the Device

The device is designed to provide an efficient, comfortable, and healthy heating system for domestic or commercial properties.

Infrared heating panels can reduce air circulation and help to maintain a clean, silent, dust free environment.

Infrared panels are designed for indoor environments with normal heating requirements. They are ideal for homes, schools, hospitals and offices. They should not be used outdoors or in large internal spaces such as workshops or warehouses.

The Ecostrad infrared panel range is available in a wide range of sizes and styles.

## 2 | Warnings & Precautions

Read this manual carefully before using or installing 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, serious injury, or all of the above. Save all warnings and instructions for future reference.



### **Warning**

Do not ceiling mount panels designed for wall mounting only. Use of panels in unspecified locations can cause panels to overheat and poses a fire risk.



### **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 the 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, or clean the appliance, or perform maintenance.



### **Warning**

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



### **Warning**

Some parts of this product can become very hot and cause burns. Do not install close to curtains or other combustible materials. Particular attention should be given where children and vulnerable adults are present. To avoid the possibility of injury, the following people should be particularly careful when using the heater: infants and children, the elderly, the disabled, people with medical conditions, people with sensitive skin, and people under the influence of alcohol, drugs, or sleeping pills.



- Remove both protective films (on the front and on the back) before using.
- Be sure the usage voltage is between 220–240V, 50Hz, and the power supply is strictly in accordance with IEC regulations. The device must be earthed.
- Any socket used with the device must be at least 5A.
- Do not use the device in rooms where contact with flammable or potentially explosive materials like dust, gas or vapour cannot be avoided.
- Do not use in rooms or environments that have a corrosive atmosphere.
- Set the device up in an upright and stable position.
- Do not operate the device when wet. If the device gets wet during cleaning, allow it to dry out before using.
- Do not use the device with wet or damp hands.



- Do not expose the device to water jets.
- Never insert fingers or objects into the device.



- Do not cover the device during operation.
- Do not 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 defective devices or device parts.
- Ensure all electric cables outside of the device are protected from damage – e.g. from animals or furniture. Never use the device if electric cables or power connections are damaged.
- The electrical connection must correspond to the specifications given in the technical information chapter (section 3).
- Insert the mains plug into a properly secured mains socket.
- Do not overload the socket used to power the device.
- Observe the device's power output, cable length and intended use when considering use of an extension cable. If an extension cable is used it should be fully unrolled; do not coil the cable. Avoid electrical overload. Do not create a hazard with trailing wires.
- Before carrying out maintenance, care or repair work on the device, ensure the device is unplugged. Do not use the cable to tug the plug from the socket. Hold the plug by its housing and pull.
- 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 damage to 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 to avoid a hazard. Defective power cables pose a serious health risk.
- When installing the device observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the installation instructions (section 6).
- Never drill into the heating device.
- Do not use the device in close proximity to curtains or other flammable materials.
- Do not touch the surface of the device during operation. The surface reaches high temperatures when in operation. Risk of burns. 
- Allow the device to cool down before touching or transporting the device, or attempting 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.

### 3 | Technical Information

Heating element	Carbon crystal
Heating method	Far infrared heating
Voltage	220-240V/50Hz
Surface temperature	Wall panels: approx. 85-95 °C Ceiling panels: approx. 90-105 °C
Body material	Aluminium
IP rating	IP54 (excluding plug)
Overheat protection	Yes
Power cable length	1.9m

#### Model Specifications

Model	Size (mm)	Power (W)	Voltage / Frequency	Rated Current (A)	Mounting Type
F0606	595 x 595	350	230V / 50Hz	1.5	Wall only
F0706	705 x 605	450		2.0	Wall only
F1006	1005 x 605	580		2.5	Wall only
F1207	1205 x 755	900		3.9	Wall only
F1209	1205 x 905	1100		4.8	Wall only
F0606-C	595 x 595	270		1.2	Ceiling or wall
F0706-C	705 x 605	320		1.4	Ceiling or wall
F1006-C	1005 x 605	450		2.0	Ceiling or wall
F1207-C	1205 x 755	700		3.0	Ceiling or wall
F1209-C	1205 x 905	800		3.5	Ceiling or wall

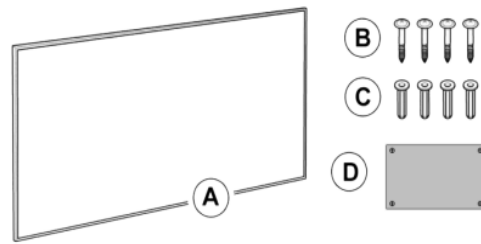
#### Warning

Do not ceiling mount panels designed for wall mounting only.

Use of panels in unspecified locations can cause panels to overheat and poses a fire risk.

## 4 | Supplied Parts

- 1 x Heating Panel (A)
- 1 x Control Guide
- 1 x Installation Manual
- 1 x Wall Mounting Kit:
  - 4 x Screws (B)
  - 4 x Wall Plugs (C)
  - 1 x Drilling Template (D)



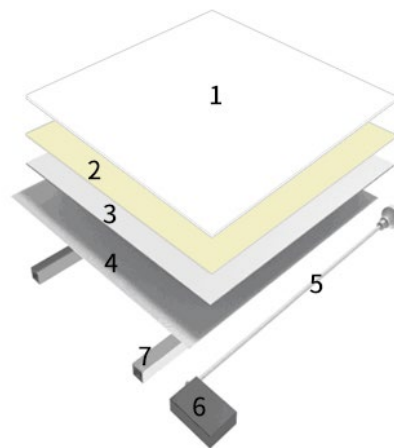
**The kit provided should be used for wall mounting only.**

Specialised ceiling mounting kits are available through the supplier. Kits are available for both direct and suspended installation. Purchase a suitable kit before attempting ceiling-mounted installation

## 5 | Device Structure

### Component parts

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



## 6 | Installation



**Warning – Remove protective films from back and front of panel before installing.**



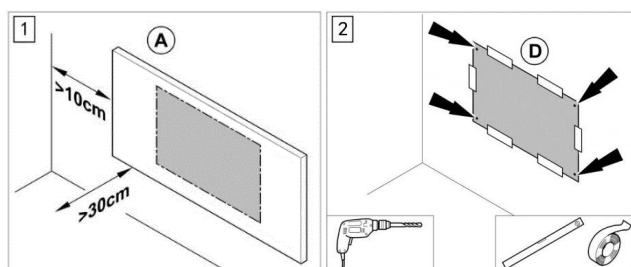
## Wall Mounting Instructions

These instructions apply to wall mounting only. Turn to page 10 for ceiling mounting instructions.

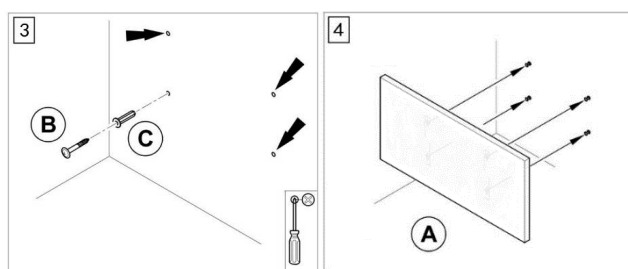
If the device is being fitted in a bathroom, the unit must not be plugged in. The plug should be removed and the unit hardwired into a fused spur. This is a job for a qualified electrician.

1. Choose the mounting position, respecting the minimum distances from surrounding walls, ceilings or fixed objects listed in the table opposite.  
**Minimum distances must be observed.** Mounting closer than recommended creates a fire risk.
2. Stick the drilling template on the wall. Drill the holes with an 8mm rotary bit.

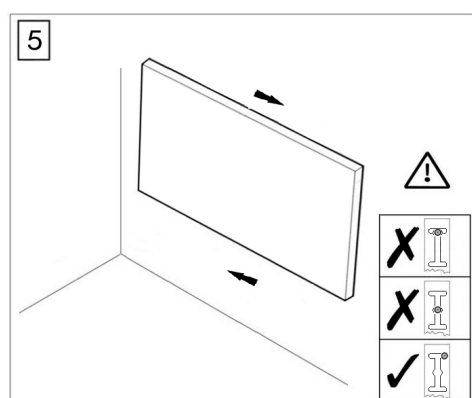
Minimum distances	
Front	300mm
Left	100mm
Right	100mm
Top	500mm



3. Push the wall plugs (C) into the holes. Insert the screws (B) into the wall plugs. The screws should protrude approx. 5mm from the plugs.
4. Hang the heating panel on the screws.



5. Slide the panel across so that the screws lock into their correct position in the bracket, as pictured below:

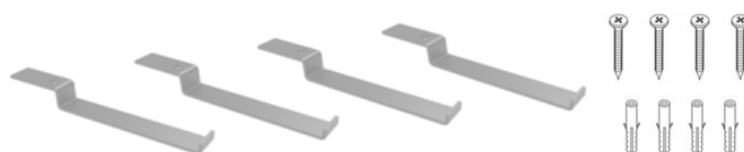


- Plug the device into a power socket to begin using. Unplug when not in use.  
Note – if the device is fitted in a bathroom, the plug must be removed and the unit hardwired into a fused spur; this is a job for a qualified electrician.

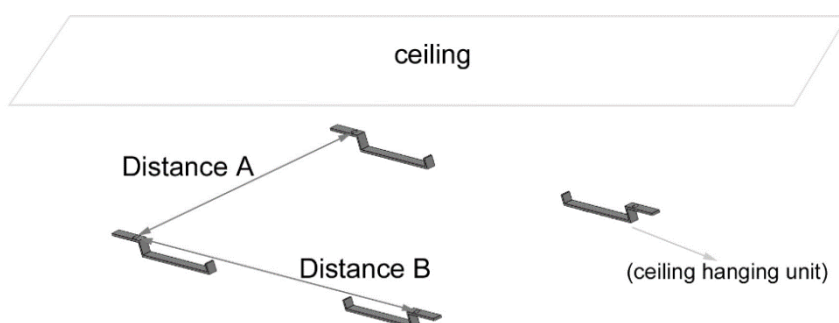
## Ceiling Mounting – Direct Method

This method should only be used with panels designed for ceiling mounting, when the kit below has been purchased:

### Ecostrad Ceiling Mounting Kit:

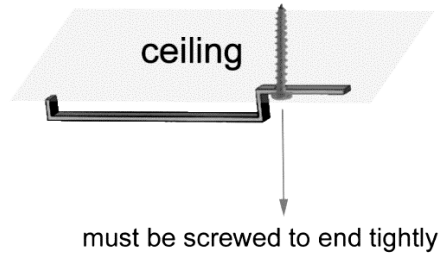


- Drill four holes on the ceiling, positioned as per the diagram below, according to the measurements given per size in the table below. You will need a 6mm drill bit.

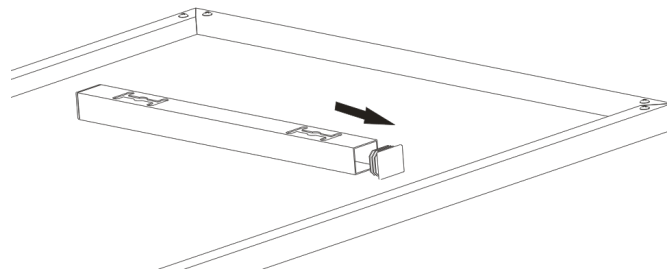


Panel Size (mm)	Distance A (mm)	Distance B (mm)
595 x 595	310	474
705 x 605	360	474
1005 x 605	480	474
1205 x 755	660	624
1205 x 905	660	704

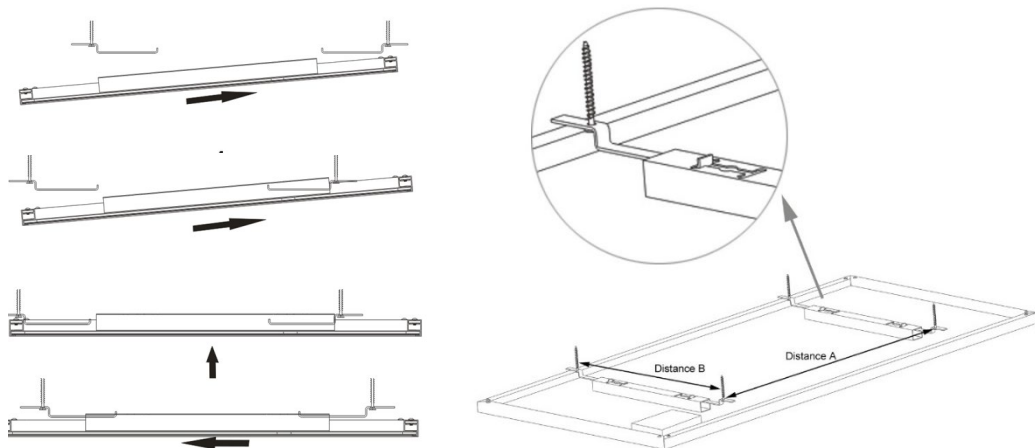
2. Push the wall plugs into the holes. Mount the four hanging brackets onto the ceiling, with the ends with the screw holes pointing outwards, as per the diagram above. Fix in place with screws. Turn the screws to the end tightly. This is important for a secure fitting.



3. Take off all four plastic caps from the mounting bars on the back of the panel.



Slide the panel onto the hanging brackets, as per the diagrams below. Slot the mounting bars all the way onto the hanging brackets on one side. Raise the panel until it is level with the ceiling and pull it back so the mounting bars slot onto the other two brackets.



## Ceiling Mounting – Suspended Method

This method should only be used with panels designed for ceiling mounting, when the kit below has been purchased:

### Ecostrad Suspended Mounting Kit:



### Components

- 1 x Heating Panel (A)
- 4 x Panel Caps (B)
- 4 x Wire Caps (C)
- 4 x Ceiling Lock Screws (D)
- 4 x Ceiling Lock Heads (E)
- 4 x Long Screws (F)
- 4 x Short Screws (G)
- 4 x Expansion Plugs (H)
- 4 x Suspension Wires (I)



A



I



B



C



D



E



F

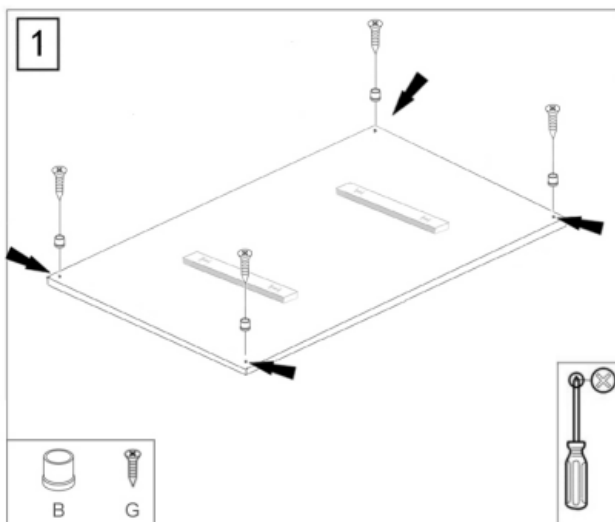


G

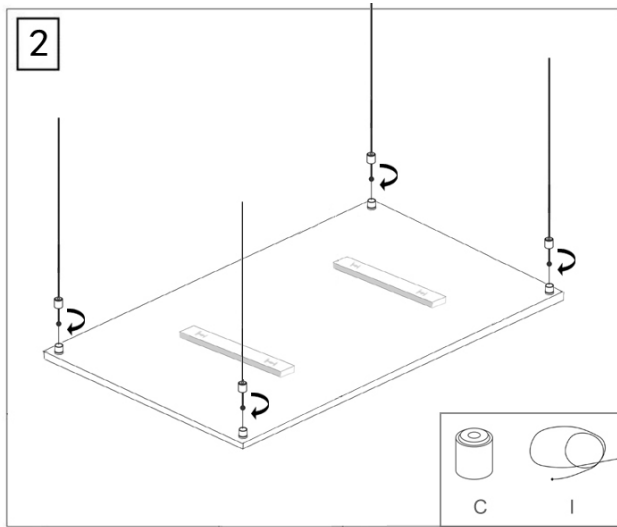


H

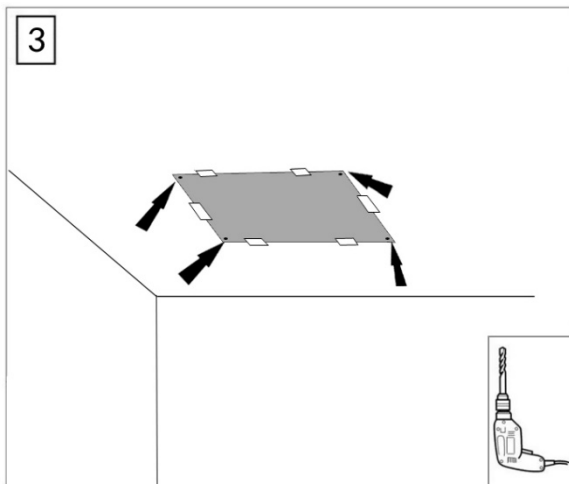
1. Push short screws (G) into panel caps (B) and screw into the holes on the back of the panel.



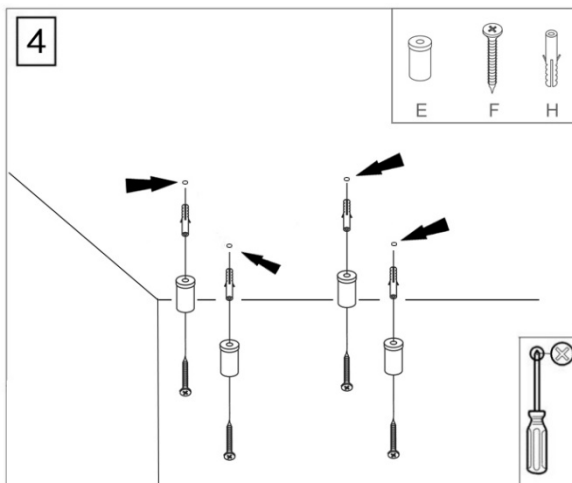
2. Thread suspension wires (I) through wire caps (C). Screw (C) onto (B).



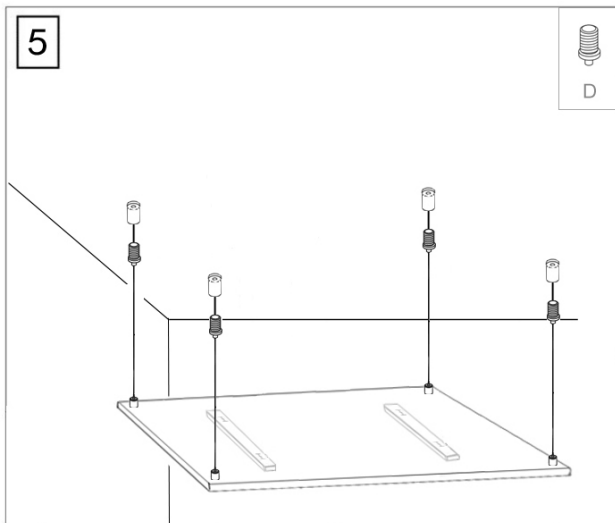
3. Drill four 6mm holes in the ceiling, using a 6mm drill bit. Fix the four expansion plugs (H) into the holes.



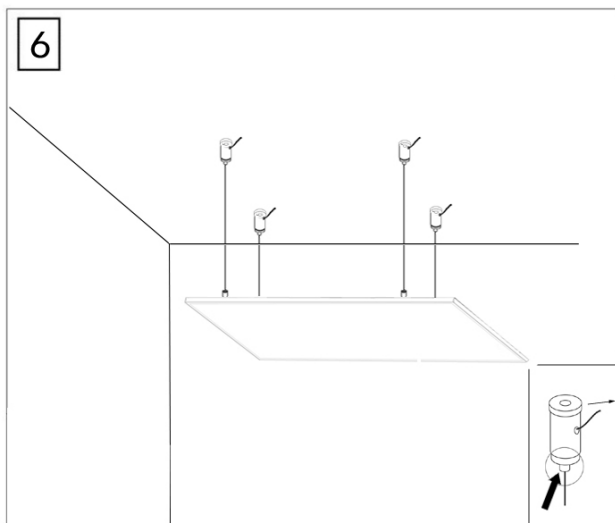
4. Insert the four long screws (F) into ceiling lock heads (E) and screw tight into the expansion plugs (H).



5. Attach ceiling lock screws (D) to suspension wires. Screw (D) tight into (E).



6. To adjust the length of the suspension wire, hold down the catch on the ceiling lock heads and feed the wire through the gap in the lock head. Release the catch and the wire will lock automatically in your chosen position. You can remove any excess wire with wire cutters if you wish.



## 7 | Troubleshooting

Problem	Possible Cause	Action
Noise from the panel when it is first heating up.	Expansion sounds from the panel as its structure adapts to being heated for the first time.	This is normal. The device will stop making noise after it has been in use for some time.
The surface of the device is slightly raised.	Expansion of the surface material when used for the first time.	This is normal.
The surface of the device heats up but doesn't get to full temperature.	Two possible causes: 1. Voltage is too low.	1. Contract an electrician to install a voltage regulator.
	2. The room where the panel is hung is very cold.	2. This is normal. Give the panel plenty of time to heat up, and make sure you have fitted a suitable number of panels for the room size and heat loss profile.

## 8 | Maintenance & Servicing

**Before starting maintenance:**



### Warning of electric voltage

- Allow the device to cool down completely.
- Do not touch the mains plug with wet or damp hands.
- Hold onto the mains plug when pulling the power cable out of the mains socket.
- Tasks which require the housing to be opened must only be carried out by authorised specialist bodies.

## Cleaning the device:



### Warning of electric voltage

- Allow the device to cool down completely before cleaning.
- 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.
- Wipe the housing dry after cleaning. Allow the device to dry before using.

## 9 | Storage

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

- Store in an upright position, out of direct sunlight.
- Store in a dry environment, protected from frost and heat.
- Protect against dust, using a cover if necessary.
- To prevent damage, do not store other objects on top of the device.

## 10 | ErP Ecodesign Information

Model	Heating capacity			Auxiliary current consumption	
	Nominal heat output ( $P_{nom}$ / KW)	Minimum heat output (indicative) ( $P_{min}$ / KW)	Maximum continuous heat output ( $P_{max.c}$ / KW)	At nominal heat output ( $e_{l_{max}}$ / KW)	At minimal heat output ( $e_l$ / KW)
F0606	0.4	N/A	0.4	0.365	N/A
F0706	0.4	N/A	0.4	0.418	N/A
F1006	0.6	N/A	0.6	0.608	N/A
F1207	0.9	N/A	0.9	0.942	N/A
F1209	1.0	N/A	1.0	1.048	N/A
F0606-C	0.3	N/A	0.3	0.282	N/A
F0706-C	0.3	N/A	0.3	0.335	N/A
F1006-C	0.4	N/A	0.4	0.470	N/A
F1207-C	0.7	N/A	0.7	0.732	N/A
F1209-C	0.8	N/A	0.8	0.836	N/A



## Information requirements for electrical local space heaters

Item	Unit
<b>Type of heat input, for electric storage local space heaters only (select one)</b>	
manual heat charge control, with integrated thermostat	N/A
manual heat charge control with room and/or outdoor temperature feedback	N/A
electronic heat charge control with room and/or outdoor temperature feedback	N/A
fan assisted heat output	N/A
<b>Type of heat output/room temperature control (select one)</b>	
single stage heat output and no room temperature control	[no]
Two or more manual stages, no room temperature control	[no]
with mechanic thermostat room temperature control	[no]
with electronic room temperature control	[no]
electronic room temperature control plus day timer	[no]
electronic room temperature control plus week timer	[yes]
<b>Other control options (multiple selections possible)</b>	
room temperature control, with presence detection	[no]
room temperature control, with open window detection	[no]
with distance control option	[no]
with adaptive start control	[yes]
with working time limitation	[no]
with black bulb sensor	[no]

## 11 | Disposal



The icon with the crossed-out waste bin on electrical or electronic equipment stipulates that this equipment must not be disposed of with household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your local authority.

The separate collection of waste electrical and electronic equipment enables the re-use, recycling and other forms of recovery of waste equipment, and prevents any negative effects for the environment or human health caused by the disposal of hazardous substances potentially contained in the equipment.