

EN

OPERATING MANUAL
INFRARED HEATING
PANELS



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01. SAFETY INSTRUCTIONS

These operating instructions are a part of this product. They must be read carefully before the unit is used / taken into operation for the first time and must always be kept either in close proximity to the location where the unit is being operated or close to the unit itself!

This product was subjected to stringent material and function tests and extensive quality checks before it left our premises. We must point out, however, that using this device can constitute a hazard when not used by people who have been instructed in its proper use or when used for purposes other than those for which it was intended!

The following safety instructions must be observed at all times:

- The unit may only be used in an upright position and when placed on a flat and level surface.
 - Do not subject the unit to a direct or continuous stream of water.
 - Do not cover, move or transport while in operation.
 - Do not use near inflammable objects.
 - Do not use too close to water (full baths, sinks, showers, ...).
 - Do not use in rooms with easily inflammable gases or vapour.
 - All electric cables outside the unit must be protected against damage (e.g. by animals).
 - Any extensions of the power cable must be carried out in full compliance with the unit's connected load, the length of cable allowed and the purpose for which it may be intended.
 - Always unroll the extension cord completely. Do not leave coiled on the reel.
 - Do not use for any other purpose other than those purposes described in the operating instructions. The warranty expires with immediate effect in case of any breach or non-observance of these terms. In such cases, we will not be held liable for any action.
 - Do not use outdoors.
 - Do not drill into the cover.
 - This unit has been built in accordance with the elementary safety and health standards as laid down in the relevant EU regulations
- Work on electrical parts may only be carried out by an authorized specialist!

02. AREAS OF APPLICATION

This unit has been designed for water damage restoration and for drying out buildings. A survey carried out by the Bundesamt für Bauwesen und Raumordnung (Federal Office for Building and Regional Planning) concluded that the use of such equipment accelerates the drying out process considerably, especially during the initial phase.

The infrared heating panels are also excellently-suited for heating rooms or for ensuring that temperatures are kept at a certain level.

The TIH 630 infrared heating panels from Trotec are ideal for pinpoint applications and for drying out isolated spots or areas in walls. They are extremely versatile and can even be mounted three high for extra height to dry out areas above 80cm (see Drying Out Larger Areas). If the cause of the damage has been remedied in due time, then the water damage is often only restricted to the area below the surface. Infrared radiation provides a quick, gentle and effective means of removing the moisture from these areas without further damaging the material in question. A high temperature is not the only factor that plays a role in ensuring that the drying out process is successfully completed: the dosage (i.e. the amount of radiation in combination with the time and the temperature) that the wall can absorb plays an equally important part.

The infrared heating panels from Trotec are designed and developed to the highest of standards so that the amount of electrosmog produced can safely be seen as being negligible. This means that the panels can also be used by persons who would normally react sensitively to electrosmog.

03. RADIATION

The wavelength of the heat radiation generated by the TIH 630 infrared panels is equivalent to the type of radiation found in the IR-C area. The wavelength depends on the heating panels' surface temperature and the temperature of the surrounding area in which the heating panels have been set up.

At 75°C = 8.3µm, at 85°C = 8.1µm, at 95°C = 7.9µm (according to Planck's Law of Radiation and Wien's Displacement Law). This type of mild IR-C radiation does not pose a risk to the eyes.

04. WHAT IS INFRARED RADIATION?

Infrared radiation is a natural form of radiation (e.g. solar radiation). It is a form of heat radiation irrespective of the manner in which it is generated. Any object or body whose temperature is above absolute zero (-273°C) radiates energy in the form of electromagnetic energy. The wavelength of the infrared radiation depends on the temperature of the body which is emitting the radiation. If this infrared radiation strikes the surface of another object, then the energy contained therein is released in the form of heat. Heat transfer occurs by means of conductivity, convection or radiation. The decisive factor in all cases is the difference in temperature.

05. SETTING UP THE PANELS

The following instructions must be observed at all times in order to guarantee an optimal, economic and safe use of the infrared heating panels:

- Place the unit on an even and level surface.
- When positioning the panels make sure that the side which radiates the heat is facing the wall or area which needs drying. The distance from the panel to the wall should be between 5 and 15cm (2 - 6ins). The panels' feet are constructed in such a manner as to ensure that the distance between the panel and the wall may be considered optimal when the panels' feet touch the wall.
- It is important to realize that the heating panels will grow hot when taken into operation. For safety reasons, please ensure that children are kept clear of the panels when these are in use.
- The heating panels can be mounted three high in order to provide an effective means of drying out areas above 80cm (32ins) (see Drying Out larger Areas).

- The heating panels may only be connected to a power source with a circuit breaker in accordance with Section 704 of DIN VDE 0100 (VDE = Association for Electrical, Electronic & Information Technologies).
- Please remember to use a separate switch when using more than 3 infrared panels at a time.

Do not use the panels near inflammable objects. Keep a safe distance of at least 15 cm (6ins) between the panels and inflammable materials like textiles, plastics, paper...

Avoid contact with water. Do not place the infrared heating panels near bath tubs, showers or sinks. Do not point the panels at current carrying sockets. Do not at any time cover the heating panels. Do not use the panels in rooms in which there are inflammable gases or vapour.

The panels are equipped with a device which controls the temperature which makes them ideal for non-stop, continuous operation.

06. DRYING ABOVE THE STANDING HEIGHT OF THE HEATING PANELS

The panels can be mounted three high to provide a means for drying out walls or damaged areas (e.g. following a burst pipe) above a height of 80 cm (32ins). Such a stacked installation requires that the panels be connected to each other:

1. First make absolutely sure that the first panel is positioned on a flat and level surface.
2. Slot the upper panel sideways into the notch of the lower panel (see figure).

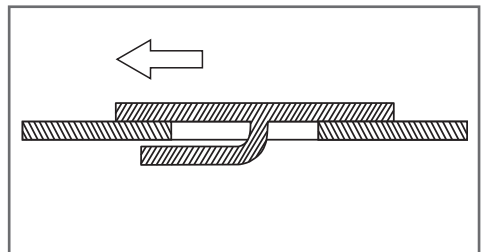
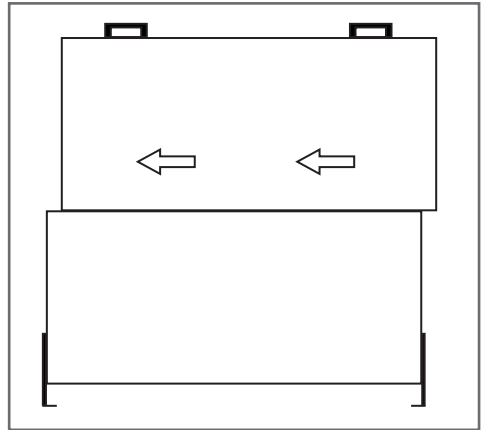


Figure 1

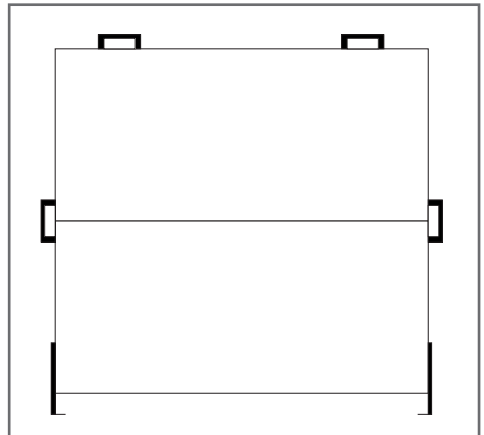


Figure 2

3. Push the connector on the side of the panel downwards into the recess provided (see figure). Make sure to connect the panel with both the left and the right connector. Do not connect the panel on one side only.

⚠ ***The second and the third panels MUST ON ALL ACCOUNTS be properly connected using the connectors included in the scope of delivery!***

07. CLEANING & MAINTENANCE

Please be sure to remove the plug from the socket when the heating panels are no longer in use and before cleaning. Check the surface of the heating panels regularly for any signs of damage.

Use a damp cloth and washing up liquid to clean.

⚠ ***Warning: Do not place or submerge in water. Do not hold under running water. Do not use any caustic cleaning agents or high pressure or steam cleaners.***

Your heating panel must be cleaned at regular intervals. Do not carry out any repairs. All repairs must be carried out by the manufacturer only.

08. DISPOSAL

Dispose of the packaging material in accordance with local and national waste disposal regulations. The infrared heating panels from Trotec may not be disposed of in normal domestic waste or recycled in any way as part of a recycling program.

09. STORAGE

The TIH infrared heating panels from Trotec must be stored in a clean and dry room.

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