Warranty and processing

The warranty/guarantee for the Schimmel-DRY is 2 years from the date of delivery and relates exclusively to the proper heating of the heating elements. The warranty includes the repair or exchange of the defective individual component and will be processed after the damage has been reported in accordance with the general terms and conditions of your dealer.

In the event of a malfunction, check which of your heating elements is affected by directly plugging in each heating element (with a connection cable of the same construction), or see whether the defect is caused by the mains cable or the connection cable. No liability is assumed for possible contamination of surfaces in the area of the heating elements due to soot, dust or other chemical influences, as well as discolouration of surfaces due to the effects of heat. In the event of damage to the device due to incorrect or unsafe installation or incorrect operation, all warranty claims are forfeited.

The manufacturer assumes no responsibility for direct or indirect damage and costs (e.g., shipping, installation, energy expenditure, heating failure, heat exposure, damage, soiling) that may arise as a result of use or the non-observance of these instructions, or from improper use. Damage caused by breakage of the heating plate is only covered by the warranty if it can be proven beyond any doubt that the breakage is due to a material or functional defect in the heating element. We recommend checking with your household insurance provider to ensure that surface units are included in your insurance against breakage of the heating surface.

Prevention and protection

As with every technical device, contact with liquids (water), dust or dirt and an excessively high operating temperature should also be avoided with the Schimmel-DRY in order to avoid malfunctions or consequential damage.

Radiant heat that can be used to dry out the wall is available from a heating plate surface temperature of approx. 55° C. In the case of an uninterrupted power supply, a surface temperature of 70 to max. 80° C should not be exceeded. If the temperature is higher, this indicates a malfunction of the heating element or insufficient ventilation.

SchimmelDRY
Technical specifications

Dimensions:	Length: 520 mm, width: 90 mm
	Depth: 16–18 mm (4–6 mm stone-ceramic composite + 12 mm console)
Model name:	EGS-WHI-GL
Colour:	White
Rated power per heating element:	45–50 watts (2 heating elements: 70–90 watts)
Rated voltage/frequency:	230 volt/50 Hz
Weight per heating element:	approx. 500 g
Surface temperature:	approx. 55–70°C
Controls:	None when connected directly; optional timer switch
Protection class:	Heating element: IP 54 (protected against dust and spraying water) Plug connections: IP 50 (protected against dust and accidental contact)
Power connection:	Optional length: 75–200 cm/cross-section: 2 x 0.75 mm ² Euro plug to IEC connector C7
Connection between 2 heating elements:	Optional length: 20–200 cm/cross-section: 2 x 0.75 mm ² IEC connector C8 to IEC connector C7
Surface:	High-quality, mechanically resistant composite heating plate with ideal radiation properties, washable
Rear:	
	Temperature-resistant paint, solvent-free, resistant to conventional solvent- free and acid-free household cleaners with an alcohol content of up to 5%
Packaging units available:	
	 1 x EGS-WHI-GL heating element, 1 power cord
	 1 x EGS-WHI-GL heating element, 1 connection cable
	 2 x EGS-WHI-GL heating elements, 1 power cord + 1 connection cable
	With fastening material in each case
Electrical capacity:	Up to 5 heating elements of 40–50 watts per connection cable
Mechanical resistance:	Avoid mechanical stress







We wish you a lot of happiness, dry walls and healthy indoor air with the Schimmel-DRY. Positioning with stand.



Customer service and information:

ELIAS Heiztechnik GmbH, Unterbruckendorf 14 9314 Launsdorf, Austria Tel: +43 (0) 4212/467 15 Email: info@schimmel-dry.com Website: www.schimmel-dry.com



INSTRUCTION MANUAL

PLEASE BE SURE TO FOLLOW THE INSTALLATION, USAGE AND SAFETY INSTRUCTIONS!

- The device is designed for continuous operation or operation at intervals (e.g., timer switch) via connection via a socket.
- Do not cover the heating elements with textiles or other materials.
- Air must be able to circulate freely around the heating elements to prevent heat build-up and possible overheating.
- No liability is accepted for damage to the device or affected objects and surfaces, or for any consequential damage resulting from non-compliance with these guidelines.
- · In the event of improper use, all warranty claims are void.

This manual describes how to install and operate the Schimmel-DRY heating elements. It is for information only and is subject to change without notice. Please read this manual first, so that you can familiarise yourself with all the product's properties before you start using it.

Manufacturer's declaration of conformity (CE)

This equipment has been designed and manufactured in accordance with the following standards relating to the European Community low voltage regulations: EN 60335-1 (Single layer insulation, general part), EN 60335-2-30 (Particular requirements for space heaters) and EN 62233 (Low voltage directive).

Properties and benefits of use

Congratulations on purchasing Schimmel-DRY heating elements. As a company, we guarantee the quality and safety of this product. The following sections explain how to use the device and provide useful information for a better understanding and the best possible use of its properties.

SECTION 1 – Introduction

Factors for efficient operation

The quality of the materials used enables sufficient heat generation for drying out partial mould infestation with efficient use of energy. Damp areas of wall the size of the areas that can be reached by the heat of the heating elements can be dried out. The heating elements emit radiant heat via the front and rear surfaces and convective heat from the position of the heating elements upwards. The drying time and the size of the dry-able areas depend on the following factors:

- Amount of moisture contained in the wall
- Humidity content of the room air
- Wall temperature
- Wall thickness
- Structure of the building
- Thermal conductivity of the wall
- Distance of the heating elements to the wall (as close as possible but no less than 1.5 cm)
- · Duty cycle of the heating elements
- · Distance of the heating elements from the affected areas

Controls

The heater can be controlled when in continuous operation (connected directly to the power supply) or at intervals (controlled by a timer switch). This will determine the ongoing operating costs. For optimum efficiency, operate the device continuously until the damp areas have dried off, and, after this – to save on operating costs – you can operate the device via a timer switch for the shortest possible intervals (no less than 1 hour) of being switched on and then switched off. Operation via a timer switch or a wall thermostat makes sense if less energy is required for the dried wall than at the beginning, in order to further dry the wall or to maintain the dry state. The following applies: the longer the wall has time to cool down again, the more time it needs to heat up again.

Versatile positioning options

The Schimmel-DRY can be positioned on walls or other surfaces. The best heating performance is achieved with wall mounting directly below the areas to be heated.

Safety and maintenance

State-of-the-art insulating materials ensure the built-in electrical connections are protected against external influences in accordance with the IP 54 standard. (Protection against dust and spraying water)

Easy care and maintenance free. The Schimmel-DRY only requires periodic cleaning with a neutral glass cleaning agent and for accumulated dust to be removed. *ATTENTION:* Do not use any cleaning aids with an alcohol content of greater than 5% (affects the back of the heating elements), nor any scouring agents.

Product description

The Schimmel-DRY consists of:

- A high-quality, mechanically very stable heating plate with the best radiation properties. The load capacity of the plate is not unlimited, so make sure to avoid strong impact or tensile forces acting on the plate during installation and operation.
- Layers of insulating, heat-resistant protective lacquer and carbon nanotubes (CNT), which are applied to the back of the heating plate.
- A sealed junction box made of plastic for the fastenings and connections, which is permanently connected to the heating plate.
- Depending on the version: a power cord with a Euro mains plug to IEC connector C7 and/or a connection cable with IEC connector C7 to C8 for connecting 2 heating elements.
- Screws and dowels for mounting to the wall.

• 2 plug-on plastic feet per heating plate for applications without fixed installation.

Extensions & accessories

The Schimmel-DRY can be combined with any timer switch.

Up to 5 Schimmel-DRY heating elements can be connected in series using the C7–C8 connection cable. A mounting basket for mounting under benches or tables (or on the ceiling) is available as part of the range of accessories. This simplifies installation and protects the heating element against getting touched and suffering impact.

Quality control

Every heating element goes through a series of strict final checks. The heating elements are 100% produced in Austria. You receive a 2-year guarantee from the date of delivery on every Schimmel-DRY heating element.

SECTION 2 – Installing the Schimmel-DRY

Electrical connection

The Schimmel-DRY may only be connected to 230V/50 Hz. As a general rule: when installing the Schimmel-DRY in rooms with a bathtub or shower, the protective area per VDE 0100 or DIN 57100 Part 701 must be taken into account. *ATTENTION:* When connecting several heating elements in parallel to the mains, the cable thickness and fuse protection must be checked based on the nominal power of all consumers operated on this cable. In any case, no more than a maximum of 5 heating elements may be operated via the same mains connection cable. For sustainable deep drying of entire rooms or buildings, using an infrared heater from T4L can be more economical than using several Schimmel-DRY heating elements. The infrared heaters differ from the Schimmel-DRY heating elements in terms of surface temperature and the heating layer technology. If necessary, please enquire about our space heaters using the contact information at: www.schimmel-dry.com

Selecting the suitable location and installation instructions When selecting a suitable location for installation, please note the following:

- . Schimmel-DRY should be mounted in the lower third (near the floor) of a wall in order to achieve optimal heat yield.
- 2. It should be at a distance of at least 2 cm from solid objects in order to allow air to circulate around the heating elements. When used for horizontal, non-fixed installations in window reveals, on tables or other surfaces, the elements must be placed on the junction boxes or the supplied installation brackets so that the heating surface can operate freely in the upward direction and does not come into contact with any objects around it and is also secured against falling.
- CAUTION! There is a risk of overheating if the heating surface comes into direct contact with materials! Experimental applications of this kind are not in accordance with the intended purpose, and any resulting damage will void the warranty!
- 4. Do not let the heating elements come into contact with liquids!
- 5. To ensure that the heating elements are not damaged during handling, they should be held carefully and not exposed to hard knocks or blows.
- 6. Make sure the installation surface is dry and free of grease when temporarily using tape. If durability is not guaranteed, use screws for installation. Damage caused by falling heating elements is not covered by the device warranty. Please note this fact when using adhesives for installation.
- 7. Keep the Schimmel-DRY free of dust.
- 8. Do not cover the Schimmel-DRY.
- Make sure that there is no material in the immediate vicinity of the heating elements that may get damaged by long-term exposure to temperatures of approx. 50–80°C. Certain plastics, such as white window strips on plastic windows, could discolour when exposed to heat.
- 10. Under no circumstances should you remove the protective devices (rear insulating layer, junction box).
- 11. You should start up the device by connecting it to a 230V socket, either directly or via a timer switch (see section 1, paragraph: "Controls").

Installation instructions

The orientation of the heating elements on the wall (horizontal/vertical/oblique) can be freely selected. You can achieve the best degree of efficiency from the Schimmel-DRY by installing it on vertical walls beneath the mould-infested areas. Make sure that there is a minimum distance of 2 cm between objects and the heating surface. When used in a bathroom, Schimmel-DRY must be installed so that it cannot be touched by anyone using the bathtub or shower tray. The minimum distance from the electrical connection point to the tub or shower is 60 cm. *DO NOT cover with towels or other textiles!*

Proceed as follows:

Please also note the assembly video at www.schimmel-dry.com/montage-und-betrieb



- Determine the desired position of the Schimmel-DRY heating elements and determine the 2 fastening points per heating element by measuring or with the aid of the drilling template. When doing so, ensure that both the length of the power cable to the nearest socket and the length of the connection cable between the heating elements are sufficient. Also consider the possibility of placing the junction boxes, with the sockets, in the best position (left or right). Make sure the drilling template is correctly positioned/aligned.
- 2. Mark the mounting points on the installation surface. When doing so, take into account the desired distance between the heating element and the corners of the wall and the distance from the edge of the heating element's heating plate to the suspension point (drilled hole) on the plastic boxes at the rear.

Installation:

- 3.1. Drill 2 holes per heating element of the right size for the dowels being used at the points you have determined by measuring or using the drilling template. Before drilling the mounting holes in the wall, make sure that no gas, water or electrical lines could get damaged!
- 3.2. Screw the appropriate screws into the wall until the screws protrude about 0.5 cm above the wall's surface.
- 3.3. Now insert the heating elements into the plastic boxes above the screws using the slotted holes provided. First attach the small installation box, then the large one, so that the screw heads are positioned behind the slots in the installation boxes. It may be necessary to adjust the length of the screws over the surface of the wall until the plastic boxes for the heating elements lie flat on the wall and the screw head can be pushed into the slots in the installation box with a little resistance. (The elongated hole with a longitudinal slot is designed so that the screw head can be clamped behind the longitudinal slot with slight resistance in order to make it possible to subsequently ensure alignment with a spirit level. If the element does not hold, the screw is too loose; in this case, carefully turn it further into the wall in small increments until it fits.) *CAUTION!* We assume no liability/guarantee for direct or indirect damage caused by improper installation or attachment with adhesive tape or other means.
- 3.4. Excess cable lengths can be accommodated behind the heating element. To do this, lay the cable over the plastic boxes and clamp it in the slots on the side. For fixed installations, it is advisable to lay a small cable duct in which the excess cable length can be accommodated invisibly.

SECTION 3 – Troubleshooting

If any problems arise, it is particularly important to determine whether the problem is to do with the Schimmel-DRY or whether there is a problem with the time control, power supply, fabric of the building or heating environment.

IMPORTANT THINGS TO KNOW FOR PERMANENTLY ECONOMICAL OPERATION

A certain amount of moisture is present in every building structure. For one thing, dry walls, dry ceilings and floors deprive mould of a means to live. Secondly, heating costs are minimised, since the insulating properties of the house are considerably better with dry walls than with damp walls.

Therefore, during the initial start-up phase (from a few weeks to a few months, depending on the humidity of the brickwork, floor or ceiling), let the Schimmel-DRY work at maximum power in order to dry the surrounding surfaces. The Schimmel-DRY also supports you in heating your living space, which also requires less energy as the brickwork dries. In good cases, depending on the building structure and heating system, the savings on heating can even be higher than the entire energy requirements of the Schimmel-DRY. For permanently dry walls and efficient heating with radiant heat, please enquire about the T4L space heaters using the contact information at: www.schimmel-dry.com

Possible problems

1. Does the Schimmel-DRY heating element not get warm?

Ensure that:

»the heating element is plugged into the socket and that the plugs of the mains cable and the connection cable are correctly and firmly connected to the plastic box behind the heating plate;

»the socket or connection is also live:

»the mains cable or connection cable is not defective;

- »for timer switches or thermostats: ensure that the switching function works correctly.
- 2. <u>Does the Schimmel-DRY heating element not seem to dry the wall</u> <u>sufficiently?</u>

Ensure that:

- »the number of heating elements corresponds to the size of the mould infestation.
- »the Schimmel-DRY has enough time to dry out the affected areas. Depending on the influencing factors (see Section 1: Factors for efficient operation), this can take anywhere from a few weeks to several months.
- »all points of the part "Selecting the suitable location and installation instructions" in Section 2 have been followed.
- 3. Does the mould seem to still be increasing after the drying phase has started?

If the mould is deprived of "moisture", its basis for life, it tries to multiply as a life-saving measure. This is reflected in a short-term increase in the mould infestation. You can counteract this by removing the visible mould before the drying process begins, or you can simply wait.

4. Special situations:

Trailing moisture

A lack of or defective sealing of the floor can result in rising damp, and damage to the roof or outer shell can also cause new moisture to creep in, despite drying. In this case, the cause of the renewed ingress of moisture must first be eliminated before the affected wall can be expected to dry out completely.

Incorrect thermal insulation

If dense insulating materials (e.g., Porozell, Styrodur or similar) prevent the brickwork from breathing, the wall moisture can only escape inwards, which may have led to the mould problem. On the other hand, this leads to a brief increase in humidity in the room during the drying process, which should be compensated for by frequent bursts of ventilation. The drying phase is usually prolonged if there are walls that are not diffusely open.

When the heating element is plugged in, the circuit breaker trips in the distribution box

In this case, the installation box has become detached from the heating plate, and the internal safety device has caused a short circuit in order to switch off the power to the device. This case indicates severe overheating of the heating element due to a lack of rear ventilation or another malfunction. Disconnect the heating element from the mains and contact the customer service team using the contact information available at: www.schimmel-dry.com to clarify the situation.