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Meaning of Symbols

Danger information



Danger!

This safety triangle with the word "Danger" indicates that there is a particular danger for personnel (danger to life, danger of injury).

e.g.:



Danger!

Risk of personal injury from electrical voltage!



Caution!

This safety triangle with the word "Caution" indicates that there is a particular danger for devices, equipment and the environment.

Important information



Note!

This symbol is not a safety warning, but provides you with information to help you understand operating processes more easily.

Guidelines

Ergoline devices have been made in conformity with the following guidelines:

- EC directive "Electromagnetic compatibility" 89/336/EEC (as last amended).
- Low voltage directives 72/23/ECC (as last amended).

Ergoline devices carry the following quality marks:



Intended use

The device is meant for commercial use only, not for home use. This device is used for tanning one adult person at a time, with a skin type suitable for tanning.

Nursing infants and small children through age 7 years may not use this device.

The following applies for children and teenagers between the ages of 8 and 17 years: Only use tanning devices in agreement with a parent or guardian, or after consulting a physician

The acrylic glass panels are designed for a maximum allowable weight of 135 kg.

The purpose of the coin devices is to pay for the tanning time of the Ergoline sunbed. In order that proper operation is ensured, the coin device must be adapted to the properties of the sunbed. The recommended tanning times depend on the tanning device. The tanning times can be taken from the respective operating instructions of the tanning device.

Any other use shall be considered improper. The manufacturer cannot be held liable for damage or injuries resulting from this. The operator bears the sole risk for this.

The proper use also includes compliance with the manufacturer's instructions, operating and maintenance conditions. The device may only be operated, maintained and repaired by persons familiar with these tasks and that have been informed of the dangers involved.

Acrylic glass panel lower part

The acrylic glass panels for the tanning devices are produced of acrylic glass developed especially for this application. The acrylics used are characterised by a particularly high UV permeability and resistance, as well as an easy-care, hygienic surface that is gentle to the skin.

The acrylic glass panels are formed to their shapes for the specific devices in a technically complex production process. Despite state-of-the-art production know-how, the presence of minor spots, air bubbles or streaks in the acrylic panels is unavoidable. In addition, microfine hairline cracks can occur on the bed surface during operation.

These occurrences are material-dependent and are unavoidable in processing, however have no significant effect on the utility value and can therefore not be recognised as defects. Cosmetics or sun screen products must be removed prior to tanning as they can cause damage (e.g. fine cracks on the surface) when used continuously.

Export

Export of the aforementioned Ergoline sunbeds to the USA and Canada, and the operation of these sunbeds in those countries, is forbidden. In the event of contravention, Ergoline refuses all liability. We point out expressly that in the event of infringement of this regulation, high risks of liability can arise for the exporter and/or the operator.

Safety

Please note that only authorised service and erection personnel may be used for the erection and installation, as well as the start-up and extension of the Ergoline devices.

The electric connections must be undertaken in accordance with local regulations by a company licensed for this purpose

Danger and safety notices fixed to the device may not be removed or covered. The safety instruction must be easily seen and must be adhered to. Safety installations (e.g. panel switches or filter panels) may not be removed or taken out of action. Further information can be taken from the operating instructions of the respective Ergoline device.

UV Rays

Depending on the model, Ergoline sunbeds emit a certain amount of UV rays at the place where they are installed. This can cause possible discoloration or fading of the materials used, such as: ceilings, wood, carpets, textiles, etc.

For this reason make certain of the UV resistance of the materials during planning.

Ozone

Certain wavelengths are reliably filtered out by the lamp glass and the built-in filter panels in the UV low-pressure and UV high-pressure lamps used by Ergoline. Thus, the formation of ozone in damaging concentrations or of other odours is not possible.

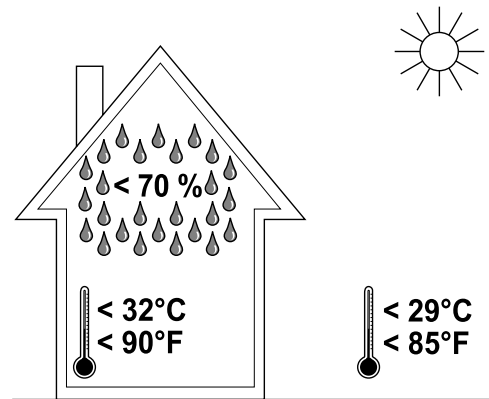
Climatic Requirements

All Ergoline devices are intended for installation in dry rooms without the danger of splash and drip-water. The maximum humidity of this room may not exceed 70 %.

To prevent an excessively high temperature on the bed surface of sunbeds, the room temperature should be a maximum of 3 to 4 °C higher than the outside temperature. However, the temperature in the room may not exceed 32 °C. The optimum temperature range is 25 to 30 °C.

Sufficient ventilation must always be ensured.

The devices may only be transported and stored at temperatures from 2 to 50 °C



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Permissible Floor / Ceiling Loads

When installing sunbeds for professional use, you should always make sure that the floors and ceilings in commercially used rooms are designed to support a maximum load of 3500 N/m².



Caution!

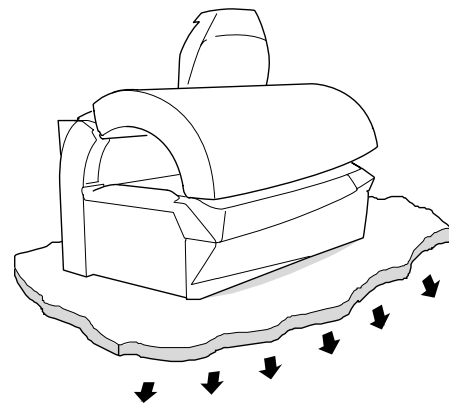
The load-bearing capacity of wooden beam ceilings must be proven in individual cases.

If the actual maximum load exceeds this value, the operator must provide separate documentary evidence in conformity with DIN 1055 – 3, October 2002, for the use of these rooms.

Examples of ceiling loads (based on normal cabin dimensions, 1 tanning device, two persons and small items of furniture):

Tanning devices up to 450 kg: Ceiling load approx. 1500 N/m²

Tanning devices up to 700 kg: Ceiling load approx. 1840 N/m²



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Cabin Sizes

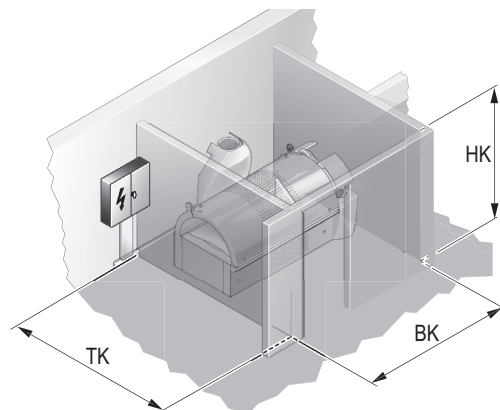
The respective minimum installation surfaces are given in the descriptions of the tanning devices.

The minimum installation surfaces refer to the dimensions:

BK Width of cabin

TK Depth of cabin

The height HK of the cabin is dependent on the local conditions and is not given.



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Mains Supply Lines

The following supply services must be taken into account in the planning of the position for an Ergoline Professional sunbed and must be laid on before installation of the device:

- Power connection cable
- Electrical control line (e.g. token/coin box)
- Headphone line

In addition, and depending on the equipment desired, planning must be made for the following supply lines:

- Loudspeaker line
- Line for external music
- Line for channel selection switching
- Bus line for data Bus
- Condensation hose

Further information, as well as the position of connections to the device, can be found in the description of the respective device.

Electrical Connections

Please note that the electric connection may only be carried out by an electrical contractor. The electrical installation must comply with national safety regulations.

Recommendations

At the site, we recommend a selective current-operated e.l.c.b. system (nominal ground current 30 mA) as well as lightning protection and a UPS installation for control and PC installations.

Connection requirements

The electrical installation is to be fitted with an easily accessible all pole isolating device (master switch) on the building side, complying with overvoltage category III. This means that each pin shall have a contact opening width complying with the conditions of overvoltage category III for full isolation.

If it is connected via a plug and socket, the plug system used shall comply with EN 60309-1/A11; 5-pin; 400 V AC ~ (10 A to 35 A) shall be used. The required rated fusing for a tanning device can be found in the chapter "Technical data" of the tanning device.

The required connection voltages must lie within a tolerance range of +/- 5% in order to ensure a malfunction-free and guaranteed operation of the devices. In the design of the electric power lines, a simultaneity factor of 1 must be expected. Time delay fuses must be supplied for protection.

The prescribed connection line per device is H05VV-F 5G x,x (x,x = 1.5 / 2.5 / 4.0 / 6.0) or local equivalent.

The cross-section of the power lines must be selected in conformity with local regulations and depends on:

- The length of the cable
- The power cable connected to it
- as well as a supply cable per device.

The mains connector cable must be laid prior to assembly of the device. In doing so, care must be taken to allow for cabling reserve, for instance in the tanning cabins, for connection of further devices. We recommend direct mains connection, i.e. without making any additional external contact points on the equipment. Further information can be obtained from the respective device descriptions.

The arrangement of the power cables must be recorded by means of corresponding labeling for the later installation of the devices.

Data, bus and/or control cables must be laid with a minimum distance of 10 cm from the mains supply. Therefore, the power supply and the control cables must not be placed in the same cabling trough

Ripple control system (TRA)

In some cases, depending on the local power supply company, the sunbeds may adversely affect the mains supply network in the building where the sunbeds are installed, causing interference with the ripple control system (TRA) operated by the power supply company. This may cause malfunctions, for example, of night storage heaters.

If the sunbeds cause this type of interference, the sunbed operator is responsible for installing an audio frequency blocking filter in the building wiring system. Please contact your firm of electricians. Your firm of electricians will be familiar with the technical connection conditions as applied by your local power supply company and will thus be able to match the audio frequency blocking filter to the mains supply of your power supply company.

Air Conditioning Technology

Ergoline sunbeds with air conditioning make it possible to influence the temperature for the ergonomic panel, surround air and the cabins. With the installed air-cooled air conditioning units, all essential factors involved in air conditioning can be adjusted throughout the entire year to meet the user's wishes and requirements.

Air conditioning can

- regulate the temperature of the warm air → Cool;
- regulate interior humidity → Dehumidify in the summer;
- clean the interior air.

Air humidity

Relative humidity

Air is able to absorb water vapour. This ability to absorb increases with increasing air temperature. For instance, 1 kg air at 15 °C can take up 10.78 g of water vapour but 20.34 g at 25 °C.

If 1 kg of air at 25 °C only contains 10 g water vapour, then the air can absorb a further 10.34 g. In this case, relative humidity is 50%.

Absolute humidity

Absolute humidity is the mass of water vapour that can be contained in a kilogram of air. Maximum humidity x_s is reached when the air is saturated with water vapour. Relative humidity is then 100%.

Relative humidity φ is derived from the relationship between absolute and maximum humidity: $\varphi = \frac{x}{x_s} \times 100\%$.

φ = relative humidity

x = absolute humidity

x_s = maximum humidity

Condensation water

Air-cooled air conditioning units have a surface temperature of 4 °C to 12 °C. As the air cools, relative humidity increases, as the ability to absorb water vapour decreases. If the air temperature continues to fall, the temperature drops below dewpoint temperature. The air is then no longer able to hold a part of the water vapour mass it contains, and condensation occurs on the cooler surfaces. The water thus formed is referred to as condensation water. Absolute humidity is reduced by this water mass.

Condensation drainage

On all air-cooled air conditioning units, condensation (→ condensation water) is expelled via the fan ring in the condenser fan. Part of the condensation is evaporated or pumped off by the condensation pump and fed to a condensation container via a plastic hose. The amount of water given off varies and depends on the air as well as the output of the cooling system. Dehumidification output can be as much as 2.8 litres per hour. When laying the plastic hose, please ensure that the hose is not longer than 20 meters and is not higher than 3 meters. The amount of condensation per device can vary even when there are the same devices in the same studio.

Acoustic Terminology

The sound pressure level measurement L_{pA} is used at a measuring distance $d = 1$ meter for characterising the acoustic sources in an enclosed space. The measurement is carried out with exhaust air and a switched-on main and body ventilator as

well as air conditioning (when available, limiting temperature 20 °C).

Terms	Explanations
Sound	Sound is generated by mechanical vibrations. It propagates itself in gaseous, fluid and solid bodies.
Frequency	No. of vibrations per second. Unit: 1 Hertz = 1 Hz = 1/s. The pitch rises with the frequency. Frequency range of human hearing: 16 Hz ... 20,000 Hz.
Acoustic level	A measure of the strength of the sound (acoustic energy).
Decibel (db)	Standard unit for the acoustic level depicted on a logarithmic scale.
dB (A)	As the human ear finds that different high tones (frequencies) of the same acoustic level have different strengths, the noise must be correspondingly damped with filters at certain frequencies. The frequency evaluation curve with filter A takes this into account and provides a subjective hearing impression. A difference of 10 db (A) corresponds somewhat to a doubling (or halving) of the perceived noise level.

Environmental Declaration

The JK corporate group is subject to the strict regulations of EC Directive 761/2001 and the standard EN ISO 14001:1996, and undergoes regular internal and external environment audits performed by trained auditors.



Environmental Regulations

Disposal of lamps

UV low-pressure lamps and UV high-pressure lamps contain fluorescent materials and other waste containing mercury.

According to the national waste disposal laws and in accordance with the municipal waste regulations, proof must be provided of the proper disposal of UV lamps.

Your local sales agency will be happy to assist you with the disposal¹⁾ of UV lamps and batteries.

- Report the number of UV lamps to your local Ergoline agency by telephone or in writing.
- Together with a disposal company, the agency then sees to the collection of the lamps and their proper disposal.

Disposal of electronic components and batteries

Batteries and printed circuits contain heavy metal compounds. These and electronic devices must be disposed of as special waste in accordance with national waste laws and community waste bylaws. Approach your regional waste recycling association for disposal of batteries, printed circuits and electronic devices.

Packaging

All packaging consists of 100 % recyclable materials. Packaging brought into circulation by the JK Corporate Group that is no longer required can be returned to the JK Corporate Group. Your agency partner or dealer will be happy to advise you.

Disposal of recyclable materials

The device has been produced of recyclable materials. When being scrapped later, the device must be disposed of properly. The JK Corporate Group will provide you with information on the content or potential hazards of the materials used.

1) Studio user liable for costs