

CEILING FAN



Box-D



EN

USER'S MANUAL



BLAUBERG
Ventilatoren

SAFETY REQUIREMENTS

Disconnect the fan from power mains prior to any installation, setup, maintenance and repair operations.

The fan must be connected by an expert qualified for unassisted operations with electrical installations up to 1,000 V after being made familiar with the present technical certificate.

Prior to installation check for any visible damage to the impeller, casing and grille.

Also check the casing flow channel for any foreign objects which may damage the impeller wheel blades. The fan may only be used as intended. No modifications or alterations are allowed.

The fan is not intended for operation by children or any persons with reduced physical, mental or sensory capacities, lacking practical experience or knowledge unless controlled or briefed on the device operation by the person responsible for their safety.

The fan may not be used to handle air containing highly flammable substances or vapours such as alcohol, petrol etc.

The fans take 220-240 V 50/60 Hz single-phase alternating current.

Children being supervised not to play with the appliance!

Disconnect the damper from the power supply (electric mains) prior to any work on the unit.

Power mains connection shall only be performed by a qualified electrician. The nominal electrical parameters of the fan are given on the manufacturer's label. Any tampering with the internal connections is prohibited and will void the warranty.

Take the necessary measures to prevent penetration of smoke, carbon monoxide and other combustion products into the spaces through open smoke ducts or other fire-safety infrastructure as well as prevent back flow of gases from any appliances which produce gas flame or naked flame.

The transported air must not contain dust and other solids as well as sticky substances and fibrous materials.

The unit is not intended for operation in environments with high concentrations of highly flammable substances or vapours such as alcohol, petrol, insecticides etc.

Do not close or block the inlet and outlet openings of the unit to ensure optimum air flow.

Do not sit on the unit or put any objects on top of it. The unit owner must follow this manual.

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PURPOSE

The Box-D ceiling fan in a metal casing with 100, 125, 150 and 160 mm exhaust outlets (hereinafter "Fan") is intended for ventilation systems of industrial or residential buildings, swimming pools, blocks of flats, offices, hospitals, restaurants and other spaces heated during the winter. The air discharged by the fan must not contain dust, solids, sticky substances and fibrous materials.

The ambient air temperature must not exceed the limit values given in Table 1.

The fan is designed for installation between the floor slab and the suspended ceiling attached to the ceiling structure on mounting brackets or to a wall on side mounts (Box-D 100 and Box-D 125 only).

The fan is designed for extended periods of continuous operation without disconnection from power mains.

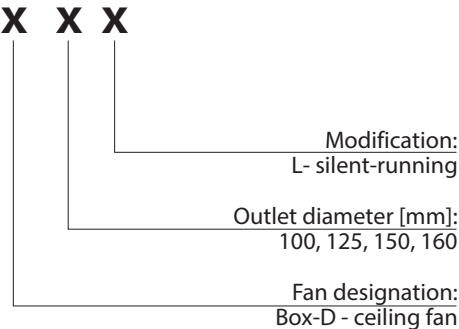
The products meet the requirements of IPX4 hazardous parts access and water ingress protection standard.

DELIVERY SET

| | | |
|--------------------------------------|-------------------------------|------------------|
| | Box-D 100 L, Box-D 100 | Box-D 150 |
| | Box-D 125 L, Box-D 125 | Box-D 160 |
| Fan | 1 item | 1 item |
| Fastening kit for wall side mounting | 1 item | - |
| Suspended holding brackets | 2 items | 4 items |
| User's manual | 1 item | 1 item |
| Packing | 1 item | 1 item |

The fan design is constantly being improved, so some models can slightly differ from those ones described in this manual.

DESIGNATION KEY



Sample designation:

Box-D 125 L - ceiling fan, outlet diameter - 125 mm, with silent-running motor.

TECHNICAL DATA

The names of the fans, their parameters and connecting dimensions are given in tables 1, 2.

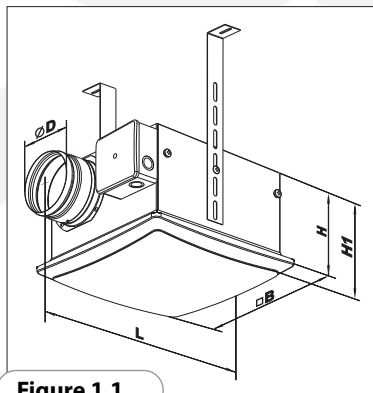


Figure 1.1

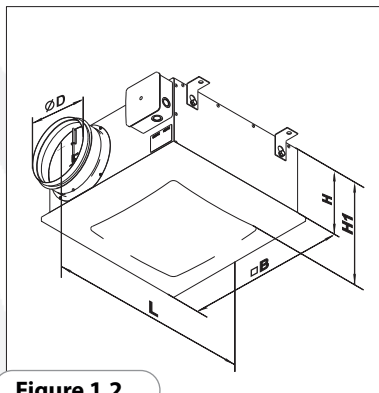


Figure 1.2

| Fan type | Box-D 100 L | | Box-D 100 | | Box-D 125 L | | Box-D 125 | | Box-D 150 | | Box-D 160 | |
|--|-------------|------|-----------|------|-------------|------|-----------|------|-----------|------|-----------|------|
| Voltage [V] | 1~220-240 | | 1~220-240 | | 1~220-240 | | 1~220-240 | | 1~220-240 | | 1~220-240 | |
| Frequency [Hz] | 50/60 | | 50/60 | | 50/60 | | 50/60 | | 50/60 | | 50/60 | |
| Power [W] | 58 | 66 | 61 | 79 | 56 | 58 | 61 | 81 | 112 | 136 | 112 | 136 |
| Current [A] | 0,28 | 0,29 | 0,26 | 0,35 | 0,34 | 0,35 | 0,26 | 0,36 | 0,5 | 0,6 | 0,5 | 0,6 |
| Maximum air capacity [m³/h] | 170 | 185 | 240 | 250 | 225 | 240 | 310 | 320 | 485 | 531 | 485 | 531 |
| R.P.M. | 2300 | 2570 | 2500 | 2730 | 2300 | 2570 | 2500 | 2740 | 2465 | 2550 | 2465 | 2550 |
| Sound pressure level at 3 m distance [dB(A)] | 42 | 43 | 47 | 48 | 43 | 44 | 48 | 49 | 52 | 53 | 52 | 53 |
| Max. transported air temperature [°C] | -25...+45 | | -25...+45 | | -25...+45 | | -25...+45 | | -25...+45 | | -25...+45 | |
| IP rating | IPX4 | | IPX4 | | IPX4 | | IPX4 | | IPX4 | | IPX4 | |

Table 1

| Fan type | Dimensions, mm | | | | | Weight, kg | Pict |
|-------------|----------------|-----|-----|-----|-----|------------|------|
| | D | B | H | H1 | L | | |
| Box-D 100 L | 100 | 240 | 160 | 189 | 305 | 3,4 | 1.1 |
| Box-D 100 | 100 | 240 | 160 | 189 | 305 | 3,4 | 1.1 |
| Box-D 125 L | 125 | 240 | 160 | 189 | 305 | 3,4 | 1.1 |
| Box-D 125 | 125 | 240 | 160 | 189 | 305 | 3,4 | 1.1 |
| Box-D 150 | 149 | 355 | 180 | 215 | 419 | 6,5 | 1.2 |
| Box-D 160 | 159 | 355 | 180 | 215 | 419 | 6,5 | 1.2 |

Table 2

FAN DESIGN

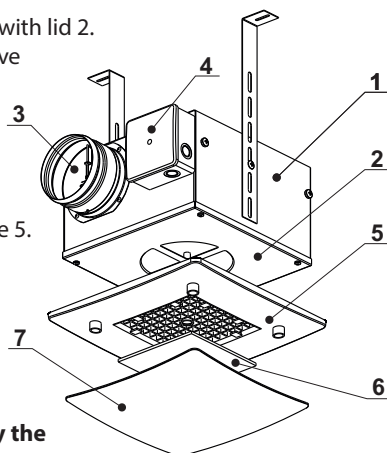
The Box-D ceiling fan (Fig. 2) comprises of casing 1 with lid 2.

The casing has an exhaust outlet 3 with a check valve which prevents back flow of air while the fan is off.

Terminal box 4 containing the terminals for connecting the fan to power mains is mounted to the casing. Grille 5 with air filter 6 is attached to the casing with screws.

Decorative front panel 7 locks into the slots on grille 5.

The casing houses a single-phase electric motor with a centrifugal impeller and backward-curved blades. The electric motor has integrated thermal protection and restarts automatically.



The replacement of parts of the safety suspension system device shall be performed by the manufacturer, its service agent or suitably qualified persons!

Figure 2

INSTALLATION AND OPERATION INSTRUCTIONS

The fan is installed between the floor slab and the suspended ceiling by means of two mounting brackets. The distance between the bracket attachment point and the suspended ceiling must be within 165 - 390 mm.

The fan installation steps are given in Fig. 5, 6.

The power is supplied via an external terminal box mounted to the fan casing.

WARNING: If unusual oscillating movement is observed, immediately stop using the ceiling fan and contact the manufacturer, its service agent or suitably qualified persons!

The fan is to be installed so that the blades are more than 2.3 m above the floor!

Figure 3

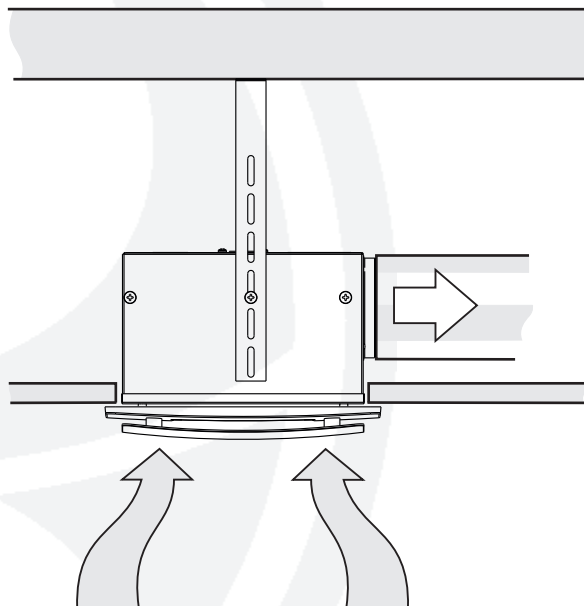
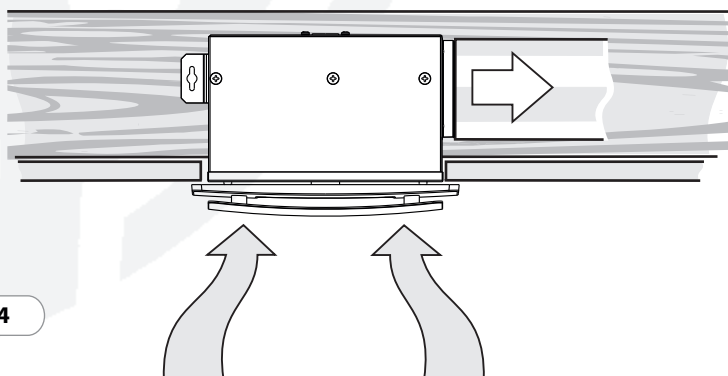
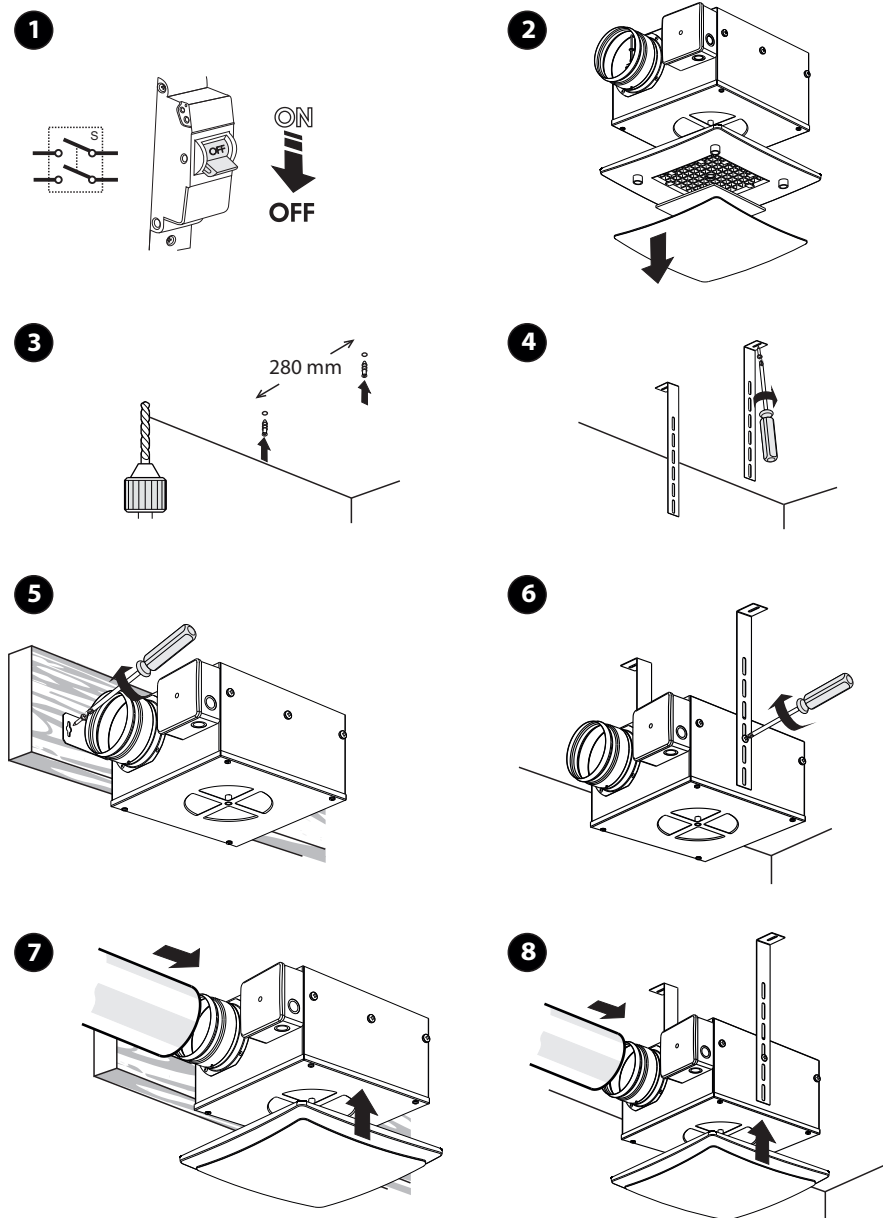


Figure 4



**Box-D 100 L, Box-D 100
Box-D 125 L, Box-D 125****Figure 5**

Box-D 150, Box-D 160

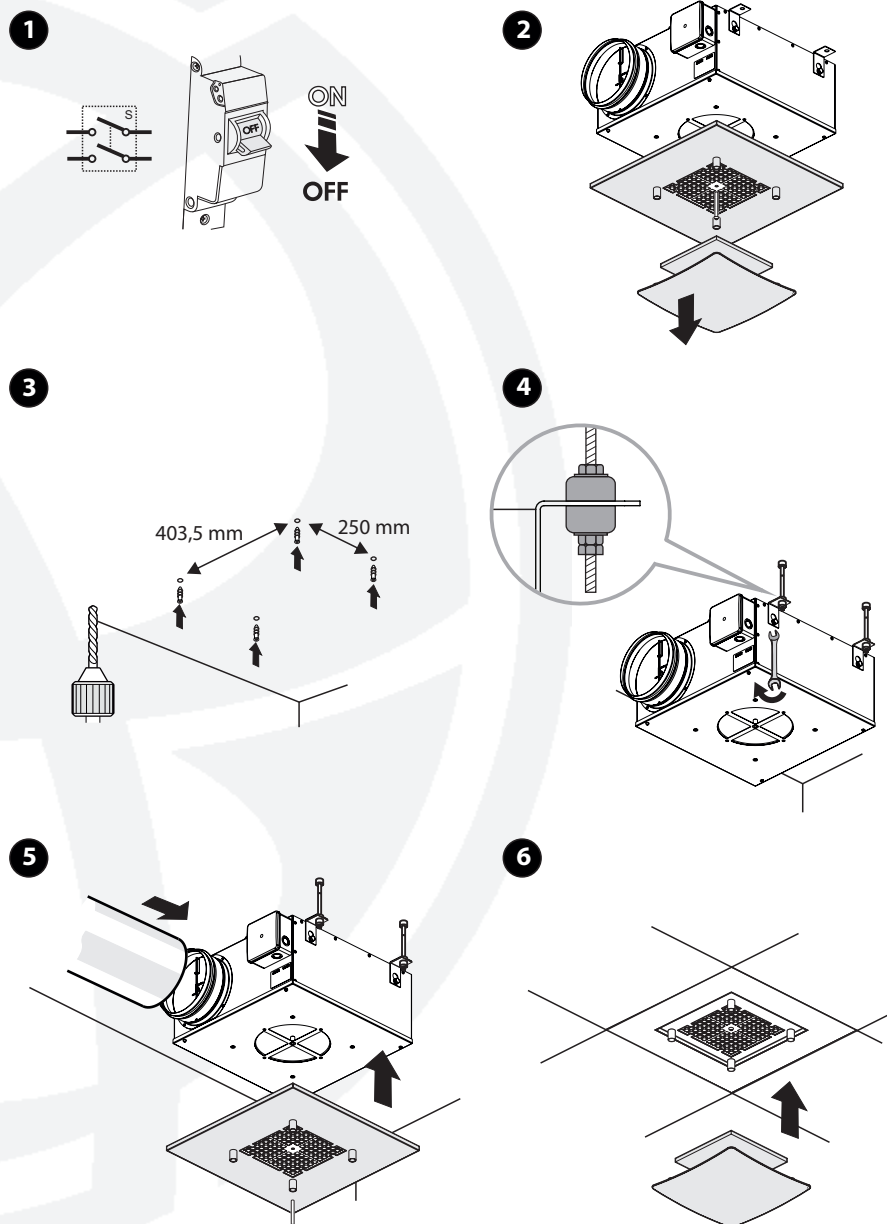


Figure 6

CONNECTION TO POWER MAINS

Disconnect the damper from the power supply (electric mains) prior to any work on the unit. Power mains connection shall only be performed by a qualified electrician. The nominal electrical parameters of the fan are given on the manufacturer's label. Any tampering with the internal connections is prohibited and will void the warranty.

The fans take 220-240 V 50/60 Hz single-phase alternating current.

The fan connections (cables and wires) must be durable, insulated and heat-resistant. The external lead-in (220-240 V 50/60 Hz) must be equipped with a switch built into the stationary wiring to disconnect all the mains phases. The location of the S external switch must ensure unobstructed access for shutting down the fan quickly if required.

The conductor cross-section values are given for reference only while the actual selection must be based on the maximum permissible wire heating which depends on the wire type, its insulation, length and installation method (i.e. overhead, in pipes or inside the walls).

The recommended current of the switch is the next current in the standard current row following the maximum current of the connected unit. The switch is not included in the delivery set.

The electrical connections are terminated on the terminal block located inside the fan casing in accordance with the Wiring Diagram and the terminal designations (Fig. 7).

The terminal designation diagram is given on a label inside the terminal box.

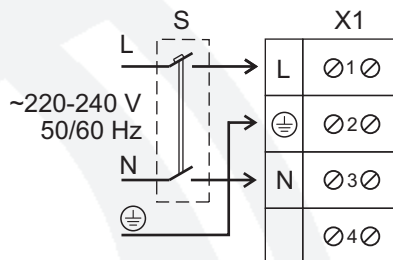


Figure 7

The steps for connecting the fan to power mains are given on Fig. 8.

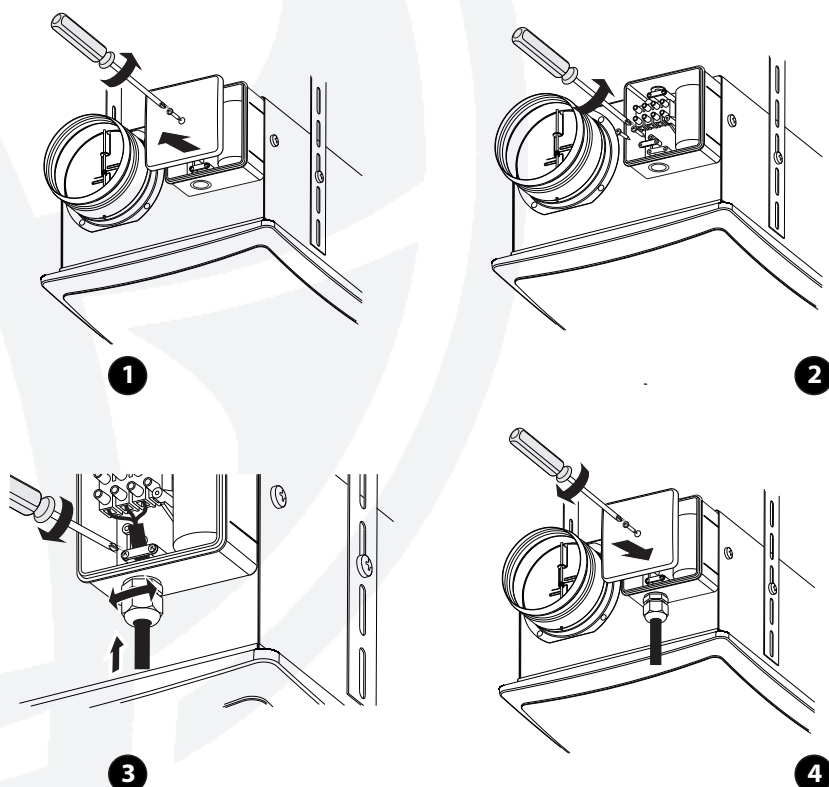


Figure 8

TECHNICAL MAINTENANCE

The technical maintenance of the fan includes periodic cleaning of the fan surfaces from dust and dirt.

The filter must be replaced on a need-to-do basis, but at least every 6 months.

The impeller cleaning and filter replacement steps are given in Fig. 9.

The impeller blades must be thoroughly cleaned from dust and dirt every 6 months.

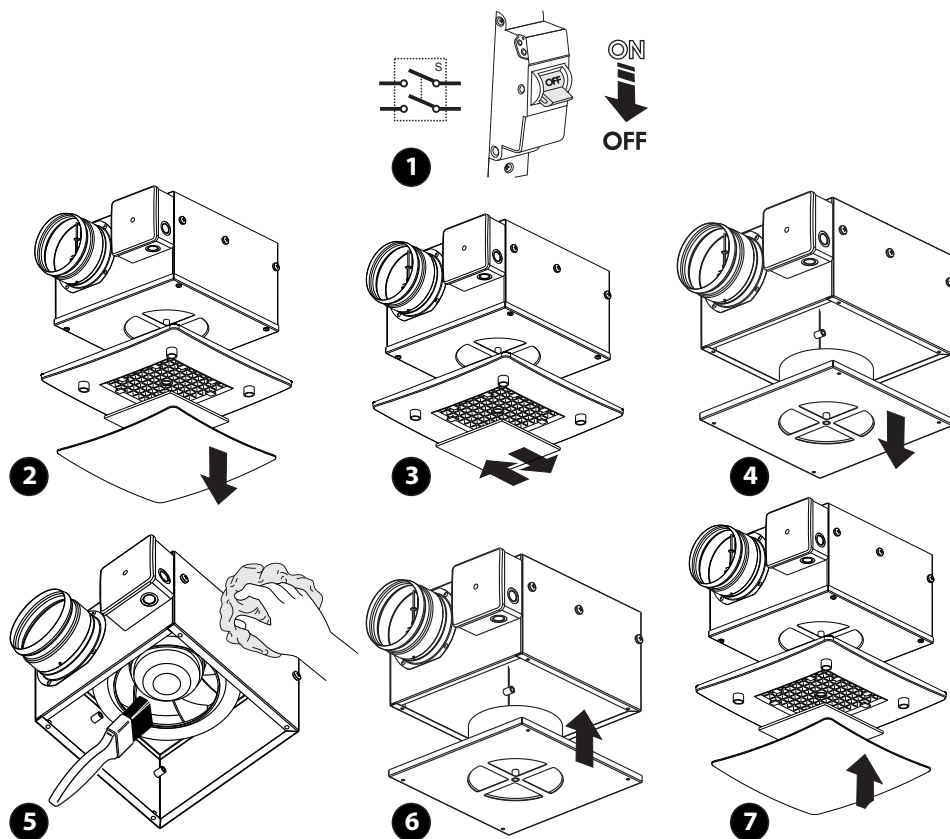


Figure 9

Take the necessary measures to prevent penetration of smoke, carbon monoxide and other combustion products into the spaces through open smoke ducts or other fire-safety infrastructure as well as prevent back flow of gases from any appliances which produce gas flame or naked flame.

The transported air must not contain dust and other solids as well as sticky substances and fibrous materials.

The unit is not intended for operation in environments with high concentrations of highly flammable substances or vapours such as alcohol, petrol, insecticides etc.
Do not close or block the inlet and outlet openings of the unit to ensure optimum air flow.
Do not sit on the unit or put any objects on top of it. The unit owner must follow this manual.

Precautions must be taken to avoid the backflow of gases into the room from the open flue of gas or other fuel-burning appliances (for duct and partition fans)!

STORAGE REGULATIONS

The fans must be stored in the original packing in a well-ventilated area at temperatures from +5 °C to +40 °C and relative air humidity up to 80 % (at T= +20 °C).

MANUFACTURER'S WARRANTY

We hereby declare that the product complies with the essential protection requirements of Electromagnetic Council Directive 2014/30/EU and Low Voltage Directive 2014/35/EU and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This certificate is issued following test carried out on samples of the product referred to above.

By purchasing the product the buyer accepts the following warranty terms and conditions:

The Manufacturer hereby guarantees normal performance of the fan during 24 months from the date of retail sale provided compliance with transport, storage, mounting and operation regulations.

To benefit from the warranty service you must produce the original User's Manual containing the unit manufacture date as well as the original receipt or other documentary evidence of the fact equipment purchase and its date.

The unit model must be consistent with the one stated in the User's Manual. In the absence of a receipt with the purchased date or any documentary evidence of the equipment ownership and purchase date the warranty period shall be calculated from the manufacture date stated in the User's Manual.

Should the User completely fail to provide the documents listed above the company reserves the right to deny free warranty service of a faulty unit.

All the units and components being part of a faulty unit (being the subject of warranty repair application) replaced over the warranty period shall inherit the warranty period and warranty service terms which apply to the entire unit.

For the avoidance of doubt this means that neither the said components nor the entire unit shall be covered by an additional warranty period.

In the event of any malfunctions in the fan operation during the warranty period which occur through the manufacturer's fault, the user shall be entitled to claim fan replacement at the factory. Please contact the Seller regarding any matters related to warranty service.

The warranty liabilities shall not apply to the accessories used with the unit irrespective of their being part of the fan delivery package and any and all damage caused to other equipment operated in conjunction with the unit. The company shall not be liable for ensuring compatibility of its products with third-party units as far as their compatibility is concerned.

The warranty is exclusively limited to the defects of workmanship.

Any and all defects and malfunctions including mechanical damage caused by physical contact in the course of operation or natural wear and tear shall not be deemed warranty cases.

The warranty liabilities shall not cover any malfunctions resulting from disregard of the instructions specific to the operation, care and maintenance of the unit or any unauthorised alterations and modifications to the unit design made by the user or any third party.

Furthermore, the warranty shall not apply to any damage resulting from accidents, lightning strike, water, fire, war, public disorder or any other factors beyond the reasonable control of the manufacturer and its official distributors.

RELATED DAMAGE LIABILITY WAIVER

The manufacturer shall not be liable for any deterioration of health or damage to equipment caused by violating the provisions of the present User's Manual, unit misuse or gross mechanical tampering.

The company does not provide compensation for any related damage (e.g. unit relocation and re-connection, direct or indirect damages etc.) related to the unit replacement.

The manufacturer's warranty shall not cover any and all transportation expenses or any other expenses including the risks specific to unit deactivation, transportation and installation.

The warranty for mounting, electrical equipment installation and adjustment work must be provided by the respective contractor.

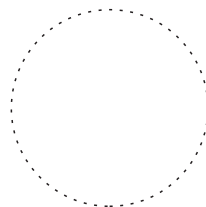
In any case the compensation under the present warranty may not exceed the amount actually paid for the faulty unit by the buyer.

ACCEPTANCE CERTIFICATE

| | |
|---|--------------------|
| Unit Type | CEILING FAN |
| Model | Box-D _____ |
| Serial Number | |
| Manufacture Date | |
| <p>is compliant with the technical specifications and is hereby declared ready for service. We hereby declare that the product complies with the essential protection requirements of Electromagnetic Council Directive 2014/30/EU and Low Voltage Directive 2014/35/EU and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.</p> <p>This certificate is issued following test carried out on samples of the product referred to above.</p> | |
| Quality Inspector's Stamp | |

SELLER INFORMATION

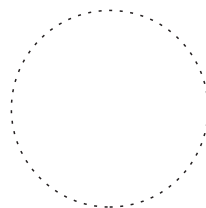
| | |
|--|--|
| Seller | |
| Address | |
| Phone Number | |
| Email | |
| Purchase Date | |
| <p>This is to certify delivery of the complete fan with the user's manual.</p> | |
| Customer's Signature | |



Seller's Stamp

CONNECTION CERTIFICATE

| | |
|--|-------------------|
| <p>The Box-D ____ ceiling fan has been connected to power mains pursuant to the requirements stated in the present user's manual.</p> | |
| Company Name | |
| Address | |
| Phone Number | |
| Installation Technician's Full Name | |
| Installation Date: | Signature: |
| <p>The fan has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards.</p> <p>The fan operates normally as intended by the manufacturer.</p> | |
| Signature: | |

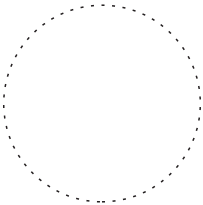


Installation Company Stamp

WARRANTY CARD

WARRANTY CARD

| | |
|-----------------|-------------|
| Unit Type | CEILING FAN |
| Model | Box-D _____ |
| Serial Number | |
| Purchase Date | |
| Purchase Date | |
| Warranty Period | |
| Seller | |



Seller's Stamp



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