HENGJHU
COMPANY LIMITED

BATHROOM EXHAUST FAN DATASHEET

Bathroom Exhaust Fan

Moisture exhaust, odor reduction, low-noise operation, and backdraft control for bathroom ventilation

The Bathroom Exhaust Fan is designed to support moisture exhaust, odor reduction, and air circulation in bathroom spaces.

With low-noise operation, 100 mm duct compatibility, 110V options, and electric damper models, it is suitable for residential bathrooms, windowless bathrooms, renovation projects, and spaces where backdraft or odor return needs to be considered.

- Moisture Exhaust
- Bathroom Ventilation
- Low-noise Operation
- Electric Damper
- Backdraft Control
- 100 mm Duct
- 110V

Moisture exhaust	Odor reduction	Backdraft control

Moisture and Odor Exhaust

Supports removal of humid air, stuffiness, and bathroom odor.

Low-noise Operation

Designed to balance exhaust performance with daily comfort.

Electric Damper Option

Helps reduce backdraft when properly selected and installed.

Model and Voltage Selection

Available in 110V options, with electric damper and basic models.

Planning note: Fan performance should be reviewed together with duct route, make-up air, damper design, bathroom conditions, and exterior exhaust outlet design.

WHY BATHROOM VENTILATION MATTERS

Bathroom ventilation is not only about airflow, but about removing moisture and odor from the space

Bathrooms are one of the most moisture-prone areas in a building. After showering, humid air may remain on mirrors, walls, ceilings, floors, glass doors, and surrounding surfaces.

If the bathroom does not have stable ventilation, moisture and odor may stay inside the space for a longer time. This may lead to foggy mirrors, slow-drying walls and floors, stuffy air, and higher cleaning demand.

For bathrooms without exterior windows, bathrooms with poor natural ventilation, or spaces that remain humid after use, a Bathroom Exhaust Fan helps support daily moisture exhaust and air circulation.

Moisture Exhaust

Supports removal of humid air after showering.

Odor Reduction

Helps exhaust odor through airflow and duct routing.

Ventilation Support

Supports airflow in bathrooms without good natural ventilation.

Foggy Mirrors and Slow Drying

Helps reduce humid air that may cause mirrors, walls, and floors to stay wet longer.

Windowless Bathrooms

Mechanical exhaust is especially important when there is no exterior window.

System Condition Matters

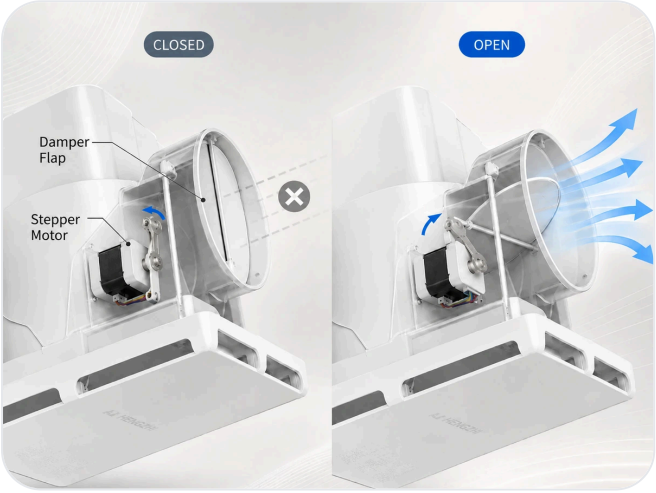
Actual exhaust performance depends on fan capacity, duct route, make-up air, damper design, and exterior exhaust outlet conditions.

A Bathroom Exhaust Fan is not a dehumidifier. It supports moisture and odor exhaust through airflow, but actual results depend on bathroom conditions, duct design, and installation quality.

DAMPER DESIGN & SPECIFICATIONS

Electric damper design helps reduce backdraft when properly selected and installed

In many bathroom exhaust systems, the fan is only one part of the ventilation path. After the fan stops, outside wind pressure, duct conditions, or exterior outlet design may affect whether air or odor returns through the duct.



Damper Design Focus

A gravity damper or backdraft damper may provide basic protection under general conditions. However, in bathrooms affected by wind pressure, odor return, or unstable exterior outlet conditions, an electric damper model may be worth evaluating.

The electric damper is designed to open with fan operation and actively close after the equipment stops, supporting better backdraft control when properly selected and installed.

Damper Comparison

Item	Gravity / Backdraft Damper	Electric Damper
Opening Method	Opened by exhaust airflow, gravity, or structural return.	Opens and closes through an electric control mechanism.
When Running	Airflow pushes the damper open.	Damper opens with fan operation.
When Stopped	Closes by gravity or structural return.	Actively closes after operation stops.
Stability	May be affected by wind pressure, dust, moisture, or sticking.	Closing status is more clearly controlled after operation stops.
Suitable Conditions	General ventilation needs.	Windowless bathrooms, high-rise buildings, wind-facing walls, odor return, or obvious backdraft concerns.

AT Series | Electric Damper Model

HG-AT100: 110V

For bathrooms where backdraft and odor return control are important.

BT Series | Basic Model

HG-BT100: 110V

For general moisture exhaust and basic bathroom ventilation needs.

Specification Table

Item	HG-AT100	HG-BT100
Type	Electric damper model	Basic model
Voltage	110V	110V
Opening Size	210 × 210 mm	210 × 210 mm
Duct Size	100 mm / 4"	100 mm / 4"

INSTALLATION CHECKLIST

Confirm bathroom conditions, duct route, and exterior exhaust outlet before installation

A Bathroom Exhaust Fan should not be selected only by appearance or voltage. Its actual performance is affected by the bathroom layout, installation position, ceiling space, duct route, make-up air, and exterior exhaust outlet conditions.

Installation Checklist

1. **Bathroom Conditions and Main Concern**
   Confirm whether the bathroom has an exterior window, the bathroom size, and whether the main concern is moisture, odor, poor exhaust, or backdraft.

2. **Installation Position and Ceiling Conditions**
   Confirm the planned fan location, ceiling space, beams, existing piping, and maintenance conditions.

3. **Duct Route and Exterior Exhaust Outlet**
   Confirm duct length, bends, duct size, and whether the exterior outlet is affected by wind, rain, or odor return.

4. **Model and Voltage Conditions**
   Confirm whether an electric damper model is needed, whether a Windproof Vent Cover should be evaluated, and whether the site uses 110V.

Recommended Information Before Quotation

- Bathroom photos
- Ceiling photos
- Existing fan or exhaust outlet photos
- Whether the bathroom has an exterior window
- Bathroom size
- Whether the bathroom is separated into wet and dry areas
- Duct route and exterior exhaust outlet photos
- Current backdraft, odor, or poor exhaust issue
- Site voltage condition: 110V
- Preferred model type: electric damper model or basic model

Need help selecting a Bathroom Exhaust Fan?

For product selection, replacement evaluation, or installation condition review, please contact HENGJHU Company Limited.

Request a Quote | Book a Technical Consultation | Contact Us

Stable bathroom ventilation depends on more than the fan itself. Fan capacity, damper design, duct route, make-up air, and exterior exhaust outlet conditions should be evaluated together before installation.