

## Masterveil Air Curtain System Installation Guide

### Applications

Masterveil air curtains are used to create an efficient separation of two temperature zones, such as between outside and inside or between a cooled space and a heated space. Air curtains from Masterveil are particularly useful in environments with a high throughput of people or goods as they create an effective protective barrier without physically blocking the door, ensuring easy and safe passage.

### Feature

Masterveil's Airstop air curtains work by creating a powerful, controlled jet of air that blows vertically or horizontally at the opening of a door or passageway. This air jet acts as an invisible barrier between two temperature zones, helping to minimize unwanted air exchanges, temperature losses, and ingress drafts, dust, or insects. Masterveil adapts all air curtains to be able to cope with the conditions in the exact place where the air curtain is to be installed.

### Placement and mounting

Place the air curtain in a stable environment with no negative pressure for optimal operation.

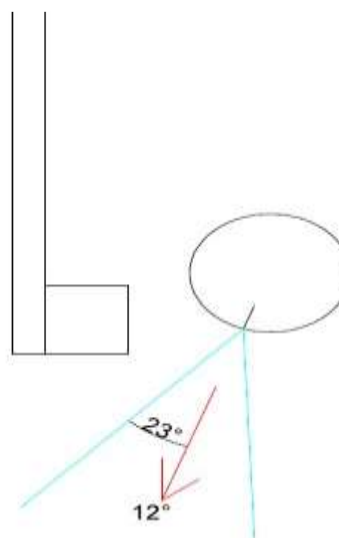
Make sure that the air curtain has free air intake and that the air jet is not obstructed by the wall, door automation, rails, etc.

Avoid disturbing air flows from other machines such as refrigeration units.

Install the air curtain as close to the doorway as possible in height or sideways. For horizontal installation, the air jet should reach the floor with minimal recirculation for the best protection.

For vertical installation, it is preferable to have an air curtain on each side of the opening and that the air jets meet at the centre of the opening with as low air velocity as possible.

If possible, make sure that the exhaust angle can be adjusted to handle drafts, wind, and temperature variations between temperature zones.

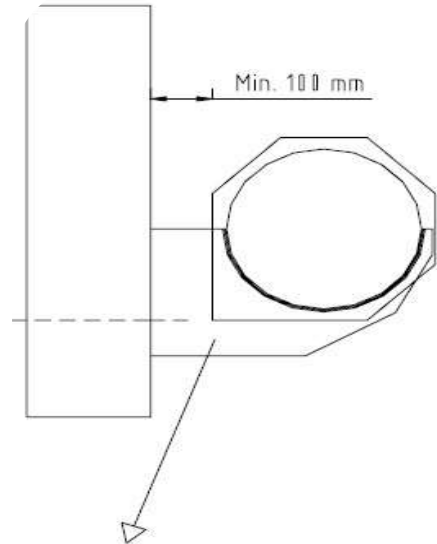


In exposed and critical applications, protect the area between the wall and the air curtain to prevent heat or cooling leakage.

Recommended overlap is at least 10 cm on each side of the doorway to ensure complete coverage.

Place the air curtain exhaust as close to the doorway as possible for optimal operation.

Keep a distance of at least 10 cm between the air curtain and the wall and make sure that the air jet is not blocked or obstructed



Mount the fan either horizontally or vertically in a weather-protected location.

Check that the fan is protected against vibration and shock.

**Precautionary measures**

Only certified technicians should perform the installation to ensure that the air curtain is installed in a safe and functionally optimal manner.

Connect the thermal connector to the electrical system. If the temperature of the motor becomes too high, the power is cut off to protect the device. In case of overheating, disconnect the electrical connection, wait for the motor to cool down, and then reset the connection.

All metal parts must be grounded to avoid electrical hazards.

Apply safety stickers to the system (e.g. on the Powerstream model) as instructed. For installations that are linked to active dehumidification in freezer rooms, ensure

that alarms and protection are in place for continuous operation and annual service. The water battery consists of copper pipes with aluminium flanges and is intended to be used in a closed system. The battery must not be connected to fresh or oxygenated water.

When connecting to glycol flow, provide the right components for accurate control and monitoring of input and output values.

**Operation and Maintenance**

Ensure the inlet grille/filter hatch is available for regular cleaning, filter replacement and maintenance. Protect the device from dust, abrasive dust, and aggressive substances.

Intake and exhaust grilles, fan wheels should be vacuumed with a soft brush or wiped with a dry cloth.

**Other considerations**

Moving air can feel cold even at temperatures above 24°C, so consider the distance between the air stream and people nearby for the best comfort.

To minimize energy losses, keep doorways as small as possible and avoid keeping doors open longer than necessary. If possible, use a pre-conditioned lock.

**Important to Remember**

Air curtains can improve comfort and reduce heat loss. Consider eventual combination with other techniques and/or equipment (like dehumidifier, etc...). Additional components can be directly combined to optimize the performance.

We disclaim responsibility for any errors or inaccuracies in the information. Products and instructions are subject to change without notice to meet new standards or specific usage requirements.