

The background features several decorative, wavy lines composed of many thin, parallel lines, creating a sense of motion and depth. These lines curve across the page, framing the central text.


Mounting

AME 900 F

AIRMASTER

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Revision	Date	Description
01	2024-12-05	First edition

	NOTICE
	<p>Read this manual thoroughly before mounting the AME 900 F unit.</p> <p>Please keep it for later use. Manuals must be given to the owner of the unit for safekeeping.</p>

Fill out this form for future reference:

Installation information	
Type	
Delivery date	
Serial number	
Mounting location	

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1 Introduction

This manual will instruct you on how to mount the AME 900 F unit correctly and safely.

Mounting and installing an AME 900 F is divided into two parts:

1. Mounting the unit and securing it to the wall (this manual).
2. Electrical installation. Please refer to the Installation manual.

Both manuals are part of the delivery. The manuals can also be downloaded from our website, see section 3.3.





1.1 Target group

This manual is addressed to qualified personnel.


1.2 Warning symbols


This manual may contain warning symbols. The colors and symbols adhere to the ISO 3864 and ISO 7010 standards. The visual depiction may vary depending on the type of media.


The symbols are described below:

	<p style="text-align: center;">DANGER</p> <p>Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.</p>
	<p style="text-align: center;">WARNING</p> <p>Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.</p>
	<p style="text-align: center;">WARNING</p> <p>Indicates a risk of crushing of hands.</p>
	<p style="text-align: center;">CAUTION</p> <p>Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.</p>

Continued on the next page

	CAUTION
	Wear safety footwear as personal protection equipment.

	NOTICE
	Failure to comply with the instructions can damage the device and its environment.

	Information, tips, and recommendations.
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1.3 Liability


The manufacturer cannot be held liable for damages due to usage violating this manual's instructions.


The manufacturer reserves the right to make changes without notice. All values stated are nominal values and may be affected by local conditions.


The warranty is voided should this manual not be followed.


2 Safety instructions

Breaching the instructions marked with a warning symbol carries a risk of personal injury or material damage.


WARNING	
	<ul style="list-style-type: none">• The unit must not be installed in explosion-protected rooms.• The unit must not be installed in rooms with flammable or corrosive gas in the air.• The unit must not be installed in rooms with abrasive particles in the air.• The unit must not be installed in wet rooms.

CAUTION	
	<p>Wear safety shoes when mounting the unit.</p>

NOTICE	
	<p>All applicable provisions must be observed when installing the air handling unit in a room with a fire or stove drawing air from the room.</p>

NOTICE	
	<p>The unit should not be used without the filters specified in the Operation & Maintenance manual.</p>

2.1 Responsibility

CAUTION	
	<ul style="list-style-type: none">• The installation technician is responsible for installing the unit following local rules and standards.• The installation technician is responsible for ensuring that the unit is properly secured in a level vertical position.• The installation technician is responsible for ensuring that any existing functions in the wall/ceiling (e.g. vapor barrier) are restored and fully functional once the unit has been installed.

2.1.1 Personnel requirements

Mounting the AME 900 F unit must be done by qualified personnel. Laypersons should not attempt to mount the unit.

3 Product identification

3.1 Product name and type

Product name	AME 900 F
Unit item number	9600900701
Type	Decentral air handling unit




Figure 1: AME 900 F unit

Table 1: Product name and type

3.2 Specifications

Weight: standard unit, complete	281 kg
Dimensions (W x H x D)	1150 x 2260 x 661 mm
Minimum ceiling height	2300 mm
Recommended ceiling height	2445 mm
Duct connection	Ø315 mm
Color: casing	RAL 9010

Table 2: AME 900 F specifications

Please refer to the AME 900 F datasheet for further information. The datasheet is available on our website.

3.3 Manufacturer

Airmaster A/S
Industrivej 59
9600 Aars
Denmark

Phone: +45 98 62 48 22
E-mail: info@airmaster.dk
Web site: www.airmaster.dk


4 Transportation and storage

The AME 900 F is packed on a pallet. Each pallet contains one unit.

The pallet must be tied up during transport so it will not move or shift. Make sure that it is not dropped or otherwise damaged during handling.


Gross weight (1 unit and pallet)	Approx. 350 kg
Net weight (unit)	281 kg
Pallet dimensions (l*w)	2350*1300 mm


Table 3: Weight and dimensions


	NOTICE
	The unit must be stored in a dry area at a temperature between -10 to 30° C.


5 Important information before you mount the unit

Read the instructions in this chapter carefully *before* you begin.

WARNING	
	<ul style="list-style-type: none">• The floor and walls in the room where the unit is mounted must be even and leveled.• Minimum ceiling height is 2300 mm (see section 3.2).• Use screws intended for the supporting wall material. Make sure the screws can support the unit's weight and fit the unit's attachment points. <p>If the unit tips over due to an uneven or unlevelled surface, there is a high risk of serious personal injury and damage to the unit.</p>

NOTICE	
	<p>Use appropriate lifting equipment. The unit is heavy; do not try to lift or move it by hand.</p>

NOTICE	
	<p>Duct holes in the wall must have an outward-downward faced gradient of 1-2% to prevent heavy rain from entering the unit.</p>

	<p>We recommend drilling duct holes 10-15 mm larger than indicated on the drawings.</p> <p>This will allow for subsequent insulation, prevent direct contact with the wall, and allow for a vapor barrier, etc. to be restored.</p>
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5.1 Minimum distance to building parts and room layout

It is important to position the unit correctly. The unit itself requires free space for the door to open. Obstacles in the room may affect the airflow from the unit, hence it is necessary to consider the room's layout when choosing the right position.

Below are the most important distances you need to consider before installation:

- A minimum distance of 10 mm is required on the left-hand side (seen from the front) to open the unit door.
- A minimum distance of 1150 mm is required in front of the unit, otherwise, the unit door cannot open.

As mentioned above, obstacles in the room can affect the flow of air. A large ceiling lamp, for instance, can interrupt the airflow creating unwanted flow directions, see an illustrative example below:

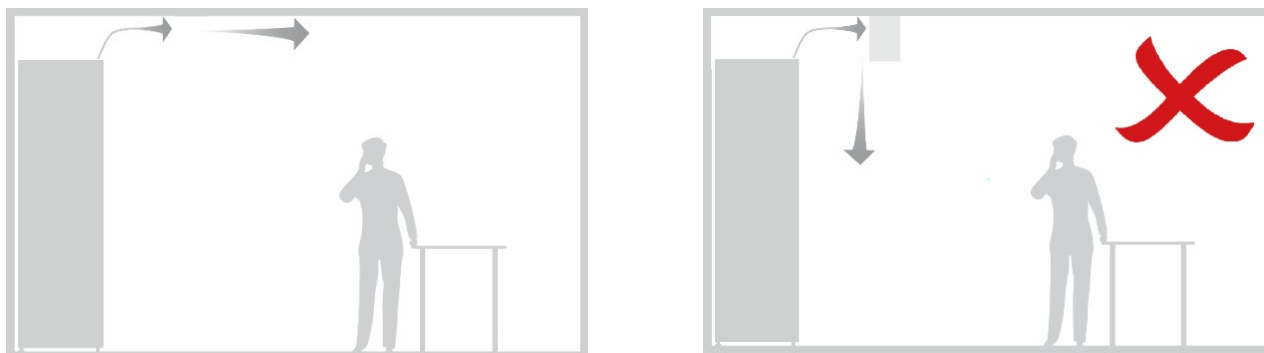


Figure 2: Obstacles can create unwanted flow directions - illustrative example only

5.2 Tools and accessories

Before you start mounting the AME 900 F unit you need the following tools and accessories:

- Lifting equipment appropriate for the unit weight (min. 290 kg), e.g., a pallet loader.
- A core drill (min. Ø315 mm, see the Information Box on page 11)
- Common hand tools, including a spirit level
- Sealants and sealing tape.

You also need laths/battens/blocks of wood to support the unit when lifting it, please see section 6.2 on page 15.

Depending on the customer's order: duct pipes, grilles, as well as a vapor barrier may also be required.


It is not possible to do the installation correctly without this equipment.

5.3 Unpacking

The scope of delivery can be seen from the delivery note; however, a general list of parts is listed below:

- AME 900 F unit
- Airlinq® Orbit control panel (option)
- Condensate drain hose (option, included if the condensate pump is selected as an option)
- Duct pipes, grilles, vapor barrier (options)
- Service cover key
- Manuals: Mounting manual, Installation manual, Operation & Maintenance manual.

Make sure you have all the parts and check if any parts look damaged before starting the installation.

	CAUTION
	Do not start the installation if one or more parts on the delivery note are damaged or missing.

6 The mounting process

The AME 900 F mounting process is divided into 3-4 steps:

1. Mark and drill duct holes
2. Mount the unit
3. Mount duct pipes and grilles + sealing
4. Connect the drain (if the unit is supplied with a condensate pump and drain).

Each of these steps is described on the next pages.

The electrical installation, including installation of the optional Airlinq® Orbit control panel, is performed afterward, please refer to the Installation manual.

Appendix A on page 20 provides a dimensional drawing of the AME 900 F unit.

Once the unit is mounted fill out the form on page 2 with details on type, date, serial number, and mounting location.

6.1 Mark and drill duct holes

When drilling the duct holes make sure you have the correct gradient as well as size, see the Information Box on page 11.

A section of the dimensional drawing depicting the top of the AME 900 F unit can be seen below. Please refer to the Dimensional drawing in Appendix A for further information.

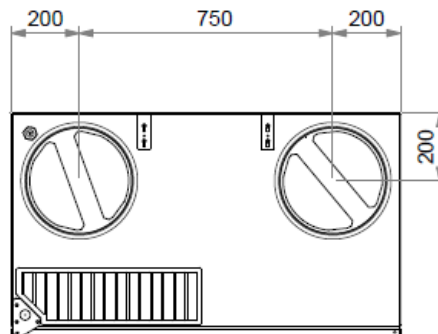


Figure 3: Dimensional drawing [in mm], top of AME 900 F unit

1. Mark the holes for the ducts.
2. Drill duct holes.

When drilling, consider wearing a face mask or similar protection equipment to protect yourself from inhaling dust particles.

6.2 Mount the unit

1. Before lifting the unit into an upright position place some laths/battens/blocks of wood as depicted in Figure 4. Without this, the height-adjustable feet may break or deform once the unit is lifted. Make sure the feet are as short as possible.

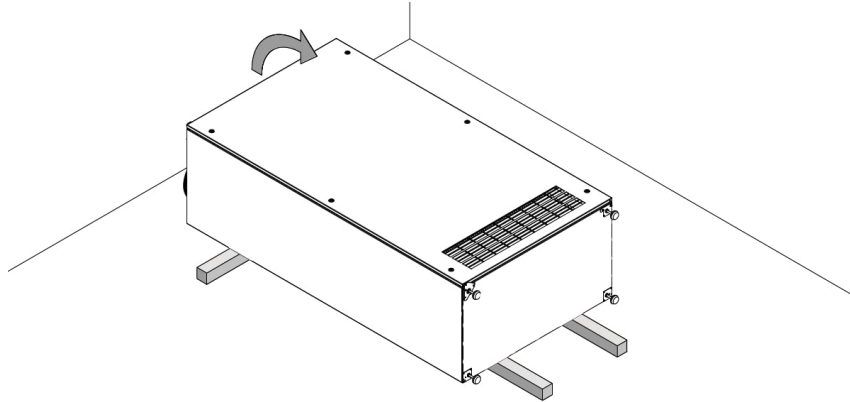


Figure 4: Place laths/battens/blocks of wood before lifting the unit

2. Raise the unit into an upright position and place it in its final position, as close to the wall as possible. A pallet loader can for instance be used to move the unit, see Figure 5 below.

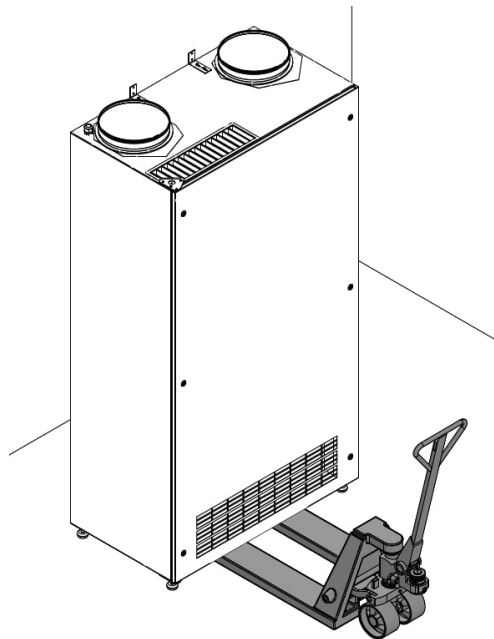



Figure 5: Move the unit into place

	WARNING	
	Do not place your hands between the wall and the unit.	



CAUTION

Be careful when moving the unit on the pallet loader. If the unit tilts over it can cause injury to persons and damage the unit.

3. Adjust the feet to make the unit level, see Figure 6 below.

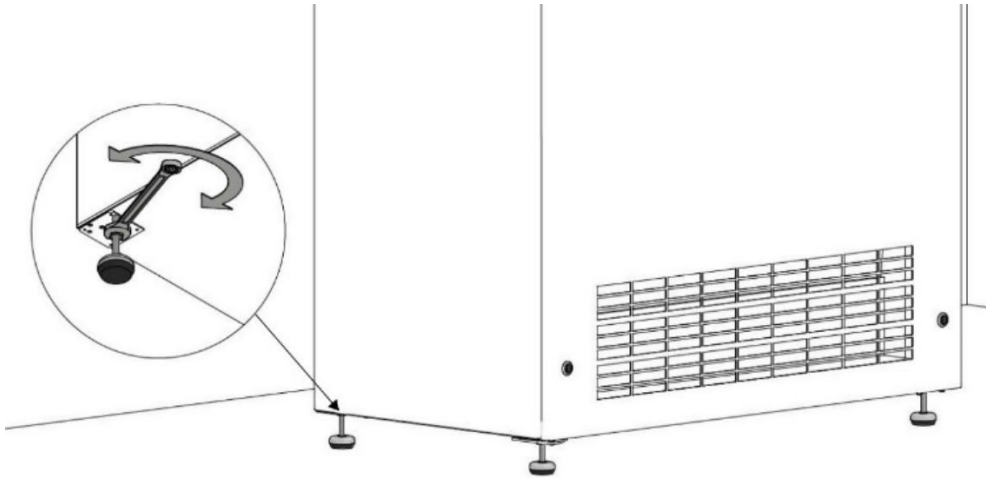


Figure 6: Adjust the feet to level the unit

4. Attach the brackets on top of the unit to the wall using screws applicable to the material of the wall. Make sure the unit is firmly secured to the wall.

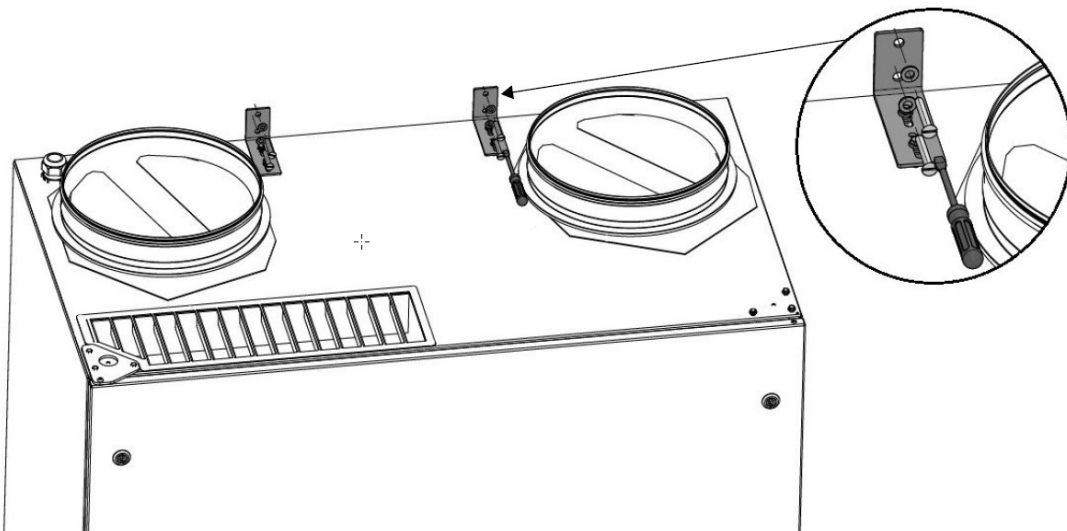


Figure 7: Attach the bracket on top of the unit to the wall

6.3 Mount duct pipes and grilles

Please note that this section and the following subsection provide a general description of fitting the ducting and subsequent sealing.

Materials and methods for fitting the ducting depend on the customer's order, the options chosen, and the actual site, hence we can only provide general guidance on this matter. However, the steps required are the same:

1. Mount the unit (already done)
2. Fitting the ducting
3. Mount the outside grille.

Figure 8 provides a general overview. Please note that this depicts a unit with intake/exhaust ducts on the back side, however, the process also applies to units with intake/exhaust ducting going through the ceiling.

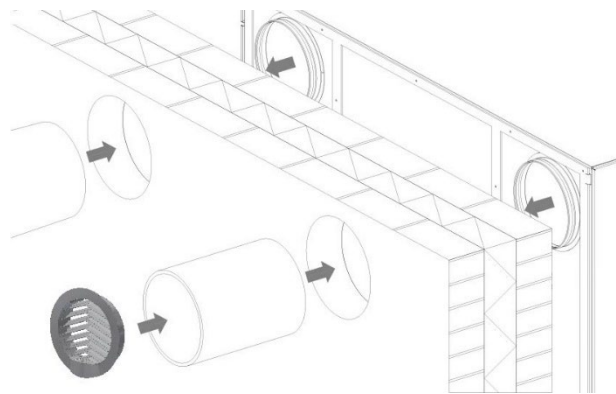



Figure 8: Duct pipes and grilles - general overview

NOTICE	
	<ul style="list-style-type: none">• Ventilation ducts must be installed according to local standards and rules in effect.• Condensation and heat insulation must be performed according to local standards and rules in effect.• Fire requirements according to local standards and rules in effect must be observed.

Important information:

- The length of the ducting is calculated based on the thickness of the wall/dimensions of the roof.
- Make sure the duct pipes do not get twisted or compressed against the intake air spigot/exhaust air spigot on the unit as this will increase the noise level.
- Intake air ducts and exhaust air ducts must be insulated against condensation if they are within the building envelope. Service access must be provided to all components.
- Intake air ducts and exhaust air ducts must be insulated against noise if they are visible. Service access must be provided to all components.
- Sealant must be applied to the outside and inside, see section 6.3.1.
- An outside grille must be mounted. Please refer to our website for more information on the Boomerain® grille.

6.3.1 Sealing

Please note that Figure 9 below depicts a unit with intake/exhaust ducts on the back side through a wall.

Figure 9 is a sectional drawing depicting a wall with a duct hole and duct fittings. A unit is installed on the inner wall, i.e. the grey box on the right-hand side marked with the number '1'.

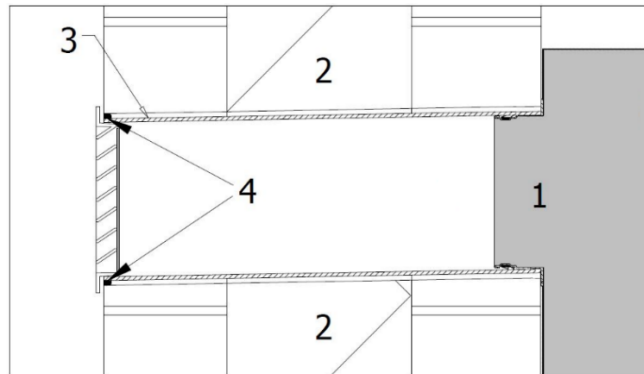


Figure 9: Sealing the gaps around ducts, sectional drawing

- 1 Unit
- 2 Wall
- 3 Duct and duct pipe
- 4 Sealing points on the outside

1. Apply sealant to the duct's outside edges, see '4' in Figure 9 above.
2. Apply sealant to the inside edges. This is done either around the air spigots or on the side of the duct holes to even out irregularities on the ceiling.

Depending on the condition of the ceiling/roof use a sealant that retains long-term elasticity or expanding sealing tape to form a flexible seal.

6.4 Condensate drainage (option)

Depending on the options chosen, the AME 900 F may be fitted with a condensate pump and a condensate hose.

Please note that this section provides general information about condensate drainage. We can only provide general guidance as drainage connections depend on the actual site.

Drainage can be done in various ways; one is to connect the drain hose to a waste-water pipe, and another is to lead the hose through the outer wall. Other options also exist.

If the drainage hose is connected to a waste-water pipe we recommend installing a water trap to block unpleasant odors emanating from the waste-water system, see Figure 10.

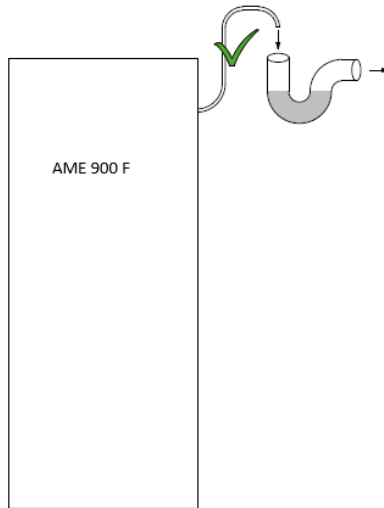


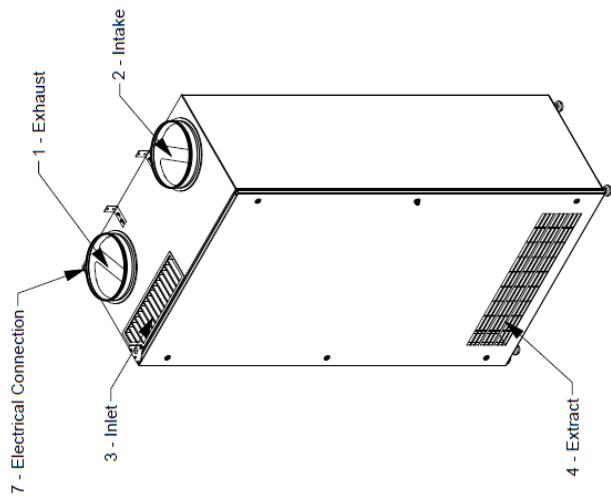
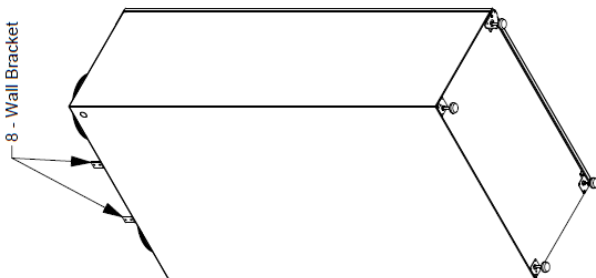
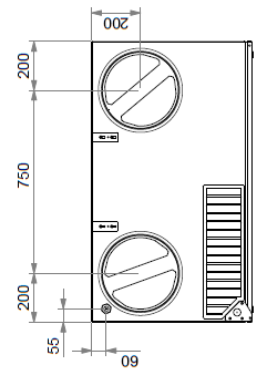
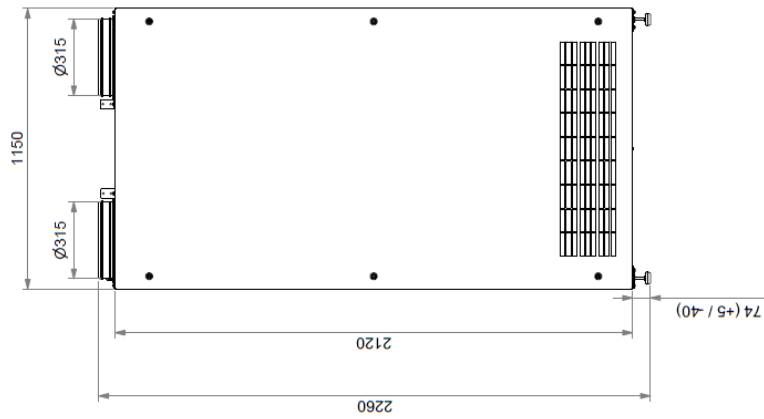
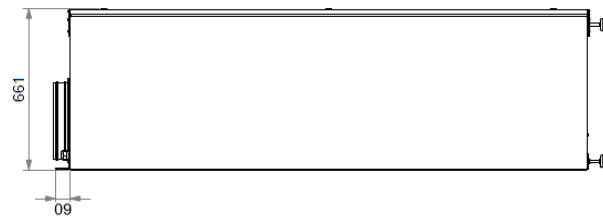
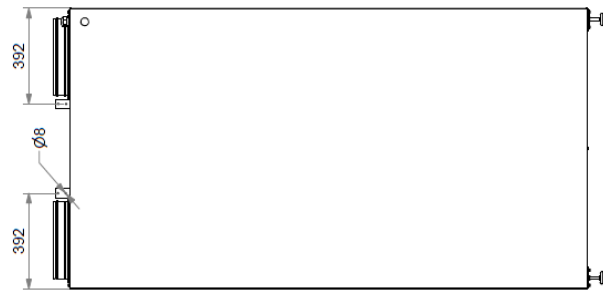
Figure 10: Water trap to avoid odors

The drainage hose can also be led through the outer wall; when doing so, the hose *must* be protected against the formation of ice.

If you wish to lead the drainage hose through the wall drill a hole with a suitable diameter and an outwardly sloping gradient of 1-2%.

Remember to seal the joint between the hose and the outer wall.

Appendix A Dimensional drawing



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AIRMASTER

Airmaster A/S

Industrivej 59
9600 Aars
Denmark

+45 98 62 48 22

info@airmaster.dk

www.airmaster

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Errors and omissions excepted. Subject to change without notice. Original user instruction.