

# **Bathroom Ventilation Kit**

Installation and Operation Manual CVK-105/210/260/450 & VK-105/210/260/450



# INTRODUCTION

Thank you for purchasing an AirScape® Bathroom Ventilation Kit. This unit has been designed to exhaust air from your bathroom, quickly, quietly and efficiently, keeping the space fresh and serene. Please take the time to read this entire manual before proceeding with installation.

## SAFETY INFORMATION

- Switch power to this unit off at the main circuit panel prior to its installation, service or cleaning.
- Installation and wiring must be done in accordance with this manual and all local codes and standards.
- Do NOT install this unit's switch where it can be reached from a tub or shower.
- This fan is for general ventilation only. It has NOT been designed to exhaust particle-laden and/ or explosive mixtures of air, or for use in fire-rated installations, and must NOT be used for such.

# WHAT'S INCLUDED

Before proceeding further, take a quick inventory of everything included in this kit.

**Table 1: Kit Contents** 

Model #	Fan	Plenum & Damper	Grille	Duct	Y-Fitting	Roof Cap / Wall Hood	Electronic Timer	Cable Ties
CVK-105	1 qty	1 qty, w/6"- 4" reducer	1 qty	25 ft. x 4"	N/A	1 qty, 4"	1 qty	4 qty
CVK-210	1 qty	1 qty	1 qty	25 ft. x 6"	N/A	1 qty, 6"	1 qty	4 qty
CVK-260	1 qty	2 qty	2 qty	25 ft. x 6"	1 qty, 6" x 6" x 6"	1 qty, 6"	1 qty	8 qty
CVK-450	1 qty	2 qty, w/8" - 6" reducer	2 qty.	25 ft. x 6"; 25 ft. x 8"	1 qty, 8" x 6" x 6"	1 qty, 8"	1 qty	7 qty
VK-105	1 qty	1 qty, w/6"- 4" reducer	1 qty	N/A	N/A	N/A	N/A	N/A
VK-210	1 qty	1 qty	1 qty	N/A	N/A	N/A	N/A	N/A
VK-260	1 qty	2 qty	2 qty	N/A	1 qty 6" x 6" x 6"	N/A	N/A	N/A
VK-450	1 qty	2 qty w/8" - 6" reducer	2 qty	N/A	1 qty 8" x 6" x 6"	N/A	N/A	N/A

## CHOOSING A LOCATION

Consider the following when selecting locations for each of this unit's components:

## Locating the Intake(s)

- Position the intake(s) above the sources of odor and moisture to exhaust.
- To ensure effective air exchange and circulation, choose a position away from windows or doors.
- CVK/VK-260 & -450 ONLY: The additional intake, grill, and damper incude with these models makes it possible to ventilate one large bathroom or two adjacent bathrooms simultaneously. as shown in Figure 1: Dual Intake Options at right. For the latter option, a second timer (sold seperately) is necessary.

Figure 1: Dual Intake Options



## Locating the Fan

- Choose a location in the attic that will be accessible for service.
- A minimum distance of 8 feet between the fan and intake(s) is recommended for quiet operation.
- The longer the duct run, the quieter the fan will be.
- Consider the total length of duct provided in the kit, being careful not to come up short.

# Locating the Roof Cap or Wall Hood

Apart from aesthetic considerations, select a location in close enough proximity for the length of duct

## **INSTALLATION**

AirScape Bathroom Ventilation Kits are designed for quick and easy installation. Once all of the fixed components are mounted, they are simple connected using the provided flex-duct and cable ties. Straightforward wiring to the included electronic push-button timer completes the job.

## Plenum Box Installation

- 1. CVK/VK 105 ONLY: Attach the 6"-4" reducer to the backdraft damper.
- 2. Check the clearance above the desired intake location(s) to make sure there is room for the plenum and duct in the attic.
- 3. Cut a 6" diameter circle out of the ceiling sheetrock in the desired intake location.
- 4. Place the plenum box over the rough opening.
- 5. Anchor the plenum to an attic joist by driving at least 2 robust self-tapping metal screws (NOT provided) through the plenum wall and into the stud. Make sure the weight of the plenum is supported by the joist. If the desired intake location is not adjacent to a joist, use appropriately sized lumber to frame a cross-peice to which to anchor the plenum. At right, **Figure 2: Plenum & Framing** shows how the plenum should be attached to the framing.
- 6. Use a high-quality latex caulk at the rough opening to make a seal between the sheetrock and plenum.
- 7. Attach the grille to the plenum from below; adjust the spring clips with pliers as needed to achieve a snug fit.
- 8. CVK/VK 105 ONLY: Repeat these steps to attach the second plenum.

Use at least two screws to anchor plenum to joists.

If needed, frame a crosspeice to which to anchor plenum using appropriately sized lumber.

Figure 2: Plenum & Framing

## Fan Installation

The fan can be mounted in any orientation.

- 1. Attach the mounting bracket to framing member at appropriate location.
- 2. Attach the fan to the mounting bracket using the provided sheet metal screws.
- 3. Electrical Connection: The fan can be plugged into an outlet in the attic using the supplied 3-prong power cord. Alternatively, the power cord can be removed and the fan hardwired directly to the timer switch (see **Figure 3: Timer & Fan Wiring**). Consult local codes for wiring standards and/or contact an electrician for further assistance with wiring.

#### Flex Duct Installation

The individual components are joined together using insulated acoustic flex-duct.

To attach the duct to a collar:

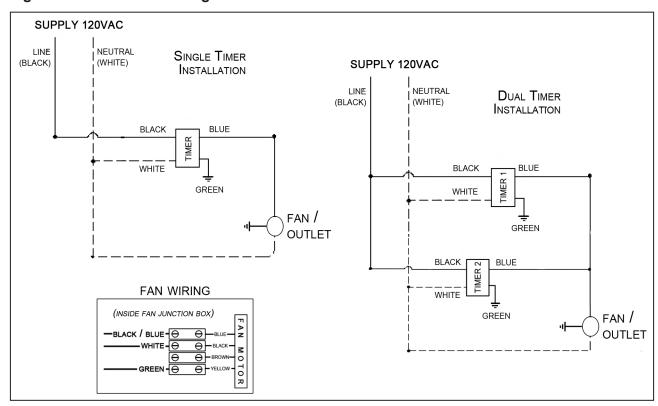
- 1. Pull back the outer foil and insulation layers to expose the black poly line with spring coil.
- 2. Pull this coil line over the collar and wrap it with one of the provided cable ties.
- 3. Pull the insulation and foil layers over the collar and wrap the joint with duct tape (NOT provided) to make an airtight seal.

#### Timer Installation

The included decora-style electronic timer installs into a standard single-gang electrical box (not included). A second timer (sold separately) can be wired to a single fan for dual-bath ventilation (see below). Be sure to shut off power at the circuit panel prior to any electrical wiring, and refer to local codes for proper and approved methods. Consult an electrician if needed.

- 1. Run wire from the fan (or outlet) in the attic to the location in the wall where the timer will be installed.
- 2. Connect leads using approved methods, following the proper wiring diagram shown below.

Figure 3: Timer & Fan Wiring



NOTE: The following instructions apply ONLY to models CVK-105, -210, and -260:

#### Roof Cap / Wall Hood Installation

\*Use caution when walking on roofs and climbing ladders\*

- 1. At the desired location, cut the proper size circular hole in the roof or wall.
- 2. Use proper and approved methods to attach the roof cap or wall hood and ensure a leak-proof seal around the flashing. *If needed, consult a roofing or siding professional.*

## OPERATION & MAINTENANCE

Once installed, operation of your AirScape Bath Ventilation Kit is as simple as a push of a button. Generally, it is recommended to have a bath fan continue to run for 20 minutes after the conclusion of a shower. With the 10/20/30/60 minute operation of the included electronic push-button timer, this can be achieved with convenience and ease.

Since the fan bearings are permanently lubricated and sealed, there is no periodic maintenance necessary.

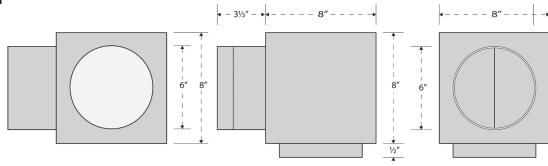
# SPECIFICATIONS & DIMENSIONS

# **Fan Specs & Dimensions**

	CFM	"A"	"B"	"C"
(C)VK-105	105	4"	11"	8"
(C)VK-210	205	6"	12.625"	7.625"
(C)VK-260	260	6"	12.625"	7.625"
(C)VK-450	450	8"	14.75"	8.25"



Plenum Box & Backdraft Damper Dimensions



## TROUBLESHOOTING

## Problem: Fan will not turn on.

Make sure power is turned on at the breaker. Check wiring to fan and timer switch. Check fan to ensure impeller can spin freely.

## Problem: Fan is noisy.

Determine location of noise source. Check duct for kinks. Check duct connections to ensure inner coil is not collapsed. If fan vibration is the noise source, try using rubberized washers or gasket to dampen the noise, or hang the fan using metal strapping and vibration absorbing material.

## Problem: Fan runs, but there is little to no airflow.

Check duct for kinks. Check backdraft damper direction. Check duct connections to ensure inner coil is not collapsed. Check that the fan impeller is spinning freely.

# **CONTACT INFORMATION**

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## WARRANTY

#### **Hardware**

AirScape warrants the original end user ("Customer") that new AirScape fan products, including all moving parts, motors, dampers, and damper actuators will be free from defects in workmanship and materials, under normal use, for three (3) years from the original purchase date. Electronic timers are excluded and are warranted by the manufacturer.

## **Software**

AirScape warrants to Customer that the AirScape fan software will perform in substantial conformance to its program specifications for a period of three (3) years from the date of the original purchase.

#### **Exclusions**

This warranty excludes (1) physical damage to the surface of the product, including cracks or scratches on the outside casing; (2) damage caused by misuse, neglect, improper installation, unauthorized attempts to open, repair, or modify the product, or any other cause beyond the range of intended use; (3) damage, caused by accident, fire, power changes, other hazard, or acts of God; or (4) use of the product with any unauthorized device if such device causes the problem.

## **Exclusive Remedies**

Should a covered defect occur during the warranty period and Customer notifies AirScape, Customer's sole and exclusive remedy will be, at AirScape's sole option and expense, to repair or replace the product. Replacement products or parts may be new or reconditioned or a comparable version of the defective item. AirScape warrants any replaced product or part for a period of ninety (90) days from shipment, or through the end of the original warranty, whichever is longer.

# **Obtaining Warranty Service**

Customer must contact and return product to AirScape, Product dealer or Installer within the applicable warranty period to obtain warranty service. Dated proof of original purchase will be required. AirScape will not be responsible for Customer's memory data contained in, stored on, or integrated with any products returned to AirScape for repair, whether under warranty or not.

## **Warranty Exclusive**

The forgoing warranties and remedies are exclusive and in lieu of all other warranties, express or implied, including warranties of merchantability, fitness for a particular purpose, correspondence with description, and non-infringement, all of which are expressly disclaimed by AirScape and its suppliers.

## **Disclaimer**

Neither AirScape nor its suppliers shall be liable for incidental, consequential, indirect, special, or punitive damages of any kind, or financial loss arising out of or in connection with the sale or use of this product, whether based in contract, tort (including negligence) or any other theory, even if AirScape has been advised of the possibility of such damages AirScape's entire liability shall be limited to replacement or repair of the product.