

# Installation/Service/Operations Manual



**COVENANT**  
Security Equipment



**AA100**  
**Access Air 100**

**Air Curtain System**

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## DISCLAIMER

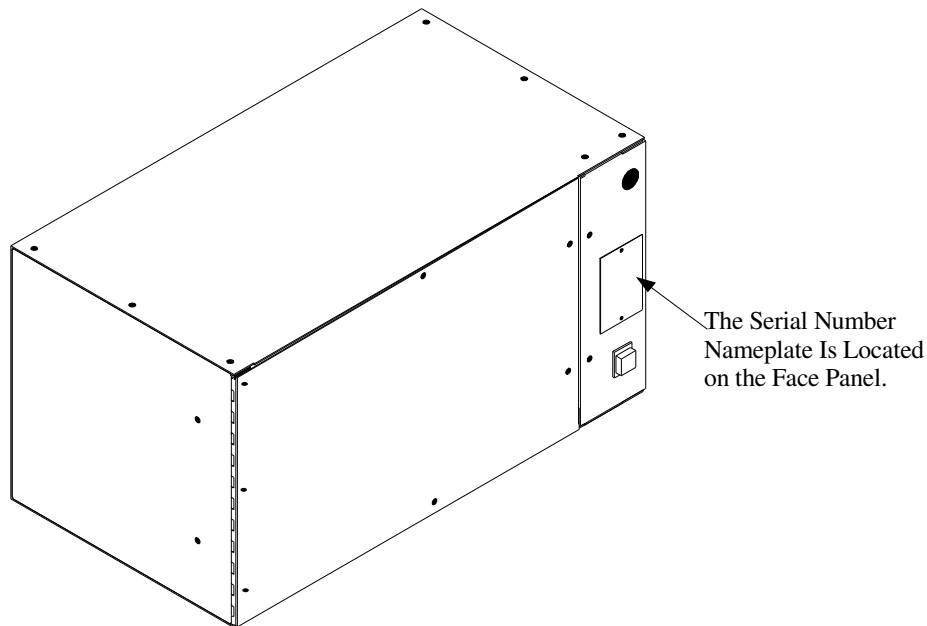
Ready Access Disclaims any Liability for any damage or harm caused to the AA100 Air Curtain, it's operator or any other equipment however caused if the AA100 Air Curtain is repaired or serviced by anyone other than an authorized service engineer or contrary to the manufacturers written instruction contained herein.

This manual is intended for use by the in-house or authorized field service engineers and sales representatives

The manufacturer maintains the right to update, add or issue a new service manual at any time without notice, thereby rendering all previous issues obsolete.

Please write the Serial Number and Installation Date for your AA100 Air Curtain in the spaces provided.

SERIAL NUMBER	
<b>Date of Installation</b>	



## INTRODUCTION

The Ready Access AA100 Pass-Thru Air Curtain System is designed to be an integral part of your drive-thru operation by protecting your workplace against the entry of insects and exhaust fumes, while increasing energy efficiency by reducing air conditioning losses. Also satisfies health department codes for fly fan applications.

# Product Information

## SPECIFICATIONS AND PERFORMANCE

Model Number	Unit Voltage USA	Actual Unit Amps	Air Velocity	Dimensions In Inches W x H x D	Weight In Shipping Carton
AA100	110/120 VAC 60Hz Single Phase	5 A	High / Low 2000/1800 FPM at Nozzle	See Below	29 lbs

## Dimensions

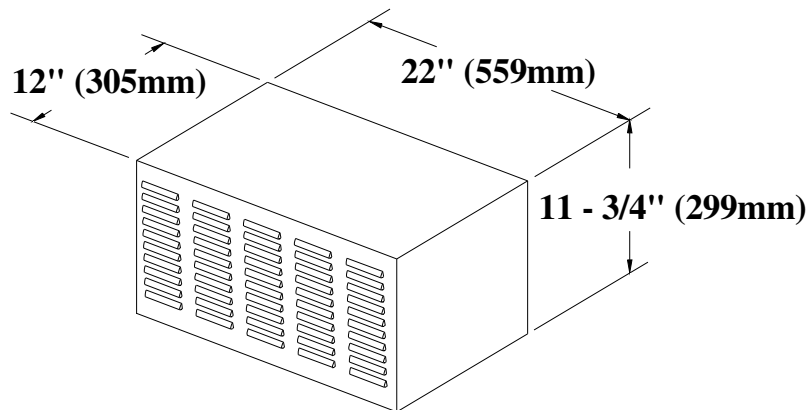


Figure 1

## SAFETY INFORMATION

**WARNING:** To avoid the risk of Fire, Electric Shock or Injury to persons, observe the following:

Use this unit only in a manner intended by the manufacturer. If you have any questions, contact the manufacturer.

Before servicing or cleaning the unit, switch the power off at the mechanical switch near the unit (Installed by an Electrician) or the electrical entry service panel/circuit breaker. (Load Center)

**OSHA LOCK OUT – TAG OUT** procedures are to be observed to prevent power from being switched on accidentally.

Any installation and / or electrical work must be done by **QUALIFIED** persons in accordance with all applicable codes / standards and manufacturers recommendations and specifications.

When cutting into the wall or ceiling, **DO NOT** damage electrical wiring and/or other hidden utilities.

**DO NOT** use this fan with any solid-state speed control device.

**DO NOT** insert fingers and / or foreign objects into the Air Curtain.

**DO NOT** block or tamper with the unit in any manner while it is in operation.

**DO NOT** attach ductwork to this product or attempt to use it as a make-up air heater.

Such use voids the warranty and may create unsafe conditions.

This product must not be used in Potentially Dangerous locations such as Flammable, Explosive Chemical – laden environment.

## Installation Procedures

### PHYSICAL INSTALLATION WITH READY ACCESS PROVIDED TRANSOM

Before you begin installing your Ready Access Air Curtain, you must determine what type of installation will be required. Wood Frame, Masonry Framing, etc. See the illustration below to determine your rough opening size and mounting.

**Warning:** Two people are required for the lifting and installation of the window.

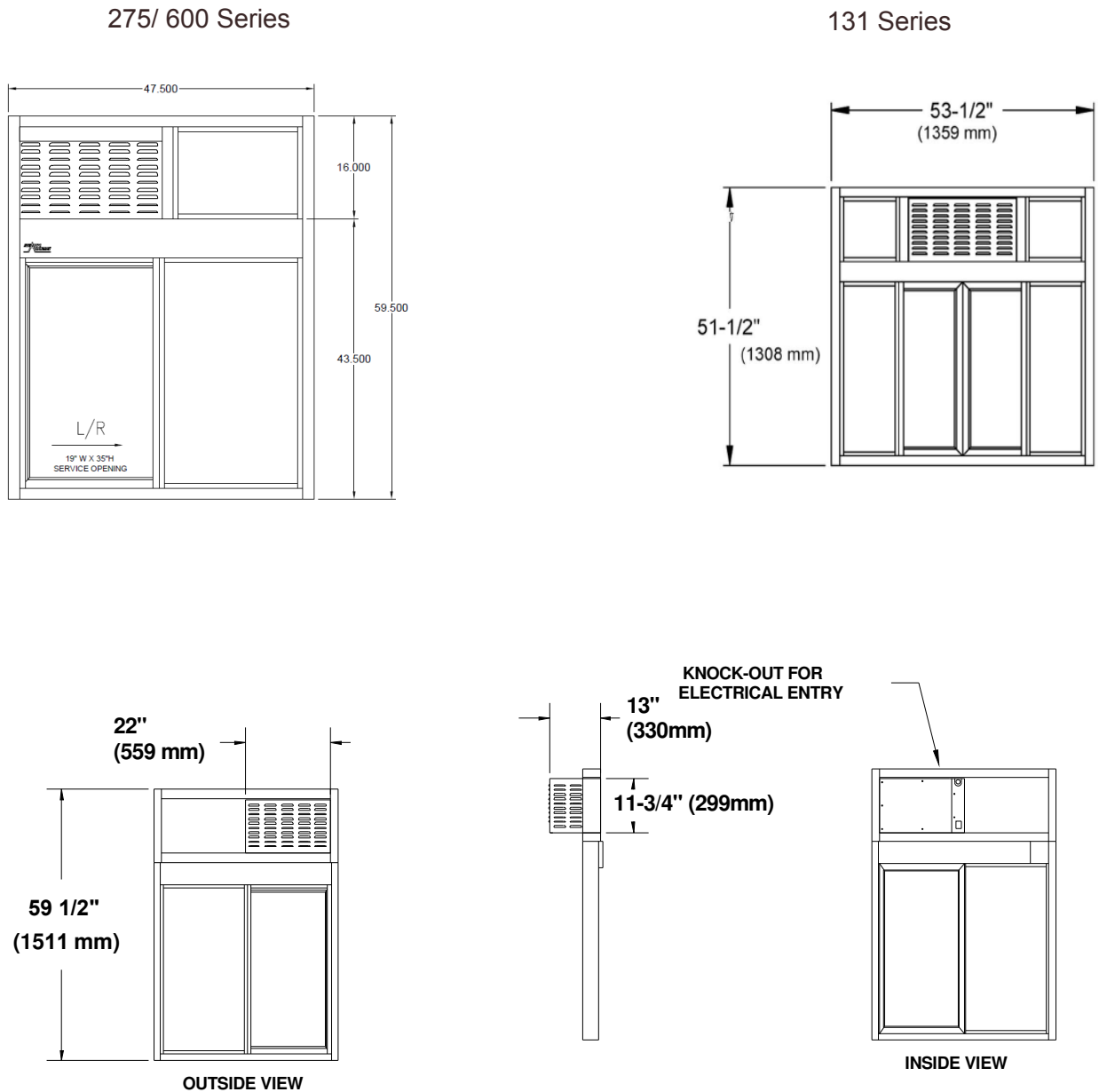


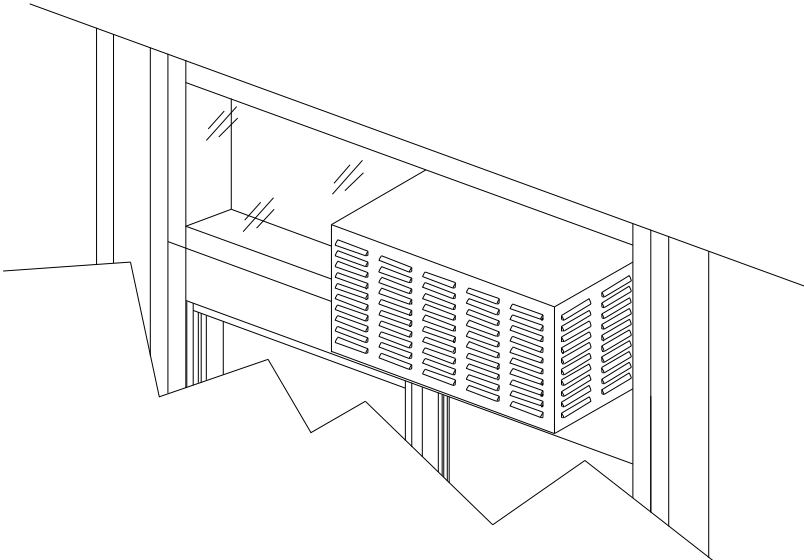
Figure 2

**PHYSICAL INSTALLATION - CUSTOMER SUPPLIED TRANSOM**

**CONFIRM THAT THE CUSTOMER-SUPPLIED FRAME IS MADE TO ACCOMMODATE THE DIMENSIONS AS ILLUSTRATED ABOVE.**

- 1. Unpack AA100 unit from carton and inspect for shipping damage. Contact Ready Access as soon as possible if damage has occurred. (800) 621-5045
- 2. A rough opening of 22-1/4" (565 mm) W x 12" (305 mm) H must be constructed before installation of AA100 unit.
- 3. Remove the (4) #2 phillips drive screws from the AA100 unit inside cover. This will allow access into unit once in position of rough opening.
- 4. Position AA100 unit into rough opening, flush with inside of window unit. (Approx. 5" max. in from the outside of window unit.)
- 5. Secure into position using the (4) 5/16" self-tapping screws provided through the mounting holes in the side panels of unit. If mounting into masonry, use 1/4" (6 mm) masonry anchors (Not Provided).
- 6. Flash and seal unit on the outside to prevent water leaks and trim inside for cosmetics.
- 7. Close unit when completing installation using the (4) #2 phillips drive screws.

PLEASE COMMUNICATE WITH ELECTRICIAN ON UNIT AND INSTALLATION INSTRUCTIONS.



**Tools Needed for Installation**

1/4" Nut Driver

3/8" Drill

5/16" Socket Adaptor to Drill

Caulk and Caulk Gun

4 5/16 " x1" Self Tapping Screws

## Electrical Installation

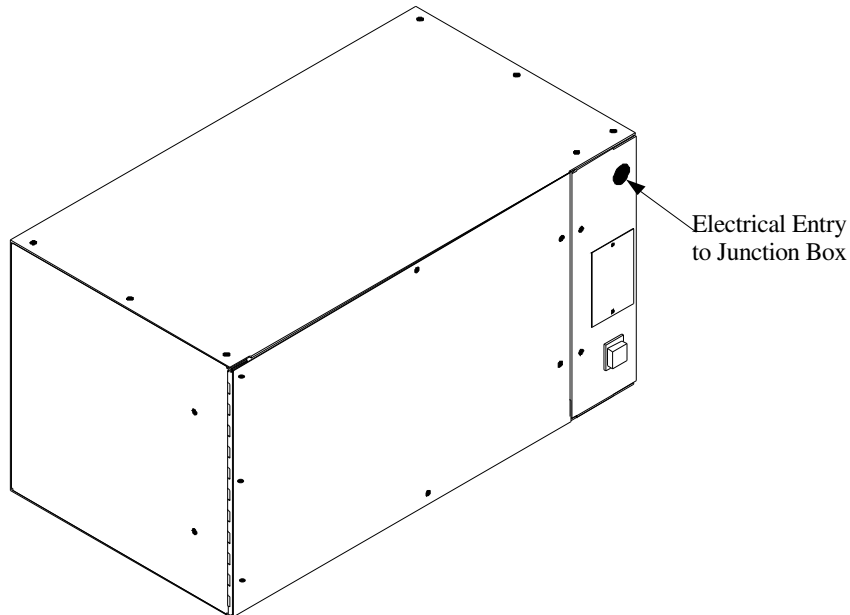
All power must be connected and wired by a qualified electrician and be in compliance with all state and local building codes.

1. Remove the (4) #2 phillips drive screws from the inside cover.
2. Located in the upper right hand of AA100 unit, will be an electrical entry junction box.  
Remove cover and expose (1) black wire (HOT), (1) white wire (COMMON) and (1) green wire (GRD).

**WARNING** - Disconnect power at service panel / circuit breaker before installation to AA100 unit.

OSHA Lock Out-Tag Out procedures are to be observed to prevent power from being switched accidentally.

3. Route incoming 115VAC from ceiling (or where dictated from customer) in Solid, Flexible conduit or Commercial Power Track for Cosmetics (MUST MEET STATE AND LOCAL CODES) into knockout provided on the face panel of AA100 unit that leads into Electrical entry junction box.
4. Connect wires together and insulate ends with wire nuts or crimp caps inside junction box.  
Reinstall Electrical entry junction box cover.
5. Press Push Button switch to test unit for operation.
6. Close inside cover and install the (4) screws.



## Initial Window Operation

### Modes of Operation

The AA100 has two modes of operation. Run and Shutdown.

Shut Down:

The main switch is in the "OFF" position. The unit has no operations.

Run

The Main switch is in the "ON" position. The unit functions as a "Fly Fan".

If the AA100 does not operate correctly, go to the troubleshooting guide in this manual.

If the AA100 still do not operate properly, then call Ready Access at

**1-800-621-5045**

**Each operator must read the operations manual before operating the unit.**

### Maintenance

Maintenance Schedule

Scheduled maintenance should be performed on a regular basis. This is to assure proper operation and performance of the AA100 Air Curtain.

DAILY

Check the air vents and ducts for foreign materials.

(Anything that might cause restricted air flow or damage to the air curtain.)

The vents can be vacuumed or wiped down to remove any foreign material.

MONTHLY

Follow safety procedures before opening the unit.

Check the interior of the unit for any build up of any foreign materials using a dry cloth.

**NOTE: KEEP ANY LIQUIDS OFF THE INTERIOR COMPONENTS.**

Clean moving parts and lubricate with silicone or Teflon spray.

NOTE: Do **NOT** use Grease or Oils.

Semi Annual (6 Months)

Check all electrical and mechanical parts for proper operations

YEARLY

Have a service technician come in and perform a maintenance check on the unit.

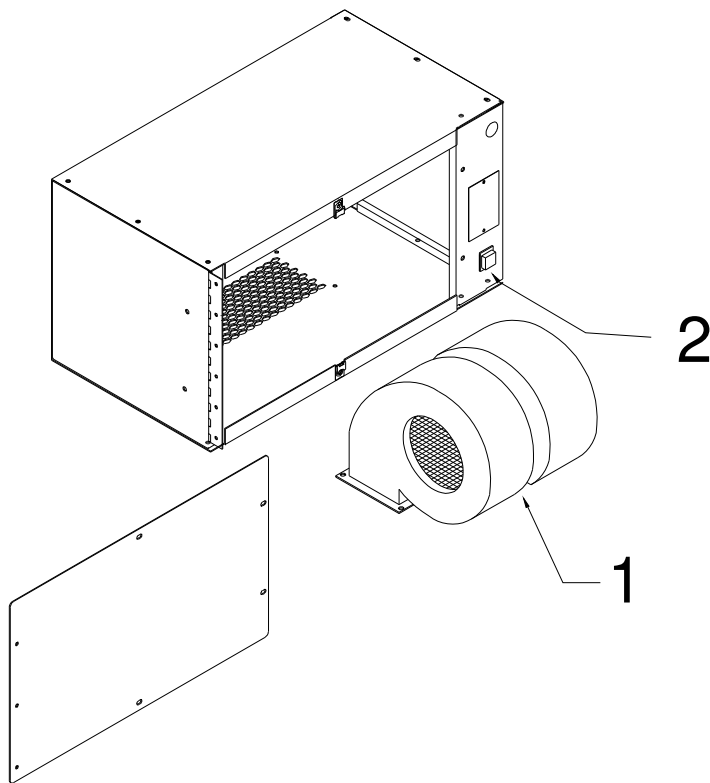
**IF NEEDED, CONTACT YOUR READY ACCESS SERVICE AGENT FOR SERVICE.**



## SERVICE

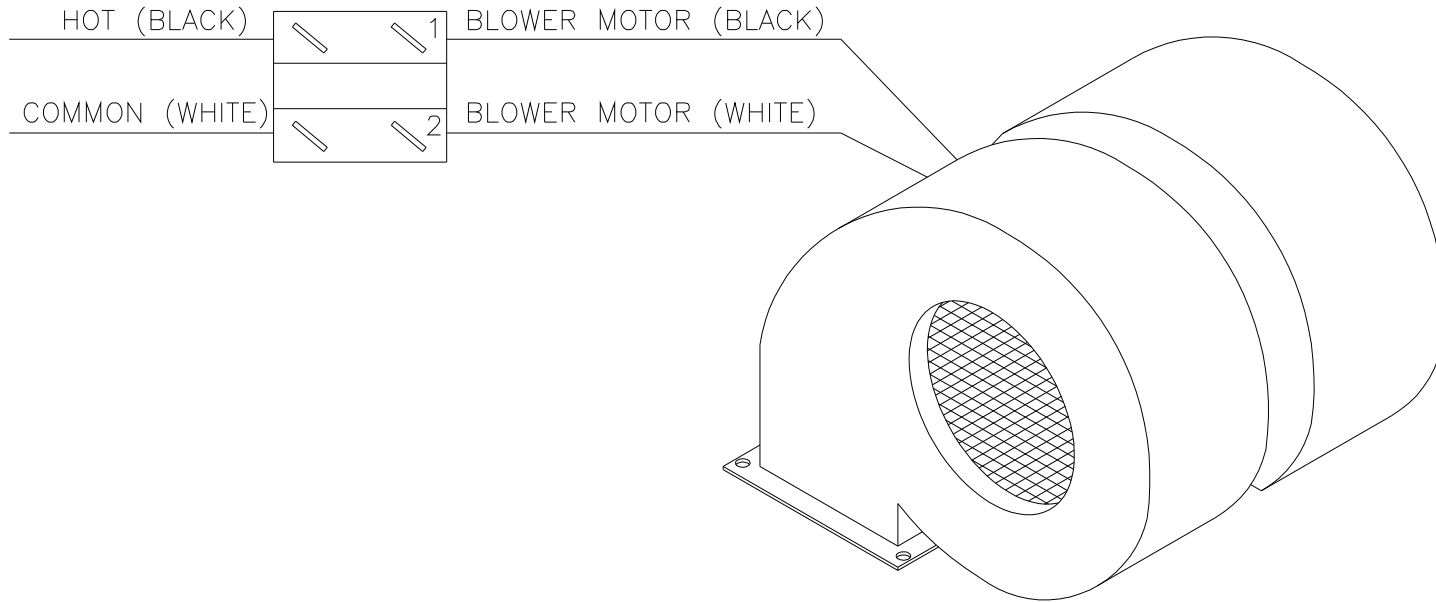
Issue	Probable Cause	Resolution
No Fan Operation. Switch does not Illuminate	No power to the unit.	Check / Reset the main circuit breaker or switch.
	Defective Main Switch.	Replace the switch.
	Switch Option is not operating.	Find and correct problem.
No Fan Operation. Switch Illuminates Normally.	Defective Blower.	Replace the blower.
	Switch Option is not operating.	Find and correct problem.


## PARTS LIST



ID Number	Part Number	Description
1	85001000	Blower Assembly ( Dual Chamber) - AA100
2	20010004	Switch - AA100 on/off Push Button

SWITCH WIRING DIAGRAM



WORK TO DIMENSIONS--DO NOT SCALE TOL. UNLESS SPECIFIED XXXX TOL. NOT REQ'D TOL. CLASS ± .030 ANGULAR TOL. ± 1'	USED IN PRODUCTS: AA100	DESIGN BY: SC DATE: 3/1/06	MATERIAL: Elec Components MATERIAL SPEC:	 1815 Arthur Drive • West Chicago, IL • 800-621-5045 • 630-876-7766 • Fax 630-876-7767
	REVISION: OR REVISION DATE: 3/1/06	DRAWN BY: SC DATE: 3/1/06	GAUGE:	
	LATEST REVISION NOTE: RELEASE FOR SERVICE INFORMATION			
	DESCRIPTION: Air Curtain Wiring Diagram			
	PART. NO.: N/A			

**WARRANTY:**

**Ready Access will only accept responsibility for manufacturing defects in the product's construction and/or materials.**

**Adjustments required during installation are the responsibility of the installer or contractor and will not be covered under warranty.**

**Problems caused by improper installation are the responsibility of the installer or contractor and will not be covered under warranty.**

