

AprilAire®

Air Cleaner

INSTALLATION & OWNER'S MANUAL

**Model 1110, 1210, 1310, 1410, 1910,
2210, 2216, 2310, 2410, & 2416**



Models 1210, 1410, 2210, and 2410 shown.

TABLE OF CONTENTS

SAFETY INSTRUCTIONS	2	PERFORMANCE	6
SPECIFICATIONS	2	MAINTENANCE	6
DIMENSIONS	3	Changing the Filters	6
PRESSURE DROP CHART	3	REPLACEMENT FILTERS	7
INSTALL THE AIR CLEANER CABINET	4	Removal Efficiency	8
Locating the Air Cleaner	4	APRILAIRE 10-YEAR CLEAN COIL COMMITMENT	8
Installation	5	LIMITED WARRANTY	8
OPERATION	6	Warranty Registration	8

READ AND SAVE THESE INSTRUCTIONS

Product Info &
Digital Manual



SAFETY INSTRUCTIONS

⚠ WARNING

- **ATTENTION INSTALLER:** Read this manual before installing. Improper installation or maintenance may cause property damage or injury. It is recommended that installation, service, and maintenance be performed by a trained service technician. This product must be installed in compliance with all local, state, and federal codes.
- **ELECTRIC SHOCK HAZARD:** 120 volts may cause serious injury from electric shock. Disconnect electrical power to the HVAC system before starting installation or servicing. Leave power disconnected until installation/service is completed.

NOTICE

EQUIPMENT DAMAGE MAY OCCUR IF INSTALLATION INSTRUCTIONS ARE NOT FOLLOWED.

- Do not install the air cleaner on the warm air supply or in an area where the temperature may exceed 140°F. This may include areas above heat exchangers in downflow furnaces or above exhaust flues in lowboy furnace cold air returns.
- Do not install air cleaner downstream of a UV light. UV lamps will cause degradation of the filtering media.

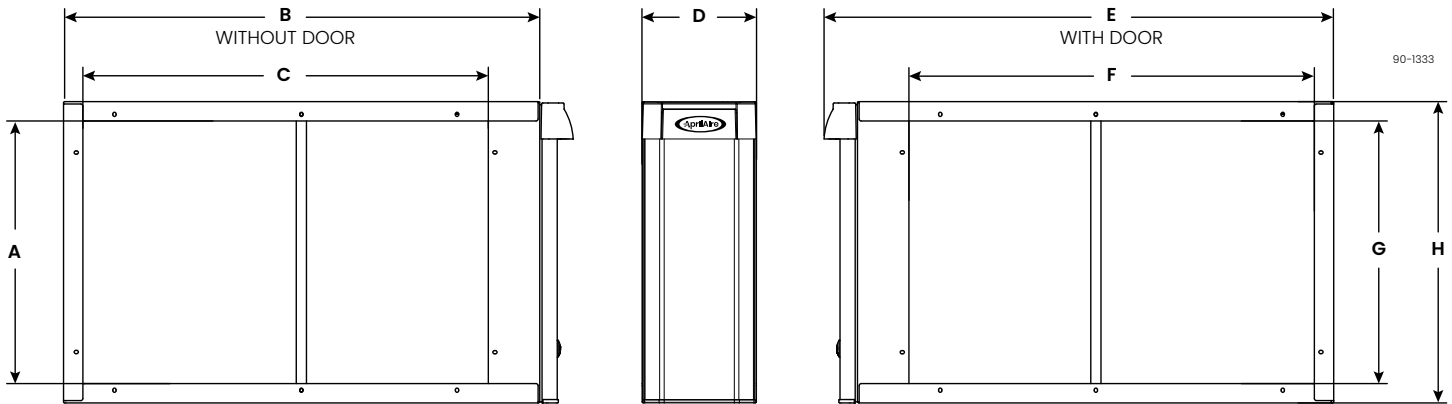
⚠ CAUTION

- **SHARP EDGES MAY CAUSE INJURY FROM CUTS.** Use care when cutting plenum openings and handling ductwork. Always wear glasses/goggles and gloves when installing the unit.
- Dropping may cause personal injury or equipment damage. Handle with care and follow installation instructions.

SPECIFICATIONS

	AIR CLEANER MODEL				
	1110	1210, 2210, 2216	1310, 2310	1410, 2410, 2416	1910
Airflow Capacity	Up to 1200 CFM maximum	Up to 2000 CFM maximum	Up to 1200 CFM maximum	Up to 2000 CFM maximum	Up to 2000 CFM maximum
Replacement Air Filter Model	110 or 113 with Self-Seal™	210, 213, 213CBN or 216 with Self-Seal	310 or 313 with Self-Seal	410, 413, 413CBN or 416 with Self-Seal	910 or 913 with Self-Seal
Maximum Equipment Weight	Cabinet will support 250 lb. static load	Cabinet will support 400 lb. static load			
Air Cleaner Operating Environment	Temperature: 0°F–140°F Humidity: 0–90% non-condensing				

DIMENSIONS (INCHES)



AIR CLEANER MODEL	A	B	C	D	E	F	G	H
1110	15-7/16	20-1/16	17-3/8	6-3/4	22-1/16	17-3/8	15-7/16	17-3/4
1210, 2210, 2216	19-3/4	25-3/8	21-3/16	6-3/4	27-3/8	21-3/16	19-3/4	22-1/16
1310, 2310	18-1/16	20-1/16	15-7/8	6-3/4	22-1/16	15-7/8	18-1/16	20-3/8
1410, 2410, 2416	15-7/16	28-1/16	23-7/8	6-3/4	30-1/16	23-7/8	15-7/16	17-3/4
1910	22-3/4	20-1/16	15-7/8	6-3/4	22-1/16	15-7/8	22-3/4	25-1/16

PRESSURE DROP CHART

	FILTER MODEL	STATIC PRESSURES AT VARIABLE CFM (in. w.c.)*														
		200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
MERV 16 ALLERGY & ASTHMA	216		0.06	0.09	0.13	0.17	0.23	0.29	0.36							
	416		0.07	0.10	0.13	0.18	0.24	0.31								
	516		0.04	0.05	0.07	0.09	0.10	0.13	0.15	0.18	0.21	0.24	0.27	0.31		
MERV 13 ODOR REDUCTION	213CBN		0.04	0.07	0.10	0.13	0.17	0.21	0.25	0.30	0.35					
	413CBN		0.04	0.07	0.10	0.14	0.19	0.24	0.29	0.36	0.43					
	513CBN		0.03	0.04	0.05	0.07	0.08	0.10	0.12	0.15	0.17	0.20	0.22	0.25	0.29	0.32
MERV 13 HEALTHY HOME	113	0.03	0.07	0.11	0.16	0.22	0.29									
	213	0.02	0.04	0.06	0.09	0.12	0.15	0.19	0.23	0.27	0.31					
	313	0.03	0.05	0.09	0.13	0.17	0.23									
	413	0.02	0.05	0.07	0.10	0.14	0.17	0.22	0.26	0.31	0.37					
	513	0.01	0.02	0.04	0.05	0.05	0.07	0.08	0.10	0.11	0.13	0.15	0.17	0.18	0.20	0.23
	613	0.02	0.05	0.07	0.10	0.14	0.17	0.22	0.26	0.31	0.37					
	813	0.02	0.04	0.06	0.09	0.12	0.15	0.19	0.23	0.27	0.31					
	913	0.04	0.07	0.10	0.13	0.17	0.22	0.25	0.30	0.35						
MERV 11 CLEAN AIR	110	0.02	0.05	0.06	0.10	0.14	0.20									
	210	0.02	0.03	0.04	0.06	0.08	0.11	0.13	0.16	0.19	0.22					
	310	0.02	0.04	0.06	0.10	0.14	0.19									
	410	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.22	0.27					
	510	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.19
	610	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.22	0.27					
	810	0.02	0.03	0.04	0.06	0.08	0.11	0.13	0.16	0.19	0.22					
	910	-	0.03	0.05	0.07	0.09	0.12	0.15	0.18	0.22	0.27					

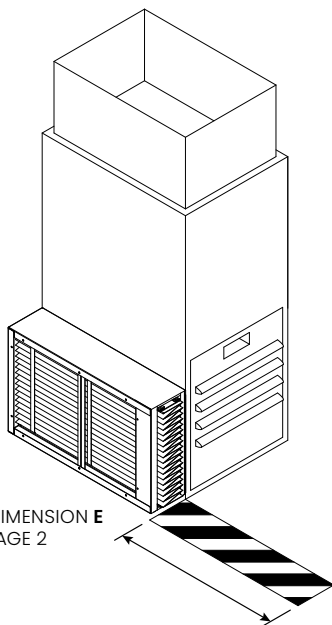
*Highest value shown is maximum recommended airflow capacity.

INSTALL THE AIR CLEANER CABINET

LOCATING THE AIR CLEANER

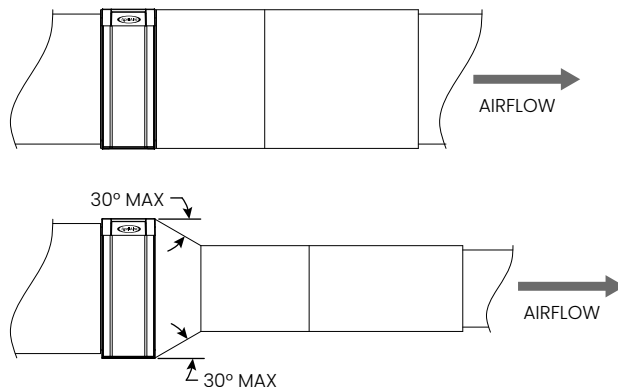
1. Leave sufficient space in front of the air cleaner for the removal of the filter (see **FIGURE 1**).
2. **DO NOT INSTALL DOWNSTREAM OF A UV LIGHT.** UV lamps will cause degradation of the filtering media.
3. **FIGURES 2-4** show typical applications.

FIGURE 1: FILTER CLEARANCE



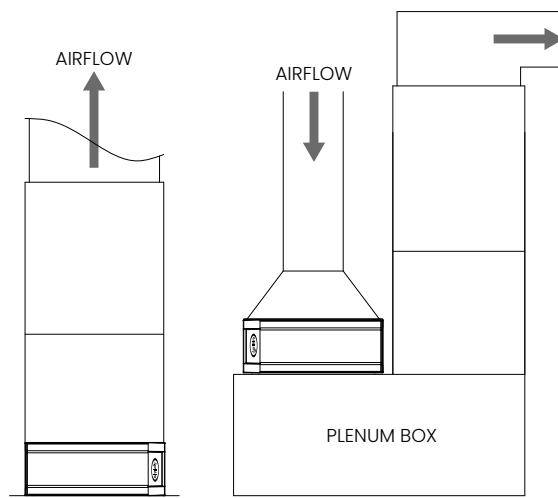
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FIGURE 2: HORIZONTAL INSTALLATION



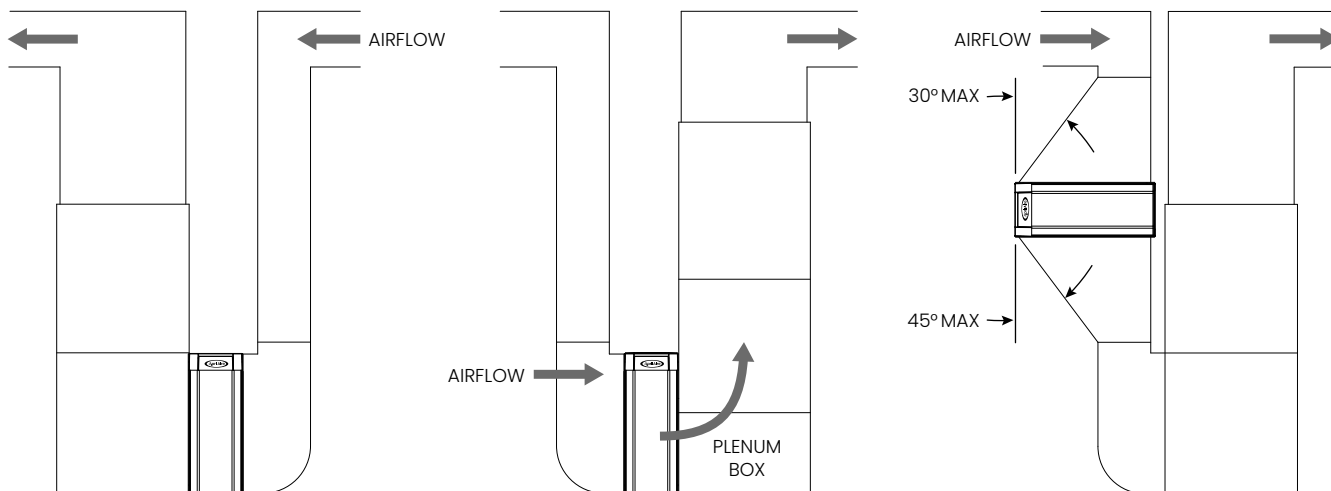
90-1319
90-2099

FIGURE 3: HIGHBOY PLATFORM INSTALLATION



90-2100
90-1318

FIGURE 4: UPFLOW INSTALLATION



90-2101
90-1320

INSTALLATION

1. Disconnect power to the furnace or air handler at the electrical service panel.

⚠ WARNING

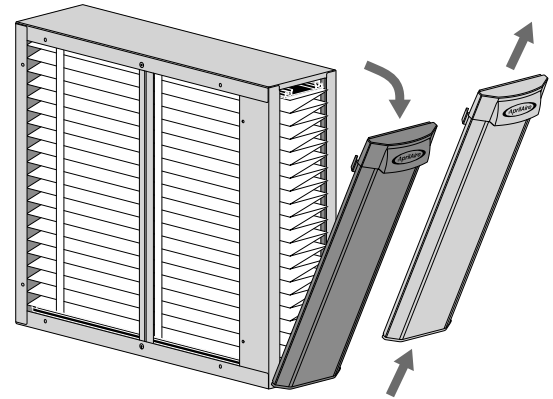
ELECTRIC SHOCK HAZARD: 120 volts may cause serious injury from electric shock. Disconnect electrical power to the HVAC system before starting installation or servicing. Leave power disconnected until installation/service is completed.

2. Remove the air cleaner door from the outer housing and pull out the filter (see **FIGURE 5**).
3. If replacing an existing filter or air cleaner, remove the old unit from the system and thoroughly clean the blower compartment.
4. Cut an opening in the furnace/air handler to match the inside opening of the air cleaner outer housing. Ensure the opening in the furnace/air handler is entirely within the blower compartment.
5. Use screws (field supplied) to mount the outer housing to the furnace/air handler. There is no inlet or outlet side on the outer housing (the outer housing can be mounted on the left or right side of the furnace/air handler).

NOTE FOR UPFLOW INSTALLATIONS: Provide support under the outer housing to ensure the quality of the seals (see **FIGURE 6**).

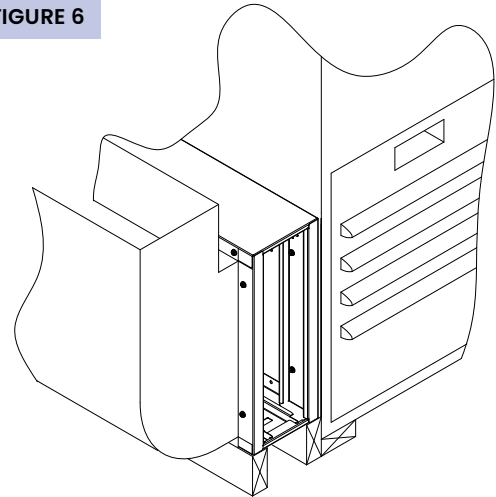
6. Mount the return ductwork to the outer housing.
7. Seal all connections using mastic, foil tape, or silicone based caulk.
8. Install the filter (see **FIGURE 7**).
9. Install the door.
10. Reconnect power to the furnace or air handler at the electrical service panel.
11. Make a cooling or heating call to test the system and make sure it operates as desired. Ensure there are no air leaks in the air cleaner or return ductwork joints.

FIGURE 5



90-2345

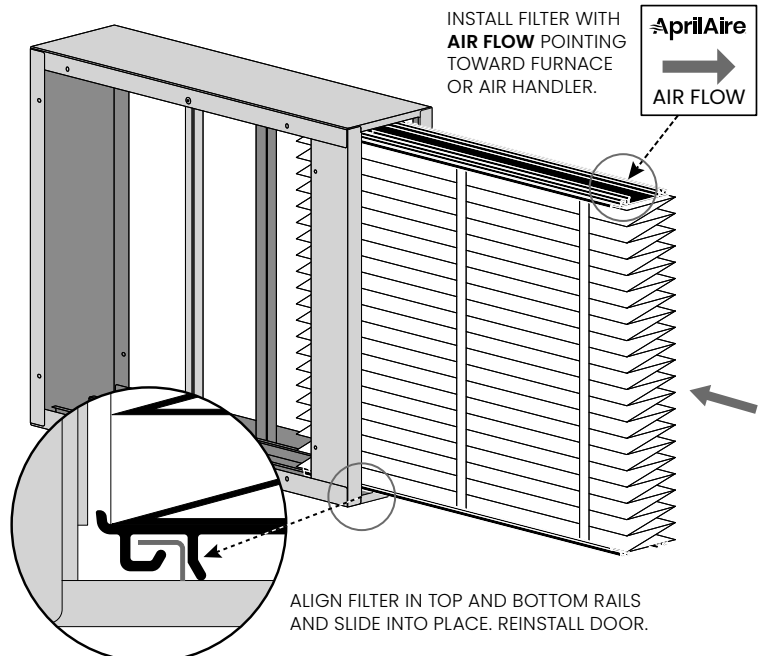
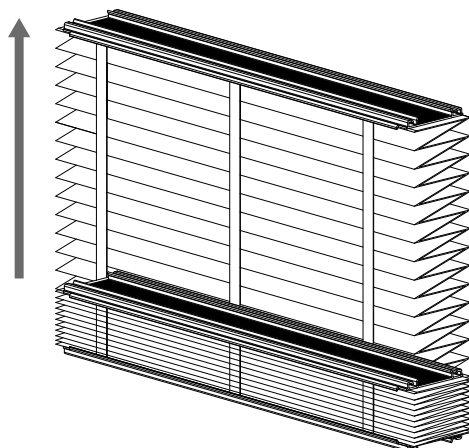
FIGURE 6



90-1374

FIGURE 7

EXPAND CLEAN FILTER



90-2344
90-2346

OPERATION

When you choose a genuine AprilAire Whole-House Air Cleaner, you're choosing Healthy Air. Your air cleaner is specifically engineered to work with your AprilAire Air Filter to remove harmful particulates from your home's air such as mold, pet dander, airborne viruses, pollen, and odors. Your genuine AprilAire Air Filter is designed for a perfect fit inside your AprilAire Air Cleaner and with this AprilAire Pure Fit Promise, delivering Healthy Air to your entire home has never been easier.

The **AprilAire Pure Fit Promise** combines patented **Self-Seal Technology**, reducing bypass and improving filter performance, with our patented **Interlock Rail System**, meaning your high-performance air filter works in your air cleaner without assembly or cardboard or metal reinforcements.

Not only do our air filters ensure healthy air, they also help protect your HVAC equipment against dirt and dust buildup which can hinder performance. AprilAire is proud to provide the **Clean-Coil Commitment** with your AprilAire Whole-House Air Cleaner and Air Filter. Should your new indoor air conditioner coil require professional cleaning in the next 10 years, AprilAire will pay \$100 toward the cost of having the coil cleaned by an HVAC contractor. For full details, please visit aprilaire.com/clean_coil or call 800.334.6011.

Please take a few minutes to read this manual and familiarize yourself with the product features and important routine maintenance. Be sure to register your product at aprilaire.com/warranty.

PERFORMANCE

An AprilAire Whole-House Air Cleaner is installed by your contractor as one of the components in your heating, ventilation, and air conditioning (HVAC) system to clean the air that circulates through your home. When the HVAC equipment turns on, the air in your home travels through the registers and return duct(s) to the HVAC equipment where it is conditioned and sent back into the rooms of your house through the supply ducts.

Airborne contaminants in the home include those from natural sources such as dust and pollen and from man-made sources such as tobacco smoke or exhaust. Removing these particles keeps the HVAC equipment components clean and, more importantly, helps ensure Healthy Air throughout the entire home.

Continuous air cleaning with your AprilAire Whole-House Air Cleaner will be accomplished when your thermostat is set for continuous air circulation ("Fan On"). If continuous air cleaning is not required, or desired, set your thermostat to "Fan Auto".

MAINTENANCE

Regular replacement of the filter is very important to keeping your HVAC system clean and preventing damage to it. For effective whole-home air purification, your AprilAire Air Cleaner requires genuine AprilAire Replacement Filters.

AprilAire recommends replacing your filter every 6-12 months depending on the filter model. Your contractor may recommend more frequent filter replacement depending on HVAC system operation time and the amount of people in the home and their activities. The size of the home, amount of carpet, number of pets or smokers, and pollution level in your area all may contribute to your maintenance schedule.

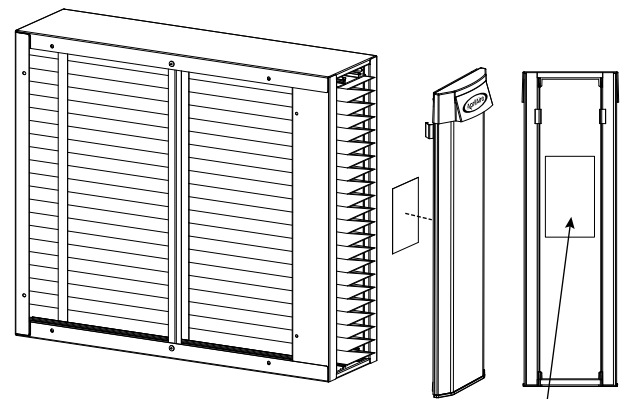
CHANGING THE FILTERS

Replace the filter with genuine AprilAire Filters designed for your AprilAire Air Cleaner. **IMPORTANT:** Follow the step by step directions on the filter carton to ensure that it is installed in the proper orientation – the outlet side of the filter is the expanded metal.

The model number of your replacement filter can be found on the label inside of the air cleaner door (see **FIGURE 8**) along with other options for upgrading your filtration.

IMPORTANT: Turn the thermostat mode to off and the fan to auto before removing air cleaner door.

FIGURE 8



FILTER REPLACEMENT LABEL ON INSIDE OF DOOR

90-1766

REPLACEMENT FILTERS



Healthy Air 16

Removes up to 99%* of Allergy and Asthma Triggers



Pollen



Mold Spores



Bacteria



Pet Dander



Dust



Dust Mite



Tobacco Smoke



Pollution



Viruses

AIR CLEANER MODEL	1110	1210 1620	1310	1410 1610	1510	1910	2210	2216	2310	2410	2416	2516
FILTER MODEL	n/a	216	n/a	416	516	n/a	216	216	n/a	416	416	516



Healthy Air 13+

Removes Pet & Cooking Odors, VOCs & Particulate



Pollen



Mold Spores



Bacteria



Pet Dander



Dust



Dust Mite



Odor

AIR CLEANER MODEL	1110	1210 1620	1310	1410 1610	1510	1910	2210	2216	2310	2410	2416	2516
FILTER MODEL	n/a	213CBN	n/a	413CBN	513CBN	n/a	213CBN	213CBN	n/a	413CBN	413CBN	513CBN



Healthy Air 13

Removes Most Common Allergens



Pollen



Mold Spores



Bacteria



Pet Dander



Dust



Dust Mite

AIR CLEANER MODEL	1110	1210 1620	1310	1410 1610	1510	1910	2210	2216	2310	2410	2416	2516
FILTER MODEL	113	213	313	413	513	913	213	213	313	413	413	513



Healthy Air 11

Vacuum and Dust Less Often



Pollen



Mold Spores



Bacteria



Pet Dander



Dust

AIR CLEANER MODEL	1110	1210 1620	1310	1410 1610	1510	1910	2210	2216	2310	2410	2416	2516
FILTER MODEL	110	210	310	410	510	910	210	210	310	410	410	510

*Contaminants removed based on air passing through the filtering system.



NATIONAL PROUD PARTNER

We Support Healthy Air | Lung.org

REMOVAL EFFICIENCY (BASED ON PARTICLE SIZE)

	0.3-1.0 Microns	1.0-3.0 Microns	3.0-10.0 Microns
MERV 16	95%	98%	99%
MERV 13	63%	88%	93%
MERV 11	37%	67%	92%

Test Method: MERV 10-16 – ASHRAE 52.2.2017, EAC – AHRI 680-2017

APRILAIRE 10-YEAR CLEAN COIL COMMITMENT

Should your new indoor air conditioner coil require professional cleaning in the next 10 years, AprilAire will pay \$100 toward the cost of having the coil cleaned by a licensed contractor. AprilAire Air Cleaners are so effective at removing particles and contaminants that are harmful to your family and your HVAC equipment, we offer you this guarantee. For full details, please visit aprilair.com/cleancoil or call **800.334.6011**.

LIMITED WARRANTY

Terms of Coverage

Your AprilAire® Air Cleaner is expressly warranted to be free from defects in materials or workmanship for five (5) years from date of purchase.

What Is Covered

The exclusive obligation of AprilAire under this Limited Warranty shall be, at the sole discretion of AprilAire, to supply, without charge, a replacement for any component or product which is found to be defective. A defective part will be replaced pursuant to this Limited Warranty with a genuine AprilAire part. A defective product will be replaced pursuant to this Limited Warranty with a new AprilAire product of equal or similar features and functionality if the original product has been discontinued or is no longer available.

Not Covered by the Limited Warranty

- Consumable or maintenance products, such as, but not limited to: Air Filters, Evaporative Humidifier Water Panels, Steam Canisters, or Steam Humidifier Electrode Wires.
- Labor charges, shipping costs, removal fees, service fees, or reinstallation costs.
- Damage caused by misuse, abuse, or improper installation due to failing to install the product in accordance with the instructions provided.
- Damage to HVAC equipment caused by improper installation(s) or misapplication installation(s).
- Modifications, changes, repurposing, or alterations to the AprilAire product.
- Extended warranties or satisfaction guarantees offered by third parties.
- Cosmetic damage or normal wear and tear, including, but not limited to: scratches, peeling finish, or dents that do not impede the mechanical functionality of the product.
- Damage caused by acts of nature, including but not limited to: fire, collision, flood, wind, power surge, lighting strike, or mold.
- Damage caused during transit.
- Damage caused during installation due to failure to follow local, state, or federal laws, statutes, codes, or ordinances.
- Defects in materials furnished by the installer.

Limit of Liability

IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE AFOREMENTIONED EXPRESS WARRANTY PERIOD. APRILAIRE LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OTHER THAN DAMAGES FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THE AFOREMENTIONED IMPLIED WARRANTIES OR THE ABOVE LIMITED WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS VOID IF DEFECT(S) RESULT(S) FROM FAILURE TO INSTALL THE PRODUCT ACCORDING TO THE APRILAIRE INSTALLATION INSTRUCTIONS. IF THE LIMITED WARRANTY IS VOID DUE TO MISAPPLICATION OR IMPROPER INSTALLATION, ALL DISCLAIMERS OF IMPLIED WARRANTIES SHALL BE EFFECTIVE UPON INSTALLATION.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation(s) may not apply to your situation. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Register Your AprilAire® Product



Thank you for choosing AprilAire. Register your product at aprilair.com/warranty to receive important updates and notifications, and to streamline the process in the unlikely event you file a claim.

Your warranty registration information will not be sold or shared outside of this company.

Make a Warranty Claim

For questions regarding the Limited Warranty or to initiate a claim, contact AprilAire Customer Service at 1.800.334.6011 Monday through Friday, 7:00 a.m. – 5:00 p.m. Central Time.

At the sole discretion of AprilAire, you may be required to: return the product not later than thirty (30) days after the warranty period to the place of purchase or (if directed) to AprilAire, contact a professional contractor to provide warranty service, submit a product for testing related to a warranty claim, and/or send pictures of the original product with the serial number (if applicable) to AprilAire Technical Support for inspection as a condition to reviewing a claim and/or receiving a replacement product under this Limited Warranty.

AprilAire® is a registered trademark and division of Research Products Corporation.