

Aprilaire®



**Trusted Solutions
for Dry Basements**



Grow Your Business with Aprilaire

The trusted name in Indoor Air Quality solutions for over 60 years in the HVAC industry is now the relied upon source for moisture control solutions in basement waterproofing applications.

Our expertise in the design, engineering and marketing of indoor air quality products has allowed us to develop efficient, effective dehumidifiers for a number of specific applications.

High-capacity dehumidifiers protect against the damaging buildup of moisture in basements better than small portable models.

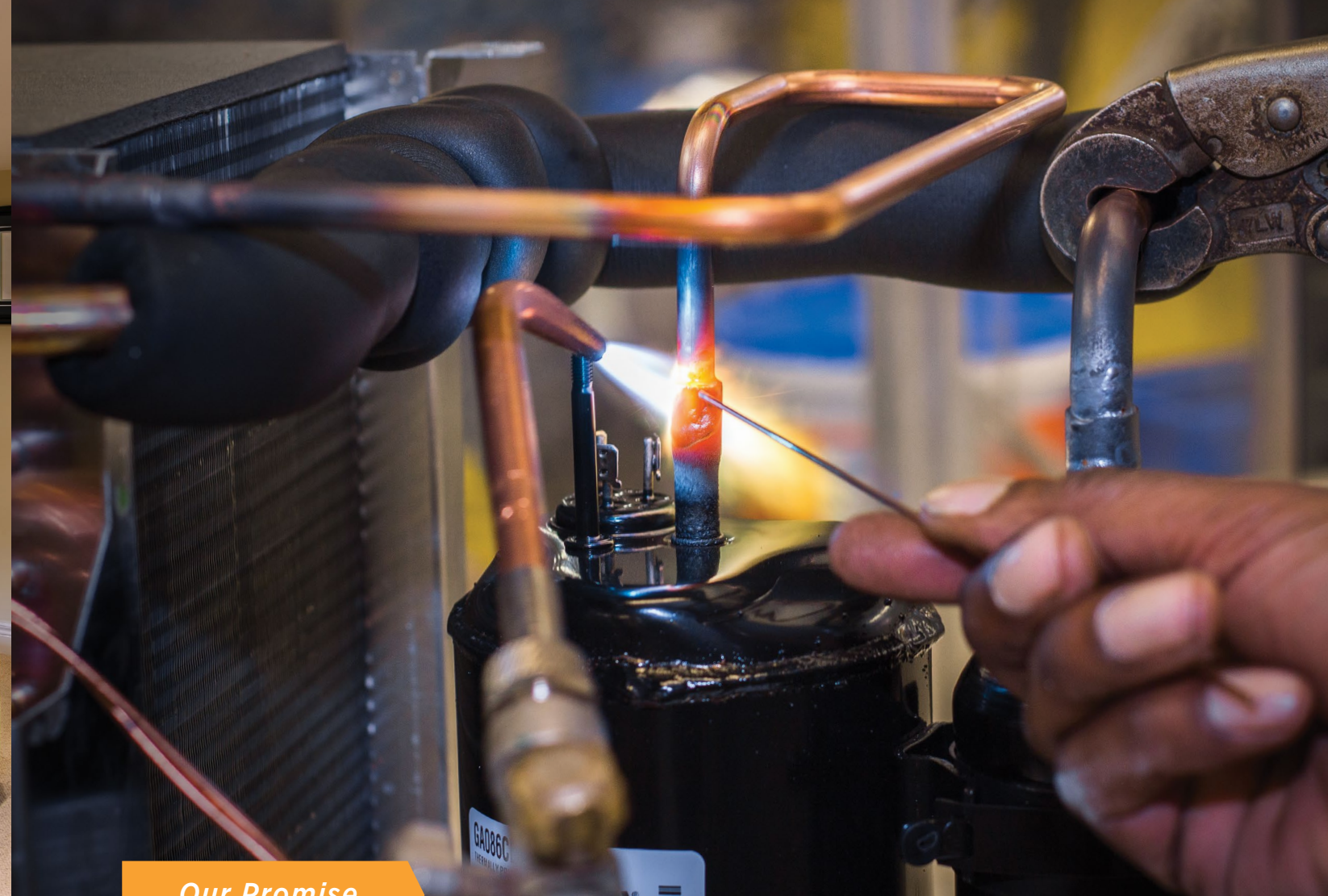
After successful waterproofing, dehumidification will protect your work and warranty. Prevent future mold growth, musty smells and structural damage in the basements you waterproof.

Differentiate your business by offering customers a more complete solution to moisture control in their basements.



**Designed for your business—
trouble free, reliable, robust.**

- + Industry-leading 5-year warranty
- + Designed, rigorously tested and assembled in the USA
- + World class tech support and customer service teams in Madison, WI



PROTECT BASEMENTS AGAINST ROT, MOLD AND ODORS

After waterproofing a basement, set your work apart by preventing moisture in all of its forms with a high-capacity dehumidifier.

High relative humidity leads to odors, structural damage and mold in basements—many of the same issues as water intrusion. A dehumidifier is essential to a complete job.

Protect your warranty and provide your customers peace-of-mind by installing high-capacity dehumidification on every job.

FOR COMPLETE SOLUTION BENEFITS

- + **Energy efficiency** – Energy Star® rated models make essential moisture control affordable and may even reduce home-cooling costs.
- + **Air circulation** – Fan mode provides complete coverage of dehumidified area by circulating the air.
- + **Quiet operation** – Customers will notice moisture control without hearing the equipment.
- + **Corrosion defense** – Aluminum coils protect the refrigeration system from damaging chemicals in the air.

A TRUSTED LEADER

Delivering comfortable, healthier indoor air has been our business at Research Products Corporation, the parent company of Aprilaire, since 1954. That's when we first began to design, manufacture and distribute quality products that improve the indoor air of homes and businesses throughout North America.

Over the years, the Aprilaire brand has been synonymous with high quality and reliability. Our reputation was built on a foundation of comprehensive testing programs performed by our engineers. The skills and equipment we've acquired have become one of our most valuable resources to assure the delivery of consistent, quality product.

Rigorous Testing

- + Highly Accelerated Life Testing (HALT)
- + Highly Accelerated Stress Screening (HASS)
- + Environmental Testing: Temperature and Humidity, Thermal Cycling
- + Electrostatic Discharge: IEC 61000-4-2
- + Electric Fast Transients: IEC 61000-4-4
- + Urge: IEC 61000-4-5
- + Power Quality Factor: IEC 61000-4-11
- + Urge Ring: ANSI C62.41
- + Test Jig Design and Manufacture
- + Data Acquisition Design and Set-Up to Monitor Performance
- + Air Filter/Air Cleaner Testing: ASHRAE 52.2
- + Dehumidification Line Testing

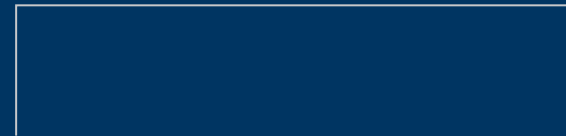


Quality

Through continuous improvement, Aprilaire provides high-quality products and services that meet or exceed our customers' expectations.

OUR QUALITY OBJECTIVES

- + To baseline, control and improve the quality of critical manufacturing processes. Improvement is measured through x-bar and Cpk assessments via sigma 6-pack analysis.
- + To establish process requirements of our critical part suppliers in order to reduce or eliminate product and service variability. Process requirements are measured through checklists, audits, supplier evaluations and supplier corrective actions.
- + To achieve an annual Cost of Poor Quality target of 0.2% of sales (CNCR only).
- + To achieve a 100% on-time schedule adherence for resolving critical nonconformities.



We are proud to design and manufacture our products in the USA and distribute throughout North America.



Our Mission

Our mission at Aprilaire has always been to help our customers grow and prosper in their business. Through web-based training, educated sales staff and in-depth product literature, we ensure you can deliver the right dehumidification product for every application.



TOOLS & TRAINING

In-home literature and sales videos

Let us help you sell in the home with our basement videos customizable with your company name. Our high-definition, professionally produced videos and literature explain to the consumer the need for high-capacity dehumidification when waterproofing a basement.

Web-based training and reference

We make it easy to find the tools and training you need with a website designed specifically for contractors. This is your home base for marketing materials, literature ordering and technical and sales training.

Customized advertising and marketing programs

We offer programs that are proven to work for local service industries, and also offer choices that fit your specific business model and budget.

- + Co-op advertising funds
- + Hyper-local marketing programs – Direct mail, radius marketing, Every-Door-Direct*
- + Strategies and tools to grow your business with new and existing customers

*Ask us for details on how to reach the right homes in your service area.

Smaller, Quieter and More Effective Dehumidification



Duct Collar

10" in diameter
with retention tabs

Fresh Air

- + Ability to pull fresh air into the home (per ASHRAE 62.2-2010)
- + Dehumidifies ventilated air

Water Removal Per Day

Industry leading capacities
(70, 95, and 130 pint per day options)

Whisper Quiet

Air flow managed to
minimize noise while
maximizing efficiency

Digital Control

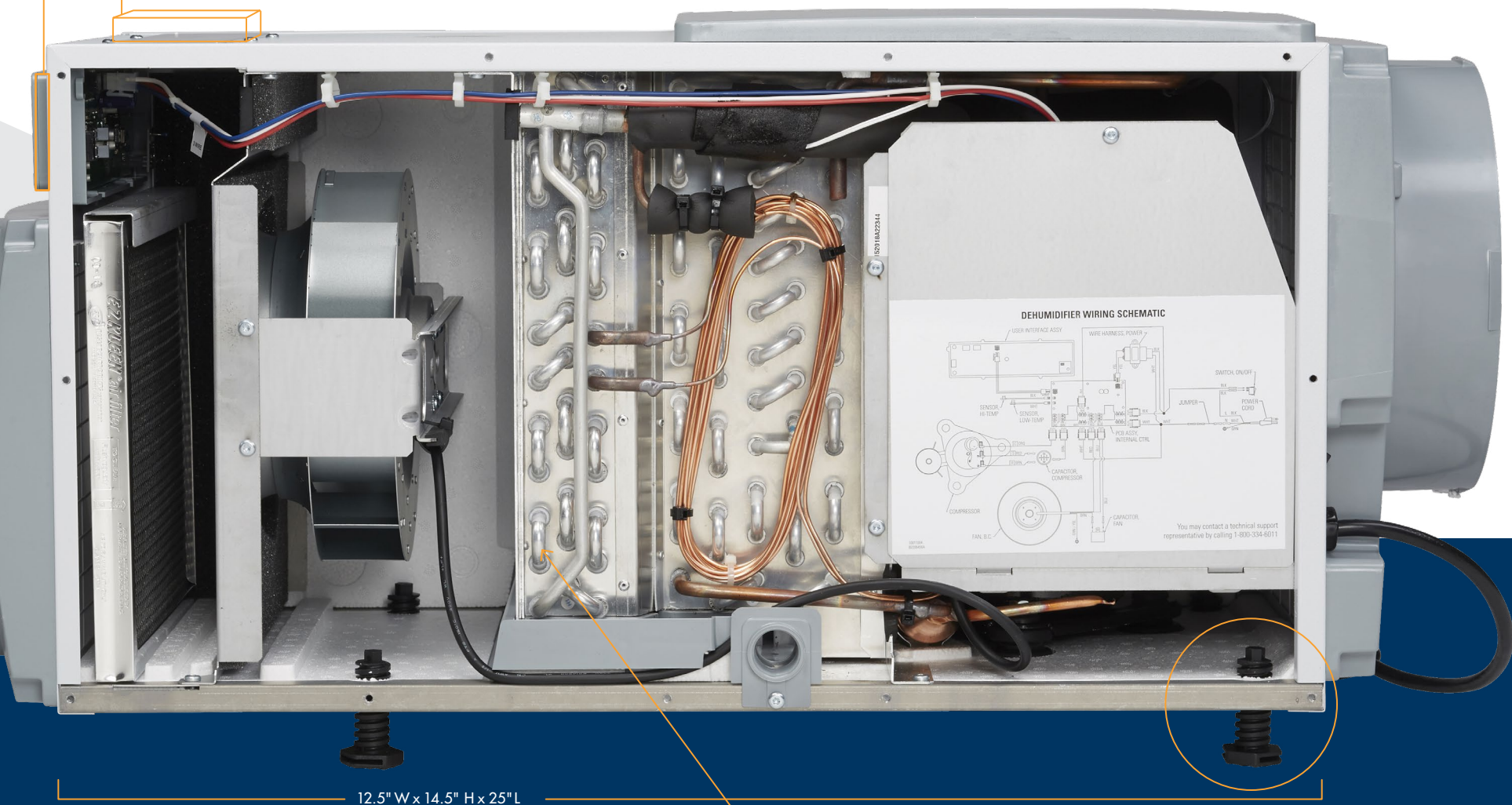
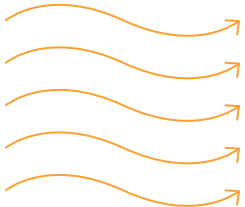
- + Intuitive consumer RH% set point
- + Top and side mounting options
- + Interactive display walks you through set up options, eliminating dip switches
- + Ventilation control options including ASHRAE 62.2-2010
- + Primary/secondary zoned dehumidification options
- + New setting to either activate or deactivate the unit while the air conditioner is running
- + Troubleshooting assistance with easy to identify diagnostic codes on the display and on back of the control cover
- + Flexible control options in living space

World-Class Quality

- + **Aluminum coils** Protect against corrosion, extending the life of the refrigeration system
- + **Manufacturing process** End of line testing with helium leak detection
- + **Refrigeration design** Optimized for manufacturing, withstands severe shipping
- + **Warranty** 5-year warranty and industry leading claim processing

Positive Pressure Cabinet

- + Convertible top and side air discharge locations (Models 1830, 1850 & 1870)
- + Helps remove condensation
- + No P-trap needed



12.5" W x 14.5" H x 25" L

Model 1850 Shown

Small Cabinet, Larger Capacity

The Models 1830 and 1850 have maximum capacity with a reduced cabinet size that fits into crawl spaces, scuttle openings and HVAC closets

Corrosion Defense

Industry leading aluminum coil for complete corrosion defense

Adjustable Feet

New robust plastic feet are easy to adjust by hand, no tools necessary

Power Options

1. Plug the unit directly into an outlet
2. Hardwired options available



Basement Dehumidifiers

Specifications

SPECIFICATIONS						
Model	1820	1830	1850	1852	1870	1872
Capacity ⁽¹⁾	70 ppd	70 ppd	95 ppd	95 ppd	130 ppd	130 ppd
Energy Factor ⁽¹⁾	2.1 L/kW-h	1.91 L/kW-h	2.2 L/kW-h	2.2 L/kW-h	2.9 L/kW-h	2.9 L/kW-h
Airflow @ varying E.S.P. (external static pressure - dry coil)	0.0" w.c. 200 CFM 0.2" w.c. 170 CFM 0.4" w.c. 140 CFM	0.0" w.c. 160 CFM 0.2" w.c. 120 CFM 0.4" w.c. 75 CFM	0.0" w.c. 265 CFM 0.2" w.c. 230 CFM 0.4" w.c. 200 CFM	0.0" w.c. 265 CFM 0.2" w.c. 230 CFM 0.4" w.c. 200 CFM	0.0" w.c. 310 CFM 0.2" w.c. 267 CFM 0.4" w.c. 226 CFM 0.6" w.c. 178 CFM	0.0" w.c. 310 CFM 0.2" w.c. 267 CFM 0.4" w.c. 226 CFM 0.6" w.c. 178 CFM
Voltage, phase, frequency	120VAC, 1, 60 Hz	120VAC, 1, 60 Hz	120VAC, 1, 60 Hz	120VAC, 1, 60 Hz	120VAC, 1, 60 Hz	120VAC, 1, 60 Hz
Current draw ⁽¹⁾	5.8 Amps	6.3 Amps	8.0 Amps	8.0 Amps	8.3 Amps	8.3 Amps
Noise	53 dBA ducted 58 dBA unducted	47 dBA ducted 51 dBA unducted	54 dBA ducted	54 dBA ducted	50 dBA ducted	50 dBA ducted
Dimensions: (cabinet only) ⁽²⁾	Width 12.5" Height 12.5" Length 25.0"	Width 12.5" Height 14.5" Length 25.0"	Width 12.5" Height 14.5" Length 27.5"	Width 12.5" Height 14.5" Length 27.5"	Width 19.5" Height 18.75" Length 30"	Width 19.5" Height 18.75" Length 30"
Weight	56 lbs.	67 lbs.	70 lbs.	70 lbs.	113 lbs.	114 lbs.
Inlet air operating conditions during						
- Dehumidification:	50°F-104°F, 40°F dew point min.	50°F-104°F, 40°F dew point min.	50°F-104°F, 40°F dew point min.	50°F-104°F, 40°F dew point min.	50°F-104°F, 40°F dew point min.	50°F-104°F, 40°F dew point min.
- Ventilation:	40°F-140°F, 0%-99%RH (non-condensing)	40°F-140°F, 0%-99%RH (non-condensing)	40°F-140°F, 0%-99%RH (non-condensing)	40°F-140°F, 0%-99%RH (non-condensing)	40°F-140°F, 0%-99%RH (non-condensing)	40°F-140°F, 0%-99%RH (non-condensing)

⁽¹⁾Rated capacity and energy factor test done and current draw measured at 80°F/60%RH inlet air at 0.0 ESP.

⁽²⁾For actual height, add up to 2" to account for adjustable leveling feet or 2½" for casters. The width excludes the filter doors and length excludes the duct collars.

FEATURES						
Model	1820	1830	1850	1852	1870	1872
Controls ⁽³⁾	Built-in digital control with front mount only	Built-in digital control with top or front mounting options	Built-in digital control with top or front mounting options	Built-in digital control with top or front mounting options	Built-in digital control with top or front mounting options	Built-in digital control with top or front mounting options
Casters or leveling feet	Leveling feet	Leveling feet	Leveling feet	Casters	Leveling feet	Casters
Crawl space alert	N/A	N/A	N/A	N/A	N/A	N/A
Cabinet insulation	1/2" EPS	1/2" EPS	1/2" EPS	1/2" EPS	1/2" EPS	1/2" EPS
Air discharge orientation	End of cabinet only	Top or end	Top or end	Top or end	Top or end	Top or end
Inlet/Outlet duct collars	8" dia.	10" dia.	10" dia.	10" dia.	10" dia.	10" dia.
Backdraft damper at outlet	No	Included	Included	Included	Included	Included
Filter	1/2" washable, MERV 8	1/2" washable, MERV 8	1/2" washable, MERV 8	1/2" washable, MERV 8	1/2" washable, MERV 8	1/2" washable, MERV 8
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A
Coil type	Corrosion resistant aluminum	Corrosion resistant aluminum	Corrosion resistant aluminum	Corrosion resistant aluminum	Corrosion resistant aluminum	Corrosion resistant aluminum
8' Power cord	Plug type	Plug type	Plug Type	Plug Type	Plug Type	Plug Type
Hardwire option	N/A	Yes, field configurable	N/A	N/A	N/A	N/A
Discharge air temperature rise	10°F-30°F	10°F-30°F	10°F-30°F	10°F-30°F	10°F-30°F	10°F-30°F
Drain connection	3/4" MNPT threaded	3/4" MNPT threaded	3/4" MNPT threaded	3/4" MNPT threaded	3/4" MNPT threaded	3/4" MNPT threaded
Includes 10' drain tube	Yes	No	No	Yes	No	Yes
Warranty	5 Years	5 Years	5 Years	5 Years	5 Years	5 Years

⁽³⁾Built-in automatic control capable to be set up for dehumidification, humidification, and ventilation or zoning.

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