

Perfect Temperature / Perfect Humidity



Dewair-Duo

The revolutionary whole-home comfort system that controls both temperature and humidity.

- ✓ Whole home comfort
- ✓ Optimum indoor temperature and humidity
- ✓ Healthier for your family
- ✓ 40% energy savings
- ✓ Up front cost savings
- ✓ Significant maintenance savings



The least expensive way by far to both air condition and dehumidify your home.

How will the Dewair-Duo save me money?

Warm dry environments are more comfortable than cooler more humid ones. Maintaining your home at 78°F instead of than 70°F in the summer represents a 40% energy savings. The Dewair-Duo is designed to maintain 78°F and 45% relative humidity, the optimum for comfort and health, as well as energy savings.

Additionally, when your home is unoccupied for any length of time, you can safely turn off cooling altogether. The Dewair-Duo will still maintain proper humidity levels while saving an additional 50% in energy.

How do I know if the Dewair-Duo is right for me?

The Dewair-Duo home comfort system is for you

- if your home often feels uncomfortable or damp,
- if you have problems with mold and mildew,
- if your home is Energy Star certified.

Why are both temperature and humidity control important?

Your comfort is directly affected by both temperature and humidity. High levels of humidity will change the feel of your indoor air, making it feel warmer than the temperature shown on your thermostat. Excessively high humidity also creates a favourable environment for the development of mold, mildew and dust mites - powerful allergens and irritants that can lead to respiratory problems like asthma.

Don't regular air conditioners also control humidity?

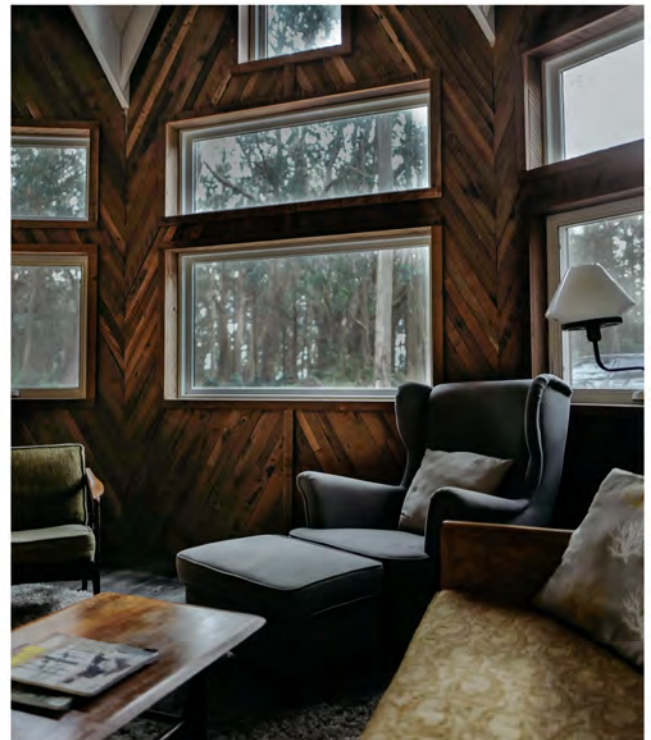
On hot days, air conditioners do a good job of bringing down the temperature inside your home. They do dehumidify, but they cannot control the amount of humidity in the air. In fact, when your air conditioner is turned on and begins to cool, it will actually raise the humidity, not lower it. By the time the AC begins to dehumidify the air, the temperature inside your home may have already started to feel uncomfortably cold.

How does the Dewair-Duo solve this problem?

Unlike a standard home air conditioner, the Dewair-Duo home comfort system is designed to control temperature and humidity independently. Dewair-Duo sensors continually monitor both temperature and humidity levels in your home, and direct the unit to perform appropriately. On hot days it cools first and dehumidifies second, while on humid days it switches priority.

How does the Dewair-Duo work?

The Dewair-Duo is a split-air dehumidifier built from air conditioner components that operates in a similar fashion to a standard air conditioner. At its core is an air conditioner cooling coil. It requires an off-the-shelf outdoor condenser (purchased separately) to provide cooling as with any split-air air conditioner. The Dewair-Duo differs from an air



conditioner in that the Dewair-Duo employs four high efficiency heat exchangers to dramatically boost dehumidification capacity, and it has a route to bypass these heat exchangers when all you want is cooling.

Dewair-Duo Features and Benefits

Feature	Benefit
Dual function dehumidifier/air conditioner.	<ul style="list-style-type: none"> ✓ Delivers true comfort by independently controlling humidity and temperature. ✓ Ideal unit for smaller homes and Energy Star rated homes ✓ Designed to work with a main air conditioner for larger homes.
Automatically selects level of dehumidification	<ul style="list-style-type: none"> ✓ Simple to operate. No guesswork to find ideal comfort.
Split Air Design	<ul style="list-style-type: none"> ✓ Energy saving architecture where hot air is exhausted outside.
High Efficiency	<ul style="list-style-type: none"> ✓ Saves energy. ✓ Won't over-cool. Can Dehumidify while minimally affecting temperature.
High capacity dehumidification	<ul style="list-style-type: none"> ✓ Designed for homes and climates where the need to dehumidify predominates over the need to cool ✓ Homeowner can use setbacks to save energy ✓ Same dehumidification capacity of much larger air conditioners
Design to maintain warmer drier environments	<ul style="list-style-type: none"> ✓ Improved comfort ✓ Improved health ✓ Prevents mold damage to a home and its contents ✓ Extends life of an existing air conditioning system ✓ Reduces energy consumption by 40%
Built from conventional air conditioning components	<ul style="list-style-type: none"> ✓ Can be installed or serviced by any certified HVAC contractor ✓ Replacement parts are inexpensive
Modular design	<ul style="list-style-type: none"> ✓ Easier servicing ✓ Easily disassembled for easy installation. Fits through narrow doorways. Heaviest component can be handled by a single person.

Dewair-Duo Technical Specifications

PERFORMANCE AT 80°F /60% RH:

MODE	COOLING	DEHUMIDIFYING
Water Removal (lbs/hr)	4 - 6	6 - 8
Sensible Cooling (BTUs/hr)	10000 - 15000	5000 - 10000
Blower CFM		
@ 0.0" WG	760	620
@ 0.2" WG	710	580
@ 0.35" WG	670	545

POWER CONSUMPTION

A 2 Ton outdoor condenser will consume approximately 2 kW.

DEWAIR-DUO AS YOUR ONLY COOLING SYSTEM

The Dewair-Duo provides a complete solution for cooling and dehumidifying for homes whose sensible heat load is less than 15,000 BTUs.

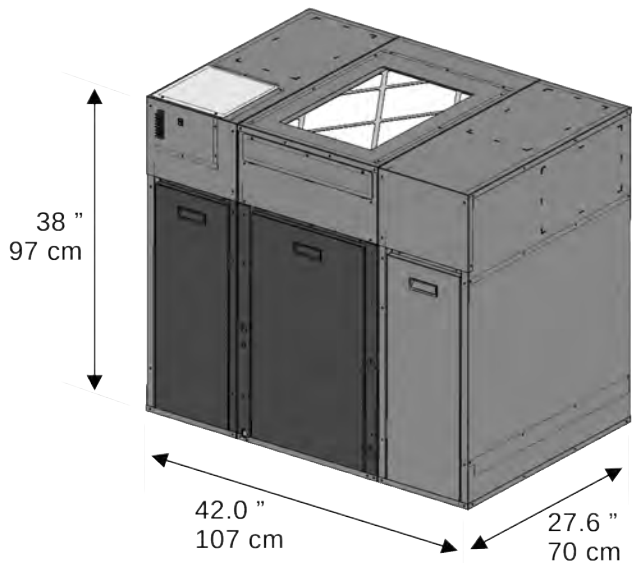
For example:

- Any super high efficiency homes where the latent load (humidity) is greater than the sensible load (temperature)
- Condominiums and townhouses
- Also for homes in regions where cooler temperatures prevail, such as northern US

DEWAIR-DUO COMBINED WITH AN AIR CONDITIONER

With homes where the cooling demand exceeds 17,000 BTUs, a Dewair-Duo used in conjunction with a smaller conventional air conditioner provides a more economic solution than using a single, larger two-stage air conditioner.

In this scenario, the Dewair-Duo would primarily operate in dehumidifier mode, effectively decoupling humidity control from temperature control. When sensible heat load creates sufficient demand, then the Dewair-Duo would be able to switch to cooling mode and deliver an extra 17,000 BTUs of cooling.



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