

*Weather-Rite<sup>LLC</sup>*



## ***Direct-Fired Make-Up Air Heater***

### ***XT-Series***

***Space Heating,  
Make-Up Air,  
Ventilation and  
Process Heating***



ANSI Z83.4/CSA 3.7 100% OUTSIDE AIR  
(US & CANADA)  
Z83.18 - RECIRCULATION (US)  
ANSI Z83.25/CSA 3.19 PROCESS HEATER  
(US & CANADA)

***1.800.589.3691  
www.weather-rite.com***

# Weather-Rite™ XT-Series - Direct Fired Make-Up Air Heater

## XT-Series air handlers improve indoor air quality and provide air comfort.

Our equipment can be designed to efficiently establish and maintain a slightly pressurized condition in your facility as outdoor air is gently tempered and, as required, mixed with existing indoor air.

## Capacities

Model		XT-112	XT-115	XT-118	XT-125	XT-130
CFM		1,000 - 5,000	5,000 - 10,000	11,000 - 18,000	16,000 - 30,000	27,500 - 40,000
Output [MBH]*	NG	119 - 594	594 - 1,188	1,307 - 2,138	1,901 - 3,564	3,267 - 4,752
	LPG	97 - 486	486 - 972	1,069 - 1,750	1,555 - 2,916	2,673 - 3,888

\*1 MBH = 1,000 Btu/h. Output range indicated at maximum temperature.

All Models XT-115 to XT-130 NG/LPG=110/90 Degree F.

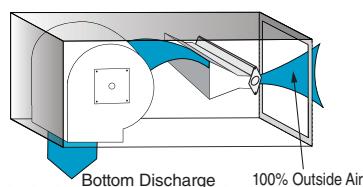
## Model Styles

### Make-Up Air (MUA)

**Design:** 100% outdoor air with a fixed discharge air volume.

**Function:** Supplies direct replacement air for building mechanical exhaust.

**Application:** Make up air for all locations and processes that have mechanical exhaust.

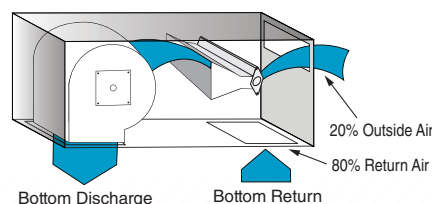


### Fixed Recirculation (FR)

**Design:** Fixed 80% return air and 20% outdoor air. Discharge air volume is fixed.

**Function:** Provides efficient, low-cost heating where minimum ventilation rates are required.

**Application:** Used in buildings that need make-up air and maximum energy conservation.

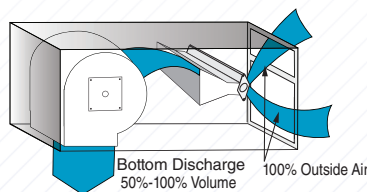


### Variable Air Volume (VAV)

**Design:** 100% outdoor air with a variable discharge air volume from 50% to 100% of total capacity.

**Function:** Automatically responds to building pressure and temperature needs.

**Application:** Used in industrial and commercial buildings that require varying amount of make-up air.

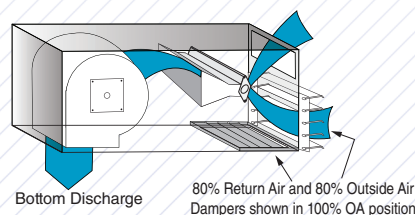


### Air Management (AM)

**Design:** Variable outdoor air / return air ratio within the range of 100% outdoor air / 0% return air to 20% outside air / 80% return air. Discharge air volume is fixed.

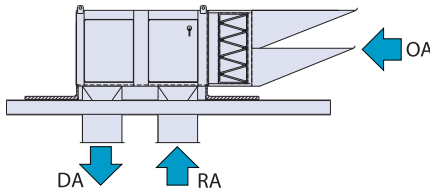
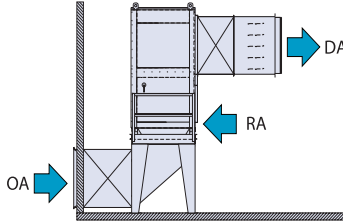
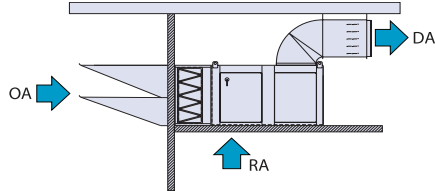
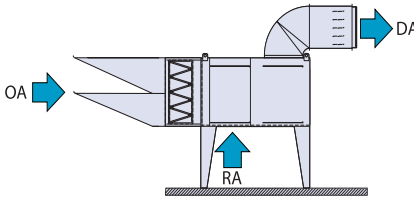
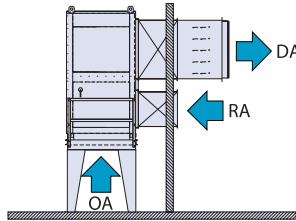
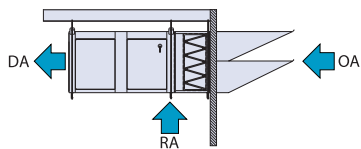
**Function:** Automatically responds to building pressure and temperature needs.

**Application:** Used in locations where both the building pressure and temperature requirements vary.





# Typical Installations

Roof-Mounted	Upright Indoor	Mezzanine-Supported	
			
Horizontal on Legs (Indoor or Outdoor)	Upright Outdoor	Suspended (Wall or Roof Inlet)	
			
<b>LEGEND</b>	OA = Outside Air	DA = Discharge Air	RA = Return Air

**NOTE:** All models are available in upright or horizontal, as well as indoor or outdoor configurations.

## Weather-Rite™ XT-Series Features

### Reliable, Efficient System Operation Provided by:

- 30:1 fully modulating burner that maintains 100% combustion efficiency.
- Double-width, double-inlet, forward-curved centrifugal fan built for long life.
- Energy-saving ignition system.
- Electronic fuel modulation providing immediate response.
- Flame rod sensor for excellent reliability and durability.
- Operation of fan only in warm weather to enjoy free ventilation cooling.
- Compliance to ETL per ANSI Z83.25, Z83.18 or Z83.4 standards.

### Long Lasting Construction Provided by:

- Heavy-duty, corrosion-resistant, galvanized steel construction.
- Sturdy, cabinet that is screwed and bolted together for durability and longer service life.
- Unpainted galvanized steel or white painted cabinet finishes available.
- Heavy-duty, factory-installed motor and drive package designed for long-lasting performance.
- Heavy-duty, pre-lubricated ABMA L-10 30,000 hour minimum rated bearings for long life and reliable operation.

### XT-Series Controls Options:

- DDC controls and conventional discharge temperature or room temperature controls available.
- Interlock to existing building management system or other remote devices.
- Mild weather stat.  
(included with DDC - optional for conventional controls)
- Low-temperature stat with bypass timer.  
(included with DDC - optional for conventional controls)

### Ease of Maintenance Provided by:

- Hinged access door for easy maintenance of blower, motor, drives and burner.
- Strategically located, removable panels, provide easy access to internally mounted actuators and sensors.

### Other XT-Series Options:

- 19" (48 cm) roof curb simplifies rooftop mounting.
- Inlet hood protects against water entrainment and is available with poly filters, bird screen or moisture limiter media.
- Outdoor air filter section or combination outdoor air / return air filter section (filters both air streams through a common filter bank) with disposable or permanent filters for longer life of internal components.
- Motorized inlet or discharge dampers for exfiltration control.
- FM and XL-GAP (formerly IRI) compliant gas trains.
- Support legs for both horizontal and vertical mounted air handlers.
- Extended grease lines for ease of lubrication/maintenance of fan bearings. (Not available for model XT-112)
- 120VAC powered convenience outlet with control panel light.



# Weather-Rite™ XT-Series Control Panels



## Standard Discharge Control Remote (SDC)

This control is used for make-up air and day/night heating of the building. The discharge temperature of the heater remains constant as selected on the selection dial. The burner flame is modulated by a discharge temperature control, which is governed by the remote temperature selector.

### AUTO/WINTER Mode:

Heater cycles on/off to maintain space temperature as selected on the thermostat.

### ON/WINTER Mode:

Heater can operate continuously for building exhaust air replacement and space heating by maintaining a constant discharge temperature.

### ON/SUMMER Mode:

The blower can operate without the burner for summer ventilation.



## Deluxe Temperature Control Remote (DTC)

This control is used for make-up air and total automatic "day/night" heating of the building. A solid-state modulating room Selectrstat fully modulates the burner flame to maintain space temperature and compensate for changing building heat losses or gains.

### AUTO/WINTER Mode:

Occupied time: Heater can operate continuously, fully modulating Btu/h output to maintain space temperature as selected on the Selectrstat®.

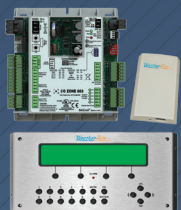
Unoccupied time: Heater cycles on/off to maintain space temperature as selected on the programmable thermostat (night setback).

### ON/WINTER Mode:

Heater can operate continuously, fully modulating Btu/h output to maintain space temperature as selected on the Selectrstat.

### ON/SUMMER Mode:

The blower can operate without the burner for summer ventilation.



## DDC Intelligent Controls

Intelligent Controls are key to keeping HVAC and productivity costs in line. Each air handler can be controlled by a DDC module to monitor, control, diagnose, log and report on a variety of functions. Time-saving benefits of Intelligent Controls include:

### Greater control:

Temperature, humidity and building pressure can be precisely monitored. Automatic tracking and recording of heating energy use and test operating parameters also available.

### Early detection of problems:

System can proactively detect and notify of potential problems.

### Data collection and trending:

Hourly logs of each air handler available. Information can be downloaded into a spreadsheet program for in-depth analysis.

### Compatibility:

Via modem, Internet or local network; controls communicate via the leading protocols including BACnet®, N2Bus and LonWorks systems.

### Easy to use and Service:

Helps simplify set up and allows for quick and efficient programming changes.

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