Wenther-Rite



HEATING, PRESSURIZATION COOLING & ENERGY RECOVERY

TT SERIES

1.616.784.0500

www.weather-rite.com

INDUSTRIAL-GRADE HVA

WEATHER-RITE™ TT-Series energy efficient, direct-fired, make-up air units provide heating, cooling, energy recovery, pressurization or ventilation for industrial applications. Our air handlers improve indoor air quality and comfort by establishing and maintaining a slightly pressurized condition, while gently tempering outdoor air and mixing it with existing indoor air.

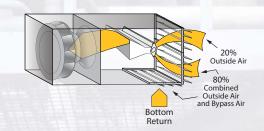
Note: All models are available in upright or horizontal, as well as indoor or outdoor configurations.

Air Management (AM) Models

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

Function: Automatically responds to building pressure and temperature

Application: Used in industrial and commercial buildings that have air quality and specific air management requirements.

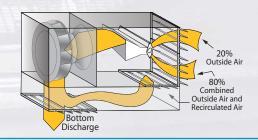


Variable Air Volume (VAV) Models

Design: 100% outdoor air with a variable discharge air volume from 20%-100% with use of bypass section.

Function: Automatically responds to building pressure needs.

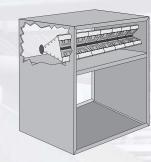
Application: Used in buildings requiring various levels of replacement air.





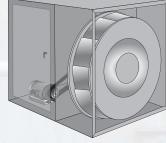
Inlet Hood

- Minimizes water entrainment into air handler.
- · Incoming air enters air handler via an angled face.
- · Bird screen is factory applied to the inlet opening on the air handler to simplify installation.



Filter Section

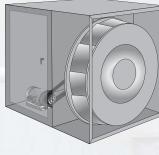
- Cleans outside air before delivering it to the conditioned
- Available filters: pleated, polyester, aluminum mesh, bag and cartridge.



Inlet Plenum

- · Provides maximum protection against water entrainment into air handler.
- Incoming air enters inlet plenum through three sides covered with moisture limiter media or optional metal louvers.
- · Equipped with drain outlets to roof or pad and sloped floor for water removal.

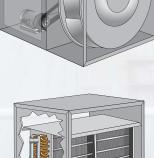
May be used in place of an inlet hood.



Filtered Mix Box Section

- · Treats outside and return air and cleans incoming air before delivering it to the conditioned space.
- Available filters: pleated, polyester, aluminum mesh, bag and cartridge.
- · Damper options: manual positioning, summer ventilation economizer and automatic positioning based on building pressure.

May be used in place of a filter section.



Direct-Fired Burner

- Maintains 100% combustion efficiency and have a nominal turndown of 30:1.
- Aluminum manifold and stainless steel burner plates.
- · Assembly includes: manuallyadjustable profile plates, flame rod flame failure system (optional UV scanner), electric spark ignition, main and pilot gas lines.

Fan Section

- Single width, single inlet (SWSI) backward-inclined airfoil fan, fan section easily moves large air volumes ranging from 5,000 to 150,000 CFM at higher static pressures and with lower motor horsenowers.
- Inlet cone is used to streamline air flow into fan wheel to help ensure full and even loading of fan blades.
- Bearings have a minimum American Bearing Manufacturers Association (ABMA) rating of L10 at 100,000 hours for long life.
- · Each fan is driven by multiple V-belt drives connected to motor.
- For flexibility, five discharge openings are available: top, bottom, left, right, end.

Cooling Coils

Mechanical cooling coils available:

- · Chilled Water Well suited for 100-250 plus tonnage range. Various coil sizes and materials are available.
- Direct Expansion (DX) Coils -Common in systems up to 100-150 tons. Row quantity, fin spacing, circuiting and refrigerant can be customized to fit the specific application.
- Reheat is also an available option.



Model Number	TT0510	TT1025	TT1530	TT2035	TT2545	TT3060	TT3580	TT4095	TT5515
Airflow (CFM)	5,000- 10,000	10,000-25,000	15,000-30,000	20,000- 35,000	25,000- 45,000	30,000- 60,000	35,000- 80,000	40,000- 95,000	55,000- 150,000
Output (MBH)*	540- 1,080	1,080-2,700	1,620-3,240	2,160-3,780	2,700-4,860	3,240-6,480	3,780-8,640	4,320-10,260	5,940-16,200

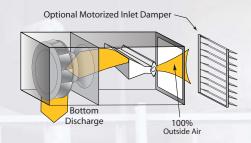
*1 MBH=1,000 Btu/h. Output range indicates range at maximum temperature rise.

Make-Up Air (MUA) Models

Design: 100% outdoor air with a fixed discharge air volume (or a variable discharge air volume if a variable frequency drive is used).

Function: Supplies direct replacement air for building mechanical exhaust.

Application: Used as make-up air for industrial applications which incorporate mechanical exhaust.

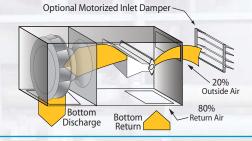


Fixed Recirculation (FR) Models

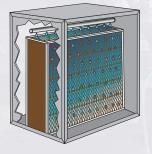
Design: Fixed 80% return air and 20% outdoor air. Discharge air volume is fixed.

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

Application: Used in warehouses, distribution centers, retail outlets, etc.



Meet specific design requirements by mixing and matching various combinations of optional sections. Create optimum indoor air quality by combining a direct-fired burner, standard backward inclined airfoil fan, filtration and energy recovery.



Evaporative Cooling

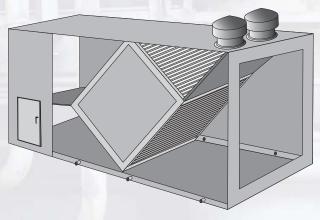
- An economical solution, evaporative cooling works when warm air passes over specially treated wetted media.
- Heat passes from air to wetted media, causing water to evaporate, resulting in cooling of airstream.

Can be used instead of cooling coils.



Heating Coils

- In place of, or in addition to direct-fired burner, electric, hot water or steam coils can be used.
- Factory-installed with appropriate safety devices.



Energy Recovery

- Available for air flows up to 60,000 CFM (larger custom sizes also available).
- When air handler is heating, an energy recovery module unit can greatly reduce fuel consumption by using warm exhaust air to pre-heat the incoming outdoor air.
- When defrost is required, or during summer ventilation, or when a mechanical cooling section is used, face and bypass dampers may be used to divert outside air around the energy recovery module.
- Several benefits of plate-style exchanger over other types of energy recovery:
 - Minimal wear and long life because there are no moving parts.
 - Exhaust air will not cross-contaminate supply air.

Exterior Finish (Paint)

- Available in two standard colors for enamel or epoxy paint, represented below (actual color may vary due to print quality vs. product application).
- Final external coating incorporates high gloss solvent borne acrylic modified alkyd enamel to ensure surfaces and fasteners are corrosion resistant.
- Special paint colors and/or exterior coatings available upon request.







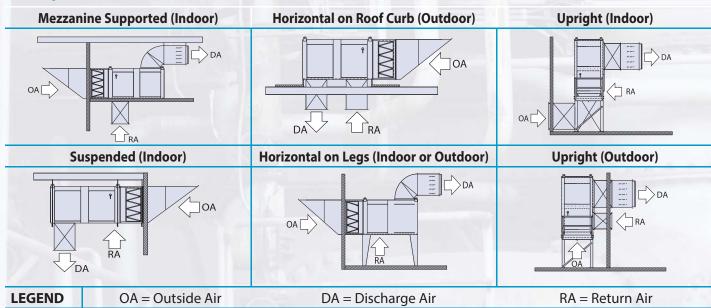
InfinityPro and Intelligent Controls

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:

- **Easy to use and service** Simplifies set up and allows for quick and efficient programming changes.
- **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®, ModBus, N2Bus and LonWorks
 systems.*



Unit/Discharge Configurations (** Not all available combinations shown)



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Z83.4 100% OUTSIDE AIR (US & CANADA) Z83.18 - RECIRCULATION (US)



Intertek

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