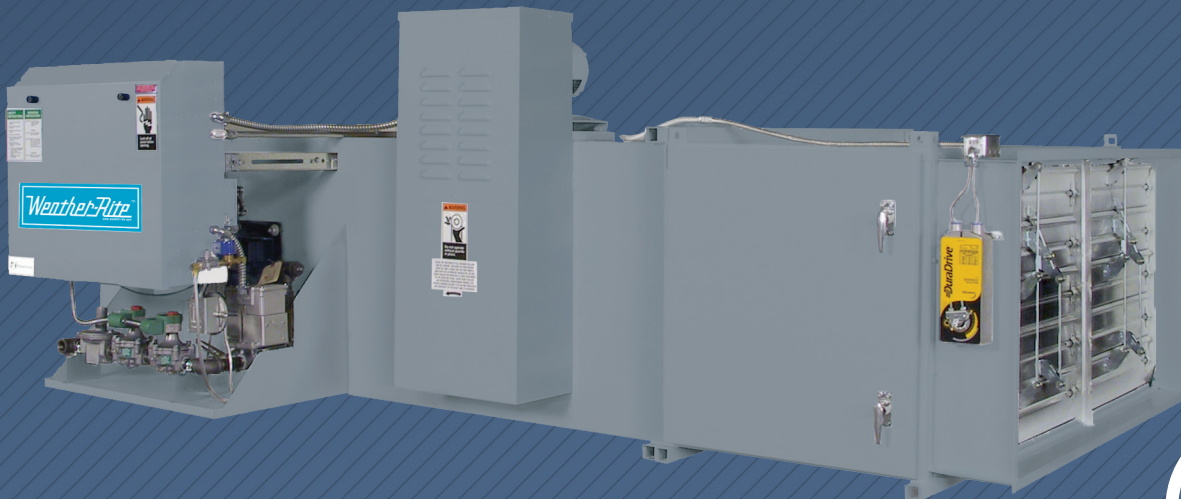


Weather-Rite LLC

Indirect-Fired Air Handler & Air Turnover

IDF Series

*Heating, Cooling,
Pressurization*



1.800.589.3691
www.weather-rite.com



Intertek
GAS/OIL HEATING ONLY

WEATHER-RITE™ Indirect-Fired Air Handler

WEATHER-RITE™ indirect-fired **air handlers** can help minimize air quality problems by pressurizing a space with conditioned outdoor air and/or effectively heat a space with recirculated air.

WEATHER-RITE™ indirect-fired **air turnover units** can help minimize air stratification problems by drawing in room air from the floor and conditioning it, sweeping air from the ceiling and recirculating it through the space.

Long Lasting Construction:

- Industrial grade, heavy-duty weld structural framework and cabinetry.
- Double-wall cabinet construction in heat exchanger section.
- Multi-pass, positive-pressure heat exchanger with stainless steel primary drum and cold-rolled steel secondary tubes. (Optional stainless steel secondary tubes).

Suit Most Applications with Design Flexibility and Options:

- Availability of upright and horizontal configurations with a variety of discharge options to meet application requirements.
- Indoor or Outdoor Approvals.
- Air Turnover Configuration (Indoor or Outdoor).
- External spring or neoprene pad vibration isolators.
- Fused disconnect switch (shipped loose or factory-mounted) for single point connection.
- Modulating mixing box dampers to control airflow and/or shutoff inlet/discharge dampers.
- Discharge heads and configurations to deflect airflow in required direction.
- Direct expansion (DX) or chilled water cooling coils.
- Selection of remote controls and/or Building Management System (BMS)-interlock control in order to provide discharge, return or space temperature control.

Reliable, Efficient System Operation:

- Single or dual belt-driven DWDI, FC centrifugal blower(s), driven by a single-speed, premium efficiency, open drip-proof (ODP) motor. (Optional totally-enclosed, fan-cooled [TEFC] motor.)
- Adjustable blower sheaves to allow the fine-tuning of airflow levels.
- Fully-assembled and tested positive pressure power burner which eliminates the need for a power venter in flue.
- Indirect-fired burners available at a variety of turndown levels and fuel options to meet specific application requirements.
- Fully-assembled and tested manifold assembly, available for gas (NG or LPG) and for ANSI, FM or XL-GAP Insurance-compliant buildings.

Ease of Maintenance:

- Easy access to fan(s), motor(s), sheaves and belts, power burner and manifold.
- Optional service receptacle to provide power during maintenance activities.

Capabilities

General

- Up to 57,000 CFM, custom CFM available
- Mixing Boxes
- Positive Pressure Heat Exchanger
- Filtering
- Horizontal/Vertical discharge configurations
- Indoor or Outdoor

Heating

- Up to 4.5 million Btu/h gas heating
- Electric Coil
- Hot Water Coil(s)
- Steam Coil(s)

Cooling

- DX (Direct Expansion)
- Evaporative
- Chilled Water
- Humidity Control

Benefits

Better Air Quality

- Filtration
- Heating and/or Cooling
- De-stratification
- Outside Air/Building Pressurization
- Humidity Control

Reduced Energy Cost

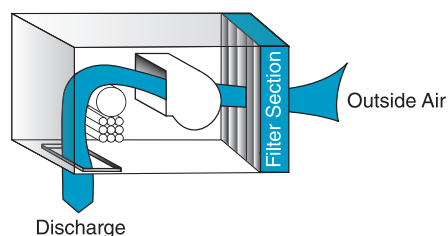
- Indoor air recirculation reduces fuel consumption
- No induced draft fan required
- Minimizes building stratification

Model		IDF-35	IDF-45	IDF-50	IDF-65	IDF-75	IDF-85	IDF-100	IDF-125	IDF-150
Airflow	(CFM)	3,500-6,000	3,500-6,000	4,000-8,000	4,000-8,000	6,000-12,000	6,000-12,000	6,000-12,000	10,000-18,000	13,000-24,000
	(m ³ /h)	5,900-10,200	5,900-10,200	6,800-13,600	6,800-13,600	10,200-20,400	10,200-20,400	10,200-20,400	17,000-30,600	22,100-40,800
Output	(MBH)*	240-350	240-450	240-500	520-650	520-750	520-850	520-1,000	560-1,250	560-1,500
	(kW)	70.3-102.5	70.3-131.9	70.3-146.5	152.4-190.5	152.4-219.8	152.4-249.1	152.4-293.1	164.1-366.3	164.1-439.6

Model		IDF-175	IDF-200	IDF-225	IDF-250	IDF-275	IDF-300	IDF-350	IDF-400	IDF-450
Airflow	(CFM)	13,000-24,000	21,000-37,000	21,000-37,000	21,000-45,000	21,000-45,000	30,000-45,000	35,000-57,000	35,000-57,000	35,000-57,000
	(m ³ /h)	22,100-40,800	35,700-62,900	35,700-62,900	35,700-76,500	35,700-76,500	51,000-76,500	59,500-96,800	59,500-96,800	59,500-96,800
Output	(MBH)*	600-1,750	600-2,000	600-2,250	600-2,500	720-2,750	720-3,000	720-3,500	1,400-4,000	1,400-4,500
	(kW)	175.8-512.9	175.8-586.1	175.8-659.4	175.8-732.7	211.0-805.9	211.0-879.2	211.0-1,025.7	410.3-1,172.3	410.3-1,318.8

*1 MBH = 1,000 Btu/h

Model Configurations

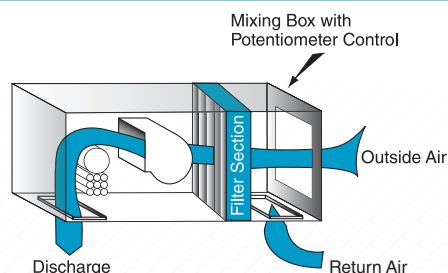


Make-Up Air (MUA) Models

Design: 100% outside air with a fixed discharge air volume.

Function: Supplies direct replacement air for building mechanical exhaust.

Application: Used as heated/cooled make-up air for industrial processes which incorporate mechanical exhaust.

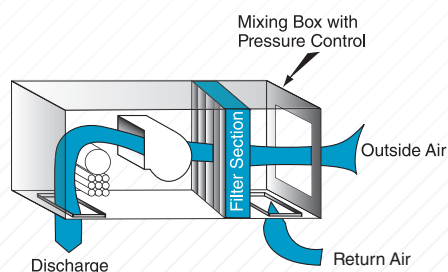


Fixed Recirculation (FR) Models

Design: Manual modulation of outdoor air/return air mix from 0% to 100% with use of mixing box and factory supplied remote controls.

Function: Provides efficient, low-cost heating where ventilation/recirculation rates are constant over time.

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

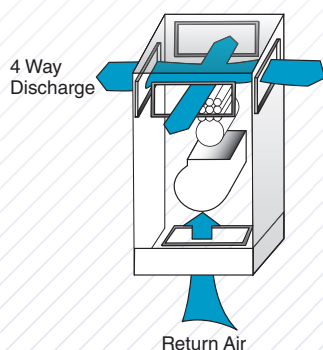


Air Management (AM) Models

Design: Automatic modulation of outdoor air/return air mix from 0% to 100% with use of mixing box and pressure controller.

Function: Automatically responds to building pressure and temperature needs.

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



Air Turnover (ATU) Models

Design: Vertical configuration draws air from the floor, filters and conditions it, as it sweeps air from the ceiling, recirculating it through the space.

Function: By the utilization of up to 100% recirculation, which maximizes the efficiency of the system, it minimizes stratification by circulating air from the floor to the ceiling while providing even space temperatures.

Application: Used in warehousing, distribution centers and areas where hot and cold spots may need to be reduced.

Remote Controls



8.1/8.5 – ON/OFF or LO/HI/LO

This control is used for on/off or two stage heater control. Available as space control or discharge temperature control.

Functions are:

Blower – On/Off
Heat – On/Off
Temperature Set point
Occupied/Unoccupied Programming (7 Day)
Burner Service Indication (Flame Fail)

Additional Options available;

Clogged Filter Indication
Up to 2 Stages Cooling
Outside Air Heating and Cooling Lockout



8.1/8.5 – Modulation

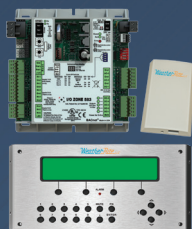
This control is used for modulation heater control. Available as space control or discharge temperature control.

Functions are:

Blower – On/Off
Heat – On/Off
Temperature Set point (Occupied/Unoccupied)
Occupied/Unoccupied Programming (7 Day)
Burner Service Indication (Flame Fail)

Additional Options available;

Clogged Filter Indication
Up to 4 Stages Cooling
Outside Air Heating and Cooling Lockout



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.



DDC-RP

Available for equipment where the controls are by others- a DDC ready package.

This package consists of:

Relay for blower – On/Off
Dry contact for blower on indication
Relay for heat- On/off
Dry contact for heat on indication
Dry contact for burner failure alarm
Input Signal Interface for temperature control

Additional Options available;

Clogged Filter Indication
Safety Alarms
Mibox Damper
Modulation

Dry Contacts (2 stage) or 0-10 vdc or 4-20 ma (modulation)

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