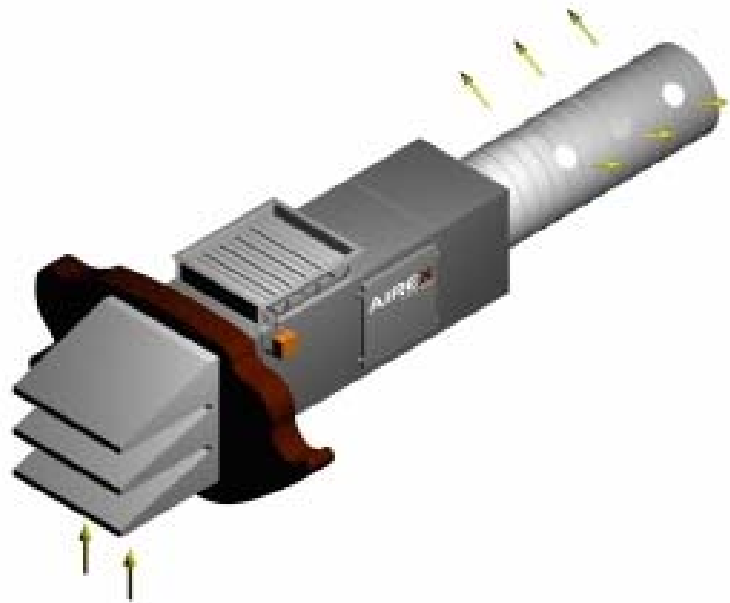


AIR MAKE-UP SYSTEM  
AIREXTUBE Series

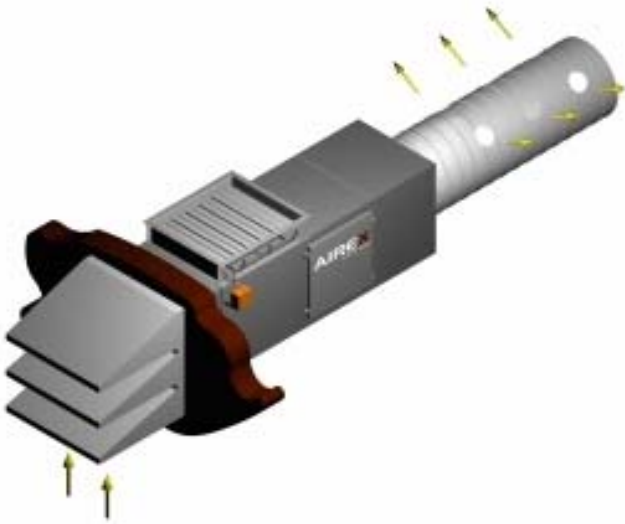




## *General Points*

The « AIREXTUBE » air make-up system can be used in all applications where the replacement of exhausted air is required due to general ventilation or local extraction. Without this air replacement the building is maintained under negative pressure, reducing the efficiency of exhaust fans and increasing infiltrations and draughts which make the work areas uncomfortable.

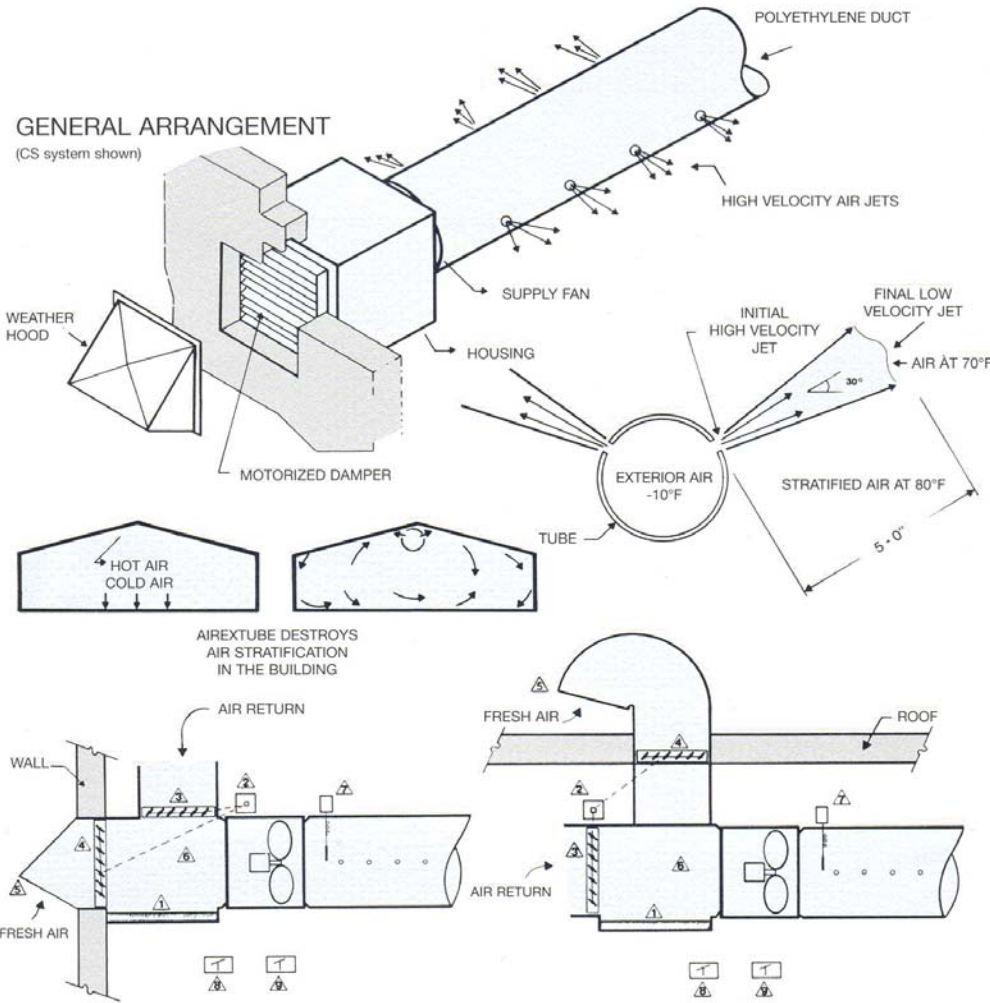
The "AIREXTUBE" systems, available in five sizes and four different models, include one housing, one (or more) motorized dampers, one axial fan and motor, and one flexible fire retardant polyethylene fabric perforated duct.





## Theory of Operation

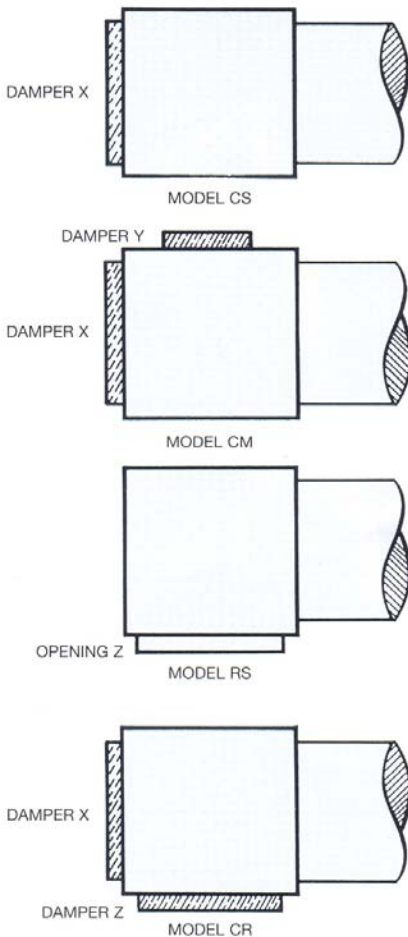
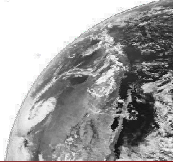
The operation of the AIREXTUBE is very simple and consists of using the hot air stratified at the top of the building to preheat the cold air introduced before it reaches the work area. The result is a very uniform temperature from bottom to top of the building. Since the top layer of warm air is usually not utilized, the make-up air can then be considered as "free air". This represents an important advantage over the conventional gas or electric make-up units; the initial cost of an "AIREXTUBE" as well as its operation cost are much lower.



- 1 DRAIN PAN WITH ISOLATION 1 INCH.
- 2 MODULATING MOTOR SPRING RETURN.
- 3 RECIRCULATING DAMPER NORMALLY OPEN.
- 4 FRESH AIR DAMPER NORMALLY CLOSE.
- 5 FRESH AIR HOOD WITH BIRD SCREEN.

- 6 ACCESS DOOR MIXING BOX.
- 7 MODULATING TEMPERATURE CONTROL (DUCT).
- 8 MODULATING TEMPERATURE CONTROL (ROOM).
- 9 FREEZE PROTECTION (ROOM).





## *Advantages*

The AIREXTUBE is available in four different configurations allowing a wide variety of uses. This versatility permits the AIREXTUBE to cover every need of the industry.

### Single compensation system (CS)

This unit has one motorized back-draught damper at the rear of the casing (damper X) that closes automatically when the unit stops operating to avoid any air infiltration. The fan and damper are operated by an on-off remote control if needed. This control can be easily interlocked with the evacuation fan controls.

### Compensation and mixing system (CM)

The CM unit is similar to the CS, except for a mixing damper (damper Y) on top of the casing. This second damper, controlled by a thermostat placed in the ducting, pre-mixes the air in the housing during cold weather. As in the CS model, the unit is supplied with an "on-off" switch.

### Recirculating systems (RS)

This model has a different function than the two others. It is used where air compensation is not required (ex. warehouses), but where the cost of heating can be lowered by using the stratification in top part of the building. The unit is provided with an opening (Z) at the bottom part of the housing. A recirculating duct must be used to bring the air from the floor level to the "Airextube". The unit is supplied with a "on-off" switch.

### Combined system (CR)

This model is provided with a damper (X) at the back and a damper (z) at the bottom of the casing. The unit has two functions : during the day, when the exhaust fans are working, it will act as an air compensation unit (CS); during the night and week ends, it functions as an air recirculation unit (RS). The unit is supplied with a three position remote control (compensation – off-recirculation).

## *Options and Accessories*

### Weather hood (model CS, CM, CR)

Placed outside the building, it prevents water and snow from entering the unit. It is supplied with a birdscreen; it can be provided with a mosquito net as an option.

### Recirculating duct (model RS, CR)

A recirculating duct of variable length, provided with a screen at the inlet can be ordered.

### Emergency thermostat (model CS, CM, CR)

A protection thermostat in the control box is available as an option. This thermostat stops the unit if the room temperature reaches 7°C (45°F) or less. It is used for protection in case of heating system break-down during weekends and holidays.





## Technical Data Sheet – AIREXTUBE SERIES

The "AIREXTUBE" systems can be used for all commercial and industrial applications.

1- Housing :

Made in galvanized steel, it includes the supports of the fan and motor. The housing is supplied with a door providing easy access to components and for the electrical connections to the remote control.

2- Fan :

Axial type fan, statically and dynamically balanced. It is connected to the motor by means of a shaft mounted on two pillow-blocks and a V-belt drive.

3- Motor :

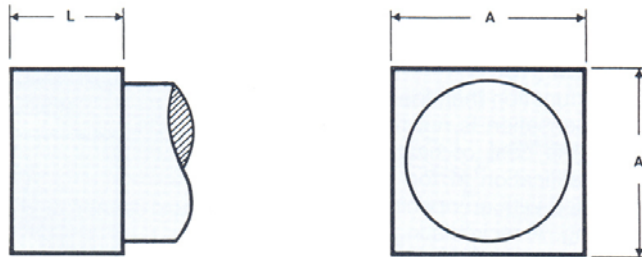
Type TEFC for continuous duty available in 110/220/1/60 or 230/460/575/3/60 for motor 2 HP. Available in 230/460/575/3/60 for motors 3 HP et 5 HP.

4- Motorized dampers :

Made in steel. The compensation damper (damper-X) is provided with a weather seal. The dampers are controlled by single phase industrial actuator.

5- Tube :

The tube itself is made of fire retardant polyethylene fabric, 8 mils thick, and supplied with support wire and duct hangers.



AIREXTUBE MODEL		CFM m <sup>3</sup> /HR	MOTOR (H.P.)	DIM. A. in. mm	DIM. L.		TUBE DIA. in. mm	TUBE LENGTH ft.m
					inche	mm		
24 CS	24 CM	7 000	2	30"	18"	457,2	24"	100'
24 RS	24 CR	11 970		762	30"	762	610	30,48
30 CS	30 CM	10 000	2	36"	18"	457,2	30"	100'
30 RS	30 CR	17 100		915	36"	915	762	30,48
36 CS	36 CM	14 000	3	42"	24"	609,6	36"	100'
36 RS	36 CR	23 940		1067	42"	1067	915	30,48
42 CS	42 CM	19 000	5	48"	24"	609,6	42"	100'
42 RS	42 CR	32 490		1219	48"	1219	1067	30,48
48 CS	48 CM	25 000	5	54"	30"	762	48"	100'
48 RS	48 CR	42 750		1372	54"	1372	1219	30,48

All dimensions can change without notice.

In order to have our product meet the highest technological standards, we reserve the right to modify its specifications without notice.

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