

0068 _ The AMCA Vocabulary: Product Definitions

Abrasion Resistant Fan (or Damper)

A fan or damper designed to minimize abrasion, having parts subject to wear constructed of materials that are abrasion resistant and/or are easily replaceable.

Acoustical Duct Silencer

An air duct section containing sound absorbing materials that reduce the transmission of sound through the air passage.

Acoustical Louver

A louver incorporating sound absorbing material to reduce sound transmission across an opening.

Adjustable Louver

A louver in which the blades may be rotated either manually or mechanically.

Air Curtain Unit

An air moving device that produces a curtain of air.

Air Diffuser

A duct discharge termination located in a ceiling and arranged to direct airflow, or to promote air mixing.

Airflow Measurement Station (AMS)

A multiple-point sensing device used to measure the airflow in a duct and which consists of a single or multiple array of sensors in permanent position across the duct system.

(1) Differential (Velocity) Pressure Output Type

Converts air velocity into a differential (velocity) pressure signal which correlates to the velocity or volume of air flowing through a duct.

(2) Electronic Output Type

Converts air velocity into an electronic signal that correlates directly and proportionally to the velocity of the air volume flowing through a duct.

Air-Handling Unit - A packaged assembly of air-conditioning components (coils, filters, fan, humidifier, and so forth) that provides for treatment of air before it is distributed.

- (1) **Blow-Through** – Fan is mounted upstream of a heat exchanger.
- (2) **Central Station** – Does not include a source of heating or cooling.
- (3) **Cooling** – Includes a means for cooling air.
- (4) **Cooling - Heating** – Includes the means for both heating and cooling air.
- (5) **Draw Through** – Heat exchanger(s) are mounted upstream of the fan.
- (6) **Heating** – Includes a means for heating air.

Axial Fan

A fan in which the airflow is predominately parallel to the impeller's axis of rotation.

Backdraft Damper

A damper which, when mounted in a duct or opening, permits airflow in one direction only.

Balancing Damper

A damper used to regulate the airflow in an air system.

Barometric Damper

A backdraft damper having an adjustable start-open pressure and used for gravity ventilation or other low velocity applications.

Bath Fan

A fan used to exhaust air from a bathing / toilet area for the primary purpose of moisture and/or odor removal.

Bifurcated Fan

A direct-driven fan having the airstream-mounted drive motor separated from the airstream by means of a compartment or tunnel.

Blast Damper

A damper that reacts to sudden pressure changes in an air system, to either relieve the air pressure, or to isolate a space from the rapid pressure rise.

Blower

A fan that operates against air system resistance downstream of the fan; a **Forced Draft Fan**.

Box Fan

A fan used in an office or residential application and having the motor and impeller enclosed in an approximately square box having a handle.

Cast-Iron Volume Fan

A fan having a housing made of cast iron.

Centrifugal Ceiling/Wall Exhauster

A factory-assembled fan consisting of one or more centrifugal impellers connected to a motor and enclosed in a housing; usually including an inlet grille and a backdraft damper, and intended for installation in a ceiling or a wall.

Ceiling Damper

A device intended to protect an air duct opening in a fire-rated ceiling assembly and which operates to interrupt airflow automatically in the event of fire to restrict the passage of flame and heat.

Ceiling Exhaust Fan

A fan mounted in a ceiling and which serves to exhaust air from a room.

Ceiling Fan

A propeller fan supported from a ceiling and which serves to circulate air within a given space; also known as an air circulation fan.

Centrifugal Fan

A fan in which a gas, such as air, is moving in a primarily axial direction upon entering the impeller and has its direction changed by the impeller blades to an essentially radial flow at the impeller discharge. The impeller is generally contained in a volute housing

Circulating Fan

A fan used for moving air within a space, and which is unconnected to any ducting, and is usually without a housing.

Combination Louver-Damper

A louver having both stationary and eccentrically pivoted movable blades that can be opened and closed.

Combustion Air Blower

A centrifugal fan that serves to supply pressurized air to a burner system combusting gas, oil, or other fuel.

Contra-Rotating Fan

An axial flow fan having two impellers arranged in series and rotating in opposite directions.

Conveying Fan

A fan suitable for conveying solids (e.g., wood chips, textile waste, pulverized material, or dust).

Corrosion Resistant Fan

A fan having an impeller and housing constructed of materials that resist corrosion, or having airstream or exterior components surface-treated to minimize the corrosive effect of certain chemicals or compounds.

Cross-Flow Fan

A fan in which the fluid path through the impeller is in a direction substantially at right angles to its axis with air both entering and leaving radially at its periphery.

Damper

A device used to vary the volume of air passing through an opening, duct or confined cross-section by varying the cross-sectional area.

Destratification Fan

An air circulation fan located in a room to move warm air from the ceiling downward or to mix air in a given space.

Downdraft Fan

An exhaust fan that serves to remove heated air and moisture by inducing air to flow down to a fan inlet located below a cooking surface.

Dust Fan

A fan that serves to extract dust-laden air.

Electric Air Heater

A space heater having electric resistance elements as the heat source and a fan for the circulation of heated air.

Evaporative Cooler

An assembly consisting of a fan or fans and other necessary equipment to cool by evaporation the airflow created by the fan(s).

Face-And-Bypass Damper

A pair of dampers that operate together but with opposite motion, to direct an airstream either through or around a heat transfer device.

Fire Damper

A device arranged to interrupt airflow automatically through part of an air system so as to restrict the passage of flame, and installed in a fire-related wall or floor to close automatically in the event of a fire in order to maintain the integrity of the fire-rated separation.

Fixed Louver

A louver having immovable blades.

Flue Gas Desulfurization Fan

An additional induced draft fan placed in series with and downstream of an induced draft fan to overcome losses of retrofit air pollution control devices.