Glossary of Terms

ACH - Air Changes Per Hour - The number of times that air in a house is completely replaced with outdoor air in one hour.


ASHRAE - American Society of Heating, Refrigerating and Air Conditioning Engineers.

Air Handler - The cabinet for a central furnace, air conditioner, or heat pump, which contains a fan that propels air through the duct system.

Backdrafting - Reverse flow of combustion gases down the chimney of a vented combustion appliance, which is often caused by depressurization of the room where the appliance is located.

Blower Door - A large powerful variable-speed fan mounted in a doorway that blows air into (pressurizes) or sucks air out of (depressurizes) a house. It is used to test for air leakage in a house.

Buffer Zone - An area within the home between the conditioned zones and the outside. Not typically conditioned (for instance, attics attached garages, crawl spaces, basements and porches).

Boot - A piece of duct used to connect ducts with registers.

Conduction - The transfer of heat through a solid material.

Convection - The movement of heat by air flow.

cfm - Cubic feet per minute (a measure of air flow).

Duct Tape - An adhesive material used to seal duct connections.

Ductwork - Round or rectangular passageways for conditioned air.

Envelope - The air barrier that separates the conditioned space from the outside and from unconditioned spaces like attics and garages. Exfiltration - Uncontrolled air leakage out of a building.

Flame Roll-out - A dangerous situation that occurs when flame is pushed out of the bottom of a combustion appliance.

Flex Duct - Usually installed in a single, continuous piece between the register and plenum box, a flexible duct usually has an inner lining and an insulated coating on the outside.

Flow Hood - A diagnostic tool used to measure air flow through ducts, supply registers, and return grills.

Heat Exchanger - A device that transfers heat from outgoing stale air to incoming cold air. In warm climates, this process is reversed.

HVAC Systems - Heating, ventilating and air conditioning systems.

Infiltration - Unintentional movement of outdoor air into a house. It results from the forces of wind, temperature difference, and HVAC operation.

Mastic - An adhesive paste used in the fabrication and sealing of ductwork. It spreads easily and dries permanently.

Manometer - An instrument that measures air pressure differences between locations. Tubes are usually attached to a manometer and run to the spaces where pressures are measured.

Pascals (Pa) - A small unit of air pressure. One pound per square inch equals 6,895 pascals. Supply - The ductwork that carries air from the air handler to the rooms in the house.

Radiation - The transfer of heat directly from one surface to another (without heating the intermediate air acting as a transfer mechanism). Return - The duct work that carries air from the house to the air handler.

Plenum - Airflow passage made of duct board, metal, drywall, or wood. Joins supply and return ducts with HVAC equipment. Pressure Balancing - The process of neutralizing pressure differences within a house. Registers and Gills - Coverings for the ducts where they open to the conditioned space.

Smoke Stick - A diagnostic tool used to observe air flow. Usually it consists of a chemical in a squeezeable container. When squeezed, it emits smoke, which visibly follows air currents.

Zone - 1) Conditioned space in a house under the control of a thermostat. 2) A space within a house with a distinct pressure compared to other pressure zones.

Referenced Documents

ASTM - (American Society for Testing of Materials) NFPA (National Fire Protection Association) SMACNA

UBC - (Uniform Building Code)

UL - (Underwriters Laboratories, Inc.)

ULC - (Underwriters Laboratories, Inc. of Canada)


Glossary of Terms (continued)


NFPA 286 "Standard Test Method for Fire Test of Interior Finish Material"
SMACNA "HVAC Duct Construction Standards"
UL 1715 "Standard for Fire Test of Interior Finish Material".
UBC 26-3 "Room Fire Test for Foam Plastic Finishes".

For Further Information

Installation Standards for Residential Heating and Air Conditioning Systems. Sheet Metal and Air Conditioning Contractors' National Association, Inc. 4201 Lafayette Center Drive, Chantilly, VA 22021.


Reflective Insulation Manufacturers Association International (RIMA-I)
14005 W. 147^ Street
Olathe, KS 66062
Toll-Free: 800/279-4123
Fax: 913/839-8882
E-Mail: rima(a)rima.net
www.rimainternational.org

The Reflective Insulation Manufacturers Association International (RIMA-I), its members, and/or agents, make no guarantee as to, and assume no responsibility for, the correctness, sufficiency or completeness of the information contained herein. The information provided herein is intended to be a guide to the concept and applications of reflective insulation.

Copyright 2005 by the Reflective Insulation Manufacturers Association International 05/05