



Mecklenburg County Health Department

AIR GAPS & AIR BREAKS FOR DRAINS & WASTE

An indirect connection between the water supply or food service equipment and the facility's drainage or wastewater disposal system is necessary to prevent wastewater from back flowing (back-siphonage or backpressure) into the supply or into equipment where food, kitchenware or utensils are retained.

DIRECT CONNECTION: A waste line or pipe from a fixture, receptacle or device that discharges used water, waste materials or sewage directly into the facility's drainage system.

INDIRECT CONNECTION: A waste line or pipe from a fixture, receptacle or device that discharges used water, waste materials or sewage into the facility's drainage system through an "air gap" or "air break." Thus, there is no direct connection between the two systems.

AIR GAP: Is the unobstructed, vertical air space that separates the end of a supply-line and the flood level rim of a receptacle. This receptacle may be a sink, coffee urn, steam kettle, floor drain, floor sink, etc. The air gap must be the greater of the two - a minimum of one inch or twice the inside diameter of the supply pipe.

AIR BREAK: is a waste line or pipe from a fixture that discharges used water or liquid waste into another fixture or receptacle at a point below the flood level rim, i.e., the waste line from a vegetable preparation sink that drains into a floor drain. (Restated: an air break is an indirect connection that does not have an "air gap.") (*Note: some jurisdictions do require the waste line to terminate above the flood level rim of the floor, sink or drain.*)

- 1. Booster heater for ware washing machine:** Provide an air gap between the relief valve vent pipe and the floor drain or floor sink.
- 2. Waste-cooled condenser for an ice machine or other refrigeration system:** Provide an air gap between the end of the supply line and the floor drain or floor sink. (The supply line water still remains as part of the supply system as it cools. The cooling water is not exposed to potential outside contamination until it exits the unit.)
- 3. Drain lines for food service equipment** such as salad cooler table or salad bar, ice machine or ice bin, soda fountain/dispenser, steam kettle and steam table: Provide an air break.
- 4. Condensate drain lines** for refrigeration equipment: Provide an air break.

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