



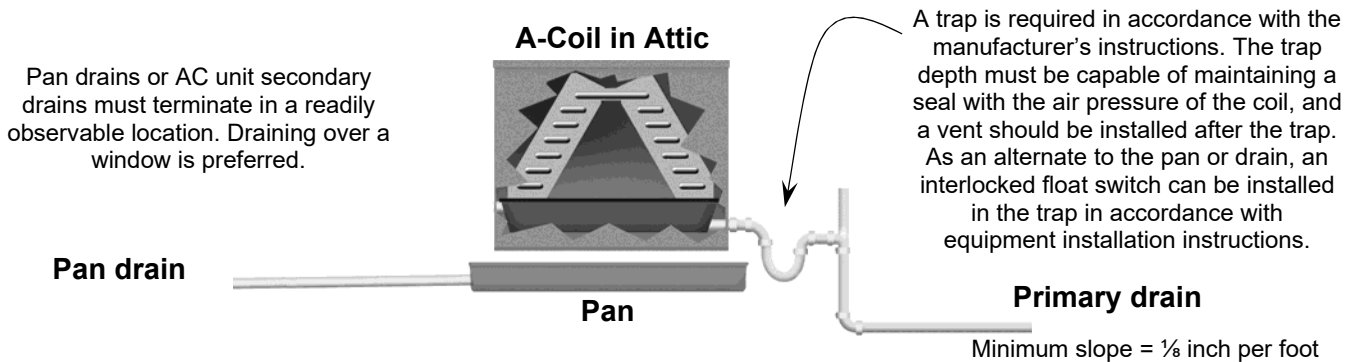
## RESIDENTIAL CONDENSATE DISPOSAL REQUIREMENTS

Air conditioner cooling coils require a condensate drain with a trap in accordance with the manufacturer's instructions [CMC310.1]. The drain must discharge by gravity to a drywell or an indirect waste, or to a condensate pump that connects to an indirect waste. An indirect waste connection can be made to a janitor sink or laundry standpipe, an accessible inlet on a bathtub overflow, or to a lavatory tailpiece in the unit controlled by the same person controlling the air-conditioned space [CMC 310.6]. Condensate from a high efficiency (Category IV) furnace can be combined with the AC condensate.

Condensate cannot be combined with the discharge of a temperature and pressure relief valve [CPC 608.5].

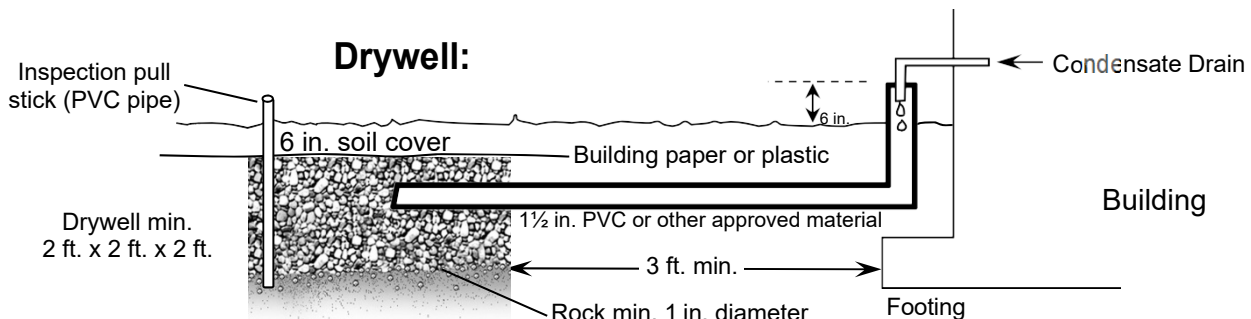
Condensate waste pipes must be at least  $\frac{3}{4}$  in. diameter and slope at least  $\frac{1}{8}$  inch per foot. Condensate pumps are allowed if interlocked to prevent AC operation during pump failure. Condensate pump discharge tubing must rise vertically to a point where it is possible to connect to a gravity condensate drain [CMC 310.1.1]

Air conditioner cooling coils in an attic or over any other area where leakage could cause damage require protection to prevent damage in the event of a blocked drain. 4 methods are acceptable (1) a drain pan that extends fully beneath the area of the cooling unit and equipped with a separate drain line; (2) a separate drain line at a higher location in the AC unit's drain pan; (3) a drain pan without a discharge line but equipped with a water-level detection device interlocked to the appliance; (4) a water-level detection device interlocked to the appliance – typically located in the drain trap. For methods 1 & 2, the discharge pipe must go to a location that is readily observed – typically over a window. [CMC 310.2] These requirements also apply to high-efficiency (Category IV) furnaces.



Residential condensate is typically terminated in drywells. Drywell specifications are as follows:

1. The minimum size of a residential drywell is 2-foot square by 2 foot deep.
2. The nearest edge of the drywell shall be at least 3 feet from any structure or building foundation.
3. The drywell shall be filled with minimum 1" rock.
4. The top of the drywell shall be covered with building paper or plastic sheeting with 6" of earth or concrete above the paper.
5. The condensate pipe from the cooling coil (min.  $\frac{3}{4}$ " ) shall connect indirectly to a minimum  $1\frac{1}{2}$  in. drainpipe. The indirect connection shall be made by an air break at the edge of the foundation.



## COMMERCIAL / INDUSTRIAL REQUIREMENTS

Terminating condensate discharge from commercial and industrial air-conditioning units must follow these specifications:

1. Trap and vent the air-conditioning condensate drains per the condition of the listing of the equipment and in accordance with the requirements of the Uniform Mechanical Code.
2. Terminate the condensate using one of the following methods:
  - a. To a landscaped area properly designed to accommodate the volume of condensate.
  - b. To a properly designed storm-water treatment system, e.g., a bio-retention unit.
  - c. Indirectly to the sanitary sewer, subject to all wastewater permitting requirements and fees. Contact the Environmental Services Department at 408-793-5300.
  - d. If none of the above methods is feasible, the City Building Division may allow an indirect discharge of condensate to the storm drain system. Indirect connections must be outside the building. The condensate drain line must be hard piped to the storm drain.

**Terminating the condensate to a parking lot or roof surface is not allowed.**