

SECTION 23 84 13**HVAC HUMIDIFICATION SYSTEMS****PART 1 - DESIGN DIRECTIVES****1.1 DESIGN CRITERIA**

- A. Humidification equipment for HVAC systems shall be electrically powered. Steam-to-steam humidification systems are not acceptable.
- B. In general, adiabatic humidifiers are preferred over electric-to-steam humidifiers due to energy efficiency considerations.
 - 1. Acceptable adiabatic humidification technologies include: high-pressure purified water with atomizing nozzles (with or without compressed air). System shall include complete water treatment system as recommended by the humidifier manufacturer (ex., softened, de-chlorination, DI, RO, etc.).
 - 2. Acceptable manufacturers include: Armstrong Cool Fog (high-pressure water and compressed air system) and DriSteam High-Pressure System (high-pressure water system).
- C. In applications where pressurized water atomizing humidifiers cannot be used, such as CRAC units, ultrasonic atomizing humidifiers are preferred over infrared humidifiers due to energy efficiency considerations.

PART 2 - MATERIALS

- A. Drain piping serving humidifiers shall be copper or stainless-steel as recommended by the manufacturer. Steel pipe is not allowed.
- B. Drain pans in humidifiers shall be stainless steel. Carbon steel drain pans are not acceptable.
- C. For aggressive water applications (DI or RO), the interior of the AHU shall be lined with stainless-steel for 18" beyond the worst-case absorption distance of the humidifier.

PART 3 - EXECUTION**3.1 NOT USED**

END OF SECTION 23 84 13