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 DriSteem 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