

## SECTION 15810

### HUMIDIFIERS

#### PART 1 - GENERAL

##### 1.01 SUMMARY

###### A. Section Includes:

1. Injection Type Steam Humidifiers.

###### B. Related Sections:

1. Section 15010 - Basic Mechanical Requirements.
2. Section 15521 - Steam and Condensate Piping and Specialties.
3. Section 15855 - Air Handling Units with Coils.
4. Section 15900 - Ductwork and Accessories.
5. Section 15950 - Controls.

##### 1.02 SYSTEM DESCRIPTION

###### A. Design Requirements:

1. Humidifiers can be specified as part of standard package as indicated in Section 15855 - Air Handling Units with Coils.
2. Where design requires duct type humidifiers, specify injection type steam humidifiers. However, using central steam is not allowed due to chemicals being used for water/steam treatment. Provide a dedicated steam generator with chemically-approved water, or use packaged electric steam generators.
3. Specify downstream ductwork to be soldered water tight, without duct liner, with external duct insulation, for the length of duct expected to be moist (absorption zone).
4. Specify in Section 15950 - Controls, a high-limit safety humidistat in duct in series with space humidistat to prevent over-saturation in duct. Specify airflow switch to confirm fan operation.

Note: Expand Part 2 Product specification minimums to include specific project requirements.

#### PART 2 - PRODUCTS

##### 2.01 INJECTION TYPE STEAM HUMIDIFIER

###### A. Manufacturer:

Armstrong  
Dri-Steem  
Nortec  
Sarco

- B. Completely assembled with steam separator, control valve which discharges through a drying chamber, silencing chamber, steam-jacketed distribution manifold, steam trap and strainer upstream.
- C. We strongly prefer systems with steam humidifier grid or panel similar to Dri-Steem Ultra-Sorb.
- D. Manifold full duct width and furnished with mounting flange.
- E. Provide integral warm-up control to prevent liquid discharge at start-up.

## PART 3 - EXECUTION

### 3.01 INSTALLATION

- A. In general, for project specifications, remove "Design Requirements" sub-paragraph A in Part 1, paragraph 1.02 "System Description" of this Design Guide and use list to expand on specific requirements of installation.

END OF SECTION