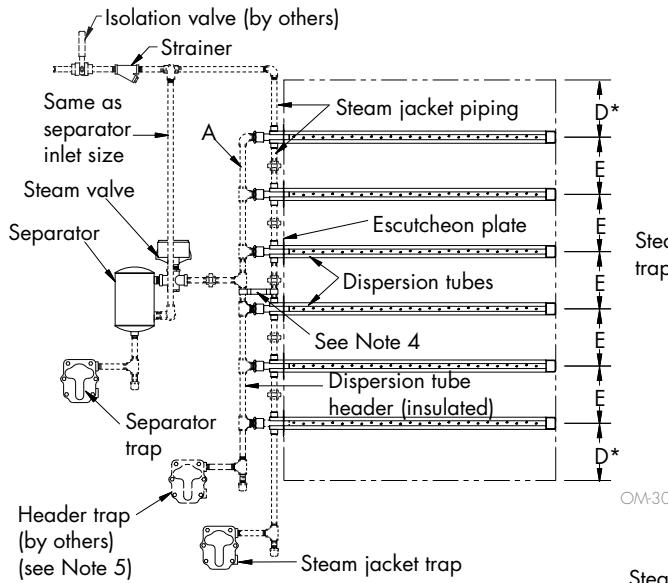


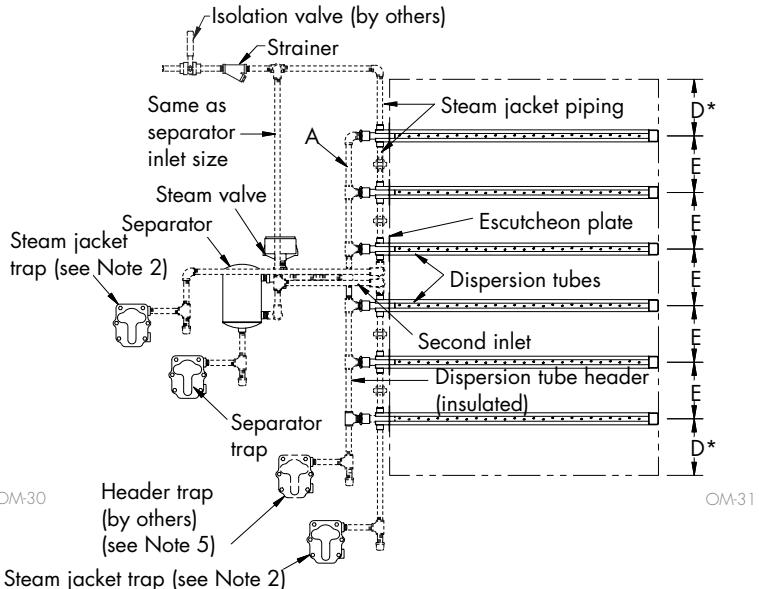
Multiple-tube Steam Injection Humidifier

FIGURE 1-1: MULTIPLE-TUBE HUMIDIFIER PIPING IN A DUCT, HORIZONTAL AIRFLOW

Total tube length less than or equal to 45' (13.7 m)

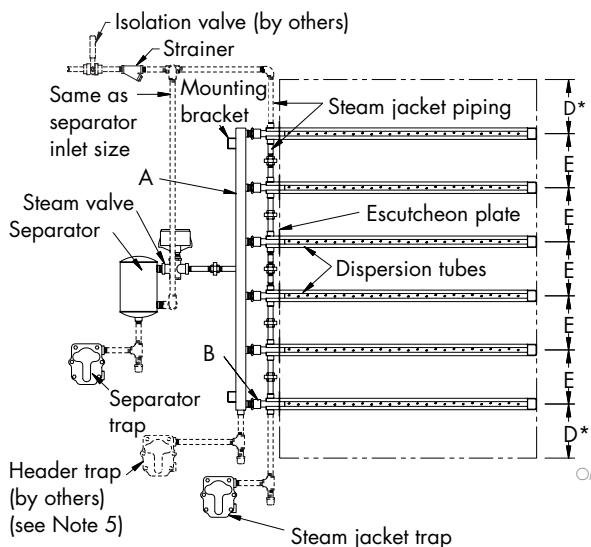


Total tube length greater than 45' (13.7 m)

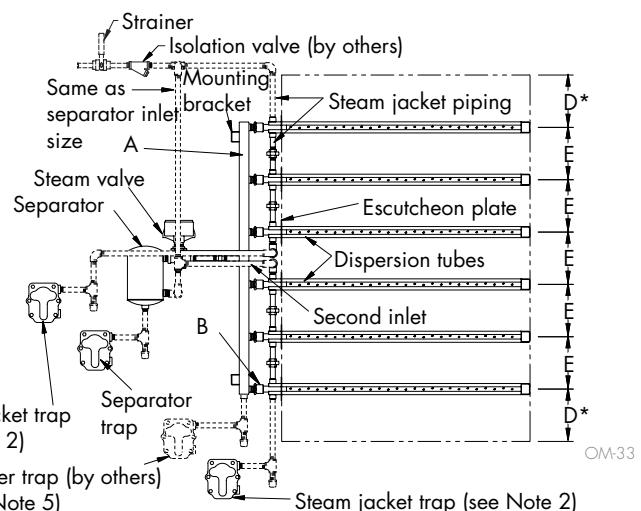


* Clearance at top and bottom should be one-half the distance between tubes, but not less than 4½" (114 mm), and not greater than E.

Maxi-bank™ option, total tube length less than or equal to 45' (13.7 m)



Maxi-bank option, total tube length greater than 45' (13.7 m)



Notes:

1. All steam jacket piping and header piping (dashed lines) by others.
2. When the total tube length of dispersion tubes exceeds 45' (13.7 m), we recommend installing an additional steam inlet to the dispersion tubes and an additional steam jacket trap — one for each additional 45' of total tube length. Divide the tubes into equal groups. For optional stainless steel thermostatic traps, installer must provide 24" (610 mm) cooling leg prior to trap connection.
3. To ensure uniform output from each tube, connect steam supply as near the middle of the header as possible.
4. After the unit is installed, the steam jacket piping should be secured to the tube header piping to eliminate the possible separation of the two.
5. Due to the pressure drop across the valve, the steam pressure at the header trap is minimal; therefore, you cannot lift condensate or return condensate to a pressurized return by steam pressure from this trap. On small headers (2" [DN50] or less in diameter), this trap may be omitted.
6. Maxi-bank option ships completely assembled and ready for installation, except when either dimension is 98 inches (2490 mm) or more.

Multiple-tube Steam Injection Humidifier

Each Multiple-tube humidifier is furnished with:

1. Maxi-bank option
 - Yes
 - No
2. Centrifugal type steam separator and steam jacketed dispersion tube with calibrated orifices for proper steam distribution (Maxi-bank option includes steam header):
 - 304 stainless steel
 - 316 stainless steel
3. Piping (Maxi-bank option includes separator and steam valve piping, and piping between tubes):
 - Black iron
 - 304 stainless steel
 - 316 stainless steel
4. Inlet Y strainer with stainless steel screen:
 - Cast iron body
 - 304 stainless steel body
5. Normally closed steam valve with stainless steel plug and seat:

Valve body:

 - Bronze
 - Stainless steel

Actuator:

 - Pneumatic valve
 - Electric modulating valve
 - Other: _____
6. Two-piece escutcheon plate to seal opening where tubes penetrate duct (one per tube):
 - Galvanized
 - 304 stainless steel
7. 3/4" pipe thread (DN20) steam traps:
 - Cast iron float and thermostatic (F&T)
 - Stainless steel float and thermostatic (F&T)