

Table 4-1:
Maximum steam carrying capacity and length of interconnecting steam hose or tubing

Steam hose ¹						Copper or stainless steel tubing					
Hose I.D.		Maximum capacity		Maximum length ²		Tubing size		Maximum capacity ³		Maximum developed length ⁴	
inches	DN	lbs/hr	kg/h	ft	m	inches	DN	lbs/hr	kg/h	ft	m
1½	40	150	68	10	3	1½	40	150	68	20	6
2	50	250	113	10	3	2	50	220	100	30	9
						3 ⁵	80 ⁵	450	204	80	24
						4 ⁵	100 ⁵	750	340	100	30

1. When using a steam hose, always use a DriSteem steam hose. Other steam hose manufacturers can contain unacceptable release agents or material mixes that can adversely affect humidifier system performance including the possibility of tank foaming and accelerated aging. Foaming causes condensate discharge at the dispersion assembly. Do not use steam hose for outdoor applications.
2. Maximum recommended length for steam hose is 10' (3 m). Longer distances can cause kinking or low spots.
3. Insulate tubing to minimize loss of capacity and efficiency.
4. Developed length of tubing equals measured length plus 50% of measured length, to account for fittings. Longer tubing lengths are possible at capacities lower than listed maximums. Consult factory.
5. Requires flange connection.

Note: Capacities and lengths in this table are based on total maximum pressure drop in hose or tubing of 5" wc (1250 Pa).

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CONNECTING TO DISPERSION ASSEMBLY WITH STEAM HOSE

- Support steam hose to prevent sags or low spots and to maintain a minimum pitch of 2"/ft (15%) back to the humidifier.
- Do not insulate steam hose. Insulation causes accelerated heat aging.

CONNECTING TO DISPERSION ASSEMBLY WITH TUBING

- Support interconnecting piping between the humidifier steam outlet and the dispersion system with pipe hangers. Failure to properly support the entire steam piping weight can cause damage to the humidifier tank and void the warranty.

Table 4-2:
Steam loss of interconnecting steam hose or tubing

Description	Nominal hose or tubing size		Steam loss				Insulation thickness	
			Noninsulated		Insulated			
	inches	DN	lbs/hr/ft	kg/h/m	lbs/hr/ft	kg/h/m	inches	mm
Hose	1½	40	0.15	0.22	N/A	N/A	N/A	N/A
	2	50	0.20	0.30	N/A	N/A	N/A	N/A
Tubing	1½	40	0.11	0.16	0.020	0.030	2.0	50
	2	50	0.14	0.21	0.025	0.037	2.0	50
	3	80	0.20	0.30	0.030	0.045	2.5	64
	4	100	0.26	0.39	0.030	0.045	3.0	76

Note: Data based on an ambient air temperature of 80 °F (27 °C), fiberglass insulation, and copper tubing.

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DriSteem U.S. operations are ISO 9001:2015 certified
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Form No. Interconnecting-IOM-EN-0515
Part No. 890000-631 Rev A

DRISTEEM HUMIDIFIER DISPERSION

 WARNING Indicates a hazardous situation that could result in death or serious personal injury if instructions are not followed.	CAUTION Indicates a hazardous situation that could result in damage to or destruction of property if instructions are not followed.
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 WARNING  Read all warnings and instructions Read these instructions before performing service or maintenance procedures on any part of the system and leave this document with the product owner. Failure to follow these warnings and instructions can cause moisture to accumulate, which can cause bacteria and mold growth or dripping water into building spaces. Dripping water can cause property damage; bacteria and mold growth can cause illness. DriSteem® Technical Support: North America: 800-328-4447 / technical.support@dristeem.com Europe: +3211823595 / dristeem-europe@dristeem.com
 Disconnect electrical power Disconnect electrical power before performing service or maintenance procedures on any part of the humidification system. 

CAUTION Hot discharge condensate water Discharge water can be as hot as 212 °F (100 °C) and can damage some drain plumbing.

Note: Failure to follow the recommendations in this section can result in excessive back pressure on the humidifier. This will result in unacceptable humidification system performance such as leaking gaskets, blown water seals, erratic water level control, and spitting condensate from dispersion tubes.

SELECTING THE DISPERSION ASSEMBLY LOCATION

- It is important that the dispersion assembly is positioned where the water vapor being discharged from the assembly is carried off with the airstream and is absorbed before it can cause condensation or dripping in the duct. This normally is downstream from the heating coil or where the air temperature is highest.
- Locate the dispersion assembly so that absorption occurs before:
 - The intake of a high efficiency filter. The filter can collect the visible moisture and become waterlogged.
 - Coming in contact with any metal surface.
 - Fire or smoke detection devices.
 - A split in the duct. Otherwise, the dispersion assembly may direct more moisture into one duct than the other.



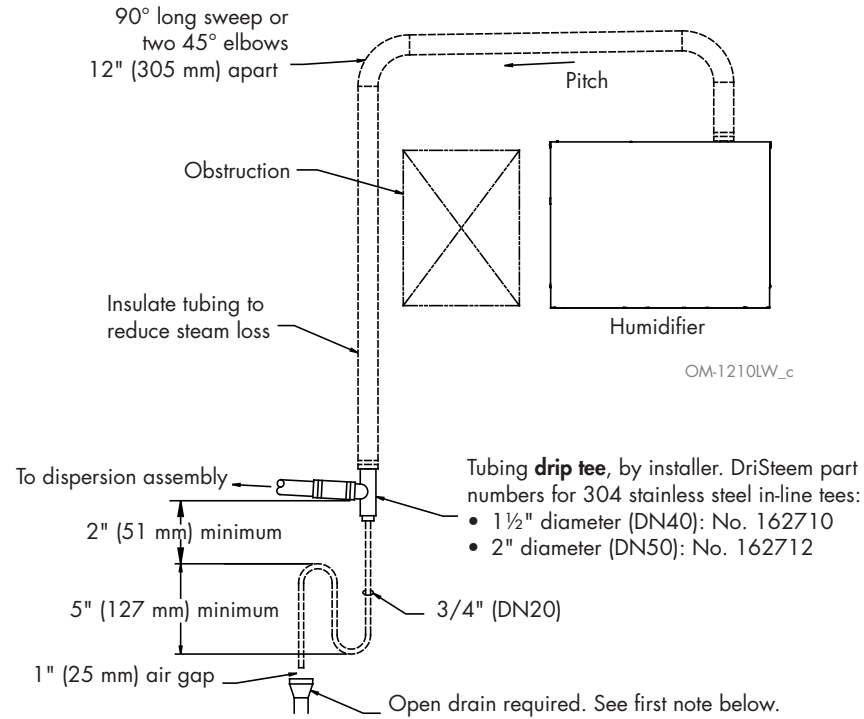
DISPERSION: DRIP TEE INSTALLATION

Install a drip tee as shown below:

- When the humidifier is mounted higher than the dispersion assembly.
- When interconnecting hose or piping needs to go over an obstruction.
- When interconnecting piping runs are longer than values in Table 4-1.
- When the interconnecting hose or piping drops vertically to cause a low point.

Note: Steam hose must be supported to prevent sagging or low spots.

FIGURE 2-1: DRIP TEE INSTALLATION (PIPING OVER AN OBSTRUCTION)

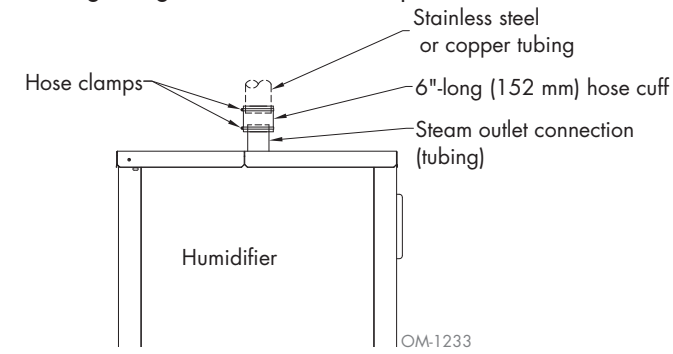


- Notes:
- Locate air gap only in spaces with adequate temperature and air movement to absorb flash steam, or condensing on nearby surfaces may occur. Refer to governing codes for drain pipe size and maximum discharge water temperature.
 - Dashed lines indicate provided by installer.

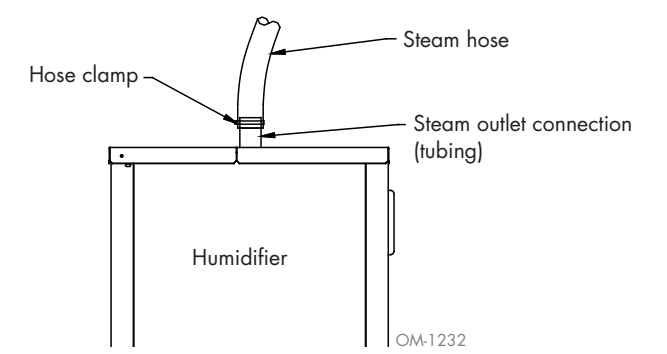
DISPERSION: STEAM OUTLET CONNECTIONS

FIGURE 3-1: STEAM OUTLET CONNECTIONS

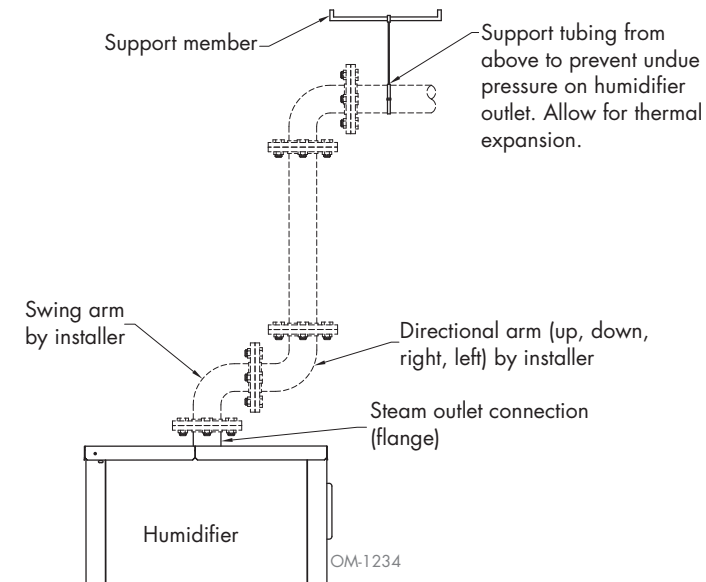
Tubing using hose cuff with clamps



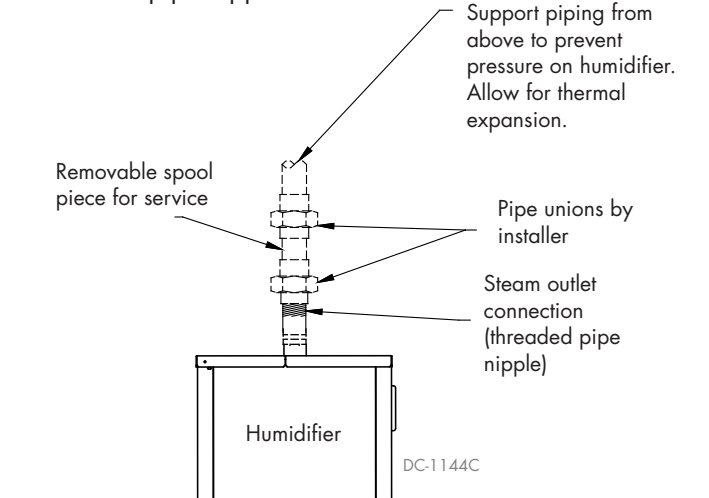
Hose connection



Flange connection



Threaded pipe nipple connection



- Notes:
- Dashed lines indicate provided by installer.
 - **Prevent pressure build-up in evaporating chamber**
 - The evaporating chamber is designed as a nonpressurized vessel.
 - **Do not restrict piping where steam exits the humidifier.**
 - Do not install a shut-off valve in the interconnecting steam piping.
 - The inside diameter of the interconnecting piping must be equal to or greater than the steam outlet size of the humidifier.