Interconnecting piping instructions

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Nominal hose or tubing size</th>
<th>Nominal insulated</th>
<th>Insulated</th>
<th>Insulation thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose</td>
<td>inches</td>
<td>DN</td>
<td>lbs/hr/ft</td>
<td>kg/h/m</td>
</tr>
<tr>
<td>1 1/2</td>
<td>2</td>
<td>40</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>0.20</td>
<td>0.30</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>0.20</td>
<td>0.30</td>
<td>0.030</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
<td>0.26</td>
<td>0.39</td>
<td>0.030</td>
</tr>
<tr>
<td>Tubing</td>
<td>inches</td>
<td>DN</td>
<td>lbs/hr/ft</td>
<td>kg/h/m</td>
</tr>
<tr>
<td>1 1/2</td>
<td>2</td>
<td>40</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>0.20</td>
<td>0.30</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>0.20</td>
<td>0.30</td>
<td>0.030</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
<td>0.26</td>
<td>0.39</td>
<td>0.030</td>
</tr>
</tbody>
</table>

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

**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.

**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.

**DISCONNECT ELECTRICAL POWER**
- Disconnect electrical power before performing service or maintenance procedures on any part of the system.

**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.

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

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, and can cause illness.

**DRISTEEM HUMIDIFIER DISPERSION**

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.

Continuous product improvement is a policy of DriSteem; therefore, product features and specifications are subject to change without notice.

DriSteem and Vapor-logic are registered trademarks of Research Products Corporation and are filed for trademark registration in Canada and the European community.

Product and corporate names used in this document may be trademarks or registered trademarks. They are used for explanation only without intent to infringe.

DriSteem Corporation
A subsidiary of Research Products Corporation
DriSteem U.S. operations are ISO 9001:2015 certified
www.dristeem.com

U.S. Headquarters:
14449 Technology Drive
Eden Prairie, MN 55344
800-328-4447 or 952-949-2415
952-229-3200 Fax

Europe:
+32, 091, 33, 13, 55
DriSteem Europe
DriSteem Europe, 101, Rue des Pastoureaux
1350, Brussels, Belgium

Form No. Interconnecting IOM-EN-0515
Part No. 89000631 Rev A

© 2011 Research Products Corporation
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.

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.

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

To dispersion assembly

Humidifier

Open drain required. See first note below.

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.

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.