Steam ramps – data sheet

Steam ramp description

<table>
<tr><th colspan="2">SRS - Steam ramp
without dedicated condensate return</th><th colspan="2">SRC - Steam ramp
with dedicated condensate return</th></tr>
<tr><td colspan="2">

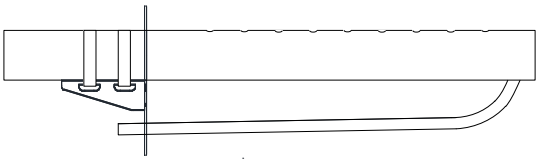
Figure 1– SRS</td><td colspan="2"> 

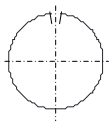
Figure 2 – SRC</td></tr>
<tr><td colspan="2">Simpler to install, but not recommended when large quantity of condensate is produced (in case of long steam line run or large duct with low air temperature).</td><td colspan="2">Avoid any possible trouble due to condensate flow against the steam flow inside steam pipe or hose.
A condensate line must be installed and connected to drain or returned to humidifier</td></tr>
<tr><th>Standard absorption</th><th>Short absorption -X</th><th>Standard absorption</th><th>Short absorption -X</th></tr>
<tr><td> 

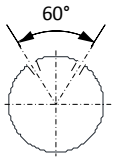
Figure 3 – SRS</td><td> 

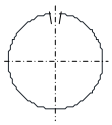
Figure 4 – SRSX</td><td> 

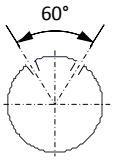
Figure 5 – SRC</td><td> 

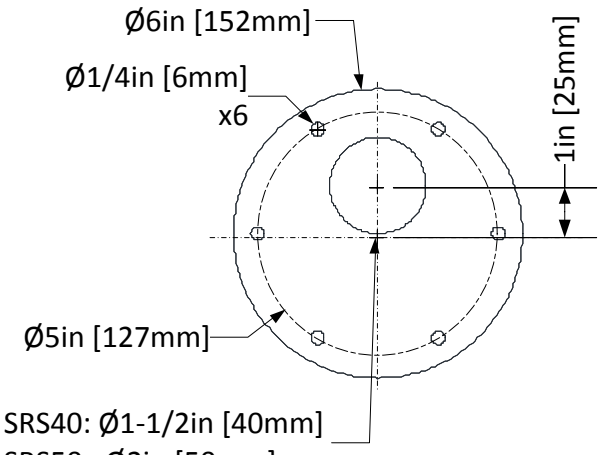
Figure 6 – SRCX</td></tr>
<tr><td colspan="2"> 

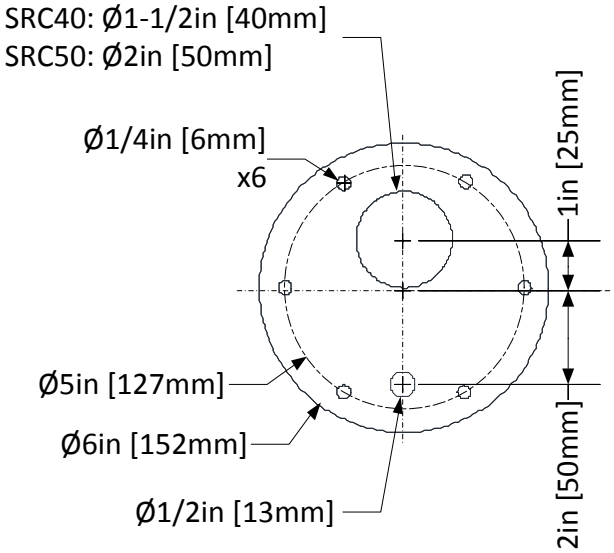
Figure 7 – SRS & SRSX cover plate dimension</td><td colspan="2"> 

Figure 8 – SRC & SRCX cover plate dimension</td></tr>
<tr><th colspan="2">Maximum steam capacity SRS</th><th colspan="2">Maximum steam capacity SRC</th></tr>
<tr><td colspan="2">SRS40 : 40lb/h [18kg/h]
SRS50 : 90lb/h [41kg/h]</td><td colspan="2">SRC40 : 55lb/h [23kg/h]
SRC50 : 100lb/h [45kg/h]</td></tr>
</table>

Horizontal duct

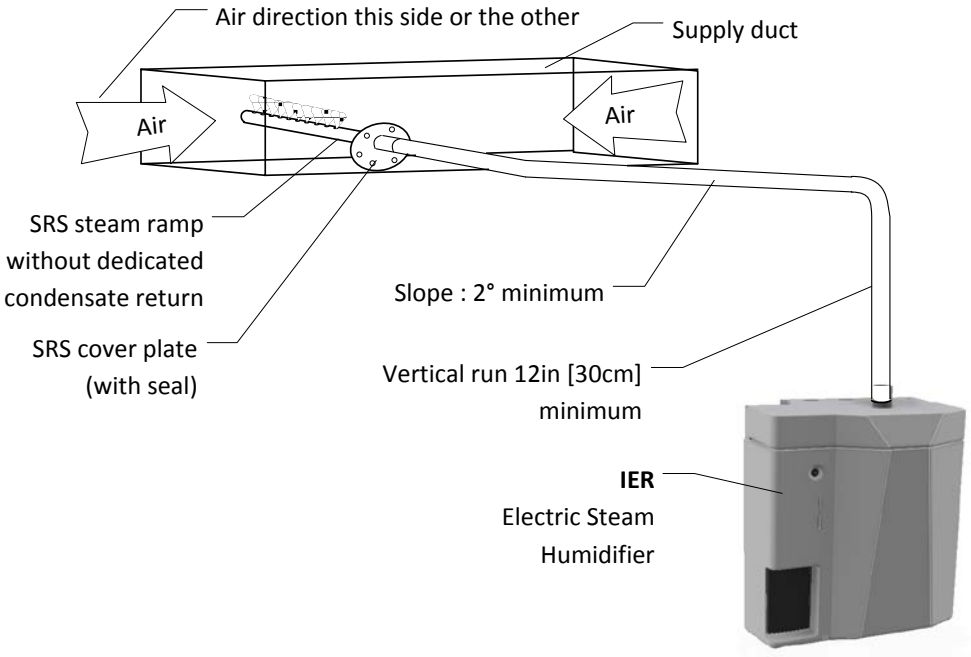


Figure 9 – SRS & SRSX installation – no dedicated condensate return line

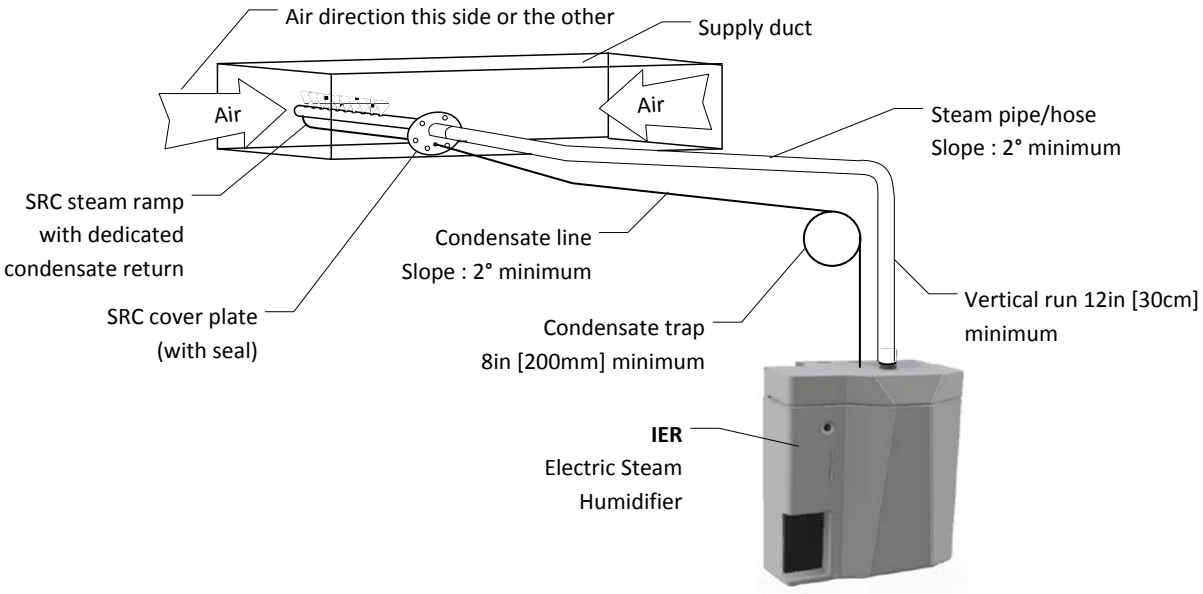


Figure 10 – SRC & SRCX installation – with dedicated condensate return line to IER

Installation steps :

1. Positioning & mounting of **SR (S, C, SX or CX)**steam ramp to the ventilation duct wall by using metal screw
2. Install the steam hose or rigid steam pipe between the IER steam humidifier and the steam ramp.
   Note: when using rigid stem pipe (stainless steel or copper) it is a good practice to connect in between the steam ramp, IER humidifier and pipe by using a small length of steam hose for ease of installation and service.
   Allow for a slope of 2° minimum.
3. Secure all connexion with hose clamps
4. For SRC or SRCX install a condensate hose in between steam ramp and IER humidifier.
   Provide a condensate trap of 8in [200mm] minimum as shown on above figure.
   Allow for a slope of 2° minimum
5. Secure all connexion with hose clamps

Minimum distances for SRS & SRSX

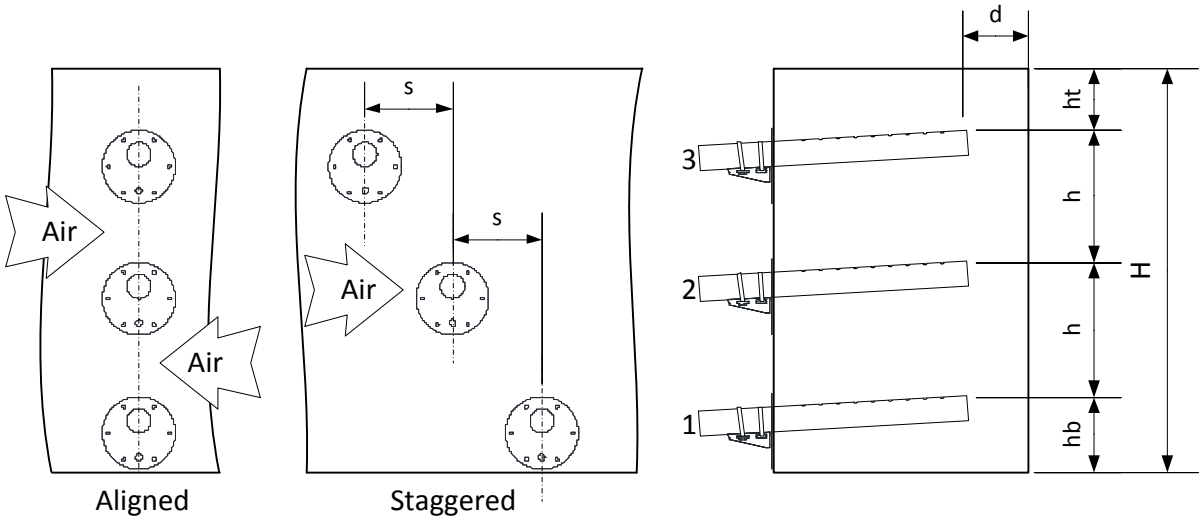


Figure 11 – SRS & SRSX minimum distances

In order to avoid condensing on the duct surface or on ramps, steamOvap recommends the following minimum distances:

- ht(min)
  Minimum height distance between end of top ramp (#3) and top of the duct.
  ht (min) = 4.5in [115mm]
- d(min)
  Minimum depth distance between top ramp and side wall of the duct.
  d(min) = ht(min) = 4.5in [115min]
- hb(min)
  There is no minimum height distance required for the bottom ramp (#1) and the bottom of the duct. However we recommend a minimum: hb(min)=4in [100mm]
- h(min)
  Height in between ramps (h) should be equal / even.
  h=H-(ht+hb)/(nb of ramps -1),

<u>If ramps are aligned</u>	<u>If ramps are staggered</u>
h(min) = 8in [200mm] Air flow can be one or the other direction.	h(min) = 4.5in [115mm] Important: the air flow direction should be as indicated on above drawing. s(min) minimum distance between ramps s(min) = 4in [100mm]

Minimum distances for SRC & SRCX

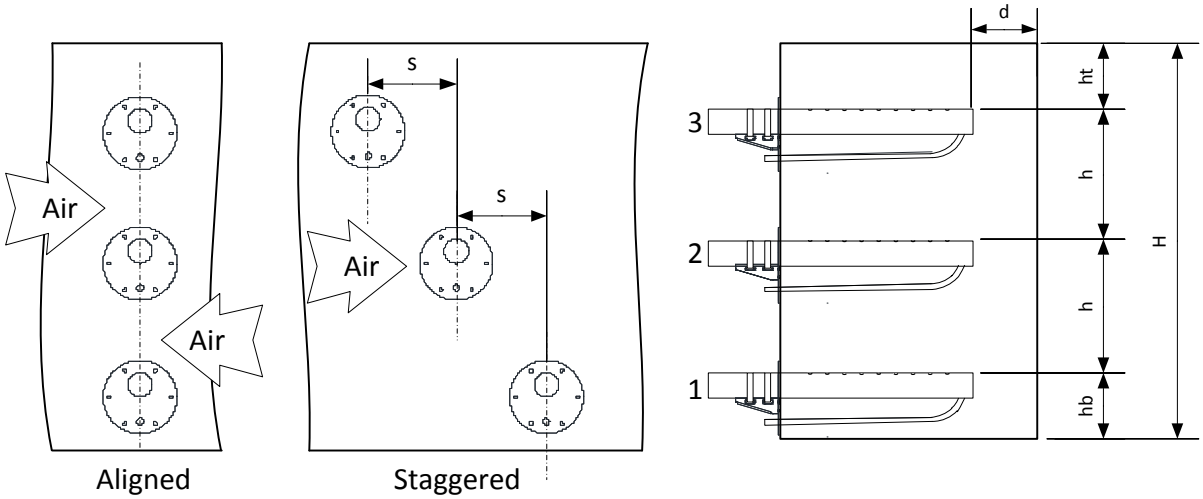


Figure 12 – SRC & SRCX minimum distances

In order to avoid condensing on the duct surface or on ramps, steamOvap recommends the following minimum distances:

- ht(min)
  Minimum height distance between end of top ramp (#3) and top of the duct.
  ht (min) = 5in [130mm]
- d(min)
  Minimum depth distance between top ramp and side wall of the duct.
  d(min) = 4.5in [115min]
- hb(min)
  There is no minimum height distance required for the bottom ramp (#1) and the bottom of the duct. However we recommend a minimum: hb(min)=4in [100mm]
- h(min)
  Height in between ramps (h) should be equal / even.
  h=H-(ht+hb)/(nb of ramps -1),

<u>If ramps are aligned</u>	<u>If ramps are staggered</u>
h(min) = 8in [200mm] Air flow can be one or the other direction.	h(min) = 4.5in [115mm] Important: the air flow direction should be as indicated on above drawing. s(min) minimum distance between ramps s(min) = 4in [100mm]