

## Rapid-sorb®

### Steam dispersion panel for use with evaporative units

DRI-STEEM's Rapid-sorb steam dispersion panels provide rapid, dry steam absorption in ducts, air handling units, and spaces. Rapid-sorb disperses steam from any DRI-STEEM steam-generating evaporative type humidifier such as CRUV®, GTS®, LTS®, STS®, Vapormist® (Humidi-tech®), Vaporstream®, VT Series, and XT Series.

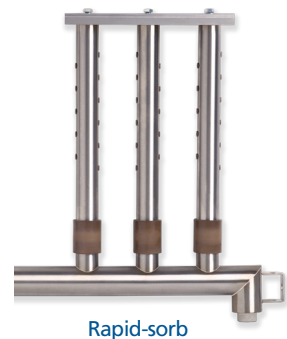
Rapid-sorb steam dispersion panels are designed for systems where multiple tubes are needed to handle the load and/or when the available non-wetting distance is limited.

- Steam capacity up to 800 lbs/hr (360 kg/h)
- Better non-wetting distance compared to standard dispersion tubes
- Models available in sizes from 10" x 10" (254 x 254 mm) and up to 120" x 120" (3048 x 3048 mm)
- For horizontal or vertical airflow with header inside or outside of duct
- Available with high-efficiency dispersion tubes

#### High-efficiency Tube option for new and existing Rapid-sorb

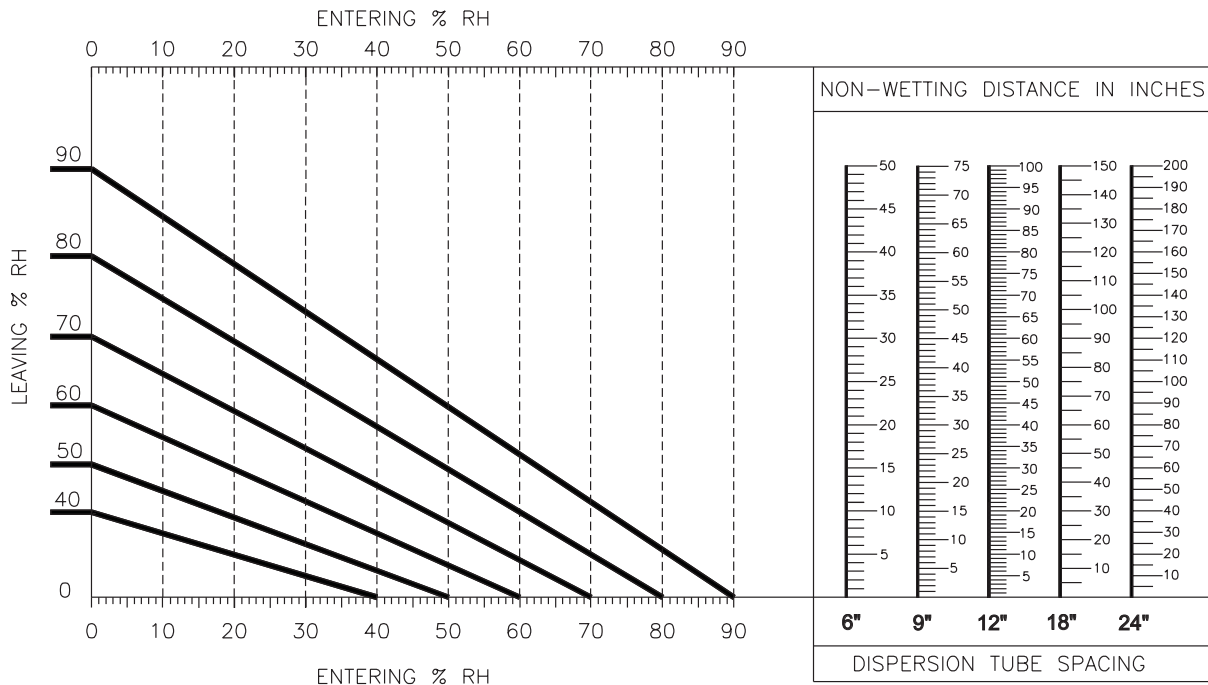
- Highest efficiency, short non-wetting distance
- Up to 85% reduction in wasted energy, airstream heat gain, and condensate production
- Plenum approved for in-duct installation with revolutionary PVDF insulating material
- High-efficiency tubes available for existing Rapid-sorbs.

High-efficiency tube benefits are staggering: Significant energy savings, sizable reduction in downstream heat gain, and substantial reduction in dispersion-generated condensate. To learn more about the High-efficiency Tube option for Rapid-sorb, [click here](#).



# Rapid-sorb dispersion

**Figure 2-1:**  
Rapid-sorb non-wetting distances



**Note:**  
The above data applies to all air velocities up to 1,500 fpm (7.6 m/s), and is based on air leaving the zone of humidification at conditions of 55 °F (13 °C) and the stated % RH.

**Table 2-1:**  
Rapid-sorb header capacities

Header capacity		Header diameter	
lbs/hr	kg/h	inches	DN
≤250	≤113	2	50
251-500	114-227	3	80
501-800	228-363	4	100

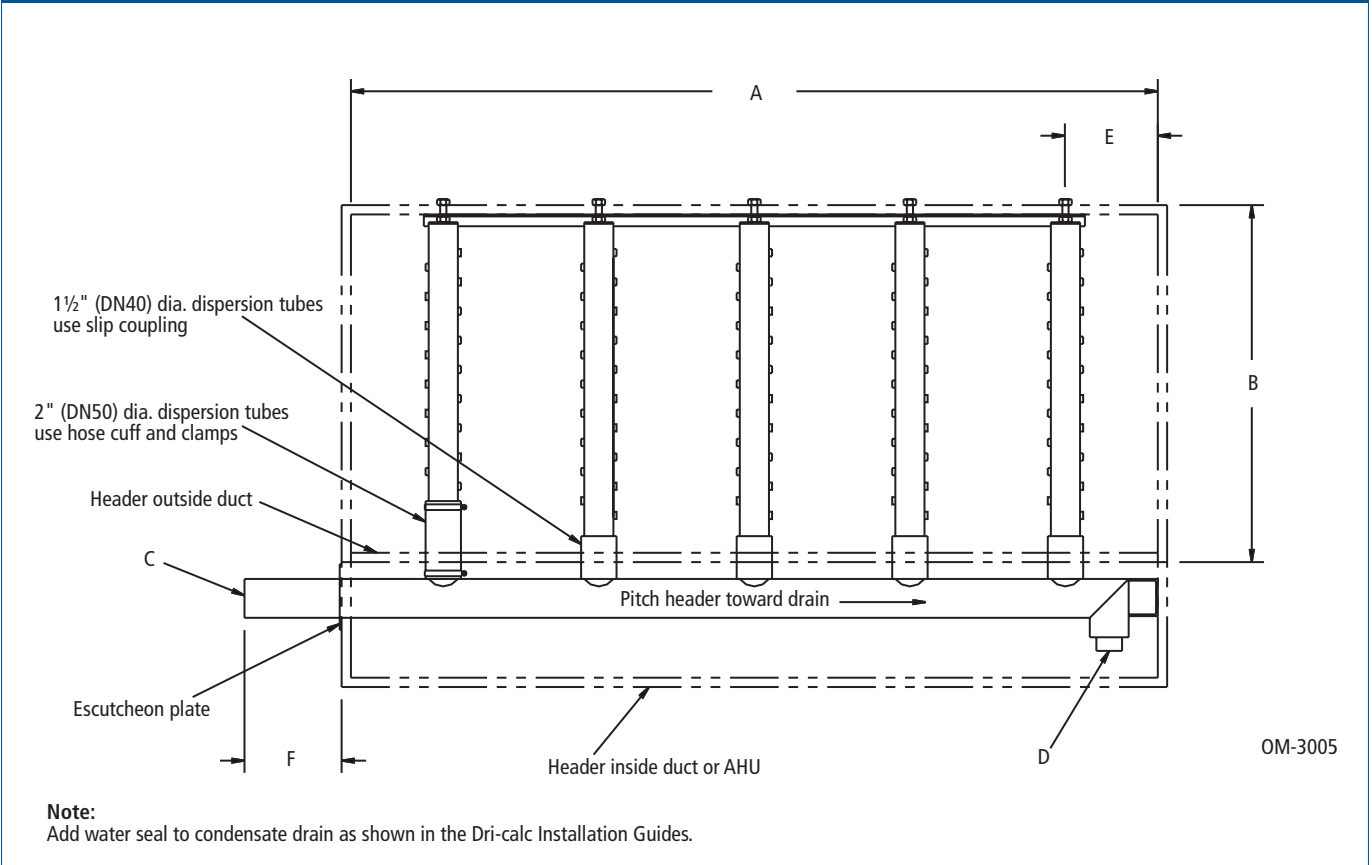
**Table 2-2:**  
Rapid-sorb dispersion tube capacities\*

Tube capacity		Tube diameter	
lbs/hr	kg/h	inches	DN
≤35	≤16	1½	40
36-70	17-32	2	50

**Note:**  
\* If duct height is <15" (381 mm), tube quantities may need to increase to compensate for reduced capacity of short tubes. Consult DRI-STEEM or see Dri-calc® for the correct calculation.

# Rapid-sorb dimensions

**Figure 3-1:**  
Rapid-sorb dimensions



**Table 3-1:**  
Rapid-sorb dimensions

Dimension	Description	Inches (mm)
A	Face width	12" (305) minimum to 120" (3048) maximum in 1" (25) increments
B	Face height	12" (305) minimum to 120" (3048) maximum in 1" (25) increments
C	Steam inlet	Determined by humidifier maximum capacity
D	Condensate drain	¾" pipe thread (DN20)
E	Distance from tube center to inside of duct or AHU wall	4.5" (114) minimum
F	Distance from outside of duct or AHU wall to end of Rapid-sorb leader	4.5" (114) minimum

**Note:**  
All Rapid-sorb units are custom-sized and field-assembled to fit the duct or air handler. Consult DRI-STEEM for sizes larger or smaller than those listed above.