# WATER TEMPERING DEVICE

#### **COOL DISCHARGED HOT WATER**

Drane-kooler<sup>TM</sup> is a water tempering device that mixes cold water with hot water discharged from various types of equipment, such as a humidifier, to reduce the discharged water temperature before it enters a municipal sewer system.

There are two reasons to use a water tempering device. First, most municipalities prohibit draining water hotter than 140°F (60°C) into their sewer systems. And second, PVC drain pipes are susceptible to damage from water that is too hot. When faced with either of these situations, Drane-kooler is the solution!

# **HOW IT WORKS: HOT + COLD = TEMPERED!**

- Hot water discharged from a humidifier or other appliance enters the Drane-kooler through piping connected to the top threaded connection. A vacuum breaker prevents backflow into potable water systems.
- 2. Cold water enters through the temperature-actuated valve. The valve and the Drane-kooler's straightforward design ensure efficient mixing of hot and cold water.
- 3. Tempered water at 140°F (60°C) or less exits through the side outlet for safe discharge into a municipal sewer system or PVC pipe.

# **RELIABLE, NON-ELECTRIC VALVE**

The temperature-actuated valve is time-tested to be reliable and maintenancefree. And because it is non-electric, no wiring is required.

#### **MULTIPLE MOUNTING OPTIONS**

The Drane-kooler can be mounted by attaching the integral mounting plate to a wall, by attaching the mounting plate to an adjustable floor stand, or by using an assembly for suspension mounting. These multiple mounting options provide capability for the Drane-kooler to be properly supported and not secured entirely by piping.

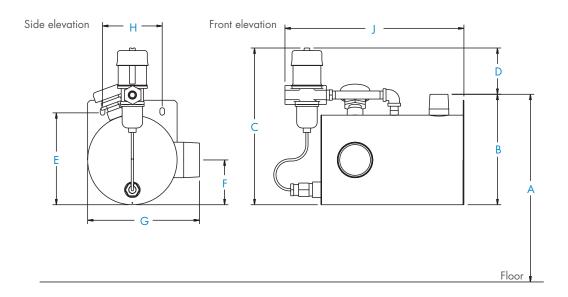


The Drane-kooler tempers hot water discharged from evaporative humidifiers or other appliances, cooling water before it enters municipal sewer systems or PVC pipe.

A space-efficient horizontal orientation and side drain outlet provide enough clearance to allow the Drane-kooler to be mounted directly underneath DriSteem humidifiers, saving footprint space while allowing room for pitched drain piping.

# Capacity and dimensions

# FIGURE 2-1: DRANE-KOOLER DIMENSIONS



DM-1113

Table 2-1: Drane-kooler connections					
Hot water inlet connection	1" (DN25) pipe thread				
Tempered water outlet connection	2" (DN50) pipe thread				
Cold water supply	3/8" (DN105) pipe thread				

Table 2-2: Drane-kooler capacities*								
	Maximum flow rate		Maximum temperature					
	U.S. gpm	L/m	°F	°C				
Hot water inflow	6	22.7	212	100				
Cold water inflow**	6	22.7	70	21				
Tempered water outflow	12	45.4	140	60				

#### Note:

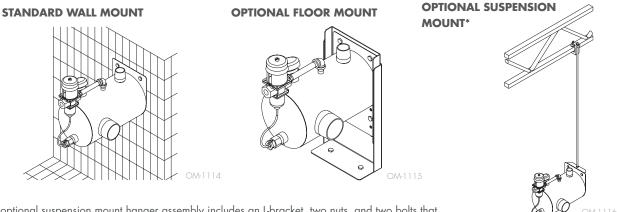
- \* This table applies only if one humidifier is connected to one Drane-kooler, with no more than 10' (3m) of vertical dimension between the Drane-kooler and the humidifier.
- \*\* Cold water inflow pressure must be between 25 psi and 80 psi (172 kPa and 552 kPa).

	Table 2-3: Drane-kooler dimensions					
	Description	Inches (mm)				
A	Height with floor stand (from floor to top of hot water inlet in 1" [25 mm] increments)	8.25 to 12.25 (210 to 312)				
^	Height with floor stand and extension (from floor to top of hot water inlet in 1" [25 mm] increments)	13.25 to 20.25 (337 to 515)				
В	Height from bottom of tank to top of hot water inlet	7.5 (191)				
С	Height from bottom of tank to top of valve	10.5 (268)				
D	Height from top of hot water inlet to top of valve	3.0 (76)				
Е	Height from bottom of tank to center of mounting hole	6.25 (159)				
F	Height from bottom of tank to center of tempered water outlet	3.0 (76)				
G	Width of tank and tempered water outlet	7.5 (191)				
Н	Width of mounting plate holes, center to center	4.0 (102)				
J	Length, from valve inlet to mounting plate	12.0 (305)				

Table 2-4: Drane-kooler material					
	Description	Material			
Α	Drane-kooler body Optional material	304 stainless steel 316 stainless steel			
В	Valve body	Bronze			
С	Vacuum breaker	Brass			

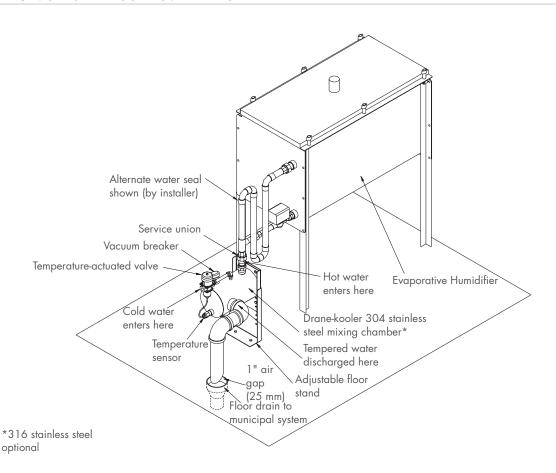
#### FIGURE 3-1: MOUNTING OPTIONS

The Drane-kooler has an integral mounting plate for wall mounting. An optional adjustable floor stand may be ordered for floor mounting, and an optional assembly may be ordered for suspension mounting. See Table 2-3 for the adjustable floor stand heights.



#### Note:

#### FIGURE 3-2: OPTIONAL FLOOR MOUNT PIPING EXAMPLE



<sup>\*</sup> The optional suspension mount hanger assembly includes an L-bracket, two nuts, and two bolts that attach to the Drane-kooler. Beam clamp assembly and 1/4" threaded rod are supplied by others.

# **DRI-STEEM Corporation**

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

U.S. Headquarters: 14949 Technology Drive Eden Prairie, MN 55344 800-328-4447 or 952-949-2415 952-229-3200 (fax)

European office:
Marc Briers
Grote Hellekensstraat 54 b
B-3520 Zonhoven
Belgium
+3211823595 (voice)
+3211817948 (fax)
E-mail: marc.briers@dristeem.com

Continuous product improvement is a policy of DriSteem Corporation; 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.

Drane-kooler is a trademark 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.

© 2014 Research Products Corporation



Form No. Drane-kooler-1214-PDS

#### **EXPECT QUALITY FROM THE INDUSTRY LEADER**

For more than 45 years, DriSteem has been leading the industry with creative and reliable humidification solutions. Our focus on quality is evident in the construction of DriSteem Evaporative Cooling Systems. DriSteem leads the industry with a Two-year Limited Warranty and optional extended warranty.

For more information www.dristeem.com sales@dristeem.com

For the most recent product information visit our website: www.dristeem.com

