

4 QUICK DESIGN BASICS

1

A common mistake people make when designing a system is to plan on sitting "in" the mist. If you're working with a covered patio area it is sometimes better to surround the area and let the mist create a wall that actually cools the entire area. It brings the total area temperature down and at the same time guests are not getting wet from mist being sprayed directly at them. If the area is very wide, additional lines can be located on the interior to allow for more cooling.

2

Remember to give yourself options when designing a system so that you can adjust things slightly after the initial installation. For example, build in the capability of rotating the lines slightly to adjust the angle of the mist. Remember to work around obstructions such as speakers, televisions, umbrellas, planters, or ceiling fans. You do not want the mist to collect and drip.

3

Every misting pump makes noise. Plan on tucking it away with other equipment like air conditioning units or pool pumps.

4

When selecting a misting system, quality matters. Consider these factors when determining which system is right for you:

- Does the system come with a full set of gauges that will help pinpoint service issues?
- Are serviceable parts easily accessible?
- Do the nozzles include check valves in order to prevent dripping?
- Are the components used in the system designed to protect against dust and water?
- Do you need a system that is enclosed to protect critical components or to dampen sound?

GETTING STARTED

✓ **MEASURE AREA**

Measure the length of misting line and the distance from the pump to the misting line. Be sure to include changes in elevations.

✓ **SELECT YOUR NOZZLE TYPE**

Your nozzles are created for different types of areas. For example, we have nozzles that are designed for humid vs. dry regions. Also, if you are mounting higher than 8-10' you can upsize your nozzles to accommodate.

✓ **DETERMINE YOUR PUMP SIZE**

The Koolfog pump size is determined by the length of misting line required and your nozzle selection. See our diagram to identify your pump model options.

✓ **PLAN FOR DURABILITY**

Determine what time of day the system will most often be running and for how long. If you are primarily using the system in the evening then remember that it is naturally cooler and more humid so you should adjust the nozzle type. If you are operating 7 days a week you should consider a commercial grade system only. Also, the stainless steel systems are more durable than the nylon systems.

✓ **REVIEW FITTINGS PACKAGE**

Determine if you need extra fittings for those twists and turns. Elbows allow you to work around corners. Tees allow you to move in two directions. Unions allow for joining sections of stainless steel or nylon lines together.

✓ **DON'T FORGET SERVICE**

Your system will need the oil changed after the first 50 hours of operation then every 500 hours thereafter. Your filters should be changed out at least once a season. Also, it is always a good idea to have a few nozzles on hand just in case.

MISTING SYSTEM KITS

Koolfog's Misting System Kits make it easy to customize your outdoor cooling system. Our kits include misting line, misting nozzles, stainless steel or nylon tubing, compression or push-in fittings and fasteners. You only need to select your pump and nozzle type.

WHICH KIT DO YOU NEED?

Koolfog Misting System Kits are organized by the type of system (i.e. STAINLESS STEEL or NYLON) and the LENGTH OF MISTING LINE required. Locate the Misting Kit size and identify the Koolfog pump(s) that will work for you. Note that this may change based on your climate. Lastly, determine if you need additional components to complete your installation such as additional high-pressure hose or additional fittings.

Stainless Steel Kits

Kit Size	20'	30'	40'	50'	60'	70'	80'	90'	100'
	See Kit	See Kit	See Kit	See Kit	See Kit	See kit	See Kit	See Kit	See Kit
Humid	G2-20, M20	G2-20, M20	G2-20, M20	G2-20, M20	G2-20, M20	G2-20, M20	G2-40, M44	G2-40, M44	G2-40, M44
Dry	G2-20, M20	G2-20, M20	G2-20, M20	G2-20, M20	G2-40, M44	G2-40, M44	G2-40, M44	G2-40, M44	G2-40, M44
Nylon Tubing	20	20	20	20	20	20	20	20	20
Nozzles (Humid or Dry)	10	15	20	25	30	35	40	45	50
3/8" SS Misting Line	20	30	40	50	60	70	80	90	100
3/8" SS Compression Endcap	1	1	1	1	1	1	1	1	1
3/8" SS Compression Union	2	3	4	6	7	8	9	11	12
3/8" SS Compression Elbow	2	2	2	2	2	2	2	2	2
3/8" SS Compression x 1/4" SS Male Connector	1	1	1	1	1	1	1	1	1
Nickel Plated Push In Female Connector	2	2	2	2	2	2	2	2	2
SS Cushioned Loop Clamps	20	25	30	35	40	45	50	55	60
Tube Cutter	1	1	1	1	1	1	1	1	1

Nylon Kits

Kit Size	20'	30'	40'	50'	60'	70'	80'	90'	100'
	See Kit	See Kit	See Kit	See Kit	See Kit	See kit	See Kit	See Kit	See Kit
Humid	G2-20 , M20	G2-20 , M20	G2-20 , M20	G2-20, M20	G2-20, M20	G2-20, M20	G2-40, M44	G2-40, M44	G2-40, M44
Dry	G2-20 , M20	G2-20 , M20	G2-20, M20	G2-20, M20	G2-40, M44	G2-40, M44	G2-40, M44	G2-40, M44	G2-40, M44
Nylon Tubing	40	50	60	70	80	90	100	110	120
Nozzles (Humid or Dry)	10	15	20	25	30	35	40	45	50
Nickel Plated Nozzle Push In Unions	10	15	20	25	30	35	40	45	50
Nickel Plated Push In Elbows	3	3	3	3	3	3	3	3	3
Brass Push In Plug	1	1	1	1	1	1	1	1	1
Nickel Plated Push In Female Connector	1	1	1	1	1	1	1	1	1
SS Cushioned Loop Clamps	20	25	30	35	40	45	50	55	60
Tube Cutter	1	1	1	1	1	1	1	1	1

Contact one of our design engineers for a custom plan for your needs at +1 760-321-9203.