

SIPHON FLOW RATES CHART

In drain back systems it is often beneficial to achieve a siphon in the piping from the collectors back to the tank. Once the piping is full and a siphon is achieved pumping power can be reduced. The siphon creates a vacuum so that water falling back to the tank helps to lift water up to the collectors. Flow velocities of 2' per second or more are required to maintain the siphon. At lower velocity the piping is not completely full and air can enter the system negating the vacuum effect.

The minimum flow rates required are as follows:

1/2"	type M copper	1.6	gpm
3/4"	type M copper	3.2	gpm
1"	type M copper	5.5	gpm
1.25"	type M copper	8.2	gpm
1.5"	type M copper	11.4	gpm
2"	type M copper	19.8	gpm
2.5"	type M copper	30.5	gpm
3"	type M copper	43.6	gpm