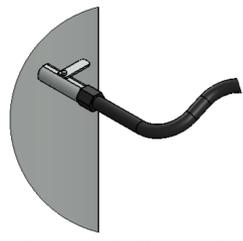


TECHNICAL BULLETIN--PIPING LAYOUT
 9-2015
 ENGINEERED SPECIALTIES, LLC
 www.rapidairproducts.com



1

- Start the system at the air compressor tank
- Ball valve for a shutoff
- Jumper hose to isolate vibration

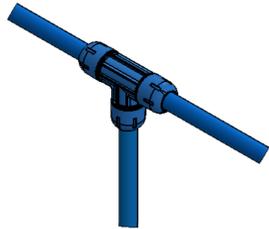
Pipe size for the air system is NOT determined by the outlet hole on the compressor
 Calculate with length of pipe and compressor HP



2

- Connect the jumper hose to a filter/regulator unit mounted to the wall

Put a minimum of 20 ft from the compressor to the filter, this helps cool the hot air from the compressor, allowing the filter to work better
 For small shops, this is not practical, and it will have to be mounted closer to the compressor



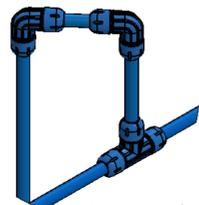
3

- In most cases and on first installation, we recommend using a tee fitting to drop to an air outlet. This allows moisture to flow down to the outlet, where it can be drained



4

- Wall outlets at the bottom of the drop pipe have pipe thread ports for couplers and a moisture drain

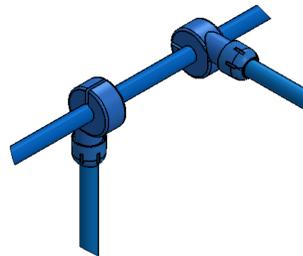


5

- This method of a drop pipe is called a shepherds hook; moisture will stay trapped in the main line not flowing up

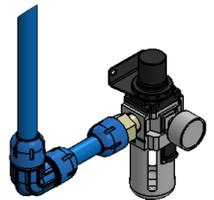
Downfalls of this method include needing extra drains added to the main line and not being able to run the main pipe flat on a wall, the drop pipe then has to wrap back around to align to the outlet below

Works well for main line sizes of 1-1/2" and up
 smaller sizes are not affected



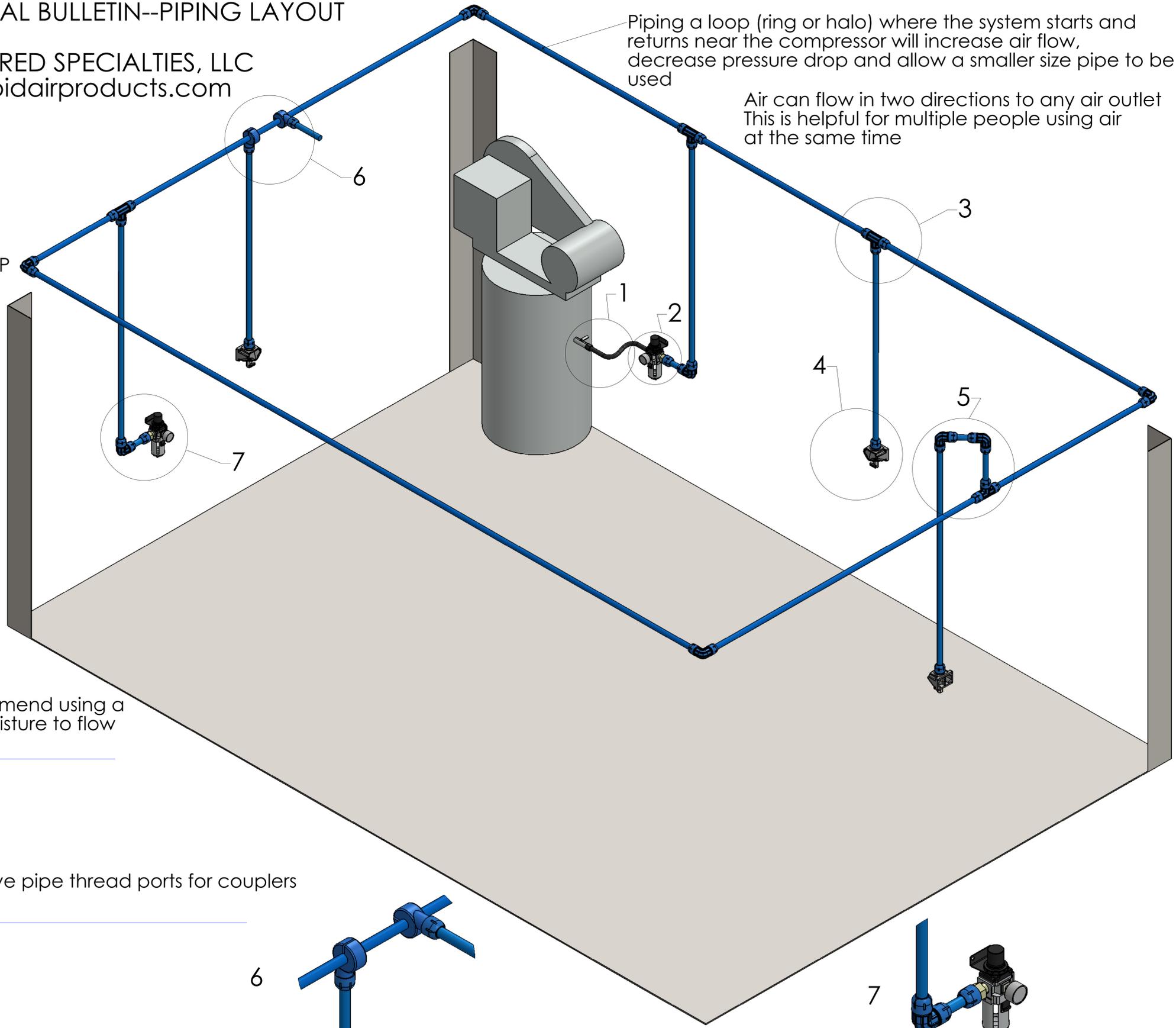
6

- Saddle drops work like the shepherds hook
- Drilling a side or top hole in the pipe allows for moisture to stay at the bottom of the main pipe
- Extra drain lines needed in the main line
- Works best for adding drops later
 recommended to use tee fittings for the initial installation



7

- Add additional specialty filters for painting or lubricators for air tools at the drop points
- NOT recommended to put a lubricator at the start of the air system. Oil will accumulate in the lines, making them useless for painting, or even blowing off dust (surfaces will be blown with oil from the lines)



Piping a loop (ring or halo) where the system starts and returns near the compressor will increase air flow, decrease pressure drop and allow a smaller size pipe to be used

Air can flow in two directions to any air outlet
 This is helpful for multiple people using air at the same time