

**TECHNICAL BULLETIN**  
**BULLETIN 64**

**Parallel vs. Series Piping**

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| <b>Definitions</b> | <p><b>Parallel-</b> Equally manifolding the inlet water pipe and outlet water pipe in multiple heater installations. Having equal number of fittings; as well as, lengths of pipe.</p> <p><b>Series-</b> Piping the outlet of one heater into the inlet of the next.</p> |
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| <b>Why shouldn't I pipe in series?</b> | <p>Piping in series can cause the first heater to fail sooner than the second. The reason this happens is you are using the full capacity of the first heater and only upon an increased demand, is the second heater cycled on. This causes the first heater to be used more than the second, and used to its fullest capacity. This can cause the first heater to condensate and corrode.</p> |
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| <b>Why should I pipe in parallel?</b> | <p>Piping in parallel allows you to use both heaters equally. It allows the system to act as one heater rather than independent. By drawing hot water out of both heaters equally, you are able to equalize the life of your heaters.</p> |
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