

A dirt trap is a crucial piece of equipment in modern hydronic systems. To protect the entire heating system we recommend installing a dirt particle trap in the return circuit. This trap is required when the boiler is installed to an existing heating system. Use of a Y strainer is not permitted as a substitute for a dirt trap.

A dirt trap is a critical piece of equipment when using brazed plate heat exchangers in the E series boilers. The small passageways inside brazed plate heat exchangers are susceptible to deposits because of contaminants in the system in much the same way as the primary boiler heat exchanger. The use of a dirt trap will greatly reduce the amount of these particulate contaminants that can enter the brazed plate heat exchanger.

A dirt trap creates an area of low velocity that causes dirt particles to fall out of solution. In this area of low velocity is media which is generally a metal mesh. The combination of the media and the low velocity area inside the dirt trap allow denser particles to separate and move to the bottom of the chamber of the dirt trap. Because of two principles taking place, a dirt trap is able to separate finer particles of dirt from a system.

A dirt trap has additional benefits for the installer:

- It provides for a quicker installation time because no isolating valves or pressure gauges need to be installed and allows for easier cleaning and flushing.
- It reduces the cost of the installation parts and labor because two isolation valves, two pressure gauges, and two Tee fittings are no longer needed.
- According to dirt trap manufacturers it will not create a blockage in the system leading to no flow and a no heat call to the installer.
- Cleaning of the dirt trap can be done while the system is in operation as compared to a Y strainer.

Placement and sizing of the dirt trap are critical and should be based on the dirt trap manufacturer's guidelines.