For SWDW Double Wall Heaters:

DRIP TRAPS:
Most heat exchangers are subject to damage from water hammer caused when an accumulation of condensate is admitted to the heat exchanger upon opening the steam control valve. To prevent this damage, steam supply lines should be adequately drained by means of steam traps installed at intervals in the steam supply system.

Therefore, whenever there is an overhead steam main, we recommend that a drip trap be installed at the bottom of the vertical section feeding the heater, and preceding the control valve.

Float & thermostatic traps (F&T) or thermodynamic disc (TD) are recommended for drip trap applications, provided they are adequately sized and of suitable pressure standard. Specific sizing depends on piping system design, and trap capacity should be adequate to eliminate any condensate that might collect at the valve inlet. A ¾” float and thermostatic trap will handle most applications.

VALVE TRAP:
A small, ½” or ¾” F&T trap is required for installation between the AERCO control valve outlet and the heater inlet to prevent the collection of condensate in this area from hammering the vertical U-tube bundle on the SWDW heater.

MAIN CONDENSATE TRAP:
Because the DW model heater is not a sub-cooling type heat exchanger, a condensate trap on the heater outlet is required. An F&T trap, which is a modulating type trap, is recommended for the diversified load patterns of heating domestic water.

See Engineering Manual page A701.2 for AERCO Steam Trap selection chart.