



**INSTALLATION, OPERATION AND  
MAINTENANCE INSTRUCTIONS**

**FLEXITUBE STEAM AIR HEATER**

**HELICAL FIN TYPE: B-FLEX, FLEX, A-FLEX**



**5/8" Tube Type: B-FLEX, FLEX**  
**1.0" Tube Type: A-FLEX**



4621 MURRAY PLACE, LYNCHBURG VA 24506  
TEL: (434) 845-7081 FAX: (434) 528-6242  
<http://www.aerofin.com>

## **INSTALLATION, OPERATION, AND MAINTANENCE INSTRUCTIONS FOR FLEXITUBE STEAM AIR HEATER COILS**

Aerofin Flexitube™ steam air heater coils have no moving parts and therefore require no adjustment of any kind within the units themselves. The tubes are supported in the casing with each tube capable of expansion and contraction independent of the others.

The coils may be supported by bolting or welding the coil casing or outer frame to the system ductwork or by suspending the coil using straps or rods along the length from the ceiling beams or trusses.

Coils should be firmly and adequately supported with a minimum of three supports; one at the center and one at each end of the coil. Coils should be securely fastened to or inside the duct or unit. All ducts or unit walls should be adequately insulated and sealed to minimize heat losses.

The most common ways to regulate the heat load is by the use of dampers and/or a control valve.

Air filters should be located on the entering air side of the coil to filter out oil, dust, lint and soil which could foul the fin surface of the coil. A strainer should be provided on the entering steam side of the coil for filtering out foreign particles.

Flexitube coils are manufactured with steam supply connection on opposite ends of the coil from the condensate return connection with steam flow making one pass across the air flow. For vertical tube installation of these coil types, the steam supply must be at the top and condensate return at the bottom.

For Flexitube coils installed with tubes horizontal (horizontal air flow) the tubes should be pitched toward the condensate return header not less than 1/2" inch for coils up to 72" inches in length and 1.0" inch minimum pitch for coils over 72" inches in length.

For Flexitube coils installed flat with tubes horizontal (vertical air flow) the supply header end of the coil should be elevated above the return header end a minimum of 2.0" inch for coils 72" inches in length and 3.0" inch minimum for coils longer than 72" inches in length.

Continuous venting and draining of the coil is absolutely necessary. Precautions should be taken to assure a positive pressure differential between the upstream side and the downstream side of the trap.

Coils installed on closed gravity systems must be installed at a sufficient distance above the water line. This height under the most favorable circumstances should not be less than 30 inches.

On startup of the coil, the steam should be on before the airflow is started and on shutdown the airflow should be shut off before terminating the steam flow to the coil.

When modulating steam supply, use a throttling control valve for best results.

For best results use only float thermostatic or bucket traps for condensate removal. Use a thermostatic air vent for venting air and 15° degree swing check valve for relieving the vacuum. Supply and return piping shall be supported independently of the coil connections. Do not use the coil connections as a piping anchor for the piping system. Refer to Aerofin steam piping recommendations in Bulletin P-56.

## **Maintenance Instructions**

### **External Cleaning of Coils:**

Fins should be either steam cleaned or sprayed with non-corrosive solvents or cleaners such as Simple Green™ to remove oil, lint, dust, and soil. Direct high-pressure blast on the fin surface should be avoided.

### **Internal Cleaning of Coils:**

The coils may be internally cleaned by flushing them out with non-corrosive cleaning solvents or steam cleaning, or flushing with clean water.

## **Spare Parts**

There are no spare parts available for these heat exchangers. To order replacement coils contact the Aerofin home office at (434) 845-7081 or visit our website at <http://www.aerofin.com> for the location of the nearest Aerofin regional sales office.