

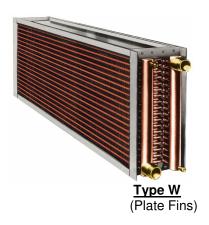
## INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

HELICAL FIN TYPE: C, CP, CPU, CD, CDP, CDPU, CB & CT

**PLATE FIN TYPE: W & WD** 

### FOR USE WITH HOT WATER OR GLYCOL









| Type WD | (Plate Fins)



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#### http://www.aerofin.com

# INSTALLATION, OPERATION, AND MAINTANENCE INSTRUCTIONS FOR HELICAL FIN RETURN BEND TYPE C, CP, CPU, CD, CDP, CDPU, CB, & CT COILS AND PLATE FIN RETURN BEND TYPE W & WD COILS FOR USE WITH HOT WATER OR GLYCOL

Return bend type C, CP, CPU, CD, CDP, CDPU, CB, CT, W, and WD 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.

Aerofin water coils should be installed with the casings level and with the top up for proper drainage. Aerofin CD, CDP, CDPU, and WD coils must be installed pitched towards the drain headers to insure complete drainage of these coils.

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. If coils are to be stacked vertically, the upper coils must be independently supported so that the weight of the upper coils does not rest on the bottom coil, unless the coils have been fabricated with additional bracing for stacking. 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. Flashing should be used to prevent by-pass of air around fin surface.

The most common ways to regulate the heating load are by the use of a control valve and/or dampers. For better control of the fluid flow, the control valve should be installed in the return piping.

When coils are heating freezing air using hot water, do not modulate the water flow through the coils. The minimum recommended water flow rate for heating freezing air is 1.7 gpm per tube circuit (2.0 ft/sec tube velocity) with a minimum leaving water temperature of 75°F. The number of tube circuits would be the number of tubes being supplied with water.

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 water side of the coil for filtering out foreign particles.

For high temperature systems caution should be taken to maintain adequate pressures to prevent the flashing of steam during operation.

When draining the coils caution should be exercised to guard against the possibility of flashing of water to steam. To completely drain the coils, it is necessary to drain from the bottom of both headers, when airflow is horizontal and from the lowest point for vertical airflow.

When coils using water are not in operation and freezing temperatures are expected and to insure proper protection of the coils, remove water from the coils as described in Aerofin Bulletin CA-194 entitled "Protection of Water Coils to Prevent Freezing Damage", or add antifreeze similar to Prestone<sup>TM</sup> (Ethylene Glycol) as mentioned in this bulletin.



#### **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 <a href="http://www.aerofin.com">http://www.aerofin.com</a> for the location of the nearest Aerofin regional sales office.

