



**jaga** canada climate systems inc.

## LOW-H<sub>2</sub>O STATIC HEAT EXCHANGER IOM

### Jaga installation

1. A heat output calculation according to the local standard should be made by a qualified individual. The required heat outputs will be determined by the tables and the fitting instruction of the building engineer.
2. The heat exchanger should be connected to a two pipe system with a same end connection, other end connections are available optionally. Type 04 - 09 - 14 and 19 are standard opposite end.
3. The heat exchanger is equipped with two brass collectors for left or right ½” NPT same end connection. Air vent ¼” NPT and drain plug ½” NPT are NOT included. In the case of same end connection flow valve always has to be fitted to the top connection.
4. In order to totally block off the cold draft from the window it is preferable that the heat exchanger covers the full length of the window. (The heat exchanger does not necessarily need to cover the entire wall).
5. Allow for extra space for curtains or window coverings with trench products.
6. The heat exchanger must always be kept accessible for maintenance purposes.
7. Jaga guarantees the Low-H<sub>2</sub>O heat exchanger for 30 years when the pH level of the water is below 10. If pH level is above 10, Jaga must be informed prior to delivery so that a special heat exchanger with a 10 year warranty is used.

### Jaga operation

1. Heat exchangers are manufactured in Belgium. The heat exchanger is manufactured from round, seamless, circulation tubes of Pure Copper and Aluminum fins with brass collectors. The units should be only used in closed hydronic systems to assure no corrosion of any system components.
2. Proper unit operation depends on adequate flow of water to the heat exchanger (which can only be accomplished when all the system air has been fully vented from the system). In addition to this proper distances as per cut sheets for supply and return air circulation is required for correct outputs.
3. Units should each be vented, with the system pressurized but in a static state (pumps off). Venting may need to be done periodically to assure a closed system.
4. DO NOT OVER-PRESSURIZE RADIATORS: Jaga radiators are designed to operate to a maximum standard pressure which is NO MORE THAN 145 PSI. The coils are factory tested at a maximum pressure of 300 PSI.
5. Careful design considerations have been made to minimize the thermal expansion of the heat exchanger. Piping attached to the radiator must provide the necessary expansion compensation as to not force the heat exchanger from its install location.
6. Flexible piping and elbowed piping are two simple ways to provide a typical ¼ inch to ½ inch of flexibility required in expansion situations.
7. Jaga Radiators require less flow rate than typical hydronic heating products. If flow noise is apparent, balance the system until the noise is insignificant.
8. For proper flow rate please consult with the manufacturer.
9. Many levels of control are available today for hydronic systems. Jaga Radiators will provide nice, even heating whether operated by a simple thermostat to baseboard loop system, or an advanced boiler reset controller with motorized mixing valves, constant circulation and 2-pipe distribution.

### Jaga maintenance

1. Hydronic system maintenance should include routine checks for piping leaks (usually indicated by frequent makeup water), and a yearly diagnosis of the system water pH to evaluate its corrosive potential.
2. Internal radiator maintenance depends entirely on the system water makeup and proper venting. Hydronic system additives are available protect against freezing. These additives will not significantly reduce the output of Jaga products.
3. External radiator maintenance consists of keeping the surfaces clean, Jaga’s casing should be vacuumed periodically, the electrostatically lacquered heat exchanger should not trap dust.