WattsRadiant
Floor Heating & Snowmelting

4500 E. Progress Place
Springfield, MO 65803-8816
Phone: 417-864-6108
Fax: 417-864-8161
Web: www.wattsradiant.com

HydroControl Submittal

PROJECT NAME: _____

WATTS RADIANT REPRESENTATIVE: _____

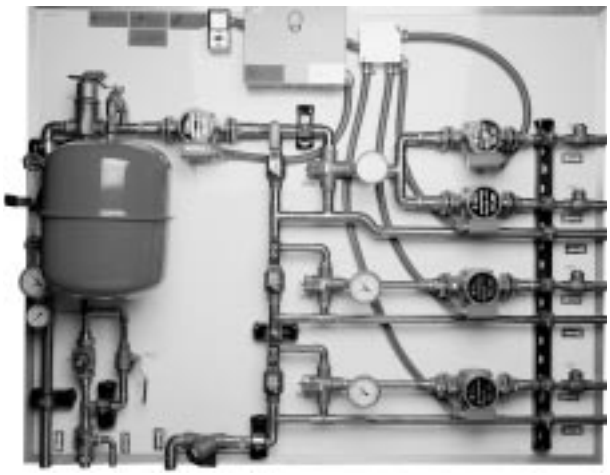
Unit Tag #: _____ Order #: _____ Date: _____

Engineer: _____ Submitted by: _____ Date: _____

Contractor: _____ Approved by: _____ Date: _____

HydroControl™

Preassembled Hydronic Heat Regulation System



Typical HydroControl panel.

DESCRIPTION

A HydroControl is the heart and brain of any hydronic heating or snowmelting system. It is the connecting and controlling point between the heat source (boiler, water heater, etc.) and the thermal transfer system (floor heat piping, baseboard, domestic hot water, snowmelt piping, etc.). HydroControls organize the mechanical components required to deliver the optimal amount of heat to the heated area(s). Each HydroControl is custom-engineered and manufactured in a factory-controlled environment to the specifications listed in this submittal and other supporting documentation. Please refer to other sections of this submittal for more information.

Your HydroControl does not include the boiler or heat source unless specifically listed below.

You should also make preparations to provide supply and return lines, special fluids and thermostats or other heating or snowmelting sensing controls, as necessary.

_____

_____

_____

_____

SPECIFICATIONS

All equipment selected below, plus additional equipment specified at the end of this section, are constructed in their proper locations on the panel. The assembled components are then mounted on a strong, durable mounting surface. Please refer to the mechanical schematic representation of your HydroControl that accompanies this page. This schematic shows the components we propose to build in your panel, but the exact location will depend on actual jobsite requirements. All HydroControls undergo a final quality control inspection to ensure proper operation of all hydronic and electrical components.

Hydronic Components — Typical:

- ❑ Primary Circulating Pump(s) with isolation flanges (or full-port isolation ball valves).
- ❑ Secondary Circulating Pump(s) with isolation flanges (or full-port isolation ball valves).
- ❑ In-line Automatic Micro-bubble Air Remover and/or air vents.
- ❑ Wye Strainer with stainless steel filter.
- ❑ Pressure Guage - primary loop.
- ❑ Temperature Gauge - primary loop and secondary loop(s).
- ❑ Manual Fill/Purge Assembly consisting of boiler drains and full-port ball valve.
- ❑ Automatic Pressure Regulating Valve with isolation valves and unions, and fast-fill bypass line with shut-off ball valve.
- ❑ Three-way Automatic Tempering Valve(s).
- ❑ Spring Check Valve(s).
- ❑ Secondary Purge Valves - 2-way, full-port.
- ❑ Miscellaneous Service Valves and Fittings as needed.
- ❑ Type L copper pipe and fittings
- ❑ All HydroControls are mounted with unistruts and vibration dampening clamps.
- ❑ Mechanical schematic showing how connections are made to the HydroControl.

Hydronic Components — Optional:

- ❑ Zone Valve(s)
- ❑ Heat Exchanger(s)
- ❑ Injection Pump(s) or Valve(s)
- ❑ 3-way Manual Mix Valve(s)
- ❑ 4-way Valve - manual or electric
- ❑ Pressure Relief Valve
- ❑ Flow Switch
- ❑ Flow Control & Regulating Valves
- ❑ Pressure Differential Bypass Valve
- ❑ Pressure Differential Indicator Assembly
- ❑ Boiler Drain for wye strainer
- ❑ Sight Glass Flow Indicator

Please refer to the schematic, construction notes, or other pertinent information on the back of this page or attached to this submittal.

Electrical Components — Typical:

- ❑ UL listed Electrical Service Box
- ❑ Cube-type, Plug-in Relays
- ❑ Prewired Terminal Blocks
- ❑ 115 or 220 VAC Wires enclosed in flexible conduit
- ❑ Fusetron with Manual Power Isolation Switch.
- ❑ 12 or 14 gauge Solid Copper Wiring for high voltage devices.
- ❑ 18 gauge Solid Copper Wiring for low voltage devices.
- ❑ Electrical schematic showing how connections are made to the HydroControl

Electrical Components — Optional:

- ❑ Boiler Reset Control
- ❑ Injection Mixing Control
- ❑ Set Point Control
- ❑ Snowmelting Control with or with out boiler control
- ❑ Temperature Display Device with Sensors
- ❑ Temperature Display Alarm with Sensors
- ❑ Alarm(s)
- ❑ Flow Switch
- ❑ Timer

Additional Equipment:

_____

_____

_____

_____

_____

CODES, STANDARDS, AND LISTINGS

UL®: Watts Radiant HydroControls Marked with the UL® trademark conform to UL® specifications.

NEC: All Watts Radiant HydroControls are manufactured in compliance with the National Electrical Code.

RPA: Install radiant tubing in compliance with the Standard Guidelines for Radiant Panel Installations, as approved by the Radiant Panel Association.

ABOUT YOUR HYDROCONTROL™

CUSTOMER NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ FAX _____

WATTS RADIANT QUOTE NUMBER: _____

WATTS RADIANT HYDROCONTROL CATALOG NUMBER: _____

CONSTRUCTION NOTES

BEFORE YOU ORDER

Make sure you have made preparations for your HydroControl. Please consider the following important items:

- **National, State and Local Code Compliance**
- **Flue Venting**
- **Electrical Service**
- **Combustion Air**
- **Floor Drainage**
- **Sufficient Space To Work**
- **Water Supply**
- **Fuel Supply**