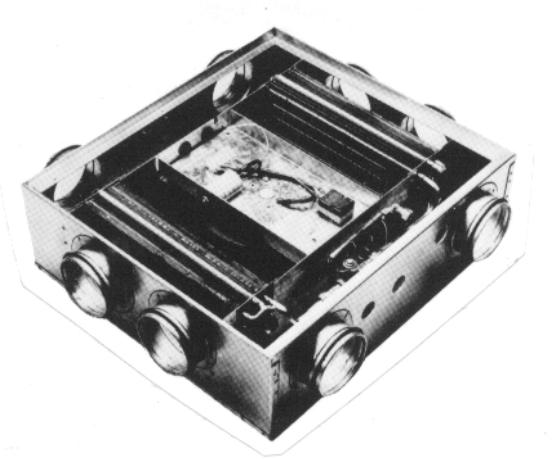
# HEATING UNIT
# IGV 2000 V and VR

Form Nº 0505
August 1999



The IGV 2000 V and IGV 2000 VR are heating units cast in the foundation, with a water-air heat exchanger
Both contain two thermostat-controlled water-air heat exchangers and a fan.

The IGV 2000 VR has the same design as the IGV 2000 V but the valve separating the 2 air-water heat exchangers is closed to allow for zone control. For foundation use, remove furnace box feet. For intermediate floor use, leave furnace box feet on.

## TECHNICAL DATA

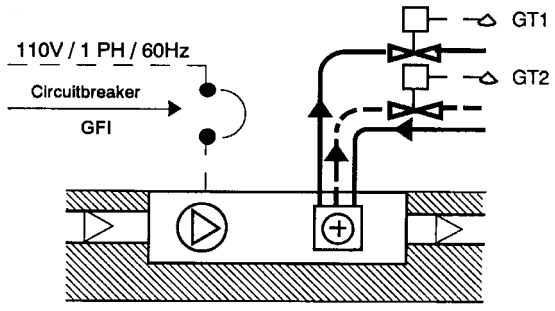
The following data is generic. Each LEGALETT installation is unique. For actual design parameters refer to customized specification for your installation.

Operating voltage . . . . . 110V / 1 PH / 60 Hz
Output, fan motor . . . . . 115 W
Breaker - GFI . . . . . 15 A
Output water-air exchanger . . . . . 2k W
Connection, pipe . . . . . ½"
Air quantity . . . . . 400-550 $m^3$/h
Inlet water temperature . . . . . 55 - 65°C

Pressure drop over water-air heat exchanger:
75 l/h . . . . . = 1.0 kPa
100 l/h . . . . . = 1.8 kPa
125 l/h . . . . . = 2.7 kPa
150 l/h . . . . . = 3.8 kPa

## OPERATION

The IGV 2000 V can be controlled by different types of control equipment (see separate sheet). In general, a thermostat opens the water valve when the room needs heat. The IGV 2000 V / IGV 2000 VR can be controlled in 2 temperature zones, whereby each coil has a separate outlet and valve. A thermostat built into the IGV 2000 V starts the fan motor when the input temperature reaches 30°C. When the supply valve closes and the input temperature decreases to approx. 27°C, the fan motor stops.




LEGALETT CANADA INC.

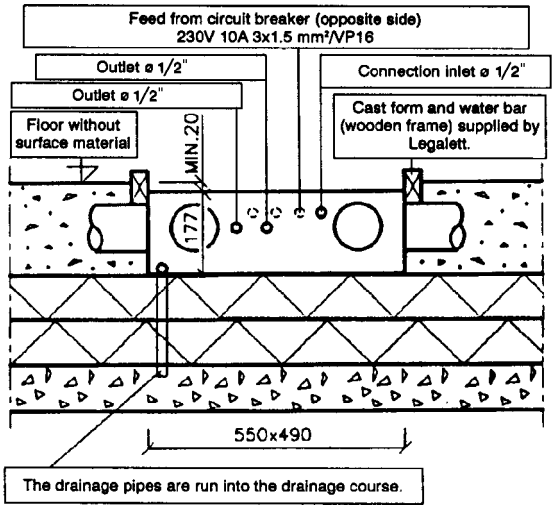
103 Warner Drive
Long Sault, Ontario, Canada K0C 1P0
Phone: (613)936-0518
Fax: (613)937-0125
E-Mail: legalett@hsp.ca
Web Site: www.legalett.on.ca

# FURNACE BOX INSTALLATION

PRIOR TO PLACING CONCRETE

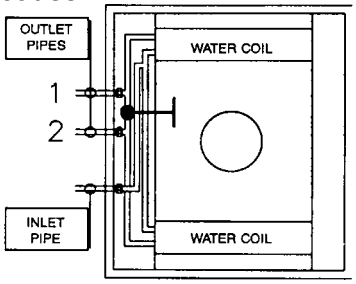
1. The IGV 2000 V/VR heating unit rests on the polystyrene sheet with its upper edge adjusted to min. 30 mm below the top of the level of the surface material of the floor. A hole is required in the insulation for the unit's drain pipe.
2. Conduit is run from one of the cable inlets on the unit to the local GFI circuit breaker. Wiring and termination must both be in accordance with local building code.
3. The inlet and outlet sleeves for the water are connected to the inlets of the furnace box. The spiral ducts in the concrete slab are laid in accordance with a separate drawing.
4. Prior to placing concrete, the furnace box should be covered with plastic sheeting to protect the unit from water and concrete. The wooden frame can be used to secure the plastic sheeting in place.

THE LOCATION OF THE HEATING UNIT IN THE FOUNDATION SLAB IS DESCRIBED IN GREATER DETAIL IN THE DRAWING FOR THE FOUNDATION SLAB




# WATER CONNECTION

1. Clean the furnace box carefully. There should be no water or dampness in the box or ductwork system when the equipment is set up.
2. Remove the 4 metal tabs mounted where the heating coils are to be assembled.
3. The sealing strips should be mounted on the metal 20 mm below and 5 mm above the heating coils.
4. Cut the incoming water pipes so that with the supplied adaptor, they stick in 44 mm for the outlet pipe and 65 mm for the inlet pipe. Mount the support sleeve. Unscrew the nuts and clamp rings on the pipe joints and put them on the pipes.
5. Insert the heating coils into the box so that the pipe joints are free of incoming water pipes. Then connect the coils' joints on to the incoming pipes and secure.
6. Mount the metal clip to the heating coils.
7. All plumbing to be in accordance with local plumbing codes.




# ELECTRICAL CONNECTION

1. Mount the fan unit with the terminal block turned towards the electrical inlet. Screw tight. Mount ground cable to the plug.
2. Straighten the capillary tube for the fan thermostat carefully and insert the bulb and the tube through the inlet so that excess tube is outside the electrical space. Roll up excess tube. Insert the bulb in the contact sleeve on the inlet pipe.
3. Check the electrical data on the unit so that other installation materials are compatible
4. Used properly sized copper wire for connection to the mains.
5. A properly sized breaker with GFI capability must be included in the installation to enable total isolation for maintenance etc.
6. The installation must be carried out by a licenced electrician