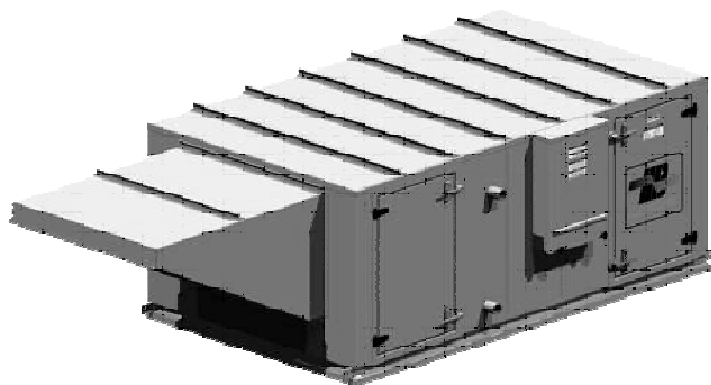


Air Conditioning Central Heating & Cooling



BC & BCH SERIES

INDOOR / OUTDOOR
INSTALLATION



INSTALLATION AND SERVICE MANUAL


BOUSQUET
Technologies

PROJECT: _____
ADDRESS: _____

MODEL: _____
SERIAL NUMBER: _____

INSTALLER: _____
ADDRESS: _____
PHONE NUMBER: _____
INSTALLATION DATE: _____

MANUFACTURER: **BOUSQUET TECHNOLOGIES INC.**
ADDRESS: **2121 NOBEL, SAINTE-JULIE (QUÉBEC), J3E 1Z9**
PHONE NUMBER: **(514) 874-9050 / 1-800-363-9197**
FAX NUMBER: **(450) 649-8756**

**THIS MANUAL HAS TO BE KEPT IN THE UNIT AT ALL TIMES AND BE
AVAILABLE**

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INSTALLATION INSTRUCTIONS

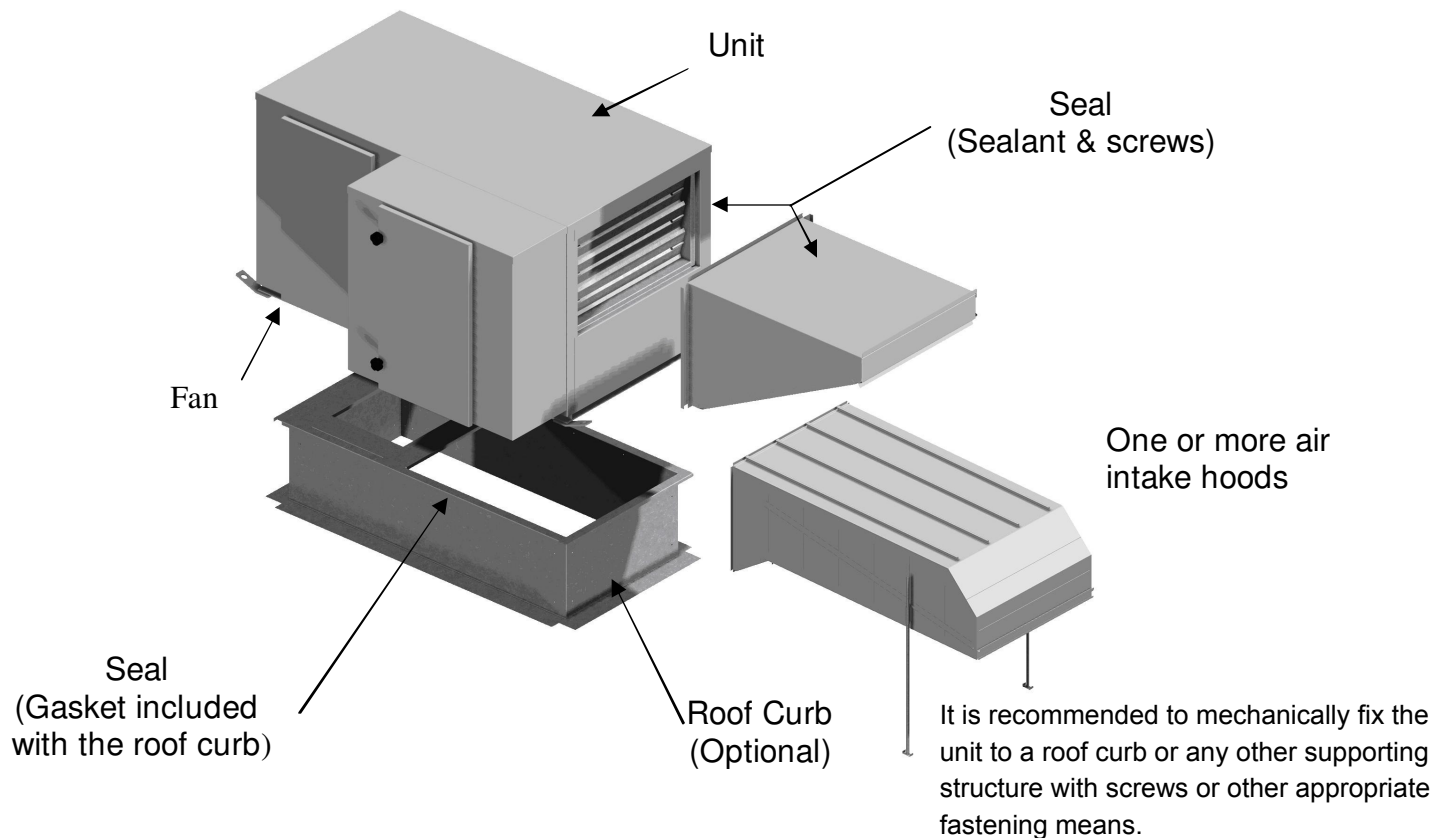


FIGURE 1: UNIT INSTALLATION

IMPORTANT

When installing the unit a minimum clearance of one inch is required between the unit and any combustible material and this all around the unit. Allow sufficient space on both sides of the unit for service and maintenance.

The air intake must be located and oriented in order to prevent infiltration of snow, rain and flammable toxic gas, as well as any other harmful material in the unit.

When the heater is hung over a work area, it must be installed at an adequate height. The installation of a service platform may be required.

When fire dampers are used in the ducts, they must be equipped with an electrical switch wired to the safety control circuit of the unit in order to shut down the air heater when fire is detected in ducts. These electrical switches must be wired to re-activate the safety circuit only when the fire dampers are completely opened.

In order to prevent any risk of freeze-up, the installer must install a minimal temperature detector if not supplied with the unit.

WIRING THE UNIT

WARNING

If the original wiring has to be modified or changed it has to be replaced by wires that have been approved to resist a temperature of 221 °F. This is applicable to all wiring except the one found inside the air intake (if applicable) and the one on the security sensors, which has to have a minimum resistance of at least 150 °F.

WARNING

The wires installed in the air flow must be an integral part of a metallic cable or be enclosed in an electrical conduct, a metallic electric tubing or in a metallic canalisation.

DANGER

This unit works on high voltage. The electrical work has to be done by a certified electrician.

INSTALLATION NORMS

The installation of this air conditioning central has to respect the installation codes in particular the Electrical Canadian Code (CSA C22.1-1994) and the norm ANSI/NFPA 70-1993.

Electrical installations must meet the standards stated in the local electrical code for this category of equipment. All indoor and outdoor electrical installations must comply with the electrical diagrams of the heater. For more information, refer to the start-up instructions, operating sequence and adjustment instructions.

Grounding of the unit must be done correctly to prevent injuries and damage to the unit.

WIRING SEQUENCE

- a) The unit name plate shows the voltage and amps that are required.
The principal electrical cable has to be sized properly to fit the written requirements of the unit.
- b) The main electrical cable has to be hooked-up to the main disconnect.
Ensure yourself that the screws on the main disconnect have been properly tightened.
- c) Wire the remote control panel (option) to the designated terminals in the unit's main control panel.
The standard Bousquet remote control panel uses 120/60/1 voltage.
- d) Wire the remote temperature selector (option).
The wiring has to be a "shielded type" if the unit is wired by others.

WARNING

Improper installation, modification, adjustment or maintenance may cause damage, injury or death. Carefully read the installation, start-up and maintenance instructions before installing or servicing this unit.

START-UP INSTRUCTIONS

BLOWER ADJUSTMENT

- Check the voltage at main disconnect switch.
- Check blower rotation and modify connections if necessary.
- Ensure that the contactor overload relays are set according to the full load amperage indicated on the motor name plate.
- Check alignment and tension of belts.
- When dampers are completely open and burner controller is not activated, read the voltage and amperage of the blower motor.

OPERATING SEQUENCE

Operating sequence of a SINGLE VOLUME / CONSTANT FLOW unit (as an example only)

STARTING UP THE BLOWER

- 1- Set the STOP/BLOWER/BURNER switch to BLOWER.
- 2- The interlock contact provides the proof that the exhaust fan is in operation.
- 3- The fresh air intake damper opens.
- 4- The damper end switch closes.
- 5- The blower motor starter is energized.
- 6- The blower is in operation.

AIR CONDITIONING CENTRAL MAINTENANCE

CHECK LIST	INSPECTION			
	WEEKLY	MONTHLY	SEMI-ANNUALLY	ANNUALLY
Inspect the filters; replace them if necessary.	•			
Ensure that no flammable material is stored near the unit.	•			
Ensure that nothing obstructs the air inlet and outlet of the unit.	•			
Check belts; adjust or replace them if necessary.		•		
Lubricate blower and motor bearings as needed.		•		
Ensure that the fresh air dampers are completely open.			•	
Ensure that all safety controls are operational.			•	
Check the high limit temperature switch.				•
Inspect all electrical connections.				•
Ensure that the blower and motor are firmly anchored.				•

IMPORTANT

BEFORE START-UP AND AFTER 8 HOURS OF OPERATION

- Check bearing alignment and lubrication;
- Check bearing clamps;
- Check alignment and belt tension.

AFTER 24 HOURS OF OPERATION

- Check belt tension.

AIR CONDITIONING CENTRAL SHUTDOWN

A) EXTENDED SHUTDOWN

When the unit is shutdown for an extended period of time, it is recommended to shut off the electric power supply.

Before turning on the unit after an extended shutdown an inspection is recommended to make sure everything is in order.

B) UNIT EMERGENCY SHUTDOWN

When the unit shuts down due to an emergency, the main power disconnect should be turned OFF.

C) TURNING ON THE UNIT AFTER A SHUTDOWN

After a shutdown, the following checks must be performed:

1. Set the main power switch to OFF;
2. Check the blower belts; replace or adjust them if necessary;
3. Check condition of filters and replace them if necessary;
4. Ensure that nothing obstructs the air inlet and outlet of the unit;
5. Ensure that nothing prevents proper operation of inlet or outlet air dampers;
6. Turn ON main disconnect;
7. Ensure that the air inlet and outlet dampers are operating properly;
8. Ensure that the blower motor is operating;

If the unit still does not start, call the manufacturer or an authorized service company for assistance.