

# COMFORT for the FUTURE

Electric thermal storage system for central heating





## **GO GREEN**

An ideal solution for replacing a fossil fuel central system.

Going green is the trend, and an electric thermal storage system for central heating is a perfect solution for homeowners who want to increase their energy savings and replace their fuel-burning central system with an electric one. A central heating system with electric thermal storage is 100% electric. Since it replaces equipment that runs on fossil fuels, it protects the environment and reduces your greenhouse emission, as electricity generated in Québec is 99% clean and renewable.



### GENIUS IN A VERY SIMPLE TECHNOLOGY

How does the Comfort Plus electric thermal storage system work?

First of all, the **Comfort Plus electric thermal storage system** for central heating is a forced-air system operating without fossil fuels. When electricity rates are at their lowest, during off-peak hours, the Comfort Plus furnance converts electricity to heat. The heat is stored in high-density ceramic bricks inside the unit. During peak periods, power to electric elements automatically turns off and unit fans releases the stored heat throughout the house.

Combined with a dynamic rate program and a high-efficiency heat pump, the heat storage system provides your household with the coziest winter and lower electricity bills.

#### More persuasive technical benefits

- Proven technology
- Minimal and easy maintenance
- Low noise level compared to a dualenergy or fuel-oil system
- Can be combined with a heat pump
- No overheating in the area where the device is installed, despite the high temperature of the thermal mass
- Easy connection to existing ventilation ducts

#### Insurance in case of power failure

The stored heat in the unit can keep you warm even during a power outage. In fact, the addition of an optional battery allows the unit to blow the stored heat throughout your home even during power outages.

#### Comfort Plus + Heat Pump : a perfect match

To maximize the many advantages of the Comport Plus furnance it is ideally coupled with a conventional central heat pump. Today's heat pumps provide efficient, low-cost heating and cooling, but many struggle to provide adequate comfort in frigid climates. When the demand for heat exceeds a heat pump's capacity, the Comfort Plus furnace adds the precise amount of stored heat to deliver consistent comfort in your home. And because that stored heat is generated off-peak, the combined benefits provide the best, most economical heating system on the market.

# MAXIMIZE YOUR SAVINGS WITH A DYNAMIC ELECTRICITY RATE

To achieve significant savings, it is also recommended to sign up for Hydro-Québec's new dynamic rate. Here's how it works: during winter, in off-peak periods, the price of electricity is below the base rate. Conversely, during peak periods, electricity is billed at a higher rate. Since the Comfort Plus central heating system elements store heat during off-peak periods and shut down during peak demands periods, major savings can be achieved. Visit <a href="https://www.hydroquebec.com/residential/customer-space/rates/rate-flex-d.html">www.hydroquebec.com/residential/customer-space/rates/rate-flex-d.html</a> for all the details.

#### Homeowner Incentives

The Comfort Plus furnace qualifies for the Electric Thermal Storage incentive. These significant rebates are available from Hydro-Québec for a stand-alone Comfort Plus furnace as well as a combination of Comfort Plus + heat pump system. For more information on Hydro-Québec rebates, visit

www.hydroquebec.com/residential/energywise/windows-heating-air-conditioning/ thermal-storage/

#### Components

- 1. Return air plenum (separately ordered or installer supplied)
- 2. AC or heat pump coil (must be installer supplied, if applicable)
- 3. Air filter
- 4. Built-in circuit breakers for power disconnect
- 5. Programmable microprocessor based control panel and digital display
- 6. Electric heating elements
- 7. High density heat storage bricks
- 8. Supply air plenum with 1/2 HP variable speed blower



1kW = 3,412 BTU/hr 1kWh = 3,412 BTU

SPECIFICATIONS					
MODEL		4120			
Charging Input		kW	19.2	24.8	
lumber of Elements		8			
Element Voltage	ement Voltage V		240		
Blowers/System Controls Voltage		V	240		
Single Feed: Charging & Blowers/Controls Circuits Minimum Circuit Ampacity (includes 25% circuit size derate for continuous load)		AMP	109	138	
Single Feed - Maximum Fuse Size		AMP	125	150	
Storage Capacity		kWh	120		
Storage Capacity		BTU	426,500		
Maximum Maintainable Heat Loss (Peak Control: 6am - 9am & 4pm - 8pm)		kW	17.44	22.52	
		BTU/hr	59,491	76,843	
Dimensions including Supply Air Handler W x D x H (in)			49 <sup>7/16</sup> x 47 <sup>5/16</sup> x 46 <sup>5/8</sup>		
Duct Openings	1/2 HP Supp	/2 HP Supply Air Outlet (in)		18 x 22 <sup>5/8</sup>	
	Furnace Return Air Inlet (in)		10 <sup>1/2</sup> x 22 <sup>5/16</sup>		
Approximate Furnace Chassis Weight		lbs	401		
Number of Bricks		Whole Brick	105		
Number of bricks		Half Brick	6		
Approximate Brick Weight		lbs	1,704		
Approximate 1/2 HP Supply Air Handler Weight		sht Ibs	65		
Approximate Total Installed Weight		lbs	2,170		

Dimensions do not include the return air plenum. The return and supply air plenums can be ordered as optional pieces with the 4100 series systems. They must be installed on the correct opening . Any ducting must accommodate the opening sizes at a minimum.

Manufacturer reserves the right to discontinue or change at any time, specifications or designs, without notice or incurring obligations.





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