

- Ultra compact size, featuring the industry's smallest footprint
- Right-sized for today's tighter homes and new codes
- Ideally suited to the replacement market
- Designed with a gas laboratory and builders' input
- Stainless primary and secondary heat exchangers



Chinook

Pottson

WARM AIR GAS FURNACE DESIGNED, ENGINEERED, AND MANUFACTURED IN CANADA FOR HEATING AND COOLING CANADIAN HOMES









# CHINOOK

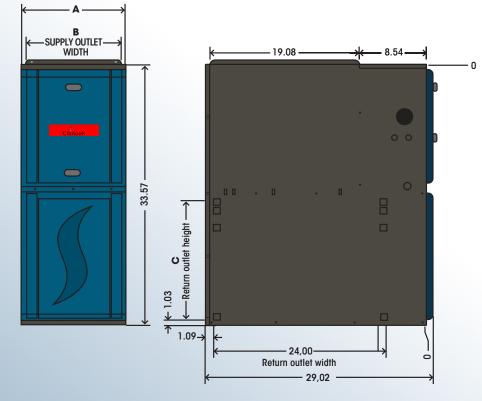
Chinook

### **Benefits and differentiators**

- Smallest footprint in the industry (height and width)
- Meets the existing replacement market requirements for both cooling and heating
- Designed for the rapidly changing new construction market which requires smaller capacity appliances due to tighter envelopes
- Stylish exterior; polypropylene doors with textured metal cabinet
- Zero-clearance certification for new construction and renovation projects
- An excellent central system solution for both the multifamily and single family home markets
- Designed and built with input from partners across North America including : gas laboratories, builders, contractors, distributors and research centers

## **Product line features**

- Efficiency over 95 % (AFUE)
- Efficient combustion, stable at both high and low firing rates
- Quiet warm air and convenient heating capacities
- Full product line from 15,000 to 120,000 BTU on four platforms; - Modulating (from 40 to 100%)
- 2 stage PSC or ECM motor
- Single stage
- Innovative & efficient blower design provides quiet operation for comfort as well as energy efficiency
- Optional propane conversion kit are available





### **DIMENSIONS (inches)**

Furnace size	A Cabinet width	<b>B</b> Supply duct width	C Return duct width	Filter Size
15 k	13 1/2	12 1/2	12 1/2	13 x 24
30 k	13 1/2	12 1/2	12 1/2	13 x 24
45 k	13 1/2	12 1/2	12 1/2	13 x 24
60 k	15 3/4	143/4	14 1/2	15 x 24
75 k	15 3/4	143/4	14 1/2	15 x 24
105 k	21	20	16 1/2	17 x 24
120 k	21	20	16 1/2	17 x 24

### **DIMENSIONS (centimeters)**

Furnace size	A Cabinet width	B Supply duct width	C Return duct width	Filter Size
15 K	34,29	31,75	31,75	33,02 x 60,96
30 K	34,29	31,75	31,75	33,02 x 60,96
45 K	34,29	31,75	31,75	33,02 x 60,96
60 K	40	37,46	36,83	38,1 x 60,96
75 K	40	37,46	36,83	38,1 x 60,96
105 K	53,34	50,80	41,91	43,18 x 60,96
120 K	53,34	50,80	41,91	43,18 x 60,96

# CHINOOK

## Reliable appliance that offers a safe maintenance environment

- Stainless steel extruded tube heat exchanger; primary (SS 409) and secondary (AL 29-4C)
- The ID blower has a single position independant of appliance orientation
- Industry known components
- Viewing ports on control board for operation readings
- Easy access to components for maintenance
- Transparent drain trap
- Simplified condensate routing
- Control board located in the combustion chamber, for easier servicing
- Simple electrical connections
- No sharp edges to ensure safe installation and maintenance



15 / 30	/ 45 /	60 / 75	/ 105	/ 120 0	OO BTU
19/30		00 / / 5	1 105	1200	UU BIU

SHIP WEIGHT	15K	30K	45K	60K	75K	105K	120K	
LB/KG	115 / 52.2	116 / 52.6	119 / 54.0	136 / 61.7	138 / 62.6	161 / 73.0	171/77.6	
ELECTRICAL DATA								
SUPPLY 115 Volts - 60 Hertz - 1 Phase					Phase			
MAXIMUM CONSUMPTION (Amps /breaker size)								
MODULATING	10.7 / 15	10.7 / 15	10.7 / 15	13.1 / 20	13.1 / 20	15.8 / 20	15.8 / 20	
2 STAGE ECM	-	-	10.7 / 15	12.6 / 15	12.6 / 15	15.8 / 20	15.8 / 20	
2 STAGE PSC	-	-	12.8 / 20	12.8 / 20	12.5 / 15	15.8 / 20	15.8 / 20	
1 STAGE	-	-	13.4 / 20	13.4 / 20	13.1 / 20	16.4 / 20	16.4 / 20	
TRANSFORMER CAPACITY 24 vac output					40 VA			

Inlet and outlet venting; This appliance is certified to meet all local North American codes for venting material.



Our latest model home, the Edenbrook, shows off two new technological features that will have a significant impact on the building code and how homes are built in the future. One of them is the pilot project we are conducting with Dettson Industries on right sized furnaces.

The challenge with the new sizing requirements that we should be using is that there are no furnaces available that perform between 12-30,000 BTU's which is what we need. This is where Dettson Industries comes into the picture.

This Canadian owned furnace manufacturer has recognized that there is a need for right sized furnaces. What I was most impressed about was not only the willingness of the Dettson engineers to listen to our performance concerns but that they understood the need for smaller, right sized, high performance furnaces. We agreed to provide Dettson Industries with two homes to test their right sized furnaces in.

The Chinook is fully modulating with an ECM motor and has a BTU output range between 12,000 to 30,000 BTU's, which matches our home's needs.

We are very appreciative of the building officials involved with our Discovery Home that helped to make this project a reality.

## CHINOOK



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Dettson



### WODULATING GAS FURNACE VARIABLE SPEED (ECM)







### 2 STAGE FIXED SPEED MOTOR GAS FURNACE (PSC)

45 / 60 / 75 / 105 / 120 000 BTU							
INPUT	HIGH	45 000	60 000	75 000	105 000	120 000	
	LOW	31 500	42 000	52 500	73 500	84 000	
OUTPUT	HIGH	42 750	57 000	71 775	99 750	115 200	
	LOW	29 925	39 900	50 243	69 825	80 640	
EFFICIENC	EFFICIENCY		95,0	95,7	95,0	96,0	
TEMP. RISE		40-70 °F (22-39°C)					
MAX CFN	MAX CFM		1 370	1 670	1 740	1 985	
COOLING CAPACITY (tons)		2	3,5	4	4	5	
MOTOR H	IP	1/2	1/2	3/4	1	1	

### **MAXIMUM EQUIVALENT STRAIGHT VENT LENGTH**

15 / 30 / 45 / 60 / 75 / 105 / 120 000 BTU						
	Lipitaiza (Dt. (laz)	Vent pipe diameter (in.)				
Altitude (ft)	Unit size (Btu/hr)	2"	3" and 4"			
	15,000	300	N/A			
	30,000	275	N/A			
	45,000	70	100			
0 to 4500 ft	60,000	70	100			
	75,000	70	100			
	105,000	15	100			
	120,000	10	65			

Ν	lod	ula	ting	& 2	stage	mod	els
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To authenticate approved products, please visit: <u>www.energystar.gov</u>

45 / 60 / 75 / 105 / 120 000 BTU							
INPUT	HIGH	45 000	60 000	75 000	105 000	120 000	
	LOW	31 500	42 000	52 500	73 500	84 000	
OUTPUT	HIGH	42 750	57 000	71 475	99 750	115 080	
OUTPUT	LOW	29 925	39 900	50 033	69 825	80 556	
EFFICIENCY		95,0	95,0	95,3	95,0	95,9	
TEMP. RISE		40-70 °F (22-39°C)					
	HIGH	915	1 350	1 570	1 850	1 985	
MAX CFM	HIGH LOW	915 620	1 350 910	1 570 1 320	1 850 1 500	1 985 1 950	
CFM	LOW	620	910	1 320	1 500	1 950	

### SINGLE STAGE FIXED SPEED MOTOR GAS FURNACE (PSC)

45 / 60 / 75 / 105 / 120 000 BTU								
INPUT	45 000	60 000	75 000	105 000	120 000			
OUTPUT	42 750	57 000	71 475	100 065	115 440			
EFFICIENCY	95,0	95,0	95,3	95,3	96,2			
TEMP. RISE	40-70 °F (22-39°C)							
MAX CFM	1 095	1 370	1 670	1 740	1 985			
COOLING CAPACITY (tons)	2	3,5	4	4	5			
MOTOR HP	1/2	1/2	3/4	1	1			

45 / 60 / 75 / 105 / 120 000 BTU						
Altitude (ft)		Vent pipe diameter (in.)				
Annude (II)	Unit size (Btu/hr)	2"	3" and 4"			
	45,000	70	90			
	60,000	45	90			
0 to 4500 ft	75,000	30	90			
	105,000	N/A	70			
	120,000	N/A	40			

1 stage models