

D'Alessandro CSI Compact Pellet Boiler Overview

Fuel: Wood Pellets

Applications: Residential Hydronic Heating

Sizes: 68,000 – 136,000 Btu

Pellet Models (examples, estimates only)

Model	Size (Btu)	Heating Capacity*	Pellet Consumption**	Oil Replaced (estimated)***
Compact 20	68,260	1365-2275 sq ft	3.5-5 tons	420-600 Gals.
Compact 30	102,390	2048-3413 sq ft	5.5-7.5 tons	660-900 Gals.
Compact 40	136,520	2730-4551 sq ft	7-10 tons	840-1200 Gals.

Features:

- Compact design
- Auto ignition
- Feed modulation
- Fire-tube design for easy access and simple cleaning
- Cast iron/steel burner with primary and secondary combustion air system

Options:

- Bulk fuel storage
- Lambda O2 trim
- Induced Draft Fan

Installation Requirements:

- 220VAC Power
- Vent/Stack
- Water hookups
- Concrete pad (suggested)
- Suspended tank or other pressurized H₂O, for fire safety



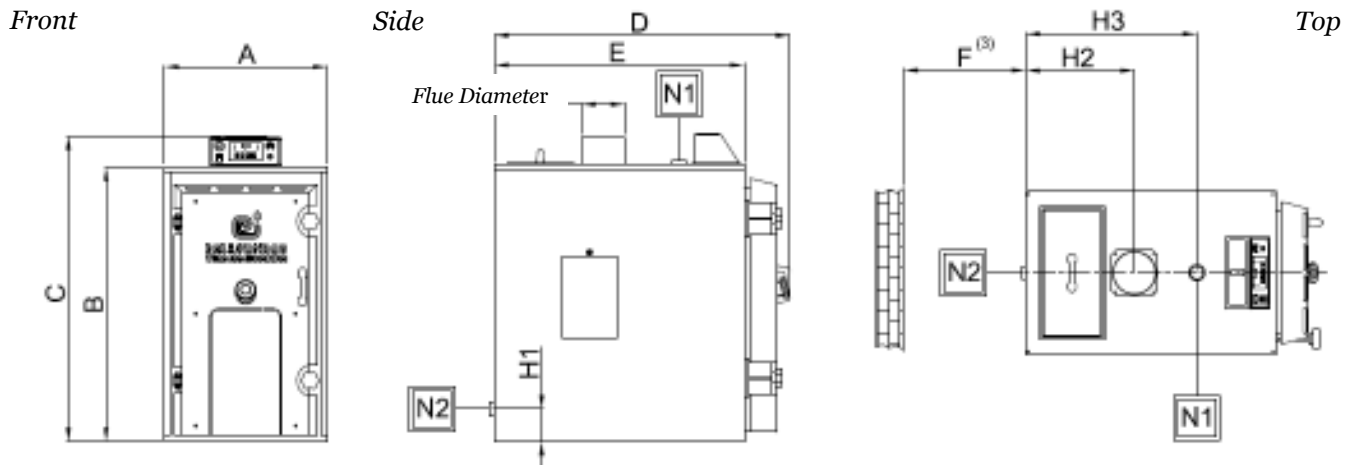
*Based on 50-80 Btu/sq ft, will vary with building use, design, and heat loss.

**Estimated consumption at full output, 850-1200 operating hrs/year for the model/size.

***All figures based on 16,500,000 Btu/ton wood pellets, 138,000 Btu/Gallon heating oil

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Technical Data Sheet - Models 20-40



MODELS		Compact 20		Compact 30		Compact 40	
Firebox Output	(Btu/kW)	81,912	24	119,455	35	160,411	47
Nominal Output	(Btu/kW)	68,260	20	102,390	30	136,520	40
Fuel Consumption*	(Lb/Hr)	7.8		11.4		15.3	
Fuel Used		wood pellets					
Fuel Specifications**		PFI Super Premium, PFI Premium, PFI Standard					
Max Working Pressure	(psi/bar)	40 / 2.8					
Max Working Temperature	(f/C)	194 / 90					
Electrical Consumption	kWh	0.21					
DIMENSIONS							
A	(inches)	23.6		23.6		23.6	
B	(inches)	39.8		39.8		39.8	
C	(inches)	44.3		44.3		44.3	
D	(inches)	41.7		45.7		53.5	
E	(inches)	36.2		40.2		48.0	
F	(inches)	29.5		29.5		29.5	
H1	(inches)	4.7		4.7		4.7	
H2	(inches)	15.7		15.7		15.7	
H3	(inches)	26.8		28.7		32.7	
CONNECTIONS							
N2 (Supply)	(inches)	1.5					
N3 (Return)	(inches)	1.5					
Fuel Hopper Capacity	(Lbs)	92					
Boiler Water Capacity	(Gals.)	21		24		32	
Boiler Weight	(Lbs)	550		616		660	
Loss of head at 10k	(mbar)	7		8		12.5	
Loss of head at 20k	(mbar)	13		20		32	
Flue Diameter	(inches)	6.0					
Draft Required	("w.c.)	0.1					
Average stack temperature	(f/C)	338 / 170					

*Based on firing at 80% firebox output and 8400 Btu/lb fuel heat density

**Details on Pellet Fuels Institute Standards at: www.pelletheat.org