

## D'Alessandro CSI Pellet Boiler Overview

**Fuel:** Wood Pellets

**Applications:** Small and large residential, garage, shops, central heating systems

**Sizes:** 68,000 – 340,000 Btu

### Pellet Models (examples, estimates only)

Model	Size (Btu)	Heating Capacity*	Pellet Consumption**	Oil Replaced (estimated)***
CSI 20	68,260	1365-2275 sq ft	3.5-5 tons	420-600 Gals.
CSI 30	102,390	2048-3413 sq ft	5.5-7.5 tons	660-900 Gals.
CSI 40	136,520	2730-4551 sq ft	7-10 tons	840-1200 Gals.
CSI 60	204,780	4096-6826 sq ft	10.5-15 tons	1260-1800 Gals.
CSI 80	273,040	5460-9101 sq ft	14-20 tons	1680-2400 Gals.
CSI 100	341,300	6826-11377 sq ft	17.5-25 tons	2100-3000 Gals.

### Features:

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

### Options:

- Automatic ash removal
- Bulk fuel storage
- Lambda O2 trim
- Induced Draft Fan (variable speed)

### Installation Requirements:

- 220VAC Power
- Vent/Stack
- Water hookups
- Concrete pad (suggested)
- Suspended tank or other pressurized H<sub>2</sub>O, for fire safety



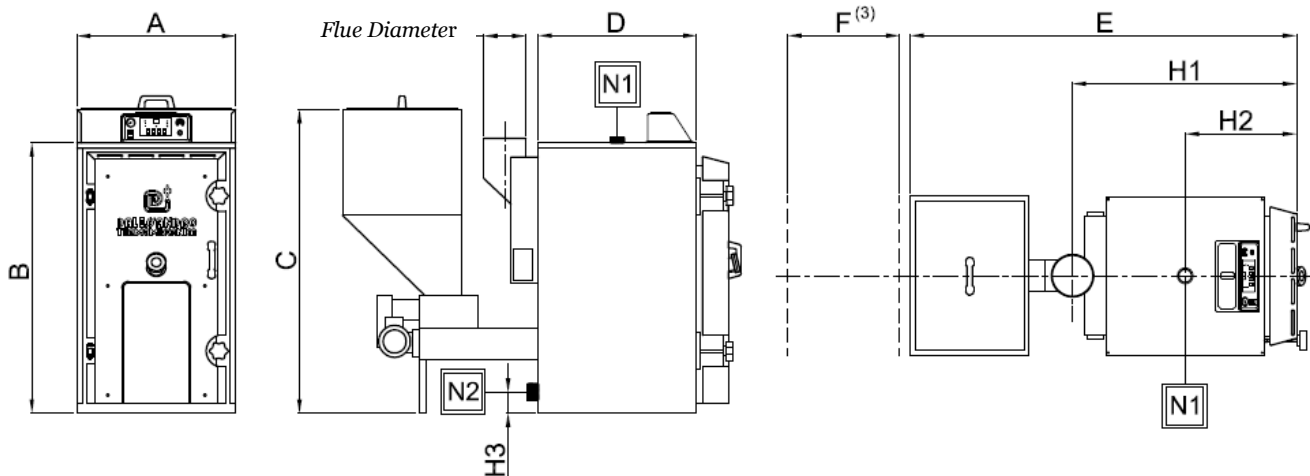
\*Based on 50-80 Btu/sq ft, will vary with building use, design, and heat loss.

\*\*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

## D'Alessandro CSI Boilers

### Technical Data Sheet - Models 20-100



MODELS		CSI 20		CSI 30		CSI 40		CSI 60		CSI 80		CSI 100	
Firebox Output	(Btu/kW)	81,912	24	119,455	35	160,411	47	242,323	71	320,822	94	392,495	115
Nominal Output	(Btu/kW)	68,260	20	102,390	30	136,520	40	204,780	60	273,040	80	341,300	100
Fuel Consumption*	(Lb/Hr)	7.8		11.4		15.3		23.1		30.6		37.4	
Fuel Used		wood pellets											
Fuel Specifications**		<i>PFI Super Premium, PFI Premium, PFI Standard</i>											
Max Working Pressure	(psi/bar)	40 / 2.8											
Max Working Temperature	(f/C)	194 / 90											
<b>DIMENSIONS</b>													
A	(inches)	23.6		23.6		23.6		27.6		27.6		27.6	
B	(inches)	39.8		39.8		39.8		45.7		45.7		45.7	
C	(inches)	45.3		45.3		45.3		53.1		53.1		53.1	
D	(inches)	19.1		25.0		30.9		31.1		40.7		50.6	
E	(inches)	52.8		59.1		65.0		69.7		79.5		89.4	
F	(inches)	17.7		17.7		17.7		23.6		23.6		23.6	
H1	(inches)	28.5		34.6		40.6		41.7		51.6		61.4	
H2	(inches)	14.2		17.3		20.1		17.3		17.3		17.3	
H3	(inches)	4.5		4.5		4.5		4.9		4.9		4.9	
<b>CONNECTIONS</b>													
N1 (Supply)	(inches)	1.5											
N2 (Return)	(inches)	1.5											
Fuel Hopper Capacity	(Lbs)	212						311					
Boiler Water Capacity	(Gals.)	18		24		32		45		58		71	
Boiler Weight	(Lbs)	550		616		660		1012		1100		1320	
Loss of head at 10k	(mbar)	7		8		12.5		16		31		49	
Loss of head at 20k	(mbar)	13		20		32		58		72		87	
Flue Diameter	(inches)	6.0						8.0					
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](http://www.pelletheat.org)