# Wood Gun" Residential

Wood Gun<sup>™</sup> F155CS

Carbon Steel
For Systems with Thermal Storage

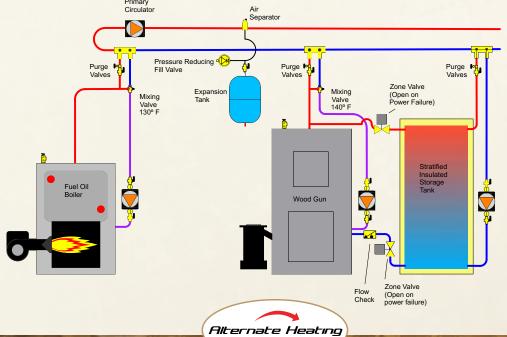
### **Introducing - The E155 CS Wood Boiler**

- · Super efficient wood gasification process
- Utilizes true batch burn technology
- A great complement to solar thermal hot water heating systems!
- Thousands less than its stainless steel sibling and still offers excellent performance on full rounds!
- Flexible firing schedules!
- Great for both high and low demand scenarios!
- For use with thermal storage
- Once per day, or 2 days, firing possible (see chart below)



Next	Firing Cycle, in hours, for E155 CS with 1000 Gallons Thermal Storage (Beginning water temperature of 190° F)								
Heat Load BTU/H ▶		15,000	25,000	35,000	45,000	65,000	100,000	150,000	
r r	110	44.7	27.6	20.3	16.2	11.8	8.4	6.3	
Lowest Water Temp	130	34.0	21.2	15.7	12.6	9.4	6.8	5.2	
	150	23.3	14.8	11.1	9.1	7.2	7.0	5.0	

The diagram below is for illustrative purposes only, and not intended as a complete guide for your specific installation. Utilize a hydronics professional for installation and/or consultation. With appropriate controls, this arrangement could accomplish heating one or more zones with the fuel oil boiler operating as backup and for shoulder season usage. Thermal storage is provided for firing flexibility and/or boiler protection. With elevation differences, thermal storage may also provide a non powered heat dump during power outages. This is the purpose of the zone valve (open on power failure). Mixing valves are included on both boilers to prevent thermal shock.



## Wood Gun<sup>™</sup> E155 Carbon Steel

Specifications:	E155
BTU/Hour Max	155,000
BTU 8 Hour Avg Output*	100,000
Water Capacity	60 gallons
Fire Box Capacity	6.5 ft <sup>3</sup>
Fire Box Length	28"
Standard Door Opening	14" x 14"
Height	58"
Width (cyclone removed)	26"
Depth	44"
Flue Size	6"
Weight (w/o gas/oil)	1,400 lbs
Typical Heating Capacity**	4,000 ft <sup>2</sup>

<sup>\*</sup>Based on loading firebox with seasoned hardwood

## **Popular Accessories**

- Domestic hot water coil
- Low water cutoff safety shutdown if water level drops
- Fuel oil backup package available with either manual or automatic switchover
- Pool/Hot tub heat exchanger
- Solar thermal integration



**Wood Gun<sup>TM</sup>** boilers can be fitted with either fuel oil, natural gas or LP gas back-up (non-UL version only). The Riello fuel oil burner supports an automatic back-up feature. This offers the convenience of matching a renewable fuel source to a backup fuel in a single unit, venting through a single, common chimney. The oil back-up system is rated over 84% efficient, rivalling top of the line oil units.

#### E155 CS (Carbon Steel) and Thermal Storage

The E155 CS requires coupling with thermal storage, or the use of other installation methods that allow the boiler to run continuously through each charge of fuel. There are many forms of thermal storage, but most commonly this requirement is met by storing heat energy in water, or water/glycol mixtures, in open or closed (pressurized) tanks. Closed systems operate at standard hydronic pressures and must therefore be built and rated to safely hold pressure.

BTUs Stored, Based on Gallons of Storage and Temperature Spread									
Gallons of Storage	20° F	40° F	60° F	80° F					
500	80,000	160,000	240,000	320,000					
1000	160,000	320,000	480,000	640,000					
1500	240,000	480,000	720,000	960,000					



Closed, Repurposed Propane Tank With Spray Foam Insulation Applied



Open Storage Using Immersed Copper Coils for Heat Exchange



(717) 987-0099

www.woodgun.com

Alternate Heating Systems manufactures alternative fuel burning heating equipment and sells (primarily direct) throughout the US, Canada, and internationally. Call us today to schedule a tour of our facilities, visit our showroom, and see a working demonstration of our boilers.

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<sup>\*\*</sup>Subject to building design/construction

Specifications subject to change without notice