FB Series

WOOD/COAL BOILER

Application

For homeowners who want to add wood or coal-burning capability to their present hydronic heating system, the Sime FB Series cast-iron boilers are first choice in both quality and value. Designed primarily for connection in tandem with an existing oil- or gas-fired system, the FB boiler enables the homeowner to burn wood or coal for all their heating needs, with the oil or gas boiler serving as automatic backup when the solid fuel fire is out. And with the addition of the optional oil- or gasburner conversion package, the FB boiler can serve as a completely independent multi-fuel system.

FB boilers are compatible with all hydronic (forced hot water) heating systems up to a maximum working of pressure of 45 psi. They are available in seven and eight section models to cover the majority of residential heating requirements.

Construction

FB boilers are sectional cast-iron boilers, with cast-iron doors and cast-iron grates. All FB boilers are constructed in accordance with Section IV of the ASME Boiler and Pressure Vessel Code, and bear the ASME "H" stamp. They are pressure tested to 90 psi, and designed for working pressures of up to 45 psi.

The boiler jacket is finished in a bright red baked enamel, and is fully insulated.

Features

FB boilers are designed to burn wood or coal conveniently and efficiently. The FB's extra large loading door makes it easy to load enough wood or coal for long burn times. Equally important for easy loading are the FB's two different types of intermediate sections: the frontmost section(s) have a reduced heat exchanger profile, so that access to the firebox is unrestricted, and the intermediate sections to the rear have a full complement of heat-exchange surface for maximum efficiency.

Both ashpan and ashpit are extra large to handle the high volumes of ash produced by the coal fire. For the highest efficiency, water-cooled fixed grates are an integral part of each intermediate boiler section. These wet grates extract additional heat from the burning coal,



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and also prevent coal ash from reaching temperatures that could cause the formation of clinkers in the coal fire.

Although unnecessary for burning most types of coal, shaker grates with an external shaker handle are available as an extra cost option.

Combustion

The wood or coal fire is controlled by an automatic, non-electric draft regulator. This regulator will continue to operate during power failures, and, in the majority of installations, will enable the boiler to continue to heat the home until power is restored.

Recommended Fuels

The FB boilers may be fired with either anthracite chestnut-sized coal or well-seasoned hardwood (moisture content of 20% or less). We do not recommend the use of bituminous coal or unseasoned wood. Well-seasoned softwood will

burn well in the FB boilers, but burn times will be considerably lower than those for hardwood.

When equipped with the burner conversion package, the FB can be fired with #2 fuel oil or gas.

Cleaning

FB boilers are supplied with a special brush for cleaning the firebox and heat-exchange passages. All heat exchange surfaces are easily accessible through the loading door for cleaning. The smoke box at the rear of the boiler has a removable cleanout plate underneath, and the smoke box itself removes easily if required.

Packaging

The boiler body is supplied on a pallet and comes completely assembled. The boiler body is equipped with eight lifting rings for easy handling. The jacket and controls are boxed separately.

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Standard Equipment

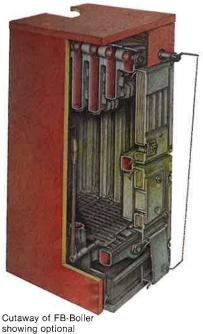
- Boiler and jacket
- Ash Pan
- Flue Brush
- Poker
- Automatic draft regulator
- · Honeywell overheat control
- Theraltimeter
- Watts ASME boiler pressure relief valve

Optional Equipment

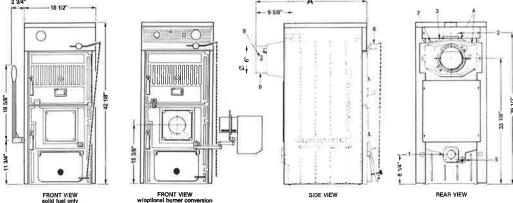
- Shaker grates w/external handle
- Burner Conversion Package
- Oil or gas burner
- Automix continuous circulation system

Warranty

All FB Series boilers are covered by a 20 year limited warranty, a copy of which is available from your dealer, distributor, or from Stoveworks.



SPECIFICATIONS		FB7	FB8
Maximum Gross Output-Wood Burn Time	Btu/hr hr	108,000 4 1/2	124,000 4 1/2
Minimum Gross Output-Wood Burn Time	Btu/hr hr	36,000 10	42,000 10
Maximum Gross Output-Coal Burn Time	Btu/hr hr	120,000 8	136,000 8
Minimum Gross Output-Coal Burn Time	Btu/hr hr	36,000 24 +	42,000 24 +
Maximum Gross Output-Oil or Gas	Btu/hr	140,000	170,000
Heating Surface	sq ft	34	39
Boiler w/Jacket Width Depth ("A'') Height	in in in	18 1/2 37 42 1/8	18 1/2 41 42 1/8
Firebox Length Width Height Volume	in in in cu ft	23 12 1/4 19 3.2	27 12 1/4 19 3.8
Height to Center of Flue	in	33	33
Tapping(s) for 1 Return 2 Supply 3 Aquastat 4 Remote Tridicator 5 Drain & Fill 6 Flue Outlet 7 Pressure Relief Valve 8 Draft Regulator 9 Flue Damper	in	1 1/2 1 1/2 1/2 1/2 1/2 6 3/4 3/4	1 1/2 1 1/2 1/2 1/2 1/2 6 3/4 3/4
Water Volume	gal	10.3	11.3
Weight of Boiler w/Jacket	Ibs	694	771
Pressure Test	psi	90	90
Maximum Working Pressureq	psi	45	45
Minimum Flue Size	in	8 x 8	8 x 12
Minimum Chimney Height	ft	20	20
Minimum Draft Required	in/WG	.07	.07
Loading Door Size	in	12 x 12	12 x 12



Distributed by:

shaker grates.

STOVEWORKS, #1 BRANCH ST., MEDFORD, NJ 08055