



The Brute FT[®]

Wall Hung Combination Boiler & Water Heater



Exceptional Home Heating and Hot Water
in one Elegant and Efficient Package



Built to be the Best[™]

Efficient Home Heating &



The Brute FT® Wall Hung is a combination (Combi) heating and domestic hot water or heating only wall-mounted boiler. It easily and efficiently meets the space heating and hot water needs of today's modern homes. Powered by an advanced fire tube heat exchanger, the Brute FT® Wall Hung utilizes the latest in heating tube technology and is designed to deliver quick heating response, exceptional efficiency, and years of reliable service.

Highlights

- **95% Efficient (AFUE)**
- **Up to 10:1 Modulation**
- **Environmentally Friendly**
- **Low NOx Emissions**
- **Integrated Indirect Tank for Superior DHW Performance**
- **Vent up to 100 feet in PVC, CPVC, & Polypropylene**
- **Natural Gas & Propane Models**
- **4.8 GPM at a 77°F rise**

95% Efficient



The Brute FT® Wall Hung performs at an ultra-high efficiency of up to 95% AFUE (Annual Fuel Utilization Efficiency) and is ENERGY STAR® rated, making it one of the best in the industry.

Modulating Technology

Modulation allows Brute FT® Wall Hung models to automatically adjust how much fuel is used to match a building's demand for heat, from 20% to 100% of full power. Brute FT® Wall Hung models will operate at 100% only on the coldest days of the year when demand is at its highest, and it will modulate down on days requiring less heat. The result can save up to 20% on heating utility bills compared to standard "on-off" boilers.

Easier on the Environment

The Brute FT® Wall Hung models also feature ultra low NOx emissions. NOx, Nitrogen Oxide, is a group of gases that form when fuel is burned at high temperatures, and it can react with other volatile compounds (VOC) to form air pollution known as smog. Brute FT® models produce very low levels of nitrogen oxides, less than 20 ppm, to provide efficient heat while minimizing the impact on the environment.



Hot Water in a Single Package

Automatic Air Elimination Valve

Modulating Gas Valve

Easily convertible from natural gas to propane

Integrated Domestic Hot Water Indirect Tank

(Combi Models Only)

Domestic hot water available at all times for quick response

- Reliable mini-indirect tank design
- Premium grade stainless steel
- Plentiful domestic hot water flow rates

Integrated Control Board

- Outdoor Reset
- Dual stage anti-freezing mechanism
- Built-in gas leak detection (alarm will activate and shuts off unit if a leak is detected)

High Performance Blower

Variable speed blower regulates the output to meet your heating and domestic hot water demands quickly and efficiently

Clean Burning Burner

Pre-mix mesh burner uses fuel efficiently and produces ultra low NOx and CO emissions

Advanced Fire Tube Heat Exchanger

Stainless steel sleeved, aluminum core heating tubes offer superior performance and 95% efficiency at low pressure drops

Condensate Trap

Integrated Boiler Pump

Advanced Fire Tube Heat Transfer Technology

The Brute FT® Wall Hung's condensing heat exchanger utilizes the latest in heating tube technology to deliver quick response, exceptional efficiency, and years of reliable service.



Stainless steel sleeved, aluminum core heating tubes

- Constructed with an inner finned aluminum core and an outer corrosion-resistant stainless steel sleeve
- Heats 10 times faster than stainless steel alone and maximizes efficiency and heating response

Channeled Tube Design

- Hot flue gas is evenly divided along the inside of the 10 channel fire tubes while causing turbulent flow
- Releases stored heat trapped inside the hot flue gases to better transfer heat from the boiler to the home
- Reduces stress points in the heat exchanger for longer life

Larger Heating Surface

- Heating surface is up to five times larger than other condensing boilers
- Results in a smaller and lighter weight unit

Advanced Integrated Controls

Brute FT® Wall Hung models are equipped with an advanced, easy-to-use, integrated control system.

- Easy-to-use dial and push button input system with a large back-lit display
- Clearly displayed functions for quick set-up and diagnostics
- Quick access buttons for temperature control and boiler status functions
- Outdoor reset feature for fuel savings



Specs at a Glance

Brute FT® Wall Hung

Specification	Units / Condition	HEATING ONLY		COMBI	
		BMFTHW100	BMFTHW140	BMFTCW140	BMFTCW199
Input, Max Fire	BTU/Hr. (kW)	100,000 (29)	140,000 (41)	140,000 (41)	199,000 (58)
Output, Max Fire	BTU/Hr. (kW)	93,000 (27)	130,200 (38)	133,000 (39)	189,050 (55)
Turndown	—	5:1	5:1	5:1	10:1
Efficiency	AFUE	95%			
Fuel	—	Natural Gas or Propane			
Gas Supply Pressure	in WC	3.5 - 14			
DHW Flow Rate	35° Temp Rise - GPM (l/m)	—	—	7.1 (27)	9.8 (37)
	45° Temp Rise - GPM (l/m)	—	—	5.5 (21)	7.7 (29)
	77° Temp Rise - GPM (l/m)	—	—	3.2 (12)	4.8 (18)
Minimum Flow Rate	GPM (l/m)	—	—	0.5 (1.9)	0.5 (1.9)
Air Intake Collar	—	3"			
Exhaust Outlet Collar	—	3"			
Space Heating 'CH' Supply (NPT)	—	1½"		1"	
Space Heating 'CH' Return (NPT)	—	1½"		1"	
DHW Outlet (NPT)	—	—	—	¾"	
DHW Inlet (NPT)	—	—	—	¾"	
Gas Inlet Connection (NPT)	—	¾"		½"	¾"
Condensate Line (NPT)	—	½"			
Pressure Relief Settings	psi (kPA)	30 (207)			
Vent Diameter / Eq Length	inches/Ft.	2 / 50*			
		3 / 100			
Vent Material	—	PVC, CPVC, Polypropylene, SS AL29-4C			
Power Supply	Volts / Hertz	120 / 60			
Shipping Weight	lbs. (kg)	98 (44)	102 (46)	111 (50)	130 (59)
Dimensions (HxWxD)	inches	29 x 17.3 x 15		29 x 17.25 x 15.5	32 x 19.6 x 16.3
Warranty	—	Limited 10-Year Warranty — 5-Year Parts Warranty			



*Propane Models are limited to 25 equivalent feet of 2" diameter vent.

† ¾" coupling provided.

Dimensions are nominal and are shown in inches.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.



BFTWH-0917

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BRADFORD WHITE®
WATER HEATERS