



CURMITTAL CHEET

Condensing High-Efficiency Gas Boiler 1,000 – 2,000 MBH

JOB NAME	
LOCATION	
ARCH. / ENGR	
MECH. CONTRACTOR	
MODEL NO	GAS TYPE
BTU/HR INPUT	BTU/HR OUTPUT
NOTES	

Standard Features:

- Up to 96.1% Combustion Efficiency
- Low NOx < 20 ppm
- Modulating Burner with 6:1 Turndown Ratio
- Sectional Aluminum Block
- Sealed Combustion
- 30 PSI ASME Relief Valve Standard
- Stainless Steel Burner with Woven Steel Fiber Mesh
- Direct Spark Ignition
- Variable Speed Blower Assembly
- Venturi Mixing System
- Negative Pressure Regulated Gas Valve
- 50 VA Transformer
- Temperature & Pressure Gauge
- Outlet Water Temp. Sensor
- Inlet Water Temp. Sensor
- Flue Gas Temp. Sensor
- Outdoor Temp. Sensor
- System Water Temp. Sensor
- 10 YR Heat Exchanger Warranty
- 2 YR Parts Warranty
- Extended Warranties Available

CSD-1 Compliant:

- Manual Reset LWCO
- Manual Reset High & Low Gas Pressure Switches
- Manual Reset High Limit
- UL 353 Certified Control

Complete Jacket Assembly with:

- Fully Removable Jacket
- On/Off Power Switch
- Manual Reset Push Button
- Condensate Tray with Drain Tee Assembly

Optional Equipment/Venting Options:

- Pressure Relief Valve 50 PSI
- Pressure Relief Valve 80 PSI
- Pressure Relief Valve 100 PSI
- Condensate Neutralizer Kit
- UPC BACnet Converter Kit
- Outdoor Reset Kit
- Direct Exhaust Sidewall
- Direct Exhaust Vertical
- Direct Vent Sidewall
- Direct Vent Vertical

Control Module:

- 7" Color Touch Screen LCD
- Labeled Terminal Blocks for Field Terminations

Standard Equipment

- Ignition Control
- High Limit & Modulating Temp.
 Control
- Ability to Control any Combination of Three Circulators
- Alarm Control Functionality
- Preset Operating Parameters Include Typical Heating Systems
- Two Adjustable Boiler Priorities
- Multiple Boiler Functionality with Lead/Lag Capability
- Lead Boiler Rotation
- Low Water Protection
- Manual Reset
- Outdoor Reset
- Warm Weather Shutdown
- Freeze Protection





5. Air Connection

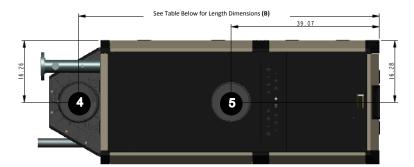
7 Control Display

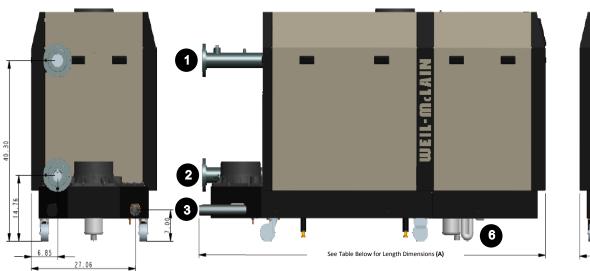
6. Condensate Trap

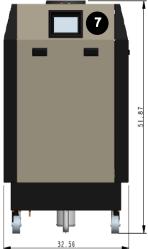
Specifications

- 1. Supply Connection
- 2. Return Connection
- 3. Gas Connection
- 4. Vent Connection

Note: See Table Below for Vent Connections and Piping Sizes.







	AHRI Ratings						Data			Dimensions						
										Minimum				(A)	(B)	Boiler
Model	Input	Input	Gross		Combustion	Thermal			Max	Gas		Gas	Shipping	Full	Front to	Water
	Maximum	Minimum	Output	Net AHRI	Efficiency	Efficiency	Vent	Vent/Air	Vent/Air	Pressure	Supply / Return	Connection	Weight	Length	Vent Length	Content
	(MBH)	(MBH)	(MBH)	(MBH)	(%)	(%)	Material	Size	Length	(W.C.)	Connections	Size	(lbs)	(In)	(In)	(Gallons)
SF1000	1000	167	958	833	96.1	95.8	PVC, CPVC, PP, AL29-4C	6" or 8"	100' or 150 '	3"	3" ASME Class 150	2" NPT Male	1,130	77.93	67.09	13
SF1500	1500	250	1,437	1,250	95.9	95.8	PVC, CPVC, PP, AL29-4C	8"	100'	3"	3" ASME Class 150	2" NPT Male	1,310	77.93	67.09	19
SF2000	2000	333	1,906	1,657	95.8	95.3	PVC, CPVC, PP, AL29-4C	8"	100'	3"	3" ASME Class 150	2" NPT Male	1,510	90.10	79.32	25

In the interest of continual improvements in product and performance, Weil-McLain reserves the right to change specification without notice. For reference use only. See product manual for detailed information.



SlimFit[™] HIGH-EFFICIENCY CONDENSING BOILER

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Water | Natural/Propane Gas | 550-2,000 MBH | 5 Sizes Direct Exhaust/Direct Vent | Efficiency Above 94%

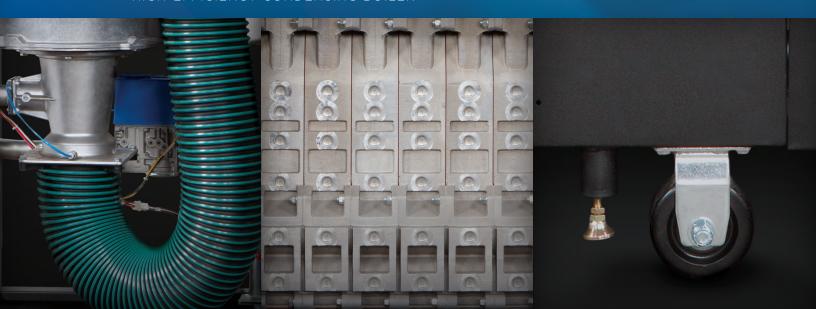


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THE NUM

Installs fast. Built to last.







EASY TO INSTALL

The SlimFit[™] high-efficiency condensing boilers are designed for fast, easy installation in new and existing commercial and institutional settings, including religious, educational and government buildings. The units assemble easily on-site—lowering installation costs and ensuring timely project completion.

Multiple Direct Exhaust and Vent Options

Venting can be either direct exhaust or direct vent. Acceptable materials include PVC, CPVC, ABS¹, PP² and SS (AL29-4C). Maximum vent lengths for fresh air intake and exhaust are up to 100 ft. each.

Durable Aluminum Heat Exchanger

Cast aluminum sectional block provides 12 times better heat transfer than stainless steel.

Fully Modulating Burner

High-grade single stainless steel burner covered with fiber mesh fires along the entire length of the combustion area. Smart boiler controls provide full combustion modulation with 5:1 turndown ratio (SF550, SF750) and 6:1 turndown ratio (SF1000, SF1500, SF2000)

Variable Speed Motor

Precise mix of fuel and air is automatically controlled by adjusting fan speed for optimal boiler performance within its entire firing range. The integrated boiler controls constantly match combustion output to building heating needs.

Modulating Gas Valve

Safe and reliable operation is provided by a negative pressure regulating gas valve even when supply gas pressure is as low as 3 inches of water column.

Composite Base

Non-metallic heat exchanger base protects against corrosion due to aggressive condensate resulting in long-lasting service backed by industry leading ten year non-prorated heat exchanger warranty. All other components come with two year warranty as standard.

Plug and Play Operation

Each unit is factory wired, pre-programmed, test fired and comes with factory provided test certificate.

CSD-1 is Standard

- High & low gas pressure switches (with manual reset and indicator light)
- Manual reset low water cut-off
- Adjustable manual reset high limit
- UL-353 certified limit controls
- Factory test report shipped with boiler

550 - 750 MBH



1,000 - 2,000 MBH



¹ ABS approved for SF550 and SF750 ² PP approved for SF1000, SF1500 and SF2000 only



Wheels for Easy Positioning

Caster wheels make positioning easy and lock to keep the unit in place. They can also be removed to secure the mounting points for seismic applications. The legs can be individually adjusted to level the SlimFit.

Pre-configured Controls

Each unit comes with factory pre-configured controls ready for express set up in the field. The advanced control system easily integrates with existing systems and displays information on a 7" color touch screen LCD. Color coding allows for at a glance unit status (pewter normal operation, grey - lost communications, red - lockout condition, yellow - hold). Screen shots for troubleshooting, trending and history of alarms can be downloaded to a USB drive for future analysis. Lead/lag capability with up to 8 boiler string, modulation for improved performance (improved comfort level), lead boiler rotation for equal run hours (longer equipment life and overall equipment efficiency), warm weather shutdown, frost protection, TOD/Night setback, 4-20mA set point adjustable and BAS communication

capability are just few of many controls features that come as standard.

Versatile Orientation

The SlimFit makes it easy to connect multiple units together in any space. Right-hand and left-hand orientations allow for side-by-side installations, making all clean-out plates and piping easily accessible. The control display can be mounted in three separate locations to accommodate any installation.

Common Venting

The SlimFit[™] commercial boilers sizes 1,000 MBH, 1,500 MBH and 2,000 MBH have been approved for Category II under the following conditions:

- Boiler models SF1000, SF1500, SF2000
- Maximum number of boilers allowed to be connected to a common duct is 8 (eight)
- All boilers in the common vent system must be the same size
- Vertical vent only
- Direct exhaust (combustion air from the boiler room) only should be considered

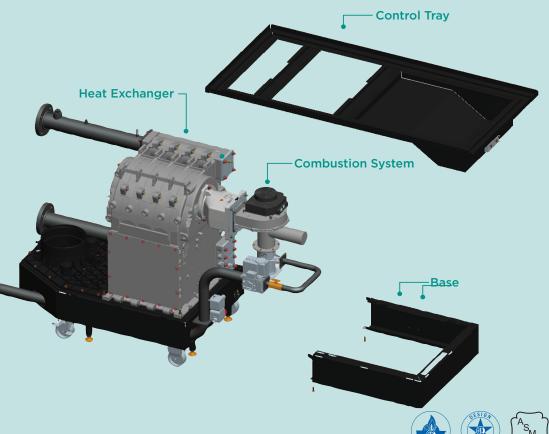




LEFT SETUP

RIGHT SETUP

SlimFit 1000-2000 MBH



Small Footprint

The unit fits through typical doorways and can be quickly disassembled for installation in extremely tight access areas. Flexible configuration allows for side-by-side installation, further minimizing the overall project footprint.

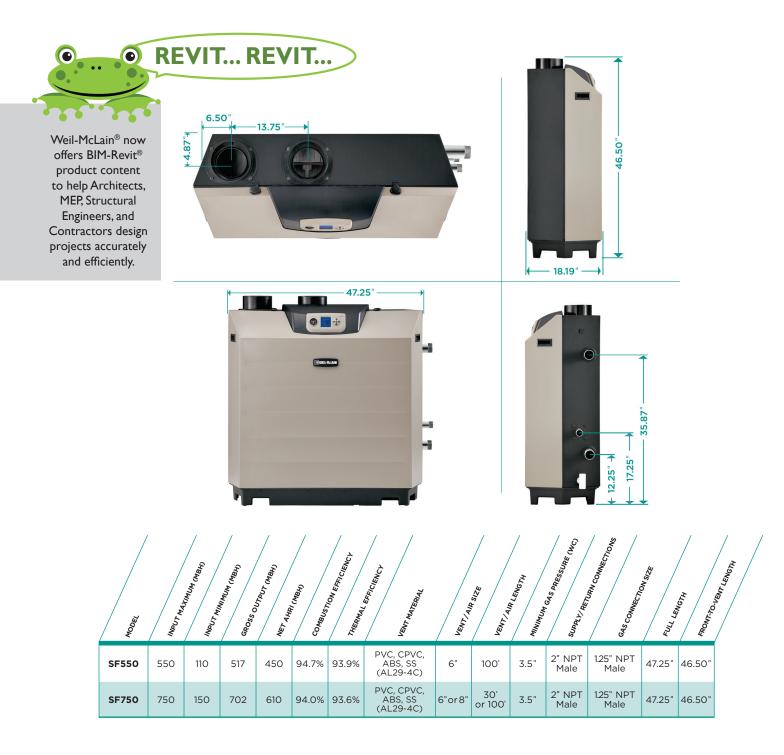
Boiler can be disassembled into (4) separate sections.

- Base
- Combustion System
- Control Tray
- Heat Exchanger





550 - 750 MBH SPECIFICATIONS





SMART CONTROLS

- Intuitive, color coded display
- Simple set up (predetermined settings) or fully customizable functions
- Multiple boilers and up to 4 circulators
- Alarm functionality
- High limit and modulating temperature control
- Outdoor reset and warm weather shutdown
- Boiler schedule and contractor information
- Low water protection
- Manual reset
- Ignition control
- Adjustable priorities

1,000 - 2,000 MBH SPECIFICATIONS





ADVANCED CONTROL SYSTEM FEATURES

- 7" color LCD touch screen display
- Multiple boiler functionality with lead/lag capability and lead boiler rotation
- Ability to control any combination of three circulators
- Fully costomizable outdoor reset curve

- Time of day/night setback
- Warm weather shutdown
- Freeze protection
- Modbus[®] standard, BACnet optional
- High limit temperature with manual reset



EASY TO OWN

The SlimFit boilers also deliver long-lasting benefits. Facility owners and managers depend on our dedicated customer service, reliable product performance and exceptional operating efficiency for decades of value.

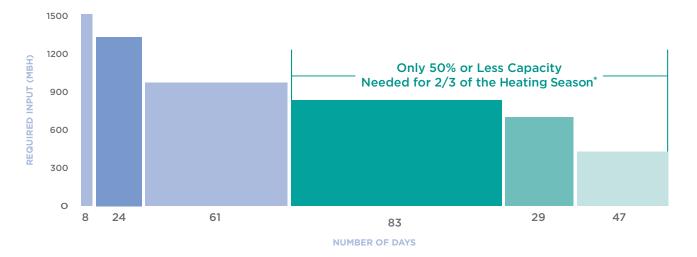
DEDICATED CUSTOMER SERVICE

Local, trained heating professionals are available for help with installation and maintenance. Our technical service department is also available for questions and assistance with troubleshooting.

RELIABLE PRODUCT PERFORMANCE

Each factory-configured and -tested unit arrives ready for a lifetime of smooth operation.

- Exclusive, durable, non-metallic base material prevents corrosion over time
- Industry-leading non-prorated warranty covers heat exchanger (10 years) and parts (two years)
- Low NOx < 20 ppm
- Thousands of successful installations since 2009



EXCEPTIONAL OPERATING EFFICIENCY

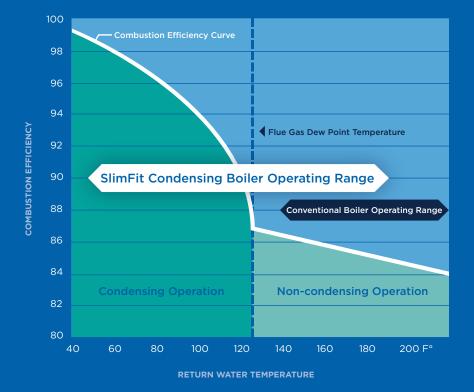
The SlimFit boiler runs at optimal efficiency — lowering operating costs, contributing to LEED points and meeting future requirements for green building operation. With maximum combustion efficiency of 96.1% and thermal efficiency of 95.8%, the SlimFit satisfies the same needs that could be provided by a larger system — but without the inefficiency. Its advanced modulating controls allow the SlimFit to effectively meet annual demand through its lead/lag functionality and lead boiler rotation.

* Based on an average building in a 0°F design area.



The SlimFit is the fastest, easiest solution for limited-space retrofits.

- Features an exceptionally small footprint
- Can be installed back-to-back
- Narrow design allows unit to maneuver into existing spaces
- Fully factory-assembled and -tested for quick, on-site installation.
- Fully integrates with older, non-condensing boilers
- Increases efficiency by creating a hybrid system
- Can be split into two smaller sections for difficult to access areas⁽¹⁾



The SlimFit operates at optimal efficiency during low-load periods, and non-condensing boilers operate at optimal efficiency during highload periods. When used together in a hybrid boiler system, the two types of boilers maximize overall energy savings.

(1) SlimFit 1000-2000 MBH

Weil-McLain® is a leading North American designer and manufacturer of hydronic comfort heating systems for residential, commercial and institutional buildings since 1881. Weil-McLain has manufacturing facilities in Michigan City, Indiana and Eden, North Carolina, along with regional sales offices throughout the United States and administrative office in Burr Ridge, Illinois. Building on a reputation of quality and innovation, Weil-McLain is committed to creating Simplified Solutions for our Complex World™.

Architects, engineers, contractors, facility managers and homeowners alike rely on Weil-McLain for their comfort heating needs. Installed in homes, offices, schools, restaurants, hotels and other facilities throughout North America, the Weil-McLain brand is among the most respected and often used in the building industry.

Weil-McLain hydronic boilers and indirect-fired water heaters integrate the latest in advanced controls and materials including cast iron, stainless steel and aluminum heat exchanger technologies. The reliability and energy efficiency of their products has helped to make Weil-McLain industry leaders. Products are engineered with aesthetics, functionality, safety and structural tolerance in mind. By combining their expertise with the responsiveness of their support operations, they provide their customers with added value and peace of mind.

Contact your local Weil-McLain sales office for more information.

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