# Peerless® FLEX-HEAT®



PeerlessBoilers.com

## **Hydronic Comfort System**

The Peerless® FLEX-HEAT® Hydronic Comfort System combines Series GM™ boilers in single, multiple or modular arrangements with the Peerless® Partner® indirect-fired water heater, modern system controls, circulators and a design application guide to provide efficient, economical space and domestic hot water heating.



### **FLEX-HEAT®** System

Modular systems have higher overall boiler plant efficiency than typical single large boiler installations.

- Higher part load efficiency Atmospheric gas boilers operate most efficiently at full gas input rate. The FLEX-HEAT® system energizes each boiler at its full gas input and efficiency and controls the system by modulating the number of energized boilers.
- Lower stand-by losses Since the FLEX-HEAT® system energizes only the number of boilers needed to meet the heat demand, less heat is dissipated to the boiler room and less heat escapes up the chimney. FLEX-HEAT® boiler circulators further reduce stand-by losses by preventing heated water from flowing through idle boilers.

Modular systems are redundant. If one boiler shuts down, the remaining boilers will provide heat until the problem boiler can be corrected. If a single boiler installation shuts down, it's a no heat situation. Modular systems can also be easier to maintain. The Series  $GM^{\mathbb{M}}$  boilers are pre-packaged and fit through a standard doorway, requiring less time to replace than changing a section of a single, large boiler.

All commercial cast iron boilers include a full one-year warranty. A limited, ten-year warranty is provided for the cast iron sections of all commercial boilers. Visit PeerlessBoilers.com for complete details.

## **System Configurations**



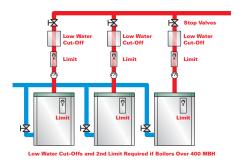
#### Modular vs. Multiple

Modular boiler systems require fewer limit controls and low water cut-offs than multiple boiler systems. On modular boiler systems, only one limit control on each boiler and one system limit control and low water cut-off are required. On multiple boiler systems, two limit controls are required on each individual boiler and, if the boilers are larger than 400 mbh input, a low water cut-off is also required on each boiler.

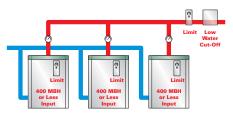
To qualify as a modular boiler system, ASME1 adds the following requirements versus a multiple boiler system:

- 1. Modules can be no larger than 400 mbh gas input (all Series GM<sup>™</sup> boilers meet this requirement.)
- 2. No isolation or stop valves can be placed between modules and the main headers.

If ASME CSD-1 applies in your area, the low water cut-off(s) and additional limit control(s) must be manual reset.



**MULTIPLE BOILER SYSTEM** Each Unit Treated as a Separate Boiler



**MODULAR BOILER SYSTEM** Treated as if a Single Boiler

Ту	pical F	LEX-F	IEAT®	Modu	ılar Bo	oiler Syst	tems
	Module		Gross	Gross	Net		
System	Quantity	Input	Output	Output	Output	Combustion	Thermal
Number	& Size	(MBH)	(MBH)	(H.P.)	(MBH)	Efficiency	Efficiency
FH-456	2-5	456	366	10.9	318	82.5%	80.3%
FH-513	1-5, 1-6	513	412	12.3	358	82.5%	80.3%
FH-570	2-6	570	458	13.7	398	82.5%	80.3%
FH-627	1-6, 1-7	627	504	15.1	438	82.5%	80.3%
FH-684	2-7	684	550	16.4	478	82.5%	80.3%
FH-741	1-7, 1-8	741	517	15.4	517	82.5%	80.3%
FH-798	2-8	798	556	16.6	556	82.5%	80.3%
FH-855	3-6	855	687	20.5	597	82.5%	80.3%
FH-912	2-6, 1-7	912	733	21.9	637	82.5%	80.3%
FH-969	1-6, 1-7	969	778	23.2	677	82.5%	80.3%
FH-1026	3-7	1026	824	24.6	716	82.5%	80.3%
FH-1140	1-7, 2-8	1140	915	27.3	796	82.5%	80.3%
FH-1197	3-8	1197	961	28.7	836	82.5%	80.3%
FH-1254	2-6, 2-7	1254	1007	30.1	876	82.5%	80.3%
FH-1368	4-7	1368	1099	32.8	955	82.5%	80.3%
FH-1482	2-7, 2-8	1482	1190	35.6	1035	82.5%	80.3%
FH-1539	1-7, 3-8	1539	1236	36.9	1075	82.5%	80.3%
FH-1596	4-8	1596	1282	38.3	1114	82.5%	80.3%
FH-1710	5-7	1710	1373	41.0	1194	82.5%	80.3%
FH-1824	3-7, 2-8	1824	1465	43.8	1274	82.5%	80.3%
FH-1881	2-7, 3-8	1881	1510	45.1	1313	82.5%	80.3%
FH-1938	1-7, 4-8	1938	1556	46.5	1353	82.5%	80.3%
FH-1995	5-8	1995	1602	47.9	1393	82.5%	80.3%
FH-2052	6-7	2052	1648	49.2	1433	82.5%	80.3%
FH-2166	4-7, 2-8	2166	1739	52.0	1512	82.5%	80.3%
FH-2280	2-7, 4-8	2280	1831	54.7	1592	82.5%	80.3%
FH-2394	6-8	2394	1922	57.4	1672	82.5%	80.3%
FH-2508	5-7, 2-8	2508	2014	60.2	1751	82.5%	80.3%
FH-2622	3-7, 4-8	2622	2105	62.9	1831	82.5%	80.3%
FH-2736	1-7, 6-8	2736	2197	65.6	1910	82.5%	80.3%
FH-2793	7-8	2793	2243	67.0	1950	82.5%	80.3%
FH-2850	6-7, 2-8	2850	2289	68.4	1990	82.5%	80.3%
FH-2964	4-7, 4-8	2964	2380	71.1	2070	82.5%	80.3%
FH-3021	3-7, 5-8	3021	2426	72.5	2109	82.5%	80.3%
FH-3078	2-7, 6-8	3078	2472	73.8	2149	82.5%	80.3%
FH-3192	8-8	3192	2563	76.6	2229	82.5%	80.3%
FH-3306	5-7, 4-8	3306	2655	79.3	2308	82.5%	80.3%
FH-3363	4-7, 5-8	3363	2700	80.7	2348	82.5%	80.3%
FH-3420	3-7, 6-8	3420	2746	82.0	2388	82.5%	80.3%
FH-3534	1-7, 8-8	3534	2838	84.8	2468	82.5%	80.3%
FH-3591	9-8	3591	2884	86.2	2507	82.5%	80.3%
FH-3648	6-7, 4-8	3648	2929	87.5	2547	82.5%	80.3%
FH-3762	4-7, 6-8	3762	3021	90.3	2627	82.5%	80.3%
FH-3876	2-7, 8-8	3876	3112	93.0	2706	82.5%	80.3%



3204

95.7

2786



80.3%

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<sup>&</sup>lt;sup>1</sup> ANSI/ASME Boiler and Pressure Code, Section IV: Rules for Construction of Heating Boilers.



82.5%

FH-3990

10-8

3990