RAYTHERM™

COMMERCIAL BOILERS AND WATER HEATERS

RAYPAK 50 YEARS RELIABILITY

THE FIRST AND STILL THE BEST

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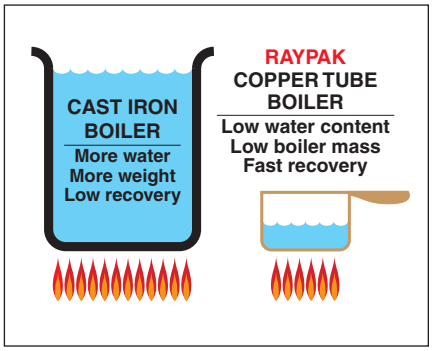
In 1948, Raypak introduced the first copper-fin tube designs for hydronic heating and hot water supply. Since then, Raypak boilers and water heaters have consistently led the industry in engineering innovations and quality improvements. Nearly 60 years and over one million installed units later, Raypak is still the undisputed leader in quality and reliability. That's why more heating professionals rely on Raypak than any other manufacturer.

Reliability

Design simplicity, quality materials and meticulous craftsmanship have earned Raypak a rock-solid reputation for reliability. While others busily design cost out of their products, Raypak has continued to engineer dependability in. Features like thermal shockproof heat exchangers with floating return headers are standard. Burners are made from a proprietary titanium-stainless steel alloy formulated to resist corrosion and warping. All metal surfaces are rust protected. Every detail is designed to extend product life. Every detail improves dependability, because every detail matters.



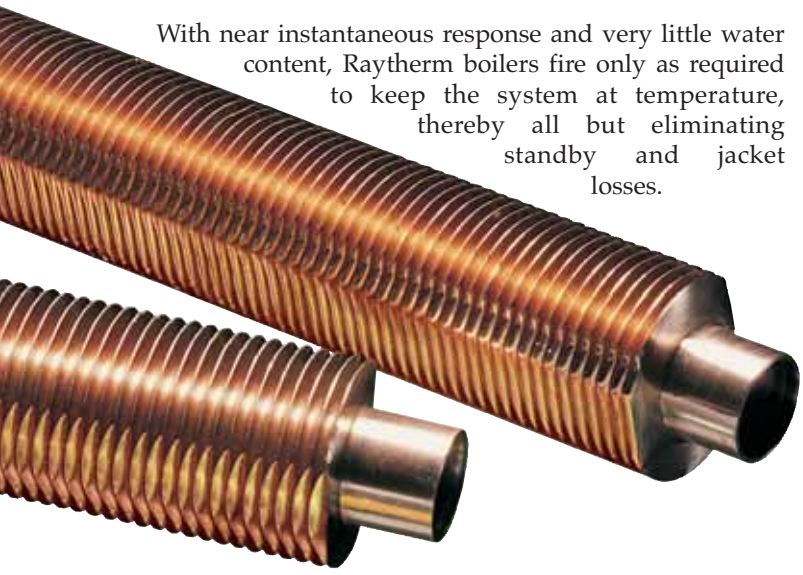
Compact Design

Raypak's low boiler mass design offers a significant improvement over antiquated cast iron, steel tube, and tank type heaters. With a smaller footprint and substantial reduction in weight, Raypak boilers can be installed just about anywhere, including rooftops and tight quarters.

Lower Operating Costs

Raytherm atmospheric boilers are the most fuel-efficient non-power burner units available. Moreover, their high recovery, low standby-loss design can cut fuel costs substantially - as much as 50% compared to low-recovery cast iron, steel tube and fire tube boilers.

With near instantaneous response and very little water content, Raytherm boilers fire only as required to keep the system at temperature, thereby all but eliminating standby and jacket losses.



Raypak Corporate Headquaters Oxnard, California

Burner and Firing Options

Raypak offers the widest variety of burner and firing options in the gas appliance industry, allowing engineers to specify the correct unit for each heating or domestic water application.

A key factor in reducing energy costs with heating equipment is the ability to precisely meet the requirements of the heating load. Raypak pioneered and perfected both mechanical and motorized modulating technology with the Raytherm atmospheric design. These designs ensure that fuel input is evenly and accurately throttled to as low as 20% of full fire. No other atmospheric design can match this capability.

Trouble-Free Operation

Raytherms are engineered to perform quietly and reliably year after year and under operating conditions where other boilers wouldn't last twelve months. High velocity flow through the heat exchanger creates a scouring action that keeps even the worst hard water conditions from fouling the boiler with scale. Heavy-duty control enclosures and wind, rain and debris-proof boiler jacket keeps out Mother Nature. Even the exterior coating, an electro-statically applied baked-on UV inhibited Polytuf powdercoat finish, was specifically selected to provide years of durability.

Serviceability

When service is required, Raypak makes it effortless. Controls are located at the front for easy access. Burners and heat exchangers are simple to remove for inspection, and are designed for quick, straightforward repair. Replacement parts, if needed, are readily available from Raypak and through a worldwide network of distributor representatives and parts houses.

Experienced Technical Support

Raypak's technical support team is the best in the business. Raypak's applications engineers and service technicians have decades of experience and can help with every aspect of the job from sizing to post-installation technical support. That's why Raypak is known as "the Hot Water Management Experts."

FEATURES

Rugged All-Bronze Headers
resist corrosion, and are easily removed for inspection or service. Cast iron headers with porcelainized waterways are available.

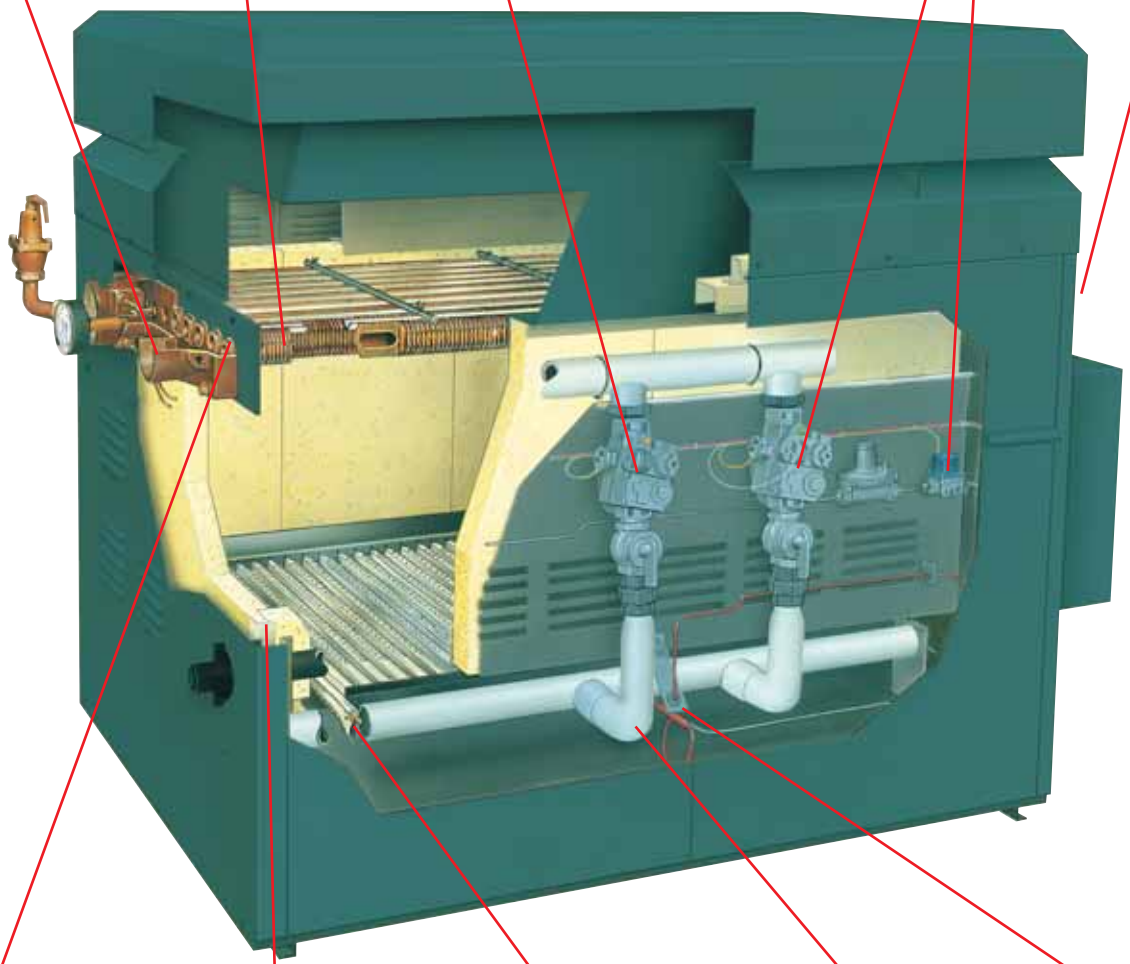
Finned Copper Tube Heat Exchanger
single bank, straight through design delivers lowest pressure drop. Integral fins have ten times the heat transfer surface of plain tubes.

Combination Modulating Valves
automatically size boiler to loads as low as 20% of full input for maximum fuel economy. Standard on Type NH boilers. Optional on Type H and WH.

Corrosion Resistant Steel
fittings are brush-galvanized against rust. Heat shields are corrosion-resistant steel. Jacket has Polytuf powder coat finish.

24-Volt Controls
are totally enclosed for protection. Door is easily removed for inspection and service.

Floating Return Header
immunizes heat exchanger to thermal shock.



Tube Sheet and "O" Ring Construction
eliminates the repair and maintenance problems associated with rolling tubes directly into a casting.

Interlocking Refractory Panels
with sealed corners reduce radiation losses.

Stainless Steel Burners
maintain precise combustion at all firing rates, burn quietly and won't clog or corrode.

Slide-out Burner Tray
allows easy inspection and service.

Spark-to-Pilot Ignition
the most dependable ignition method available.

Indoor/outdoor construction

MODEL INFORMATION

Models 133, 181-401

Indoor model shown

Outdoor model shown

Model No.	MBTUH†		Dimensions (in.)					
	Input	Output	Width	Overall Height		Depth	Water Conn.	Flue Dia.
				Indoor	Outdoor			
133	136	112	14-1/4	45	38-1/2	24-1/8	1-1/4	6
181/182	181	148	18-1/4	62-5/8	40	26-1/2	1-1/2	6
260/261	264	216	22-3/8	62-7/8	40	26-1/2	1-1/2	7
330/331	334	274	25-3/4	63-3/4	40	26-1/2	1-1/2	8
400/401	399‡	327‡	29-1/4	65-3/8	40	26-1/2	1-1/2	9

† Natural gas and propane
‡ For 2-stage Model 401 (low NOx) units, derate 5%

Models 514-824

Indoor model shown

Model No.	MBTUH†		Dimensions (in.)					
	Input	Output	Width	Overall Height		Depth	Water Conn.	Flue Dia.
				Indoor	Outdoor			
514	512	419	32-3/4	57	44-1/8	29-1/2	2	10
624	627	514	37-1/2	57	44-1/8	29-1/2	2	12
724	726	595	41-5/8	57	44-1/8	29-1/2	2	12
824	825	677	45-3/4	57	44-1/8	29-1/2	2	14

† For natural gas units; For propane units, use .94 multiplier

Models 926-1826

Outdoor model shown

Model No.	MBTUH†		Dimensions (in.)				
	Input	Output	Width	Overall Height	Depth	Water Conn.‡	Flue Dia.
Outdoor							
926	926	759	52-3/8	46-3/4	32-1/2	2-1/2	N/A
1083	1083	888	59-1/4	46-3/4	32-1/2	2-1/2	N/A
1178	1178	966	63-5/8	46-3/4	32-1/2	2-1/2	N/A
1287	1287	1055	68-5/8	46-3/4	32-1/2	2-1/2	N/A
1414	1413	1159	74-7/8	46-3/4	32-1/2	2-1/2	N/A
1571	1570	1287	81-1/8	46-3/4	32-1/2	2-1/2	N/A
1758	1758	1442	89-3/8	46-3/4	32-1/2	2-1/2	N/A
Indoor							
962	962	789	52-3/8	76-1/8	32-1/2	2-1/2	14
1125	1125	922	59-1/4	78-1/8	32-1/2	2-1/2	16
1223	1226	1002	63-5/8	78-1/8	32-1/2	2-1/2	16
1336	1337	1096	68-5/8	80-1/8	32-1/2	2-1/2	18
1468	1467	1203	74-7/8	80-1/8	32-1/2	2-1/2	18
1631	1630	1337	81-1/8	80-1/8	32-1/2	2-1/2	18
1826	1826	1497	89-3/8	80-1/8	32-1/2	2-1/2	20

† For natural gas units; For propane units, use .92 multiplier for indoor, .955 multiplier for outdoor
‡ 3"NPT on single-pass boilers (Type H)

Models 2100-4001

Indoor model only

Model No.	MBTUH†		Dimensions (in.)				
	Input	Output	Width	Overall Height	Depth	Water Conn.‡	Flue Dia.
2100	2100	1722	61	68-1/4	54-3/4	3	24
2500	2499	2049	70	68-1/4	54-3/4	3	26
3001	3000	2460	81-1/8	68-1/4	54-3/4	3	28
3500	3500	2870	92-1/2	68-1/4	54-3/4	3	30
4001	4000	3280	103-3/4	68-1/4	54-3/4	3	32

† Natural gas and propane
‡ 4" on single-pass boilers (Type H)

Raypak A Rheem Company

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