

every KNIGHT

needs the Service of a Squire



Squire[®]
Indirect Water Heater

Five Models from 30 to 120 gallons

- >> High Recovery
- >> Factory supplied Tank Well and Sensor
- >> Dent Resistant Jacketing
- >> 444L Passivated Stainless Steel Construction
- >> Large Capacity Heat Exchanger
- >> Ultra Light Weight
- >> Limited Lifetime Warranty



www.knightheatingboiler.com

a new Class of Water Heater

How It Works

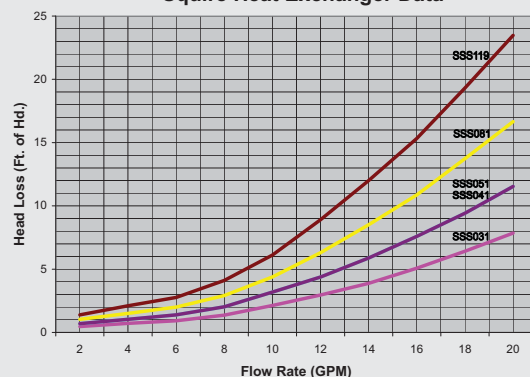
The Squire uses the power and efficiency of the boiler that heats the home to generate domestic hot water for showers, dishwashing, clothes washing...any hot water demand required. The efficiency of the boiler used to heat the home can be as much as 20% higher than a direct-fired tank-type water heater. So why not use that efficiency to "indirectly" provide hot water for all domestic applications.



The Squire passes the boiler water used to heat the home through a uniquely designed internal helical coil that is immersed in the water heater tank. The super heated coil then passes its energy directly to the potable water. The end result is hot water for domestic use from boiler water already being used to heat the home.

By using the Squire, to indirectly heat the domestic water, you eliminate the additional gas line, electrical connections and vent ducts needed with direct-fired tank-type water heaters.

Squire Heat Exchanger Data



Outstanding Features

Quality Finish

Durable plastic jacket provides a rustproof finish even in wet & corrosive environments.

Large Capacity 444L Passivated Stainless Steel Tank

Stainless steel construction increases tank's corrosion resistance for years of reliable, dependable service.

High Output 304 Stainless Steel Heat Exchanger Coil

Maximum heat transfer efficiency with more surface area, delivering larger amounts of hot water. Supplies up to 5 times more recovery compared to conventional water heaters. The heat exchanger's internal size and external surface area give the Squire greater recovery performance. This way the Squire far exceeds the recovery rate of gas fired water heaters, and supplies as much as five times the amount of hot water as a comparably sized electric water heater.

5 Different Models and Sizes

Meets all your space requirements and hot water demands.

Maintenance-Free Operation

Squire does not need expensive maintenance check-ups. Its simple design requires virtually no maintenance, saving money on costly service calls.

The Squire Advantage

The Squire is a true advancement in hot water generation. By coupling the Squire with an existing or new high efficiency condensing boiler the energy that is being utilized to heat the home is also used to efficiently heat the domestic hot water thus consuming fuel more efficiently than with a direct fired water heater.

Energy Efficient Operation

The Squire's 2" thick insulation quality, connected to a modern boiler system will reduce your operating cost to produce hot water. With today's increasing fuel costs the Squire will provide the homeowner fast pay back over conventional methods of heating hot water!

Limited Lifetime Warranty

Squire Limited Lifetime Warranty will give homeowners the peace of mind that their water heater is covered by the industry's strongest warranty.

Attractive Design

The Squire's attractive appearance will assure each customer that they have installed a superior water heater. The Squires color will match a Knight boiler's color adding to the system's overall appearance.

"I really like the KNIGHT Boiler and Squire Indirect Water Heater because they're very simple to install. The Smart System control is great and I really like being able to troubleshoot with the PC software. My customers choose KNIGHT for its high efficiency and state-of-the-art design, and they're all thrilled that KNIGHT and Squire operate so quietly and make their home much more comfortable."

— Chad Padilla, TLC Plumbing, Albuquerque, NM



Squire Performance Data

First Hour Rating (GPH)

KNIGHT Selection and Sizing Chart (Boiler Water at 180°F)

Indirect Model #	SSS031		SSS041		SSS051		SSS081		SSS119	
	Domestic Hot Water	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F
WBN050		76 97	86 106	95 116	118 138	149 170				
KBN080, WBN080		108 140	117 150	127 160	149 182	180 213				
KBN105, WBN105		133 176	143 185	152 195	175 217	206 249				
KBN150, WBN150		138 182	191 252	200 261	223 284	254 315				
KBN210, WBN210		138 182	203 269	213 279	287 373	318 404				
KBN285		138 182	203 269	213 279	319 417	397 514				

NOTES: Based on incoming domestic cold water temperature of 50°F.

Universal Selection and Sizing Chart (Boiler Water at 180°F)

Indirect Model #	SSS031		SSS041		SSS051		SSS081		SSS119	
	Domestic Hot Water	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F
45,000 Btu/Hr		75 95	85 105	94 114	117 137	148 168				
60,000 Btu/Hr		92 119	102 129	112 139	134 161	165 192				
75,000 Btu/Hr		110 144	120 153	129 163	152 185	183 216				
95,000 Btu/Hr		133 176	143 185	152 195	175 217	206 249				
115,000 Btu/Hr		138 182	166 218	176 227	198 250	229 281				
140,000 Btu/Hr		138 182	195 258	205 268	227 290	259 321				
165,000 Btu/Hr		138 182	203 269	213 279	257 331	288 362				
195,000 Btu/Hr		138 182	203 269	213 279	292 379	323 410				
225,000 Btu/Hr		138 182	203 269	213 279	319 417	358 459				
260,000 Btu/Hr		138 182	203 269	213 279	319 417	399 515				
295,000 Btu/Hr		138 182	203 269	213 279	319 417	438 570				

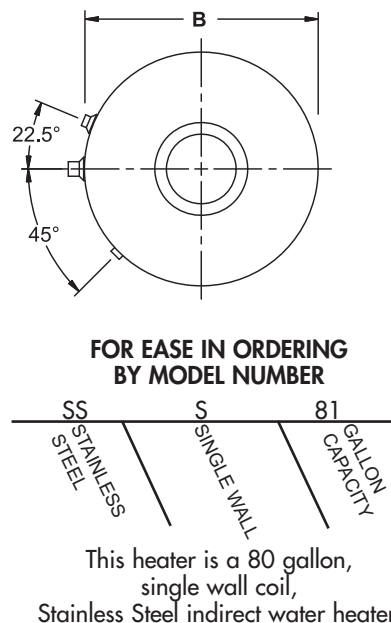
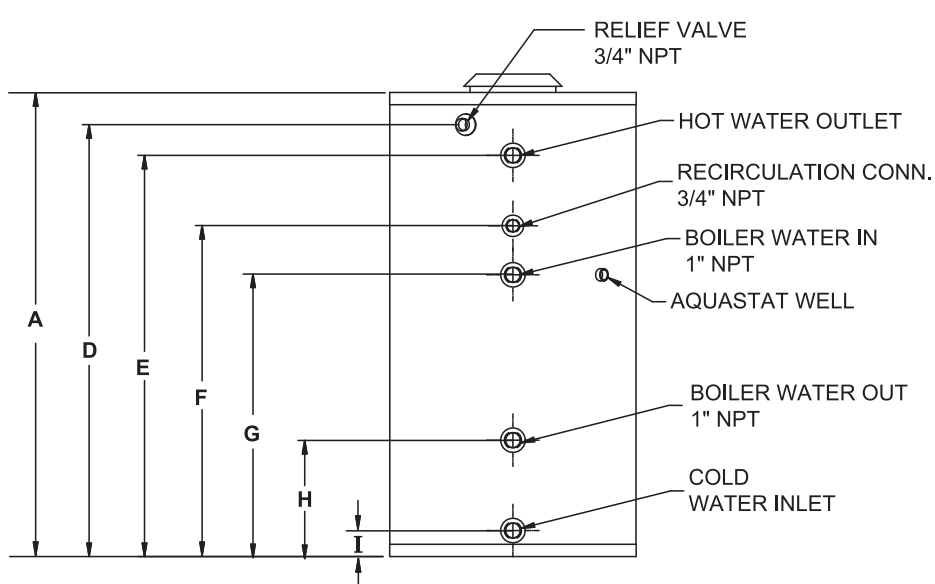
NOTES: Based on incoming domestic cold water temperature of 50°F and gross boiler output as listed.

Universal Selection and Sizing Chart (Boiler Water at 200°F)

Indirect Model #	SSS031		SSS041		SSS051		SSS081		SSS119	
	Domestic Hot Water	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F	140°F 115°F
45,000 Btu/Hr		82 106	92 115	102 125	124 147	155 178				
60,000 Btu/Hr		102 133	112 143	122 152	144 175	175 206				
75,000 Btu/Hr		122 161	132 171	142 180	164 203	195 234				
95,000 Btu/Hr		149 198	159 207	168 217	191 239	222 271				
115,000 Btu/Hr		154 205	185 244	195 254	217 276	249 308				
140,000 Btu/Hr		154 205	219 291	228 300	251 323	282 354				
165,000 Btu/Hr		154 205	228 303	238 313	284 369	315 400				
195,000 Btu/Hr		154 205	228 303	238 313	324 424	355 455				
225,000 Btu/Hr		154 205	228 303	238 313	356 468	395 511				
260,000 Btu/Hr		154 205	228 303	238 313	356 468	442 575				
295,000 Btu/Hr		154 205	228 303	238 313	356 468	487 638				

NOTES: Based on incoming domestic cold water temperature of 50°F and gross boiler output as listed.

Stainless Steel Indirect Dimensions and Specifications



Dimensions

Model	A	B	D	E	F	G	H	I	Domestic Water Conn.	Shipping Weight
SSS031	38-3/4"	20"	32-3/4"	32-3/4"	27"	22"	9-1/2"	2-1/4"	1"	60
SSS041	54-3/4"	20"	48"	48"	29-1/4"	25-1/4"	9-1/2"	2-1/4"	1"	80
SSS051	47-3/4"	24"	40-1/4"	39-3/4"	30"	26"	10"	2"	1"	105
SSS081	68-3/4"	24"	62-3/4"	59-1/2"	34-1/2"	29-1/2"	10-3/4"	2"	1-1/2"	205
SSS119	64-3/4"	29"	58-3/4"	52-1/2"	44-1/2"	40-3/4"	12-1/4"	2"	1-1/2"	220

Note: Heat Exchanger connections are 1" male NPT

Specifications

Model	Gallon Capacity	First Hour Rate (Gallons)		Max Coil Load BTU/hr	Flow Rate GPM	Pressure Drop Ft. Hd	Continuous Rate (GPH)	
		140°F	115°F				140°F	115°F
SSS031	27	154	204	99,000	4.6	0.8	132	183
SSS041	40	228	303	146,900	6.9	1.8	196	271
SSS051	52	238	313	146,900	6.9	1.8	196	271
SSS081	80	356	468	218,600	10.4	4.9	292	404
SSS119	112	485	636	293,700	13.6	11.5	392	542

Note: Based on incoming cold water temperature of 50°F and boiler water temperature of 200°F.

All models standard with a Lifetime Limited Warranty Against Tank Failure. All parts are warranted for one year. Five year limited tank warranty on all models when installed in a commercial application.



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www.Lochinvar.com