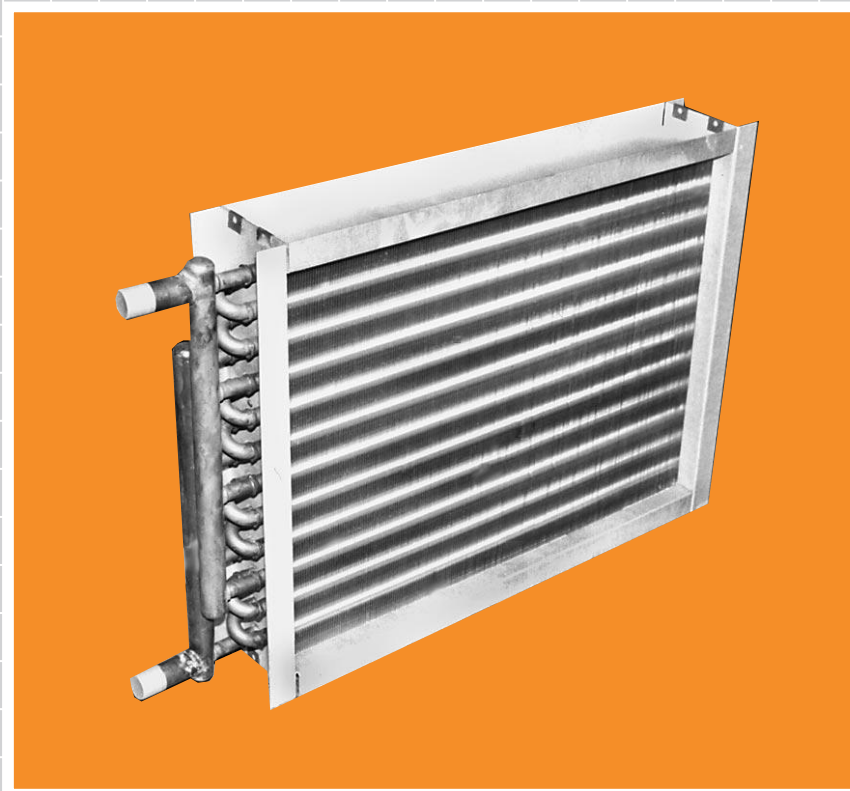


# *Magic Aire*®

## **HOT WATER COILS**

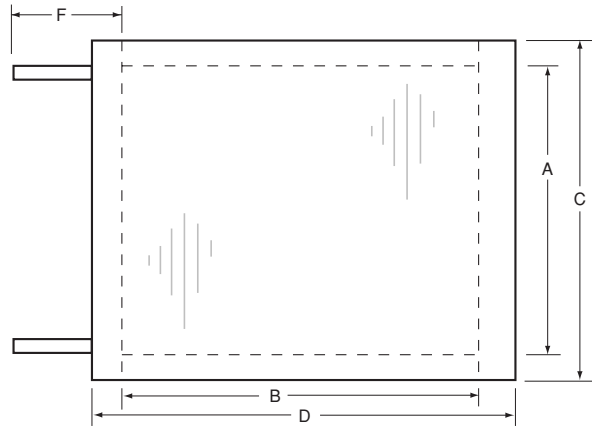
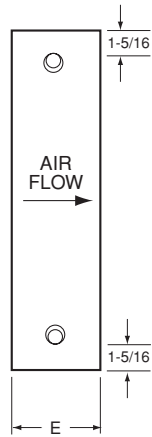


**MAGIC AIRE HOT WATER COILS ARE TESTED TO U.S. AND CANADIAN SAFETY STANDARDS AND ARE ASSEMBLED FOR COMPETITIVE DELIVERY.**

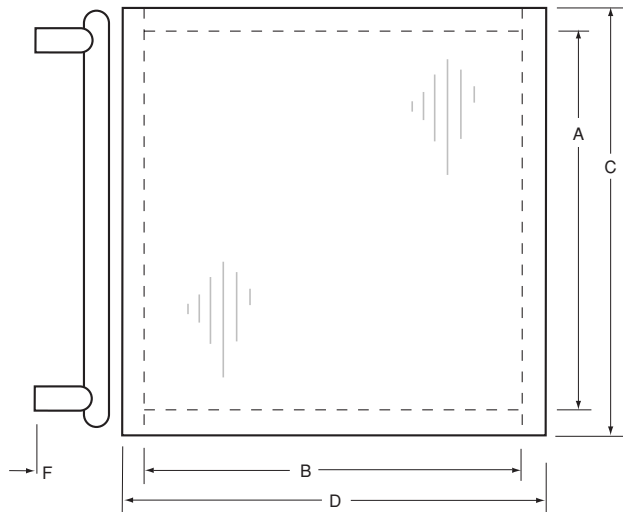
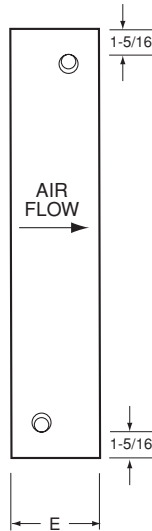
**UNITED ELECTRIC COMPANY, L.P.**

501 Galveston St. • Wichita Falls, Texas 76301 • 940-397-2100 • [customer.service@magicaire.com](mailto:customer.service@magicaire.com)

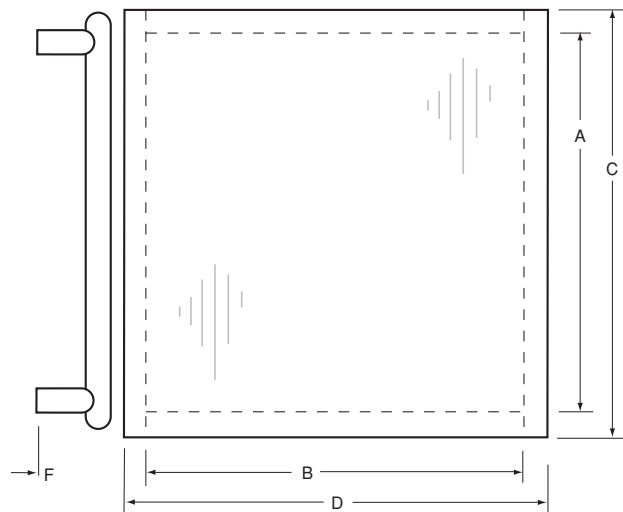
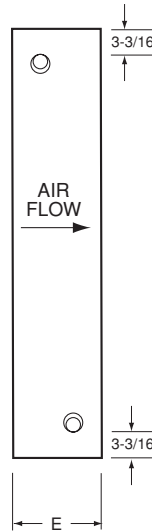
**MODEL**  
2130  
3130  
4130



**MODEL**  
2208  
2347  
2417  
2122410  
2151510  
2153010  
2202010  
2252510  
2253010



**MODEL**  
3208  
3347  
3417  
4208  
4347  
4417





# Space Heating Water Coils

## MODEL SHW

### FEATURES

- Constructed of seamless copper tubing, aluminum fins, and galvanized steel casing.
- Mechanical tube expansion process assures maximum heat transfer.
- Designed for maximum 400 PSIG operating pressure and are UL® listed.
- Designed with top and bottom casing for mounting in new or existing ducts.
- Sweat connections are actual O.D.

### ENGINEERING SPECIFICATIONS

Coils shall be staggered tube type, constructed with 1/2" O.D., .017" wall seamless copper tubes, Type L copper tube headers, and deep corrugated .0045" thick aluminum fins with straight edges. Manufacturer shall supply full depth collars drawn in fin stock to provide accurate control of fin spacing and completely cover the copper tubes to lengthen coil life. Tubes shall be mechanically expanded into the fins for a permanent primary to secondary surface bond, assuring maximum heat transfer efficiency. Coil casing shall be of heavy gauge galvanized steel, with 18 gauge tube sheets and 20 gauge top and bottom casing. Coils shall be tested at 500 PSIG for operation at 400 PSIG.

MODEL	ROWS	FACE AREA	A	B	C	D	E	F	COIL CONN. O.D.	SHIP WT.
SHW-2130	2	1.30	12 1/2	15	14 1/2	17	3 3/4	3 1/2	5/8	11
SHW-2208	2	2.08	15	20	17	22	3 3/4	4 1/2	7/8	15
SHW-2347	2	3.47	20	25	22	27	3 3/4	5	7/8	23
SHW-2417	2	4.17	20	30	22	32	3 3/4	5 1/4	1 1/8	28
SHW-2151510	2	1.56	15	15	17	17	3 3/4	4 3/8	7/8	11
SHW-2122410	2	2.00	12 1/2	24	14 1/2	26	3 3/4	4 3/8	7/8	15
SHW-2202010	2	2.78	20	20	22	22	3 3/4	4 3/8	7/8	20
SHW-2153010	2	3.13	15	30	17	32	3 3/4	4 3/8	7/8	23
SHW-2252510	2	4.34	25	25	27	27	3 3/4	4 3/8	7/8	31
SHW-2253010	2	5.21	25	30	27	32	3 3/4	4 3/8	7/8	37
SHW-3130	3	1.30	12 1/2	15	14 1/2	17	3 3/4	3 1/2	5/8	13
SHW-3208	3	2.08	15	20	17	22	3 3/4	4 1/2	7/8	21
SHW-3347	3	3.47	20	25	22	27	3 3/4	5	7/8	29
SHW-3417	3	4.17	20	30	22	32	3 3/4	5 1/4	1 1/8	35
SHW-4130	4	1.30	12 1/2	15	14 1/2	17	4 7/8	4	5/8	18
SHW-4208	4	2.08	15	20	17	22	4 7/8	4 1/2	7/8	25
SHW-4347	4	3.47	20	25	22	27	4 7/8	5	7/8	38
SHW-4417	4	4.17	20	30	22	32	4 7/8	5 1/4	1 1/8	44

### 2 Row Heating

**SHW-2130**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
180	2.0	1.84	550	26.3	103.9	153.6
			775	29.9	95.5	149.9
			1000	32.7	90.1	147.1
	4.0	4.77	550	28.9	108.3	165.5
			775	33.6	99.8	163.1
			1000	37.2	94.2	161.3
	6.0	9.37	550	30.0	110.1	170.0
			775	35.0	101.5	168.3
			1000	39.2	95.9	166.9

**SHW-2208**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
180	4.0	1.36	900	46.8	107.7	156.6
			1150	51.7	101.2	154.1
			1400	55.7	96.5	152.1
	8.0	3.53	900	51.1	112.1	167.2
			1150	57.2	105.6	165.7
			1400	62.3	100.8	164.4
	2.0	6.92	900	52.8	113.8	171.2
			1150	59.4	107.3	170.1
			1400	65.0	102.5	169.2

**SHW-2347**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
180	10.0	3.06	1500	81.8	109.9	163.6
			2000	92.7	102.4	161.5
			2500	101.3	97.1	159.7
	15.0	6.01	1500	85.5	112.2	168.6
			2000	97.5	104.6	167.0
			2500	107.3	99.3	165.7
	20.0	10.07	1500	87.5	113.4	171.2
			2000	100.2	105.9	170.0
			2500	110.6	100.5	168.9

**SHW-2417**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
180	15.0	3.51	1800	101.8	111.7	166.4
			2400	115.9	104.2	164.5
			3000	127.3	98.8	163.0
	20.0	5.64	1800	104.4	113.1	169.6
			2400	119.4	105.5	168.1
			3000	131.6	100.2	166.8
	25.0	8.34	1800	106.0	113.9	171.5
			2400	121.6	106.4	170.3
			3000	134.4	101.0	169.2



# HOT WATER HEATING CAPACITIES

## 2 Row Heating

**SHW-2122410**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				900	47.4	108.2
180	4.8	3.37	1150	52.5	101.8	158.1
			1400	56.6	97.0	156.4
			900	48.4	109.2	162.4
180	5.5	4.17	1150	53.7	102.8	160.4
			1400	58.1	98.0	158.8
			900	48.9	109.8	163.7
180	6.0	4.80	1150	54.4	103.3	161.8
			1400	58.9	98.6	160.3

**SHW-2151510**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				550	30.3	110.6
180	3.1	0.83	775	34.7	101.2	157.5
			1000	38.2	95.0	155.3
			550	31.3	112.4	163.4
180	3.8	0.97	775	36.2	102.9	160.9
			1000	40.0	96.7	158.9
			550	31.9	113.4	165.1
180	4.3	1.08	775	37.0	103.9	162.7
			1000	41.1	97.6	160.9

**SHW-2153010**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1200	70.9	114.1
180	7.1	5.79	1700	82.9	104.6	156.6
			2200	92.2	98.4	154.0
			1200	72.3	115.1	163.0
180	8.5	7.86	1700	84.8	105.7	160.0
			2200	94.6	99.4	157.7
			1200	73.1	115.8	164.9
180	9.7	9.91	1700	86.1	106.3	162.2
			2200	96.2	100.0	160.1

**SHW-2202010**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1000	56.9	112.1
180	6.0	1.46	1500	67.4	101.1	157.5
			2000	75.0	94.3	155.0
			1000	58.8	113.8	164.3
180	7.5	1.95	1500	70.2	102.8	161.3
			2000	78.5	95.9	159.0
			1000	59.8	114.8	166.1
180	8.6	2.37	1500	71.7	103.7	163.3
			2000	80.5	96.8	161.3

**SHW-2252510**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1800	97.1	109.4
180	9.8	2.77	2400	109.5	101.8	157.6
			3000	119.3	96.4	155.6
			1800	99.0	110.3	162.3
180	11.2	3.43	2400	112.0	102.7	160.0
			3000	122.3	97.3	158.1
			1800	100.4	111.1	163.9
180	12.5	4.11	2400	113.9	103.4	161.8
			3000	124.7	98.0	160.0

**SHW-2253010**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				2000	114.1	112.2
180	11.8	3.80	2800	131.9	103.1	157.6
			3600	145.6	97.0	155.3
			2000	116.7	113.4	163.4
180	14.1	5.14	2800	135.6	104.3	160.8
			3600	150.2	98.2	158.7
			2000	118.4	114.2	165.2
180	16.0	6.41	2800	137.9	105.1	162.7
			3600	153.2	98.9	160.8

HOT WATER HEATING CORRECTION FACTORS									
Entering Air Temp (F)	Entering Water Temp (F)								
	100°	110°	120°	130°	140°	150°	160°	170°	180°
50°	.419	.500	.579	.665	.742	.838	.917	1.000	1.090
55°	.376	.460	.544	.629	.708	.791	.873	.963	1.048
60°	.335	.419	.500	.579	.665	.742	.838	.917	1.000
65°	.290	.376	.460	.544	.629	.708	.791	.873	.963
70°	.251	.335	.419	.500	.579	.665	.742	.838	.917
75°	.205	.290	.376	.460	.544	.629	.708	.791	.873
80°	.167	.251	.335	.419	.500	.579	.665	.742	.838

When correction factors are used for various entering air and entering water temperatures, multiply the correction factor times the above listed capacity. The correction factors may be used with all Magic Aire published 180° E.W.T. heating capacities.

### 3 Row Heating

**SHW-3130**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				550	33.2	115.4
180	2.0	0.93	775	38.1	105.0	141.8
			1000	41.7	98.2	138.3
			550	37.2	122.2	161.3
180	4.0	2.03	775	43.9	111.9	158.0
			1000	49.0	104.9	155.5
			550	38.9	124.9	167.0
180	6.0	3.69	775	46.3	114.7	164.6
			1000	52.0	107.6	162.6

**SHW-3208**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				900	58.9	120.0
180	4.0	1.10	1150	65.5	112.2	147.2
			1400	70.8	106.3	144.6
			900	65.5	126.6	163.6
180	8.0	2.63	1150	74.1	119.0	161.5
			1400	81.2	113.1	159.7
			900	66.9	128.1	166.6
180	10.0	3.73	1150	76.0	120.5	164.8
			1400	83.7	114.7	163.3

**SHW-3347**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1500	106.7	125.1
180	10.0	3.34	2000	122.6	116.1	155.5
			2500	135.3	109.5	152.9
			1500	111.6	128.1	165.1
180	15.0	6.61	2000	129.5	119.2	162.7
			2500	143.9	112.7	160.8
			1500	114.2	129.7	168.6
180	20.0	11.10	2000	133.2	120.9	166.7
			2500	148.7	114.4	165.1

**SHW-3417**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1800	132.6	127.4
180	15.0	4.21	2400	153.4	118.5	159.5
			3000	170.3	111.9	157.3
			1800	136.1	129.2	166.4
180	20.0	6.84	2400	158.3	120.4	164.2
			3000	176.5	113.9	162.3
			1800	138.2	130.3	168.9
180	25.0	10.14	2400	161.4	121.6	167.1
			3000	180.5	115.1	165.5

### 4 Row Heating

**SHW-4130**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				550	45.6	135.9
180	6.0	5.71	775	54.9	124.9	161.7
			1000	62.2	117.0	159.2
			550	46.6	137.7	168.3
180	8.0	9.38	775	56.6	126.9	165.8
			1000	64.5	119.1	163.9
			550	47.3	138.8	170.5
180	10.0	14.02	775	57.6	128.1	168.5
			1000	66.0	120.4	166.8

**SHW-4208**

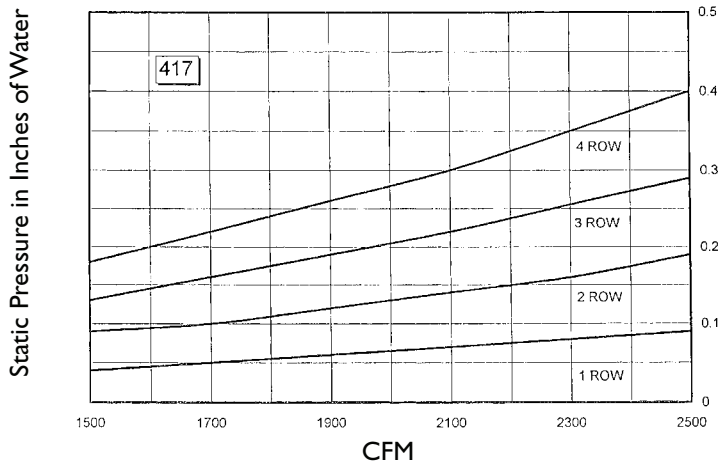
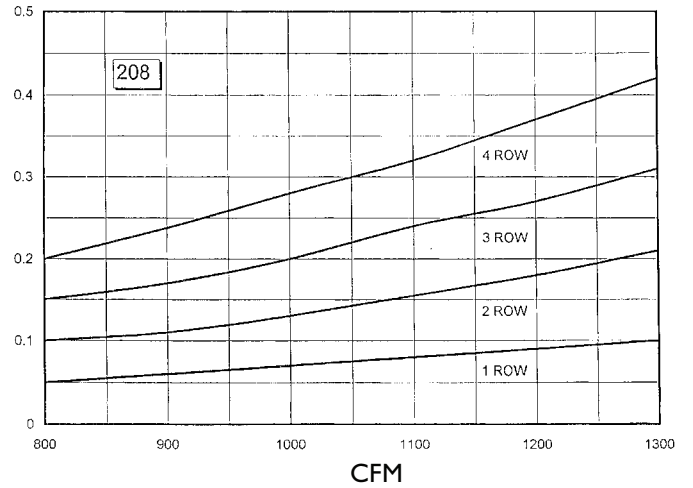
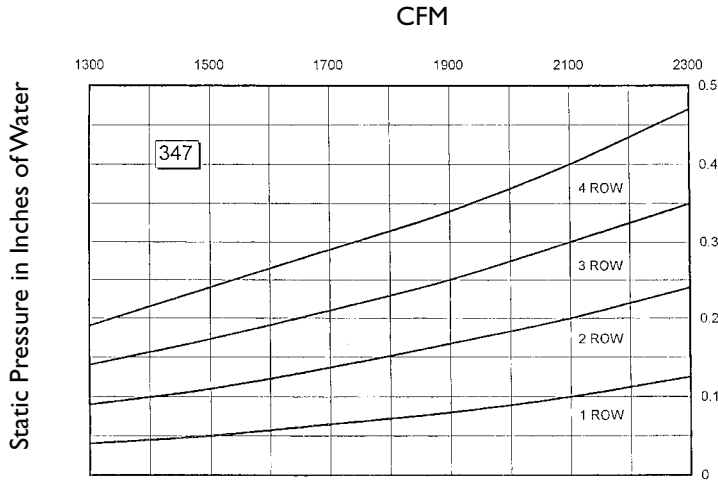
Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				900	67.7	128.9
180	4.0	0.99	1150	75.7	120.2	142.1
			1400	81.9	113.6	139.0
			900	75.9	137.2	161.0
180	8.0	2.29	1150	86.7	129.0	158.3
			1400	95.6	122.5	156.1
			900	77.7	139.0	164.4
180	10.0	3.22	1150	89.2	131.0	162.1
			1400	98.9	124.6	160.2

**SHW-4347**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1500	125.5	136.5
180	10.0	3.63	2000	146.0	126.8	150.8
			2500	162.4	119.4	147.5
			1500	131.1	140.0	162.5
180	15.0	7.23	2000	154.3	130.6	159.4
			2500	173.3	123.4	156.9
			1500	134.0	141.8	166.6
180	20.0	12.14	2000	158.8	132.6	164.1
			2500	179.2	125.6	162.1

**SHW-4417**

Ent Wtr	GPM	PD FT.	CFM	60 DegF Ent Air		
				TTL MBH	LAT F	LWT F
				1800	150.6	136.6
180	15.0	2.53	2400	175.5	126.9	156.6
			3000	195.4	119.6	153.9
			1800	155.4	139.0	164.4
180	20.0	4.01	2400	182.6	129.6	161.7
			3000	204.7	122.4	159.5
			1800	158.5	140.6	167.3
180	25.0	5.87	2400	187.1	131.4	165.0
			3000	210.6	124.3	163.1



# Magic Aire®

**MAGIC AIRE HOT WATER COILS ARE TESTED TO U.S. AND  
CANADIAN SAFETY STANDARDS AND ARE ASSEMBLED FOR  
COMPETITIVE DELIVERY.**

**UNITED ELECTRIC COMPANY, L.P.**

501 Galveston St. • Wichita Falls, Texas 76301 • 940-397-2100 • [customer.service@magicaire.com](mailto:customer.service@magicaire.com)