

# COOLING TOWERS

## *LSTE / LPT* Forced Draft Cooling Towers



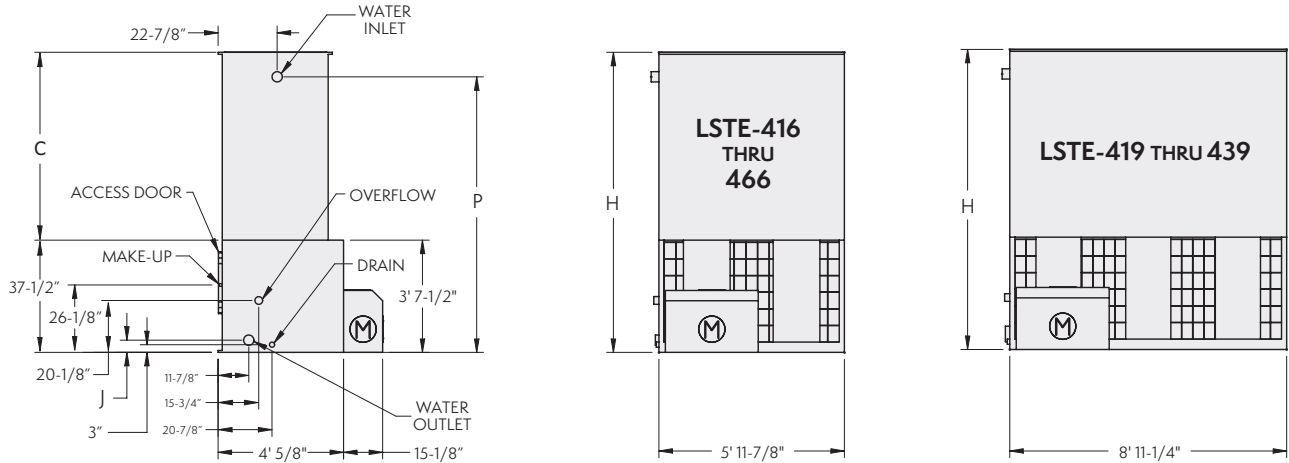
## ENGINEERING DATA



† Mark owned by the Cooling Technology Institute

# Models: LSTE-416 to 439

## ENGINEERING & DIMENSION DATA



## SMALL CENTRIFUGAL FAN MODELS

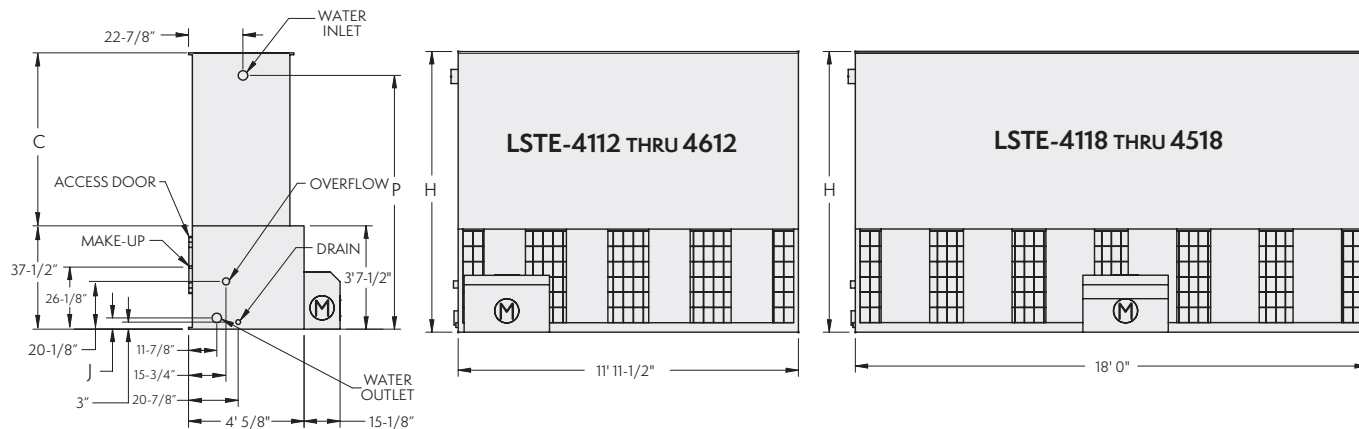
Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP)*	Air Flow CFM	DIMENSIONS				CONNECTIONS (IN.)				
		Shipping	Operating				H	P	C	J	Water In	Water Out	Make Up	Drain	Over Flow
LSTE-416	33	1,640	2,300	2	2	9,100	8' 8-1/4"	7' 10-3/4"	5' 3/4"	4-3/4"	4"	4"	1"	2"	3"
LSTE-426	39	1,670	2,330	2	3	10,300	8' 8-1/4"	7' 10-3/4"	5' 3/4"	4-3/4"	4"	4"	1"	2"	3"
LSTE-436	47	1,680	2,340	2	5	12,100	8' 8-1/4"	7' 10-3/4"	5' 3/4"	4-3/4"	4"	4"	1"	2"	3"
LSTE-446	55	1,730	2,390	2	7.5	13,700	8' 8-1/4"	7' 10-3/4"	5' 3/4"	4-3/4"	4"	4"	1"	2"	3"
LSTE-456	61	1,800	2,460	2	7.5	13,300	9' 8-1/4"	8' 10-3/4"	6' 3/4"	4-3/4"	4"	4"	1"	2"	3"
LSTE-466	67	1,810	2,470	2	10	14,500	9' 8-1/4"	8' 10-3/4"	6' 3/4"	4-3/4"	4"	4"	1"	2"	3"
LSTE-419	71	2,270	3,290	3	7.5	18,300	8' 8-1/4"	7' 10-3/4"	5' 3/4"	6"	4"	4"	1"	2"	3"
LSTE-429	79	2,280	3,300	3	10	19,900	8' 8-1/4"	7' 10-3/4"	5' 3/4"	6"	4"	4"	1"	2"	3"
LSTE-439	88	2,310	3,330	3	10	19,400	9' 8-1/4"	8' 10-3/4"	6' 3/4"	6"	4"	4"	1"	2"	3"

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 1/2", use next size fan motor.

# Models: LSTE-4112 to 4518

## ENGINEERING & DIMENSION DATA



## SMALL CENTRIFUGAL FAN MODELS

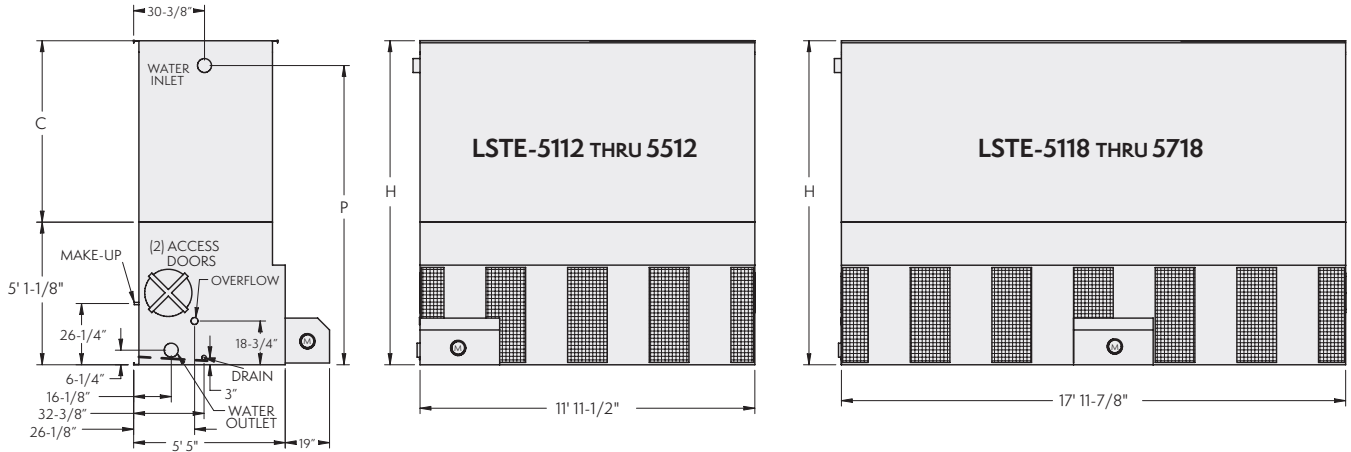
Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP)*	Air Flow CFM	DIMENSIONS				CONNECTIONS (IN.)				
		Shipping	Operating				H	P	C	J	Water In	Water Out	Make Up	Drain	Over Flow
LSTE-4112	96	2,930	4,240	4	10	24,400	8' 10-3/8"	7' 11-7/8"	5' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4212	107	3,110	4,420	4	10	23,800	9' 10-3/8"	8' 11-7/8"	6' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4312	114	3,300	4,610	4	10	23,000	10' 10-3/8"	9' 11-7/8"	7' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4412	123	3,240	4,550	4	15	26,900	9' 10-3/8"	8' 11-7/8"	6' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4512	130	3,430	4,740	4	15	26,000	10' 10-3/8"	9' 11-7/8"	7' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4612	142	3,490	4,800	4	20	28,400	10' 10-3/8"	9' 11-7/8"	7' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4118	161	4,330	6,330	6	20	40,200	8' 10-3/8"	7' 11-7/8"	5' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4218	179	4,600	6,600	6	20	39,200	9' 10-3/8"	8' 11-7/8"	6' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4318	193	4,630	6,630	6	25	41,900	9' 10-3/8"	8' 11-7/8"	6' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4418	203	4,910	6,910	6	25	40,600	10' 10-3/8"	9' 11-7/8"	7' 2-7/8"	6"	6"	6"	1"	2"	3"
LSTE-4518	215	4,960	6,960	6	30	42,900	10' 10-3/8"	9' 11-7/8"	7' 2-7/8"	6"	6"	6"	1"	2"	3"

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 1/2", use next size fan motor.

# Models: LSTE-5112 to 5718

## ENGINEERING & DIMENSION DATA



## SMALL CENTRIFUGAL FAN MODELS

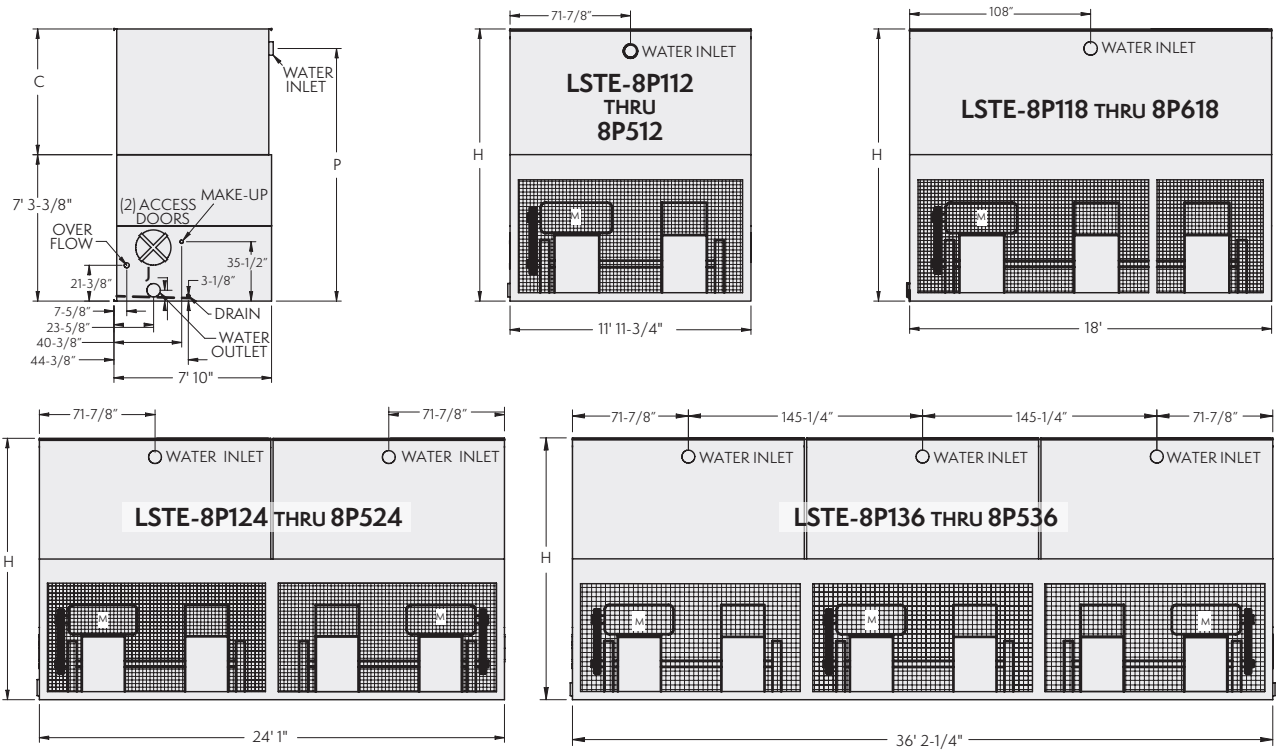
Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP) <sup>2</sup>	Air Flow CFM	DIMENSIONS				CONNECTIONS (IN.)				
		Shipping	Operating				H	P	C	J	Water In	Water Out	Make Up	Drain	Over Flow
LSTE-5112	157	4,130	6,250	4	20	38,700	10' 6-7/8"	9' 8-1/4"	5' 5-3/4"	6	6	6	2	3	3
LSTE-5212	175	4,370	6,490	4	20	37,600	11' 6-7/8"	10' 8-1/4"	6' 5-3/4"	6	6	6	2	3	3
LSTE-5312	188	4,400	6,520	4	25	40,400	11' 6-7/8"	10' 8-1/4"	6' 5-3/4"	6	6	6	2	3	3
LSTE-5412	198	4,640	6,760	4	25	39,500	12' 6-7/8"	11' 8-1/4"	7' 5-3/4"	6	6	6	2	3	3
LSTE-5512	209	4,690	6,810	4	30	41,800	12' 6-7/8"	11' 8-1/4"	7' 5-3/4"	6	6	6	2	3	3
LSTE-5118	221	5,970	9,160	6	25	55,100	10' 6-7/8"	9' 8-1/4"	5' 5-3/4"	6	6	6	2	3	3
LSTE-5218	236	6,020	9,210	6	30	58,400	10' 6-7/8"	9' 8-1/4"	5' 5-3/4"	6	6	6	2	3	3
LSTE-5318	262	6,180	9,370	6	40	64,000	10' 6-7/8"	9' 8-1/4"	5' 5-3/4"	6	6	6	2	3	3
LSTE-5418	263	6,370	9,560	6	30	56,800	11' 6-7/8"	10' 8-1/4"	6' 5-3/4"	6	6	6	2	3	3
LSTE-5518	289	6,530	9,720	6	40	62,200	11' 6-7/8"	10' 8-1/4"	6' 5-3/4"	6	6	6	2	3	3
LSTE-5618	304	6,880	10,070	6	40	60,800	12' 6-7/8"	11' 8-1/4"	7' 5-3/4"	6	6	6	2	3	3
LSTE-5718	326	6,890	10,080	6	50	63,200	12' 6-7/8"	11' 8-1/4"	7' 5-3/4"	6	6	6	2	3	3

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 12", use next size fan motor.

# Models: LSTE-8P112 to 8P536

## ENGINEERING & DIMENSION DATA



## LARGE CENTRIFUGAL FAN MODELS

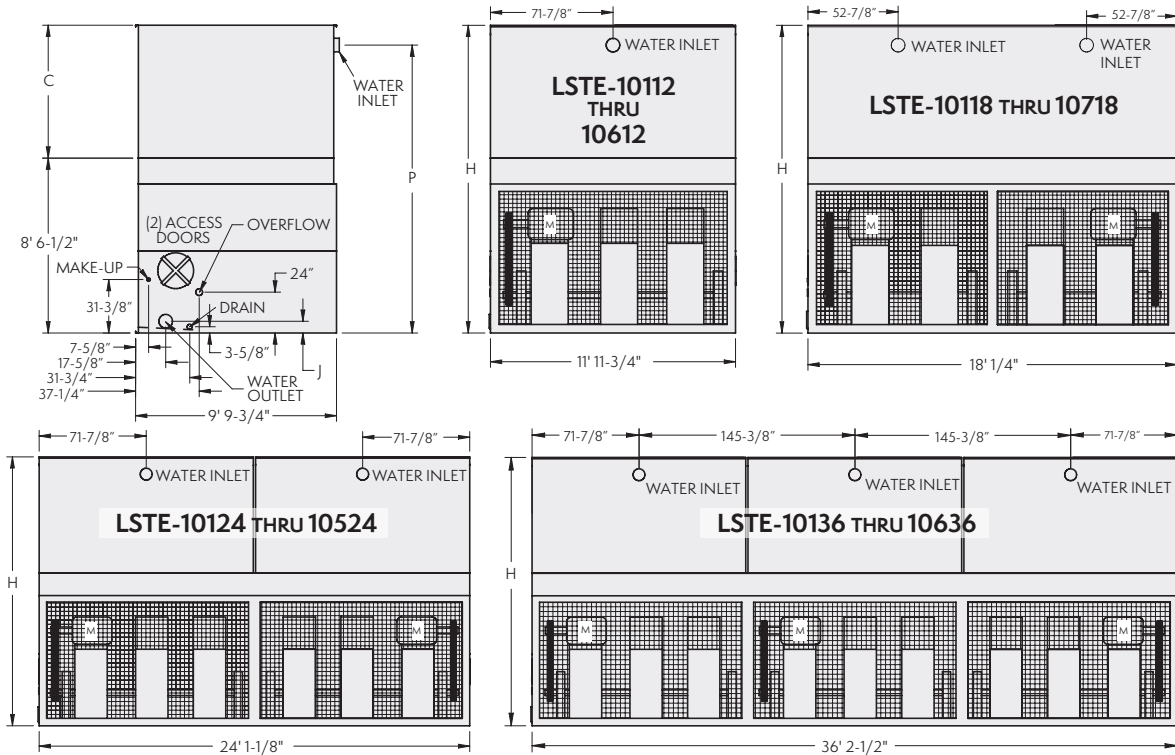
Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP)*	Air Flow CFM	DIMENSIONS				CONNECTIONS (IN.)				
		Shipping	Operating				H	P	C	J	Water In	Water Out	Make Up	Drain	Over Flow
LSTE-8P112	235	5,550	9,030	2	30	58,400	12' 6-3/8"	11' 6-3/4"	5' 3"	7"	8	8	2	2	3
LSTE-8P212	261	5,710	9,190	2	40	63,800	12' 6-3/8"	11' 6-3/4"	5' 3"	7"	8	8	2	2	3
LSTE-8P312	289	6,050	9,530	2	40	62,100	13' 6-3/8"	12' 6-3/4"	6' 3"	7"	8	8	2	2	3
LSTE-8P412	305	6,380	9,860	2	40	60,100	14' 6-3/8"	13' 6-3/4"	7' 3"	7"	8	8	2	2	3
LSTE-8P512	326	6,390	9,870	2	50	64,300	14' 6-3/8"	13' 6-3/4"	7' 3"	7"	8	8	2	2	3
LSTE-8P118	339	8,180	13,530	3	40	84,800	12' 6-3/8"	11' 6-3/4"	5' 3"	7"	8	8	2	2	3
LSTE-8P218	368	8,190	13,540	3	50	90,800	12' 6-3/8"	11' 6-3/4"	5' 3"	7"	8	8	2	2	3
LSTE-8P318	381	8,210	13,560	3	40	82,600	13' 6-3/8"	12' 6-3/4"	6' 3"	7"	8	8	2	2	3
LSTE-8P418	410	8,220	13,570	3	50	88,500	13' 6-3/8"	12' 6-3/4"	6' 3"	7"	8	8	2	2	3
LSTE-8P518	436	8,440	13,790	3	60	93,500	13' 6-3/8"	12' 6-3/4"	6' 3"	7"	8	8	2	2	3
LSTE-8P618	459	9,380	14,730	3	60	90,600	14' 6-3/8"	13' 6-3/4"	7' 3"	7"	8	8	2	2	3
LSTE-8P124	494	11,470	18,660	4	(2) 25	107,500	13' 6-3/8"	12' 6-3/4"	6' 3"	7-7/8"	(2)8	10	2	2	3
LSTE-8P224	521	11,210	18,400	4	(2) 40	127,500	12' 6-3/8"	11' 6-3/4"	5' 3"	7-7/8"	(2)8	10	2	2	3
LSTE-8P324	578	11,890	19,080	4	(2) 40	124,200	13' 6-3/8"	12' 6-3/4"	6' 3"	7-7/8"	(2)8	10	2	2	3
LSTE-8P424	609	12,550	19,740	4	(2) 40	120,100	14' 6-3/8"	13' 6-3/4"	7' 3"	7-7/8"	(2)8	10	2	2	3
LSTE-8P524	653	12,570	19,760	4	(2) 50	128,600	14' 6-3/8"	13' 6-3/4"	7' 3"	7-7/8"	(2)8	10	2	2	3
LSTE-8P136	705	16,710	27,240	6	(3) 30	175,200	12' 6-3/8"	11' 6-3/4"	5' 3"	7"	(3)8	(2)8	(2)2	(2)2	(2)3
LSTE-8P236	782	17,190	27,720	6	(3) 40	191,300	12' 6-3/8"	11' 6-3/4"	5' 3"	7"	(3)8	(2)8	(2)2	(2)2	(2)3
LSTE-8P336	868	18,210	28,740	6	(3) 40	186,300	13' 6-3/8"	12' 6-3/4"	6' 3"	7"	(3)8	(2)8	(2)2	(2)2	(2)3
LSTE-8P436	914	19,200	29,730	6	(3) 40	180,200	14' 6-3/8"	13' 6-3/4"	7' 3"	7"	(3)8	(2)8	(2)2	(2)2	(2)3
LSTE-8P536	979	19,230	29,760	6	(3) 50	193,000	14' 6-3/8"	13' 6-3/4"	7' 3"	7"	(3)8	(2)8	(2)2	(2)2	(2)3

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 12", use next size fan motor.

# Models: LSTE-10112 to 10636

## ENGINEERING & DIMENSION DATA



## LARGE CENTRIFUGAL FAN MODELS

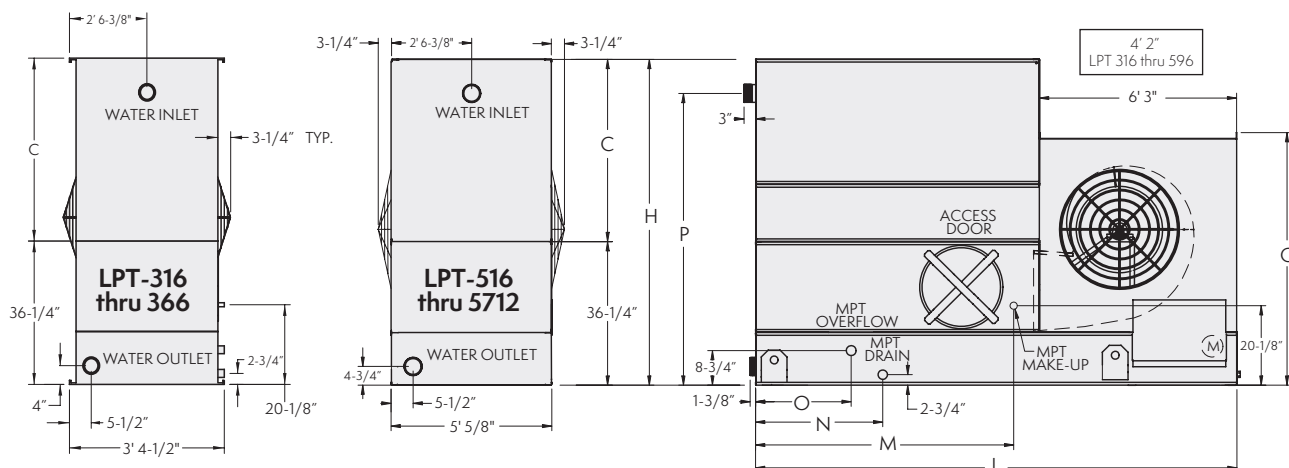
Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP)*	Air Flow CFM	DIMENSIONS				CONNECTIONS (IN.)				
		Shipping	Operating				H	P	C	J	Water In	Water Out	Make Up	Drain	Over Flow
LSTE-10112	318	8,030	13,940	3	30	69,000	15' 3/8"	14' 3/4"	6' 5-7/8"	7-1/4"	8"	8"	2"	3"	4"
LSTE-10212	350	8,190	14,100	3	40	75,600	15' 3/8"	14' 3/4"	6' 5-7/8"	7-1/4"	8"	8"	2"	3"	4"
LSTE-10312	370	8,600	14,510	3	40	73,800	16' 3/8"	15' 3/4"	7' 5-7/8"	7-1/4"	8"	8"	2"	3"	4"
LSTE-10412	377	8,200	14,110	3	50	81,000	15' 3/8"	14' 3/4"	6' 5-7/8"	7-1/4"	8"	8"	2"	3"	4"
LSTE-10512	396	8,610	14,520	3	50	79,200	16' 3/8"	15' 3/4"	7' 5-7/8"	7-1/4"	8"	8"	2"	3"	4"
LSTE-10612	420	8,830	14,740	3	60	83,900	16' 3/8"	15' 3/4"	7' 5-7/8"	7-1/4"	8"	8"	2"	3"	4"
LSTE-10118	429	11,460	20,420	4	(2) 25	110,600	14' 3/8"	13' 3/4"	5' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10218	459	11,560	20,520	4	(2) 30	117,100	14' 3/8"	13' 3/4"	5' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10318	482	12,080	21,040	4	(2) 25	107,500	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10418	513	12,180	21,140	4	(2) 30	113,900	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10518	543	12,510	21,770	4	(2) 30	111,300	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10618	565	12,500	21,460	4	(2) 40	124,700	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10718	594	13,130	22,090	4	(2) 40	121,900	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10124	628	15,220	27,400	6	(2) 40	155,400	14' 3/8"	13' 3/4"	5' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10224	700	16,040	28,220	6	(2) 40	151,200	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10324	754	16,060	28,240	6	(2) 50	162,000	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10424	793	16,880	29,060	6	(2) 50	158,400	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10524	839	17,310	29,490	6	(2) 60	163,600	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(2)8"	10"	2"	3"	4"
LSTE-10136	942	23,880	41,240	9	(3) 40	233,100	14' 3/8"	13' 3/4"	5' 5-7/8"	8-1/8"	(3)8"	(2)10"	3"	3"	4"
LSTE-10236	1050	25,110	42,470	9	(3) 40	226,800	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(3)8"	(2)10"	3"	3"	4"
LSTE-10336	1131	25,140	42,500	9	(3) 50	243,000	15' 3/8"	14' 3/4"	6' 5-7/8"	8-1/8"	(3)8"	(2)10"	3"	3"	4"
LSTE-10436	1189	26,370	43,730	9	(3) 50	237,700	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(3)8"	(2)10"	3"	3"	4"
LSTE-10536	1259	27,020	44,380	9	(3) 60	251,800	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(3)8"	(2)10"	3"	3"	4"
LSTE-10636	1349	27,320	44,680	9	(3) 75	269,000	16' 3/8"	15' 3/4"	7' 5-7/8"	8-1/8"	(3)8"	(2)10"	3"	3"	4"

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 1/2", use next size fan motor.

# Models: LPT-316 to 5712

## ENGINEERING & DIMENSION DATA



## LARGE CENTRIFUGAL FAN MODELS

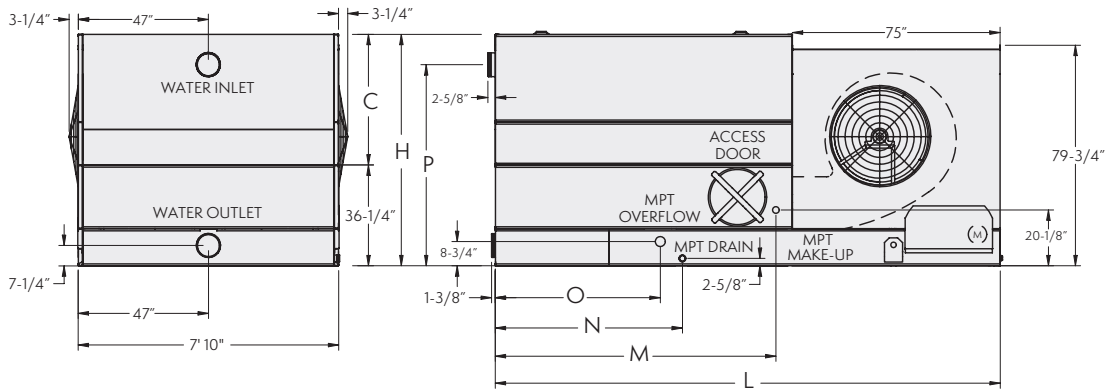
Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP)*	Air Flow CFM	DIMENSIONS						CONNECTIONS (IN.)						
		Shipping	Operating				H	L	P	C	O	N	M	G	Water In	Water Out	Make Up	Drain	Over Flow
LPT-316	27	1,510	2,490	1	1.5	7,020	6' 10-1/2"	10' 2"	6' 1-7/8"	3' 10-1/4"	2' 1/4"	2' 8-1/4"	5' 6"	5' 3-7/8"	4	4	1	2	2
LPT-326	34	1,520	2,490	1	2	8,850	6' 10-1/2"	10' 2"	6' 1-7/8"	3' 10-1/4"	2' 1/4"	2' 8-1/4"	5' 6"	5' 3-7/8"	4	4	1	2	2
LPT-336	38	1,530	2,510	1	3	10,130	6' 10-1/2"	10' 2"	6' 1-7/8"	3' 10-1/4"	2' 1/4"	2' 8-1/4"	5' 6"	5' 3-7/8"	4	4	1	2	2
LPT-346	43	1,620	2,590	1	3	9,940	6' 10-1/2"	10' 2"	6' 1-7/8"	3' 10-1/4"	2' 1/4"	2' 8-1/4"	5' 6"	5' 3-7/8"	4	4	1	2	2
LPT-356	50	1,630	2,600	1	5	11,780	6' 10-1/2"	10' 2"	6' 1-7/8"	3' 10-1/4"	2' 1/4"	2' 8-1/4"	5' 6"	5' 3-7/8"	4	4	1	2	2
LPT-366	56	1,670	2,640	1	7.5	13,490	6' 10-1/2"	10' 2"	6' 1-7/8"	3' 10-1/4"	2' 1/4"	2' 8-1/4"	5' 6"	5' 3-7/8"	4	4	1	2	2
LPT-516	58	2,320	4,040	1	3	14,880	6' 10-5/8"	12' 3"	6' 1-3/4"	3' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-526	68	2,330	4,050	1	5	17,640	6' 10-5/8"	12' 3"	6' 1-3/4"	3' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-536	72	2,470	4,190	1	3	14,560	7' 10-5/8"	12' 3"	7' 1-3/4"	4' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-546	75	2,410	4,130	1	5	17,320	6' 10-5/8"	12' 3"	6' 1-3/4"	3' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-556	77	2,370	4,100	1	7.5	20,210	6' 10-5/8"	12' 3"	6' 1-3/4"	3' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-566	82	2,400	4,120	1	7.5	19,960	6' 10-5/8"	12' 3"	6' 1-3/4"	3' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-576	90	2,480	4,210	1	10	21,300	6' 10-5/8"	12' 3"	6' 1-3/4"	3' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-586	94	2,520	4,240	1	7.5	19,750	7' 10-5/8"	12' 3"	7' 1-3/4"	4' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-596	102	2,560	4,280	1	10	21,300	7' 10-5/8"	12' 3"	7' 1-3/4"	4' 10-3/8"	2' 1/4"	2' 9-3/4"	5' 6"	6' 7-3/4"	4	4	1	2	3
LPT-519	101	2,820	5,430	1	10	26,470	7' 5/8"	15' 2-3/8"	6' 2-7/8"	4' 3/8"	4' 11-5/8"	5' 7-1/8"	8' 5-3/8"	6' 7-3/4"	6	6	1	2	3
LPT-529	114	2,930	5,530	1	15	30,290	7' 5/8"	15' 2-3/8"	6' 2-7/8"	4' 3/8"	4' 11-5/8"	5' 7-1/8"	8' 5-3/8"	6' 7-3/4"	6	6	1	2	3
LPT-539	123	2,990	5,590	1	15	29,960	7' 5/8"	15' 2-3/8"	6' 2-7/8"	4' 3/8"	4' 11-5/8"	5' 7-1/8"	8' 5-3/8"	6' 7-3/4"	6	6	1	2	3
LPT-549	131	3,000	5,600	1	20	32,110	7' 5/8"	15' 2-3/8"	6' 2-7/8"	4' 3/8"	4' 11-5/8"	5' 7-1/8"	8' 5-3/8"	6' 7-3/4"	6	6	1	2	3
LPT-559	139	3,170	5,770	1	15	29,590	8' 5/8"	15' 2-3/8"	7' 2-7/8"	5' 3/8"	4' 11-5/8"	5' 7-1/8"	8' 5-3/8"	6' 7-3/4"	6	6	1	2	3
LPT-569	152	3,240	5,830	1	20	32,110	8' 5/8"	15' 2-3/8"	7' 2-7/8"	5' 3/8"	4' 11-5/8"	5' 7-1/8"	8' 5-3/8"	6' 7-3/4"	6	6	1	2	3
LPT-5112	136	3,440	6,990	1	15	32,190	7' 5/8"	18' 2-3/4"	6' 2-7/8"	4' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3
LPT-5212	150	3,450	7,010	1	20	35,460	7' 5/8"	18' 2-3/4"	6' 2-7/8"	4' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3
LPT-5312	161	3,460	7,020	1	25	38,170	7' 5/8"	18' 2-3/4"	6' 2-7/8"	4' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3
LPT-5412	171	3,490	7,040	1	30	40,550	7' 5/8"	18' 2-3/4"	6' 2-7/8"	4' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3
LPT-5512	176	3,700	7,250	1	25	37,890	8' 5/8"	18' 2-3/4"	7' 2-7/8"	5' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3
LPT-5612	185	3,720	7,270	1	30	40,280	8' 5/8"	18' 2-3/4"	7' 2-7/8"	5' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3
LPT-5712	198	3,980	7,520	1	30	40,110	9' 5/8"	18' 2-3/4"	8' 2-7/8"	6' 3/8"	8'	8' 7-1/2"	11' 5-3/4"	6' 7-3/4"	6	6	1	2	3

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 1/2", use next size fan motor.

# Models: LPT-819 to 8812

## ENGINEERING & DIMENSION DATA



## LOW PROFILE COOLING TOWERS

Model No.	Nominal Tonnage	WEIGHTS (LBS)		No. Fans	Fan Motor (HP)*	Air Flow CFM	DIMENSIONS						CONNECTIONS (IN.)					
		Shipping	Operating				H	L	P	C	O	N	M	Water In	Water Out	Make Up	Drain	Over Flow
LPT-819	181	4,220	7,620	2	20	49,270	6' 11-1/2"	15' 2-3/8"	6' 5/8"	3' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-829	189	4,290	7,690	2	15	41,610	6' 11-1/2"	15' 2-3/8"	6' 5/8"	3' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-839	195	4,220	7,620	2	20	46,850	6' 11-1/2"	15' 2-3/8"	6' 5/8"	3' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-849	206	4,460	7,860	2	15	41,020	7' 11-1/2"	15' 2-3/8"	7' 5/8"	4' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-859	207	4,320	7,720	2	25	49,340	6' 11-1/2"	15' 2-3/8"	6' 5/8"	3' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-869	214	4,340	7,740	2	30	51,110	6' 11-1/2"	15' 2-3/8"	6' 5/8"	3' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-879	229	4,490	7,890	2	25	48,680	7' 11-1/2"	15' 2-3/8"	7' 5/8"	4' 11-1/4"	4' 11-5/8"	5' 7-5/8"	8' 5-3/8"	8	8	1	2	3
LPT-8112	232	4,760	9,490	2	25	57,240	6' 11-1/2"	18' 2-3/4"	6' 5/8"	3' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8212	251	4,830	9,550	2	30	59,530	6' 11-1/2"	18' 2-3/4"	6' 5/8"	3' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8312	266	5,080	9,800	2	40	66,940	6' 11-1/2"	18' 2-3/4"	6' 5/8"	3' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8412	273	5,110	9,840	2	30	58,650	7' 11-1/2"	18' 2-3/4"	7' 5/8"	4' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8512	287	5,190	9,910	2	50	68,790	6' 11-1/2"	18' 2-3/4"	6' 5/8"	3' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8612	300	5,410	10,130	2	40	64,560	7' 11-1/2"	18' 2-3/4"	7' 5/8"	4' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8712	321	5,520	10,240	2	50	68,790	7' 11-1/2"	18' 2-3/4"	7' 5/8"	4' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3
LPT-8812	333	5,840	10,550	2	50	68,700	8' 11-1/2"	18' 2-3/4"	8' 5/8"	5' 11-1/4"	8'	8' 7"	11' 5-3/4"	8	8	2	2	3

### NOTES:

1. An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
  2. Connections smaller than 6" are MPT. Connections 6" or larger are Beveled For Weld/Grooved for mechanical coupling (BFW/Grooved).
  3. Do not use catalog drawings for certified prints. Dimensions are subject to change.
- \* For external static pressure up to 1/2", use next size fan motor.



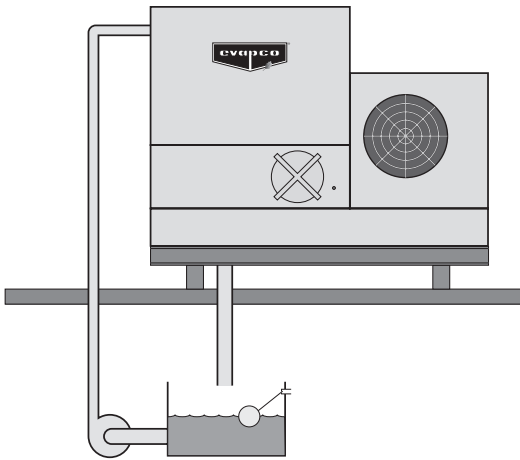
# Freeze Protection and Heat Loss

## Pan Freeze Protection

Whenever a cooling tower is idle during subfreezing weather, the water in the sump must be protected from freezing and damaging the pan.

## Remote Sump Configuration

The surest way to protect the recirculating water system from freezing is with a remote sump. The remote sump should be located inside the building and below the unit. When a remote sump arrangement is selected, the spray pump is provided by others and installed at the remote sump tower. All water in the cooling towers basin should drain to the remote sump when the spray pump cycles off. When a remote sump is not possible, a supplementary means of heating the pan water must be provided.



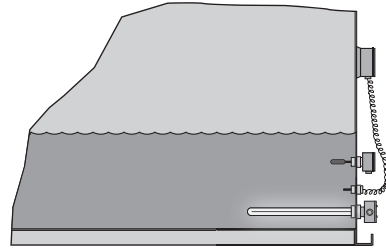
## Electric Water Level Control

EVAPCO LPT and LSTE Cooling Towers are available with an optional electric water level control system in place of the standard mechanical make-up valve and float assembly. This package provides accurate control of the pan water level and does not require field adjustment, even under widely variable operating conditions.

The controller was designed by EVAPCO and consists of multiple heavy duty stainless steel electrodes. These electrodes are mounted external to the unit in a vertical standpipe. For winter operation, the standpipe must wrapped with electric heating cable and insulated to protect it from freezing. The weather protected slow closing solenoid valve for the makeup water connection is factory supplied and is ready for piping to a water supply with a pressure between 5 psi (minimum) and 125 psi (maximum).

## Basin Heater Package

If a remote sump configuration is not practical, electric basin heater packages are available to keep the pan water from freezing when the unit cycles off. Water lines to and from the unit, spray pump and related piping should be heat traced and insulated up to the overflow level to protect from freezing.



## LSTE Basin Heater Sizing

Unit Footprint	kW (0°F)	kW (-20°F)	kW (-40°F)
4' x 6'	(1) 2	(1) 3	(1) 4
4' x 9'	(1) 3	(1) 4	(1) 5
4' x 12'	(1) 3	(1) 5	(1) 7
4' x 18'	(1) 5	(1) 7	(1) 9
5' x 12'	(1) 4	(1) 6	(1) 8
5' x 18'	(2) 3	(2) 4	(1) 12
8P' x 12'	(1) 5	(1) 8	(1) 10
8P' x 18'	(2) 4	(2) 6	(2) 7
8P' x 24'	(2) 5	(2) 7	(2) 10
8P' x 36'	(2) 7	(2) 12	(2) 15
10' x 12'	(1) 7	(1) 10	(1) 15
10' x 18'	(2) 5	(2) 7	(2) 10
10' x 24'	(2) 7	(2) 10	(2) 15
10' x 36'	(2) 10	(4) 7	(4) 9

## LPT Basin Heater Sizing

Unit Footprint	kW (0°F)	kW (-20°F)	kW (-40°F)
3' x 6'	(1) 2	(1) 3	(1) 4
5' x 6'	(1) 3	(1) 5	(1) 6
5' x 9'	(1) 4	(1) 6	(1) 8
5' x 12'	(1) 6	(1) 8	(1) 12
8' x 9'	(1) 7	(1) 9	(1) 12
8' x 12'	(1) 9	(1) 12	(1) 16

## Hot Water Coils

Pan coils are available as an alternate to using electric basin heaters or a remote sump. Constructed of galvanized pipe and installed in the cooling tower basin, they are supplied without controls and are ready for piping to an external hot water source. Pan water heater controls should be interlocked with the water circulating pump to prevent their operation when the pump is energized.

# Steel Support and Optional Equipment

## Steel Support

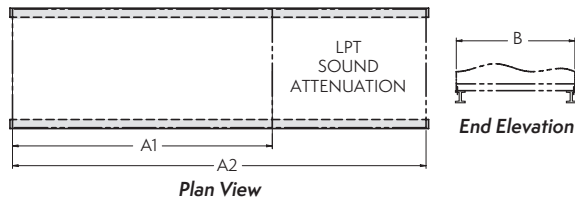
### Steel Support

The recommended support for EVAPCO LSTE/LPT is structural "I" beams located under the outer flanges and running the entire length of the unit. Mounting holes 3/4" in diameter are located in the bottom channels of the pan section to provide for bolting to the structural steel. (Refer to certified drawings from the factory for bolt hole locations.)

Beams should be level to within 1/360 of unit length, not to exceed 1/2" before setting the unit in place. Do not level the unit by shimming between it and the "I" beams as this will not provide proper longitudinal support.

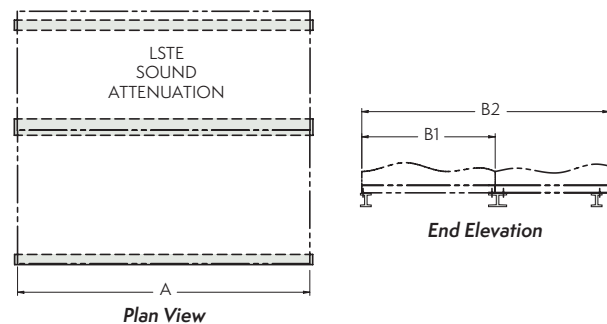
LPT Dimensions

Fill Section Footprint	A1 (Unit Only)	A2 (Unit with Intake Atten.)	B
3' x 6'	10' 1-7/8"	13' 9-5/8"	3' 4-1/2"
5' x 6'	12' 2-7/8"	15' 10-5/8"	5' 5/8"
5' x 9'	15' 2-1/4"	18' 10"	5' 5/8"
5' x 12'	18' 2-5/8"	21' 10-3/8"	5' 5/8"
8' x 9'	15' 2-1/4"	18' 10"	7' 10"
8' x 12'	18' 2-5/8"	21' 10-3/8"	7' 10"



LSTE Dimensions

Unit Footprint	B1 (Unit Only)	B2 (Unit with Intake Atten.)	A
4' x 6'	4' 5/8"	9' 11-1/2"	5' 11-7/8"
4' x 9'	4' 5/8"	9' 11-1/2"	8' 11-1/4"
4' x 12'	4' 5/8"	9' 11-1/2"	11' 11-1/2"
4' x 18'	4' 5/8"	9' 11-1/2"	18' 0"
5' x 12'	5' 5"	11' 3-15/16"	11' 11-1/2"
5' x 18'	5' 5"	11' 3-15/16"	17' 11-7/8"
8P' x 12'	7' 10"	13' 8-7/8"	11' 11-3/4"
8P' x 18'	7' 10"	13' 8-7/8"	18' 0"
8P' x 24'	7' 10"	13' 8-7/8"	24' 1"
8P' x 36'	7' 10"	13' 8-7/8"	36' 2-1/4"
10' x 12'	9' 9-3/4"	15' 8-5/8"	11' 11-3/4"
10' x 18'	9' 9-3/4"	15' 8-5/8"	18' 1/4"
10' x 24'	9' 9-3/4"	15' 8-5/8"	24' 1-1/8"
10' x 36'	9' 9-3/4"	15' 8-5/8"	36' 2-1/2"



## Optional Equipment

### Electric Water Level Control

Cooling Towers may be ordered with an electric water level control in lieu of the standard mechanical float and make-up assembly. This package provides accurate control of water levels and does not require field adjustment.



### Screened Bottom Panels

Protective inlet screens are provided on the sides and/or end of the unit's air intake. Screens are not provided below the fan section since most units are mounted on the roof or at ground level. It is recommended that bottom screens be added to the unit when it will be elevated. These screens can be provided by the factory at an additional cost or added by the installing contractor.

### Solid Bottom Panels for Ducted Installations

When centrifugal fan units are installed indoors and intake air is ducted to the unit, a solid bottom panel is required to completely enclose the fan section and prevent the unit

from drawing air from the room into the fan intakes. When this option is ordered, air inlet screens are omitted.

### Stainless Steel Material Options

The EVAPCOAT Corrosion Protection System is satisfactory for most applications. If additional corrosion protection is required the following stainless steel options are available. Please contact your local EVAPCO representative for pricing.

- Stainless Steel Cold Water Basins
- Stainless Steel Water Touch Basins
- Stainless Steel Water Touch Units
- All Stainless Steel Units

### Additional Available Options Include:

- Vibration Cutout Switch
- Electric Basin Heaters
- Vertical Ladders
- Sound Attenuation Packages

# Optional Equipment for Low Sound Solutions

## Sound Attenuation Packages

**LPT:** The standard LPT is the quietest, low profile centrifugal fan cooling tower in the industry. This is achieved by providing the first stage of inlet sound attenuation as part of the LPT's standard design. The LPT drive system, including the fan housing(s), electric motors, belts, bearings and drives, is completely enclosed by a protective housing which covers the drive system and also provides a significant level of sound reduction.

**LSTE:** The centrifugal fan design of the LSTE models operate at lower sound levels, which make these units well suited for sound sensitive applications.

If the standard LSTE and LPT sound pressure level is not quiet enough for certain applications, the sound levels can be further reduced by adding various stages of sound attenuation. Consult the factory for Factory Certified Sound Data for each option. Please refer to Evapco's selection software for correct model number designation and CTI Certified performance.

## Fan Side Inlet Attenuation

(LPT Only)

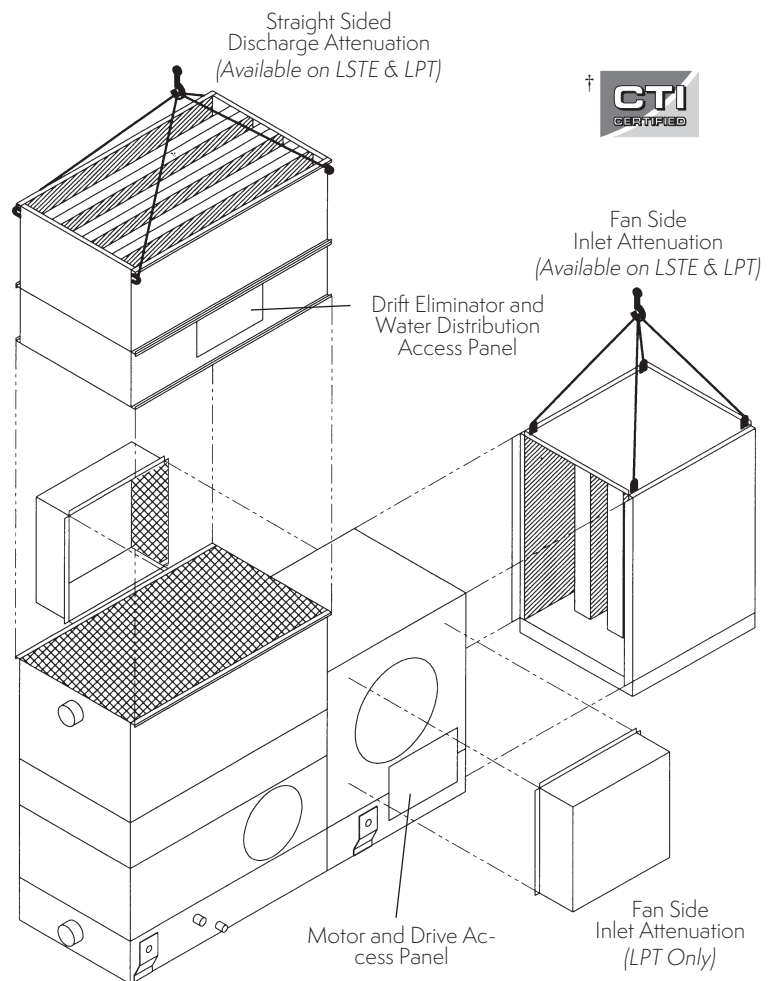
Reduces sound radiated from the fan side air intakes and has an open side to allow for air entry. This attenuation package ships loose to be mounted in the field on each side of the tower over the fan intakes.

## Inlet Attenuation

Reduces sound radiated through the end and side air intakes. It consists of baffled panels to change the path of the air entry and to capture the radiated noise thus reducing the overall sound levels generated. In addition, the external belt adjustment mechanism is extended through the inlet attenuator to allow easy belt adjustment without having to enter the unit. Solid bottom panels are included with this option to force the inlet air through the attenuator.

## Discharge Attenuation

The discharge attenuation hood features a straight sided design with insulated baffles to reduce the overall sound levels of the discharge air. The discharge attenuation incorporates a large access panel to allow entry to the drift eliminators and water distribution system. If a higher discharge velocity is required with minimal sound attenuation, a tapered discharge hood is available.



Example of Sound Attenuation on an LPT Model

† Mark owned by the Cooling Technology Institute



OUR PRODUCTS ARE MANUFACTURED WORLDWIDE.



- ★ World Headquarters/ Research and Development Center
- EVAPCO Facilities

### EVAPCO, Inc. — World Headquarters & Research/Development Center

P.O. Box 1300 • Westminster, MD 21158 USA  
410-756-2600 p • marketing@evapco.com • evapco.com

#### North America

##### EVAPCO, Inc. World Headquarters

Westminster, MD USA  
410-756-2600 p | 410-756-6450 f  
marketing@evapco.com

##### EVAPCO East

Taneytown, MD USA  
410-756-2600 p | 410-756-6450 f  
marketing@evapco.com

##### EVAPCO East

Key Building  
Taneytown, MD USA  
410-756-2600 p  
marketing@evapco.com

##### EVAPCO Midwest

Greenup, IL USA  
217-923-3431 p  
evapcomw@evapcomw.com

##### EVAPCO West

Madera, CA USA  
559-673-2207 p  
contact@evapcowest.com

##### EVAPCO Iowa

Lake View, IA USA  
712-657-3223 p

##### EVAPCO Iowa

Sales & Engineering  
Medford, MN USA  
507-446-8005 p  
evapcomn@evapcomn.com

##### EVAPCO Newton

Newton, IL USA  
618-783-3433 p  
evapcomw@evapcomw.com

##### EVAPCOLD Manufacturing

Greenup, IL USA  
217-923-3431 p  
evapcomw@evapcomw.com

##### EVAPCO Dry Cooling, Inc.

Bridgewater, NJ USA  
908-379-2665 p  
info@evapcodc.com

##### EVAPCO Dry Cooling, Inc.

Littleton, CO USA  
908-379-2665 p  
info@evapcodc.com  
Spare Parts: 908-895-3236  
Spare Parts: spares@evapcodc.com

##### EVAPCO Power México S. de R.L. de C.V.

Mexico City, Mexico  
+52 (55) 8421-9260 p  
info@evapco.de

##### Refrigeration Vessels & Systems Corporation

A wholly owned subsidiary of EVAPCO, Inc.  
Bryan, TX USA  
979-778-0095 p  
rvs@rvscorp.com

##### EvapTech, Inc.

A wholly owned subsidiary of EVAPCO, Inc.  
Edwardsville, KS USA  
913-322-5165 p  
marketing@evaptech.com

##### Tower Components, Inc.

A wholly owned subsidiary of EVAPCO, Inc.  
Ramseur, NC USA  
336-824-2102 p  
mail@towercomponentsinc.com

##### EVAPCO Alcoi, Inc.

A wholly owned subsidiary of EVAPCO, Inc.  
York, PA USA  
717-347-7500 p  
info@alcoi.net

#### Europe

##### EVAPCO Europe BVBA European Headquarters

Tongeren, Belgium  
(32) 12-395029 p | (32) 12-238527 f  
evapco.europe@evapco.be

##### EVAPCO Europe, S.r.l.

Milan, Italy  
(39) 02-939-9041 p  
evapcoeuropa@evapco.it

##### EVAPCO Europe, S.r.l.

Sondrio, Italy

##### EVAPCO Europe GmbH

Meerbusch, Germany  
(49) 2159 6956 18 p  
info@evapco.de

##### EVAPCO Air Solutions

A wholly owned subsidiary of EVAPCO, Inc.  
Aabybro, Denmark  
(45) 9824 4999 p  
info@evapco.dk

##### EVAPCO Air Solutions GmbH

Garbsen, Germany  
(49) 5137 93875-0 p  
info@evapcoas.de

##### Evap Egypt Engineering Industries Co.

A licensed manufacturer of EVAPCO, Inc.  
Nasr City, Cairo, Egypt  
2 02 24022866 / 2 02 24044997 p  
primacool@link.net / shady@primacool.net

##### EVAPCO S.A. (Pty.) Ltd.

A licensed manufacturer of EVAPCO, Inc.  
Isando, South Africa  
(27) 11-392-6630 p  
evapco@evapco.co.za

#### Asia Pacific

##### EVAPCO Asia Pacific Headquarters

Shanghai, P.R. China  
(86) 21-6687-7786 p  
(86) 21-6687-7008 f  
marketing@evapcochina.com

##### EVAPCO (Shanghai) Refrigeration Equipment Co., Ltd.

Baoshan Industrial Zone Shanghai, P.R. China  
(86) 21-6687-7786 p  
marketing@evapcochina.com

##### EVAPCO (Beijing) Refrigeration Equipment Co., Ltd.

Huairou District Beijing, P.R. China  
010-6166-7238 p  
evapcobj@evapcochina.com

##### EVAPCO Air Cooling Systems (Jiaxing) Company, Ltd.

Xiuzhou district, Jiaxing, Zhejiang, P.R. China  
info@evapcoacs.cn

##### EVAPCO Australia (Pty.) Ltd.

Riverstone, Australia  
(61) 2 9627-3322 p  
sales@evapco.com.au

##### EvapTech Asia Pacific Sdn. Bhd

A wholly owned subsidiary of EvapTech, Inc.  
Puchong, Selangor, Malaysia  
(60-3) 8070-7255 p  
marketing-ap@evaptech.com

#### South America

##### EVAPCO Brasil

Equipamentos Industriais Ltda.  
São Paulo, Brazil  
(55+11) 5681-2000 p  
vendas@evapco.com.br

##### FanTR Technology Resources

São Paulo, Brasil  
55 (11) 4025-1670 p  
fantr@fantr.com

