



TXS⁺

SERIES COOLING TOWER

MULTI-CELL 100-2600 HRT COOLING CAPACITY

Modular Design Crossflow Type



LOW NOISE • SUPER LOW NOISE • ENERGY SAVING SUPER LOW NOISE



TXS+ Series is an induced draft cross-flow, film filled, FRP multi-cell rectangular cooling tower designed for the equipment cooling, industrial process cooling and air conditioning applications.

The TXS+ Series Cooling Tower is designed in accordance to CTI & JCI standards. Its design saves space, light weight, blends easily with architectural designs and offers low operating costs.

The thermal performance of TXS+ Series is backed by full written guarantee. Field performance test to CTI standards can be carried out and witnessed by the owners appointed inspection engineer to ensure the supplied cooling tower meets the thermal performance.

Truwater TXS+ Series Cooling Tower meets most design criteria in terms of economy, extra low noise and space saving.



Advantages

- **Space Saving & Light Weight**

Incorporating the high performance fill, the installation space and operating weight are greatly reduced.

- **Energy Saving**

The low speed, high efficiency fan and low pressure drop fill design optimize the energy consumption.

- **Low Noise level**

The noise level is lowered by the specifically designed low noise fan.

- **Proven Corrosion Protection**

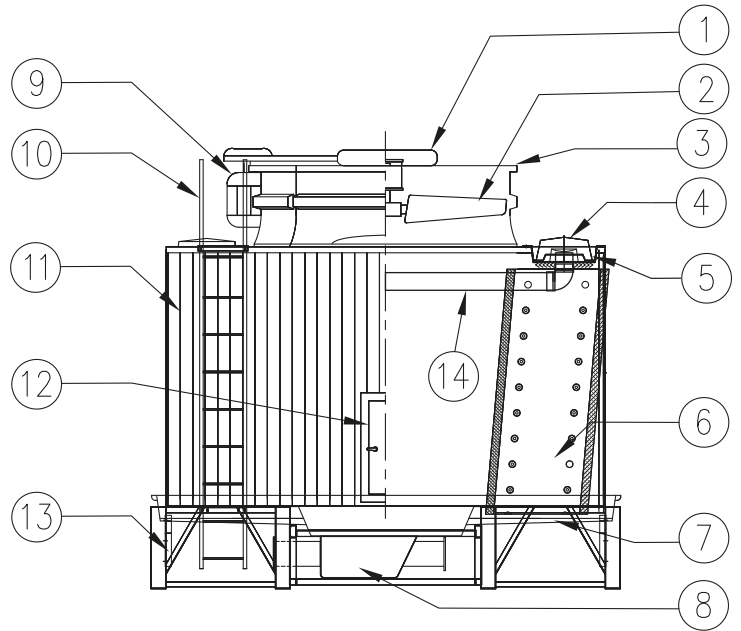
Tower components are made of anti-corrosive material suitable for cooling water application.

- **Easy Hoisting or Crane Placement**

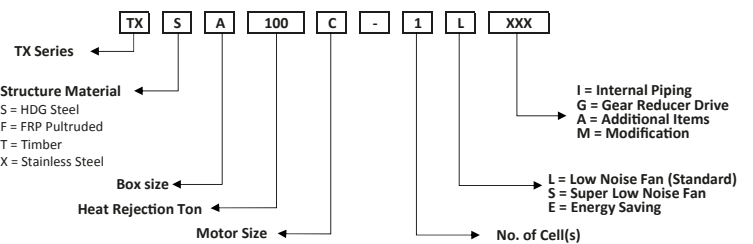
The tower can be preassembled in the factory for easy transport, lifting and site installation.



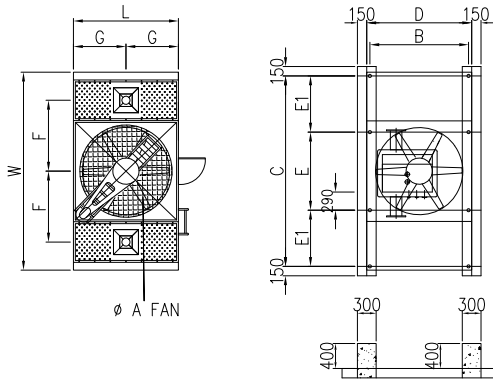
Features



No	Description	Material / Specification
1	V-Belt and Pulley System	FRP Pulley Cover
2	Fan Assembly	Aluminium Alloy
3	Fan Stack	FRP
4	Hot Water Distribution Box	FRP
5	Hot Water Basin	FRP
6	High Performance Film Fill Pack and Drift Eliminator	PVC
7	Cold Water Basin Floor	FRP
8	Suction Sump	FRP
9	Motor	Weather Proof TEFC type
10	Ladder	HDG Steel
11	Casing / Louver	FRP
12	Inspection Door	FRP
13	Cold Water Basin Frame	HDG Steel
14	Internal Piping	Optional

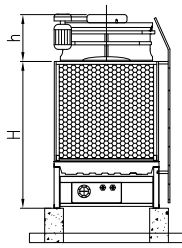


Outline And Foundation Drawing (Single Cell)

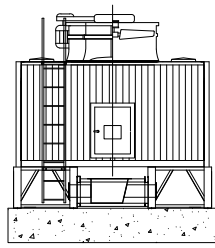


PLAN VIEW

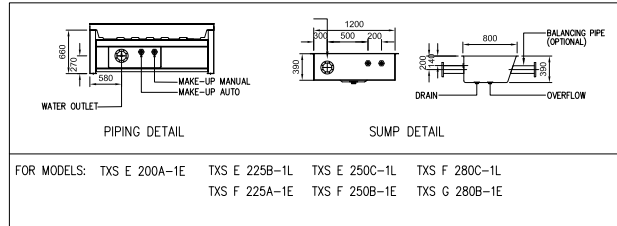
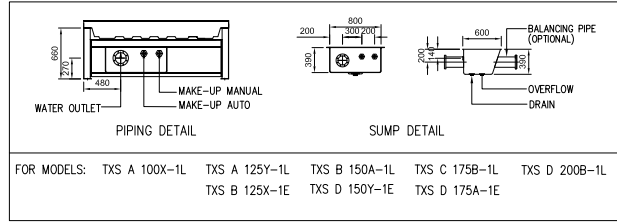
RC FOUNDATION DETAIL



SIDE VIEW



FRONT VIEW

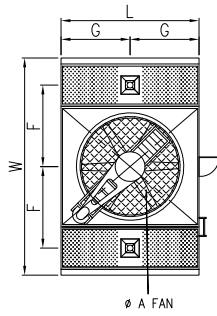


TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

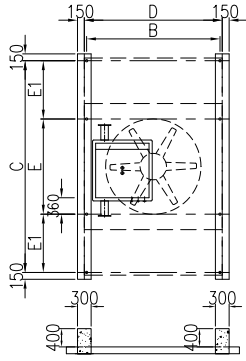
Tower Model	OVERALL DIMENSION				MOTOR				AXIAL FLOW FAN			
	TXS+	L	W	H	h	Rated Output kW	Rated Current (A 50/60Hz)	Type	Power Source	Diameter (mm)	Fan Speed	No of blades
TXSA 100 X- 1L	1680	3170	2350	750	1.5	3.3	TEFC, outdoor, 3 phase, induction motor, 4 pole	3ph / 380V /50Hz or 3ph / 415V /50Hz	1400	450	Four (4) to Six (6)	V-Belt and Pulley
TXSA 125 Y- 1L	1680	3170	2350	750	2.2	4.7			1400	450		
TXSB 125 X- 1E	1680	3170	2750	750	1.5	3.3			1400	450		
TXSB 150 A- 1L	1680	3170	2750	750	4.0	8.1			1400	450		
TXSD 150 Y- 1E	1880	3370	2750	750	2.2	4.7			1600	360		
TXSC 175 B- 1L	1880	3370	2350	750	5.5	11.0			1600	360		
TXSD 175 A- 1E	1880	3370	2750	750	4.0	8.1			1600	426		
TXSD 200 B- 1L	1880	3370	2750	750	5.5	11.0			1600	475		
TXSE 200 A- 1E	2080	3570	2750	750	4.0	8.1			1830	475		
TXSE 225 B- 1L	2080	3570	2750	750	5.5	11.0			1830	450		
TXSF 225 A- 1E	2280	3770	2750	750	4.0	8.1			2000	450		
TXSE 250 C- 1L	2080	3570	2750	750	7.5	13.6			1830	450		
TXSF 250 B- 1E	2280	3770	2750	750	5.5	11.0			2000	450		
TXSF 280 C- 1L	2280	3770	2750	750	7.5	13.6			2000	450		
TXSG 280 B- 1E	2280	3770	3460	750	5.5	11.0			2000	450		
TXSG 320 C- 1L	2280	3770	3460	750	7.5	13.6			2000	450		
TXSJ 320 B- 1E	2680	4770	3480	1000	5.5	11.0			2135	430		
TXSJ 350 C- 1L	2680	4770	3480	1000	7.5	13.6			2135	430		
TXSK 350 B- 1E	3030	4770	3480	1000	5.5	11.0			2440	400		
TXSJ 400 D- 1L	2680	4770	3480	1000	11.0	20.1			2135	430		
TXSK 400 C- 1E	3030	4770	3480	1000	7.5	13.6			2440	400		
TXSK 450 D- 1L	3030	4770	3480	1000	11.0	20.1			2440	400		
TXSL 450 C- 1E	3430	5170	3480	1000	7.5	13.6			2745	380		
TXSK 500 E- 1L	3030	4770	3480	1000	15.0	26.7			2440	400		
TXSL 500 D- 1E	3430	5170	3480	1000	11.0	20.1			2745	345		
TXSL 550 E- 1L	3430	5170	3480	1000	15.0	26.7			2745	345		
TXSM 550 D- 1E	3430	5170	3880	1000	11.0	20.1			2745	345		
TXSL 600 F- 1L	3430	5170	3480	1000	18.5	33.2			2745	400		
TXSM 600 E- 1E	3430	5170	3880	1000	15.0	26.7	2745	345				
TXSM 650 F- 1L	3430	5170	3880	1000	18.5	33.2	2745	400				
TXSN 650 E- 1E	3430	5170	4480	1000	15.0	26.7	2745	345				

* We reserve the right to change data and specification without prior notice.

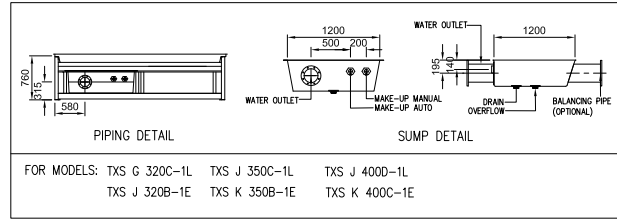
Outline And Foundation Drawing (Single Cell)



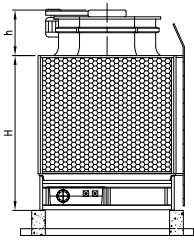
PLAN VIEW



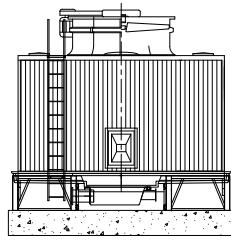
RC FOUNDATION DETAIL



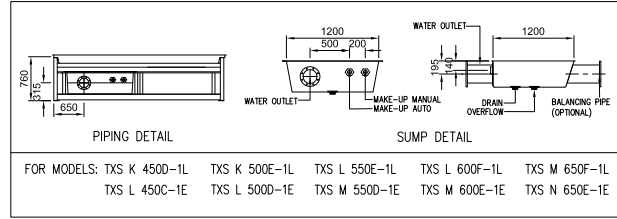
FOR MODELS: TXS G 320C-1L TXS J 350C-1L TXS J 400D-1L
TXS J 320B-1E TXS K 350B-1E TXS K 400C-1E



FRONT VIEW



SIDE VIEW



FOR MODELS: TXS K 450D-1L TXS K 500E-1L TXS L 550E-1L TXS L 600F-1L TXS M 650F-1L
TXS L 450C-1E TXS L 500D-1E TXS M 550D-1E TXS M 600E-1E TXS N 650E-1E

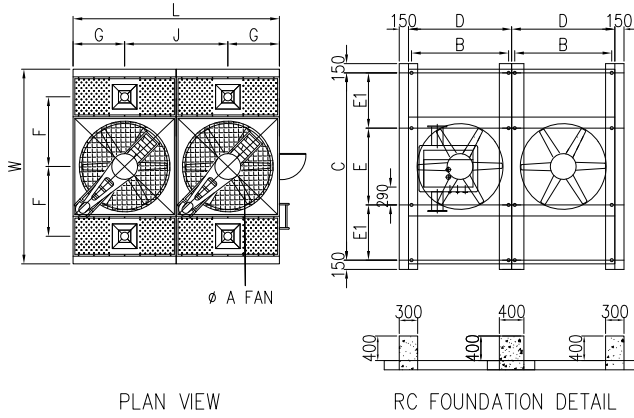
TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	FOUNDATION DIMENSION					PIPING DATA			PIPING SIZE						WEIGHT (KG)	
	B	C	D	E	E1	F	G	J	External Piping	Internal Piping	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
TXSA 100 X- 1L	1580	3050	1680	1250	900	1135	840	-	100 x 2	100 x 1	100 x 1	50 x 1	50 x 1	25 x 1	784	1990
TXSA 125 Y- 1L	1580	3050	1680	1250	900	1135	840	-	100 x 2	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	790	2010
TXSB 125 X- 1E	1580	3050	1680	1250	900	1135	840	-	100 x 2	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	867	2013
TXSB 150 A- 1L	1580	3050	1680	1250	900	1135	840	-	100 x 2	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	886	2180
TXSD 150 Y- 1E	1780	3250	1880	1450	900	1235	940	-	100 x 2	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	1010	2500
TXSC 175 B- 1L	1780	3250	1880	1450	900	1235	940	-	100 x 2	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	951	2400
TXSD 175 A- 1E	1780	3250	1880	1450	900	1235	940	-	100 x 2	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	1023	2540
TXSD 200 B- 1L	1780	3250	1880	1450	900	1235	940	-	100 x 2	125 x 1	150 x 1	50 x 1	50 x 1	25 x 1	1038	2570
TXSE 200 A- 1E	1980	3450	2080	1450	1000	1335	1040	-	100 x 2	125 x 1	150 x 1	50 x 1	50 x 1	25 x 1	1179	2920
TXSE 225 B- 1L	1980	3450	2080	1450	1000	1335	1040	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1194	2950
TXSF 225 A- 1E	2180	3650	2280	1650	1000	1435	1140	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1318	3290
TXSE 250 C- 1L	1980	3450	2080	1450	1000	1335	1040	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1207	2980
TXSF 250 B- 1E	2180	3650	2280	1650	1000	1435	1140	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1333	3320
TXSF 280 C- 1L	2180	3650	2280	1650	1000	1435	1140	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1346	3360
TXSG 280 B- 1E	2180	3650	2280	1650	1000	1435	1140	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1474	3620
TXSG 320 C- 1L	2180	3650	2280	1650	1000	1435	1140	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1487	3660
TXSJ 320 B- 1E	2580	4650	2680	2090	1280	1790	1340	-	125 x 2	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1898	5050
TXSJ 350 C- 1L	2580	4650	2680	2090	1280	1790	1340	-	150 x 2	200 x 1	250 x 1	80 x 1	50 x 1	50 x 1	1911	5090
TXSK 350 B- 1E	2930	4650	3030	2090	1280	1830	1515	-	150 x 2	200 x 1	250 x 1	80 x 1	50 x 1	50 x 1	2206	5780
TXSJ 400 D- 1L	2580	4650	2680	2090	1280	1790	1340	-	150 x 2	200 x 1	250 x 1	80 x 1	50 x 1	50 x 1	1942	5150
TXSK 400 C- 1E	2930	4650	3030	2090	1280	1830	1515	-	150 x 2	200 x 1	250 x 1	80 x 1	50 x 1	50 x 1	2219	5830
TXSK 450 D- 1L	2930	4650	3030	2090	1280	1830	1515	-	150 x 2	250 x 1	250 x 1	80 x 1	50 x 1	50 x 1	2261	5930
TXSL 450 C- 1E	3330	5050	3430	2490	1280	1990	1715	-	150 x 2	250 x 1	250 x 1	80 x 1	50 x 1	50 x 1	2570	6850
TXSK 500 E- 1L	2930	4650	3030	2090	1280	1830	1515	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2281	5990
TXSL 500 D- 1E	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2612	6940
TXSL 550 E- 1L	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2632	7010
TXSM 550 D- 1E	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2762	7320
TXSL 600 F- 1L	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2672	7090
TXSM 600 E- 1E	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2822	7480
TXSM 650 F- 1L	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	2959	7880
TXSN 650 E- 1E	3330	5050	3430	2490	1280	1990	1715	-	200 x 2	250 x 1	250 x 1	80 x 1	80 x 1	50 x 1	3036	8110

* Note: 1.) For Internal Piping Detail, Please Contact Truwater's Engineer.
3.) External Piping to Open End. Internal Piping & Water Outlet to JIS10K FF Flange.

2.) Balancing Pipe Connection Is Available Upon Request.
4.) Overflow, Drain, Make Up Auto & Manual to BSP Female Thread.

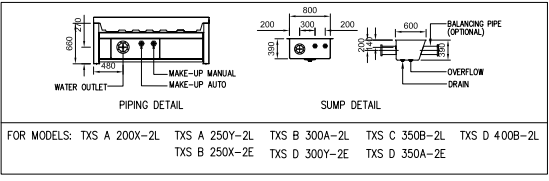
Outline And Foundation Drawing (Two Cells)



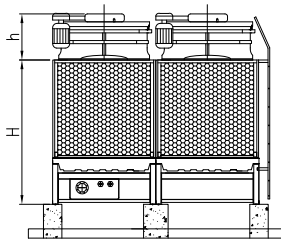
PLAN VIEW

RC FOUNDATION DETAIL

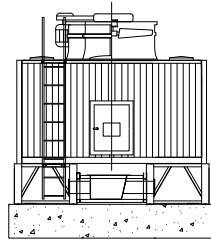
- | | | |
|-----------------|-----------------|-----------------|
| TXSA 200 X - 2L | TXSA 250 Y - 2L | TXSB 300 A - 2L |
| TXSC 350 B - 2L | TXSD 400 B - 2L | TXSE 450 B - 2L |
| TXSE 500 C - 2L | TXSF 560 C - 2L | TXSB 250 X - 2E |
| TXSD 300 Y - 2E | TXSD 350 A - 2E | TXSE 400 A - 2E |
| TXSF 450 A - 2E | TXSF 500 B - 2E | TXSG 560 B - 2E |



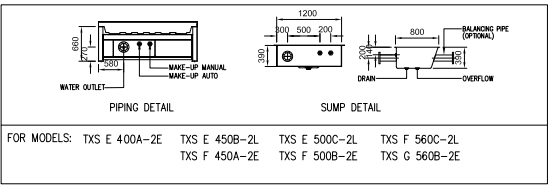
FOR MODELS: TXS A 200X-2L TXS A 250Y-2L TXS B 300A-2L TXS C 350B-2L TXS D 400B-2L
TXS B 250X-2E TXS D 300Y-2E TXS D 350A-2E



FRONT VIEW



FRONT VIEW

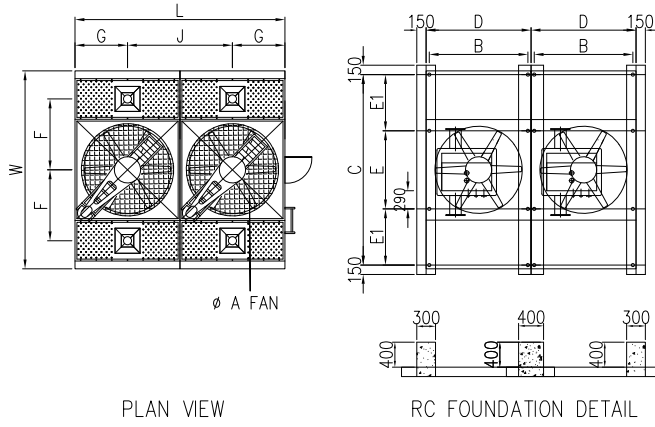


FOR MODELS: TXS E 400A-2E TXS E 450B-2L TXS E 500C-2L TXS F 560C-2L
TXS F 450A-2E TXS F 500B-2E TXS G 560B-2E

TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	OVERALL DIMENSION				MOTOR				AXIAL FLOW FAN			
	L	W	H	h	Rated Output kW	Rated Current (A 50/60Hz)	Type	Power Source	Diameter (mm)	Fan Speed	No of blades	Drive System
TXSA 200 X - 2L	3360	3170	2350	750	1.5	3.3	TEFC, outdoor, 3 phase, induction motor, 4 pole	3ph / 380V /50Hz or 3ph / 415V /50Hz	1400	450	Four (4) to Six (6)	V-Belt and Pulley
TXSA 250 Y - 2L	3360	3170	2350	750	2.2	4.7			1400	450		
TXSB 250 X - 2E	3360	3170	2750	750	1.5	3.3			1400	450		
TXSB 300 A - 2L	3360	3170	2750	750	4.0	8.1			1400	450		
TXSD 300 Y - 2E	3760	3370	2750	750	2.2	4.7			1600	360		
TXSC 350 B - 2L	3760	3370	2350	750	5.5	11.0			1600	360		
TXSD 350 A - 2E	3760	3370	2750	750	4.0	8.1			1600	426		
TXSD 400 B - 2L	3760	3370	2750	750	5.5	11.0			1600	475		
TXSE 400 A - 2E	4160	3570	2750	750	4.0	8.1			1830	475		
TXSE 450 B - 2L	4160	3570	2750	750	5.5	11.0			1830	450		
TXSF 450 A - 2E	4560	3770	2750	750	4.0	8.1			2000	450		
TXSE 500 C - 2L	4160	3570	2750	750	7.5	13.6			1830	450		
TXSF 500 B - 2E	4560	3770	2750	750	5.5	11.0			2000	450		
TXSF 560 C - 2L	4560	3770	2750	750	7.5	13.6			2000	450		
TXSG 560 B - 2E	4560	3770	3460	750	5.5	11.0			2000	450		
TXSG 640 C - 2L	4560	3770	3460	750	7.5	13.6			2000	450		
TXSJ 640 B - 2E	5360	4770	3480	1000	5.5	11.0			2135	430		
TXSJ 700 C - 2L	5360	4770	3480	1000	7.5	13.6			2135	430		
TXSK 700 B - 2E	6060	4770	3480	1000	5.5	11.0			2440	400		
TXSJ 800 D - 2L	5360	4770	3480	1000	11.0	20.1			2135	430		
TXSK 800 C - 2E	6060	4770	3480	1000	7.5	13.6			2440	400		
TXSK 900 D - 2L	6060	4770	3480	1000	11.0	20.1			2440	400		
TXSL 900 C - 2E	6860	5170	3480	1000	7.5	13.6			2745	380		
TXSK 1000E - 2L	6060	4770	3480	1000	15.0	26.7			2440	400		
TXSL 1000D - 2E	6860	5170	3480	1000	11.0	20.1			2745	345		
TXSL 1100E - 2L	6860	5170	3480	1000	15.0	26.7			2745	345		
TXSM 1100D - 2E	6860	5170	3880	1000	11.0	20.1			2745	345		
TXSL 1200F - 2L	6860	5170	3480	1000	18.5	33.2			2745	400		
TXSM 1200E - 2E	6860	5170	3880	1000	15.0	26.7	2745	345				
TXSM 1300F - 2L	6860	5170	3880	1000	18.5	33.2	2745	400				
TXSN 1300E - 2E	6860	5170	4480	1000	15.0	26.7	2745	345				

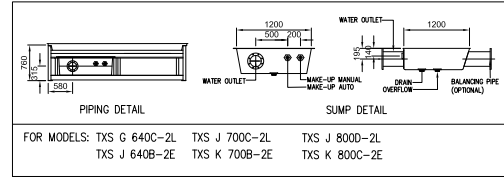
Outline And Foundation Drawing (Two Cells)



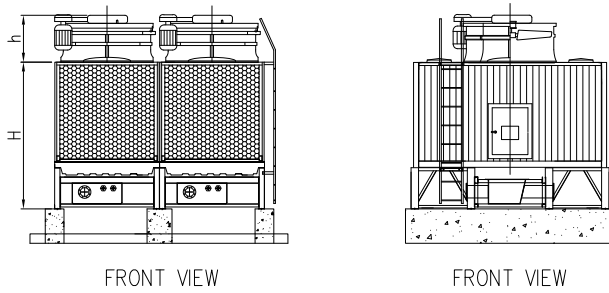
PLAN VIEW

RC FOUNDATION DETAIL

- TXS G 640 C - 2L
- TXS K 900 D - 2L
- TXS L 1200F - 2L
- TXS K 700 B - 2E
- TXS L 1000D - 2E
- TXS N 1300E - 2E
- TXS J 700 C - 2L
- TXS K 1000E - 2L
- TXS M 1300F - 2L
- TXS K 800 C - 2E
- TXS M 1100D - 2E
- TXS J 800 D - 2L
- TXS L 1100E - 2L
- TXS J 640 B - 2E
- TXS L 900 C - 2E
- TXS M 1200E - 2E

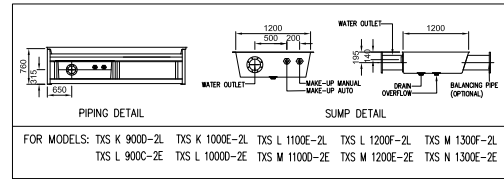


FOR MODELS: TXS G 640C-2L TXS J 700C-2L TXS J 800D-2L
TXS J 640B-2E TXS K 700B-2E TXS K 800C-2E



FRONT VIEW

FRONT VIEW



FOR MODELS: TXS K 900D-2L TXS K 1000E-2L TXS L 1100E-2L TXS L 1200F-2L TXS M 1300F-2L
TXS L 900C-2E TXS L 1000D-2E TXS M 1100D-2E TXS M 1200E-2E TXS N 1300E-2E

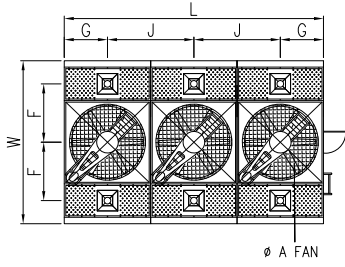
TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	FOUNDATION DIMENSION					PIPING DATA			PIPING SIZE					WEIGHT (KG)		
	B	C	D	E	E1	F	G	J	External Piping	Internal Piping	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
TXS A 200 X - 2L	1580	3050	1680	1250	900	1135	840	1680	100 x 4	100 x 2	150 x 1	50 x 1	50 x 1	25 x 1	1568	3980
TXS A 250 Y - 2L	1580	3050	1680	1250	900	1135	840	1680	100 x 4	125 x 2	200 x 1	50 x 1	50 x 1	50 x 1	1580	4020
TXS B 250 X - 2E	1580	3050	1680	1250	900	1135	840	1680	100 x 4	125 x 2	200 x 1	50 x 1	50 x 1	50 x 1	1734	4260
TXS B 300 A - 2L	1580	3050	1680	1250	900	1135	840	1680	100 x 4	125 x 2	250 x 1	50 x 1	50 x 1	50 x 1	1772	4360
TXS D 300 Y - 2E	1780	3250	1880	1450	900	1235	940	1880	100 x 4	125 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2021	5000
TXS C 350 B - 2L	1780	3250	1880	1450	900	1235	940	1880	100 x 4	125 x 2	250 x 1	50 x 1	50 x 1	50 x 1	1903	4800
TXS D 350 A - 2E	1780	3250	1880	1450	900	1235	940	1880	100 x 4	125 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2047	5080
TXS D 400 B - 2L	1780	3250	1880	1450	900	1235	940	1880	100 x 4	125 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2077	5140
TXS E 400 A - 2E	1980	3450	2080	1450	1000	1335	1040	2080	100 x 4	125 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2358	5840
TXS E 450 B - 2L	1980	3450	2080	1450	1000	1335	1040	2080	125 x 4	150 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2388	5900
TXS F 450 A - 2E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 4	150 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2636	6580
TXS E 500 C - 2L	1980	3450	2080	1450	1000	1335	1040	2080	125 x 4	150 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2414	5960
TXS F 500 B - 2E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 4	150 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2666	6640
TXS F 560 C - 2L	2180	3650	2280	1650	1000	1435	1140	2280	125 x 4	150 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2692	6720
TXS G 560 B - 2E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 4	150 x 2	250 x 1	50 x 1	50 x 1	50 x 1	2948	7240
TXS G 640 C - 2L	2180	3650	2280	1650	1000	1435	1140	2280	125 x 4	150 x 2	200 x 2	50 x 2	50 x 2	50 x 2	2974	7320
TXS J 640 B - 2E	2580	4650	2680	2090	1280	1790	1340	2680	125 x 4	150 x 2	200 x 2	50 x 2	50 x 2	50 x 2	3797	10100
TXS J 700 C - 2L	2580	4650	2680	2090	1280	1790	1340	2680	150 x 4	200 x 2	250 x 2	80 x 2	50 x 2	50 x 2	3823	10180
TXS K 700 B - 2E	2930	4650	3030	2090	1280	1830	1515	3030	150 x 4	200 x 2	250 x 2	80 x 2	50 x 2	50 x 2	4411	11560
TXS J 800 D - 2L	2580	4650	2680	2090	1280	1790	1340	2680	150 x 4	200 x 2	250 x 2	80 x 2	50 x 2	50 x 2	3883	10300
TXS K 800 C - 2E	2930	4650	3030	2090	1280	1830	1515	3030	150 x 4	200 x 2	250 x 2	80 x 2	50 x 2	50 x 2	4437	11660
TXS K 900 D - 2L	2930	4650	3030	2090	1280	1830	1515	3030	150 x 4	250 x 2	250 x 2	80 x 2	50 x 2	50 x 2	4521	11860
TXS L 900 C - 2E	3330	5050	3430	2490	1280	1990	1715	3430	150 x 4	250 x 2	250 x 2	80 x 2	50 x 2	50 x 2	5139	13700
TXS K 1000E - 2L	2930	4650	3030	2090	1280	1830	1515	3030	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	4561	11980
TXS L 1000D - 2E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	5223	13880
TXS L 1100E - 2L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	5263	14020
TXS M 1100D - 2E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	5524	14640
TXS L 1200F - 2L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	5343	14180
TXS M 1200E - 2E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	5644	14960
TXS M 1300F - 2L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	5917	15760
TXS N 1300E - 2E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 4	250 x 2	250 x 2	80 x 2	80 x 2	50 x 2	6072	16220

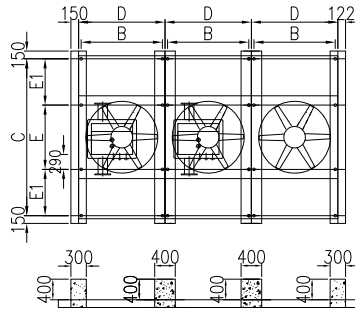
* Note: 1.) For Internal Piping Detail, Please Contact Truwater's Engineer.
3.) External Piping to Open End. Internal Piping & Water Outlet to JIS10K FF Flange.

2.) Balancing Pipe Connection Is Available Upon Request.
4.) Overflow, Drain, Make Up Auto & Manual to BSP Female Thread.

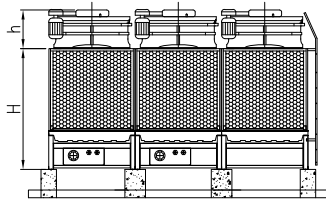
Outline And Foundation Drawing (Three Cells)



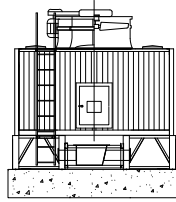
PLAN VIEW



RC FOUNDATION DETAIL

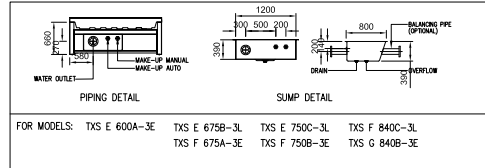
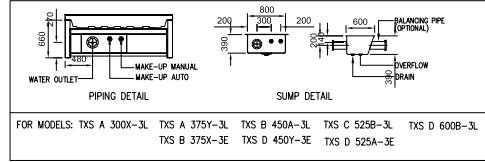


FRONT VIEW



FRONT VIEW

- | | | |
|-----------------|-----------------|-----------------|
| TXSA 300 X - 3L | TXSA 375 Y - 3L | TXSB 450 A - 3L |
| TXSC 525 B - 3L | TXSD 600 B - 3L | TXSE 675 B - 3L |
| TXSE 750 C - 3L | TXSF 840 C - 3L | TXSB 375 X - 3E |
| TXSD 450 Y - 3E | TXSD 525 A - 3E | TXSE 600 A - 3E |
| TXSF 675 A - 3E | TXSF 750 B - 3E | TXSG 840 B - 3E |

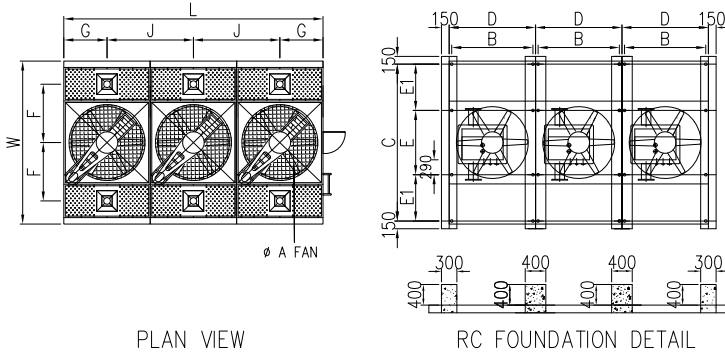


TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	OVERALL DIMENSION				MOTOR				AXIAL FLOW FAN			
	L	W	H	h	Rated Output kW	Rated Current (A 50/60Hz)	Type	Power Source	Diameter (mm)	Fan Speed	No of blades	Drive System
TXSA 300 X - 3L	5040	3170	2350	750	1.5	3.3	TEFC, outdoor, 3 phase, induction motor, 4 pole	3ph / 380V /50Hz or 3ph / 415V /50Hz	1400	450	Four (4) to Six (6)	V-Belt and Pulley
TXSA 375 Y - 3L	5040	3170	2350	750	2.2	4.7			1400	450		
TXSB 375 X - 3E	5040	3170	2750	750	1.5	3.3			1400	450		
TXSB 450 A - 3L	5040	3170	2750	750	4.0	8.1			1400	450		
TXSD 450 Y - 3E	5640	3370	2750	750	2.2	4.7			1600	360		
TXSC 525 B - 3L	5640	3370	2350	750	5.5	11.0			1600	360		
TXSD 525 A - 3E	5640	3370	2750	750	4.0	8.1			1600	426		
TXSD 600 B - 3L	5640	3370	2750	750	5.5	11.0			1600	475		
TXSE 600 A - 3E	6240	3570	2750	750	4.0	8.1			1830	475		
TXSE 675 B - 3L	6240	3570	2750	750	5.5	11.0			1830	450		
TXSF 675 A - 3E	6840	3770	2750	750	4.0	8.1			2000	450		
TXSE 750 C - 3L	6240	3570	2750	750	7.5	13.6			1830	450		
TXSF 750 B - 3E	6840	3770	2750	750	5.5	11.0			2000	450		
TXSF 840 C - 3L	6840	3770	2750	750	7.5	13.6			2000	450		
TXSG 840 B - 3E	6840	3770	3460	750	5.5	11.0			2000	450		
TXSG 960 C - 3L	6840	3770	3460	750	7.5	13.6			2000	450		
TXSJ 960 B - 3E	8040	4770	3480	1000	5.5	11.0			2135	430		
TXSJ 1050C - 3L	8040	4770	3480	1000	7.5	13.6			2135	430		
TXSK 1050B - 3E	9090	4770	3480	1000	5.5	11.0			2440	400		
TXSJ 1200D - 3L	8040	4770	3480	1000	11.0	20.1			2135	430		
TXSK 1200C - 3E	9090	4770	3480	1000	7.5	13.6			2440	400		
TXSK 1350D - 3L	9090	4770	3480	1000	11.0	20.1			2440	400		
TXSL 1350C - 3E	10290	5170	3480	1000	7.5	13.6			2745	380		
TXSK 1500E - 3L	9090	4770	3480	1000	15.0	26.7			2440	400		
TXSL 1500D - 3E	10290	5170	3480	1000	11.0	20.1			2745	345		
TXSL 1650E - 3L	10290	5170	3480	1000	15.0	26.7			2745	345		
TXSM 1650D - 3E	10290	5170	3880	1000	11.0	20.1			2745	345		
TXSL 1800F - 3L	10290	5170	3480	1000	18.5	33.2			2745	400		
TXSM 1800E - 3E	10290	5170	3880	1000	15.0	26.7	2745	345				
TXSM 1950F - 3L	10290	5170	3880	1000	18.5	33.2	2745	400				
TXSN 1950E - 3E	10290	5170	4480	1000	15.0	26.7	2745	345				

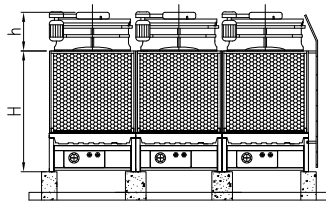
* We reserve the right to change data and specification without prior notice.

Outline And Foundation Drawing (Three Cells)

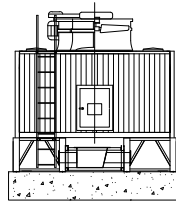


PLAN VIEW

RC FOUNDATION DETAIL

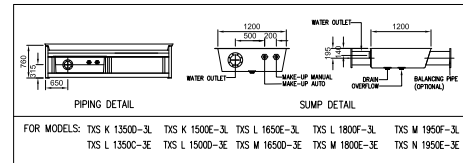
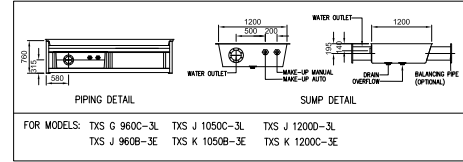


FRONT VIEW



FRONT VIEW

TXSG 960 C- 3L TXS J 1050C- 3L TXS J 1200D- 3L
 TXS K 1350D- 3L TXS K 1500E- 3L TXS L 1650E- 3L
 TXS L 1800F- 3L TXS M 1950F- 3L TXS J 960 B- 3E
 TXS K 1050B- 3E TXS K 1200C- 3E TXS L 1350C- 3E
 TXS L 1500D- 3E TXS M 1650D- 3E TXS M 1800E- 3E
 TXS N 1950E- 3E



TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	FOUNDATION DIMENSION					PIPING DATA			PIPING SIZE						WEIGHT (KG)	
	B	C	D	E	E1	F	G	J	External Piping	Internal Piping	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
TXSA 300 X- 3L	1580	3050	1680	1250	900	1135	840	1680	100 x 6	100 x 3	150 x 2	50 x 2	50 x 2	25 x 2	2352	5970
TXSA 375 Y- 3L	1580	3050	1680	1250	900	1135	840	1680	100 x 6	125 x 3	150 x 2	50 x 2	50 x 2	25 x 2	2370	6030
TXSB 375 X- 3E	1580	3050	1680	1250	900	1135	840	1680	100 x 6	125 x 3	150 x 2	50 x 2	50 x 2	25 x 2	2601	6390
TXSB 450 A- 3L	1580	3050	1680	1250	900	1135	840	1680	100 x 6	125 x 3	200 x 2	50 x 2	50 x 2	25 x 2	2658	6540
TXSD 450 Y- 3E	1780	3250	1880	1450	900	1235	940	1880	100 x 6	125 x 3	200 x 2	50 x 2	50 x 2	25 x 2	3031	7500
TXSC 525 B- 3L	1780	3250	1880	1450	900	1235	940	1880	100 x 6	125 x 3	200 x 2	50 x 2	50 x 2	50 x 2	2854	7200
TXSD 525 A- 3E	1780	3250	1880	1450	900	1235	940	1880	100 x 6	125 x 3	200 x 2	50 x 2	50 x 2	50 x 2	3070	7620
TXSD 600 B- 3L	1780	3250	1880	1450	900	1235	940	1880	100 x 6	125 x 3	250 x 2	50 x 2	50 x 2	50 x 2	3115	7710
TXSE 600 A- 3E	1980	3450	2080	1450	1000	1335	1040	2080	100 x 6	125 x 3	250 x 2	50 x 2	50 x 2	50 x 2	3536	8760
TXSE 675 B- 3L	1980	3450	2080	1450	1000	1335	1040	2080	125 x 6	150 x 3	250 x 2	50 x 2	50 x 2	50 x 2	3581	8850
TXSF 675 A- 3E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 6	150 x 3	250 x 2	50 x 2	50 x 2	50 x 2	3954	9870
TXSE 750 C- 3L	1980	3450	2080	1450	1000	1335	1040	2080	125 x 6	150 x 3	250 x 2	50 x 2	50 x 2	50 x 2	3620	8940
TXSF 750 B- 3E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 6	150 x 3	250 x 2	50 x 2	50 x 2	50 x 2	3999	9960
TXSF 840 C- 3L	2180	3650	2280	1650	1000	1435	1140	2280	125 x 6	150 x 3	250 x 2	50 x 2	50 x 2	50 x 2	4038	10080
TXSG 840 B- 3E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 6	150 x 3	250 x 2	50 x 2	50 x 2	50 x 2	4423	10860
TXSG 960 C- 3L	2180	3650	2280	1650	1000	1435	1140	2280	125 x 6	150 x 3	200 x 3	50 x 3	50 x 3	50 x 3	4462	10980
TXSJ 960 B- 3E	2580	4650	2680	2090	1280	1790	1340	2680	125 x 6	150 x 3	200 x 3	50 x 3	50 x 3	50 x 3	5695	15150
TXS J 1050C- 3L	2580	4650	2680	2090	1280	1790	1340	2680	150 x 6	200 x 3	250 x 3	80 x 3	50 x 3	50 x 3	5734	15270
TXS K 1050B- 3E	2930	4650	3030	2090	1280	1830	1515	3030	150 x 6	200 x 3	250 x 3	80 x 3	50 x 3	50 x 3	6617	17340
TXS J 1200D- 3L	2580	4650	2680	2090	1280	1790	1340	2680	150 x 6	200 x 3	250 x 3	80 x 3	50 x 3	50 x 3	5825	15450
TXS K 1200C- 3E	2930	4650	3030	2090	1280	1830	1515	3030	150 x 6	200 x 3	250 x 3	80 x 3	50 x 3	50 x 3	6656	17490
TXS K 1350D- 3L	2930	4650	3030	2090	1280	1830	1515	3030	150 x 6	250 x 3	250 x 3	80 x 3	50 x 3	50 x 3	6782	17790
TXS L 1350C- 3E	3330	5050	3430	2490	1280	1990	1715	3430	150 x 6	250 x 3	250 x 3	80 x 3	50 x 3	50 x 3	7709	20550
TXS L 1500E- 3L	2930	4650	3030	2090	1280	1830	1515	3030	200 x 6	250 x 3	250 x 3	80 x 3	80 x 3	50 x 3	6842	17970
TXS L 1500D- 3E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 3	250 x 3	80 x 3	80 x 3	50 x 3	7835	20820
TXS L 1650E- 3L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 3	250 x 3	80 x 3	80 x 3	50 x 3	7895	21030
TXS M 1650D- 3E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 3	250 x 3	80 x 3	80 x 3	50 x 3	8286	21960
TXS L 1800F- 3L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 3	250 x 3	80 x 3	80 x 3	50 x 3	8015	21270
TXS M 1800E- 3E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 3	250 x 3	80 x 3	80 x 3	50 x 3	8466	22440
TXS M 1950F- 3L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 2	250 x 3	80 x 3	80 x 3	50 x 3	8876	23640
TXS N 1950E- 3E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 6	250 x 2	250 x 3	80 x 3	80 x 3	50 x 3	9108	24330

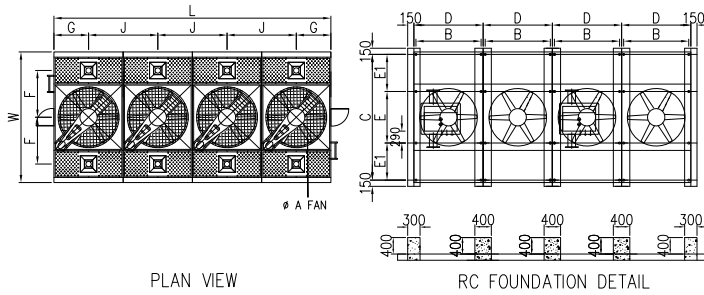
* Note: 1.) For Internal Piping Detail, Please Contact Truwater's Engineer.

3.) External Piping to Open End. Internal Piping & Water Outlet to JIS10K FF Flange.

2.) Balancing Pipe Connection Is Available Upon Request.

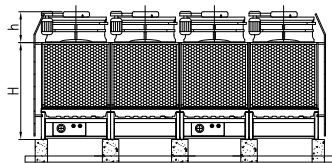
4.) Overflow, Drain, Make Up Auto & Manual to BSP Female Thread.

Outline And Foundation Drawing (Four Cells)

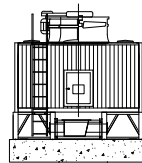


PLAN VIEW

RC FOUNDATION DETAIL

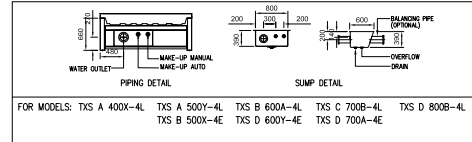


FRONT VIEW

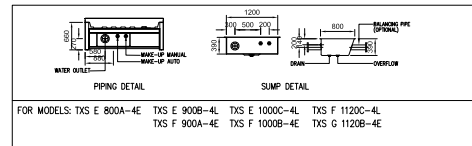


FRONT VIEW

- | | | |
|-----------------|-----------------|-----------------|
| TXSA 400 X - 4L | TXSA 500 Y - 4L | TXSB 600 A - 4L |
| TXSC 700 B - 4L | TXSD 800 B - 4L | TXSE 900 B - 4L |
| TXSE 1000C - 4L | TXSF 1120C - 4L | TXSB 500 X - 4E |
| TXSD 600 Y - 4E | TXSD 700 A - 4E | TXSE 800 A - 4E |
| TXSF 900 A - 4E | TXSF 1000B - 4E | TXSG 1120B - 4E |



FOR MODELS: TXS A 400X-4L TXS A 500Y-4L TXS B 600A-4L TXS C 700B-4L TXS D 800B-4L
TXS B 500X-4E TXS D 600Y-4E TXS D 700A-4E



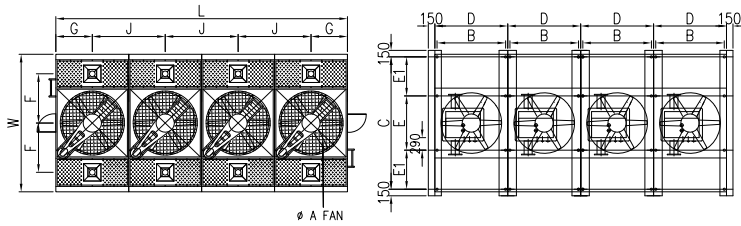
FOR MODELS: TXS E 800A-4E TXS E 900B-4L TXS E 1000C-4L TXS F 1120C-4L
TXS F 900A-4E TXS F 1000B-4E TXS G 1120B-4E

TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	OVERALL DIMENSION				MOTOR				AXIAL FLOW FAN			
	L	W	H	h	Rated Output kW	Rated Current (A 50/60Hz)	Type	Power Source	Diameter (mm)	Fan Speed	No of blades	Drive System
TXSA 400 X - 4L	6720	3170	2350	750	1.5	3.3	TEFC, outdoor, 3 phase, induction motor, 4 pole	3ph / 380V /50Hz or 3ph / 415V /50Hz	1400	450	Four (4) to Six (6)	V-Belt and Pulley
TXSA 500 Y - 4L	6720	3170	2350	750	2.2	4.7			1400	450		
TXSB 500 X - 4E	6720	3170	2750	750	1.5	3.3			1400	450		
TXSB 600 A - 4L	6720	3170	2750	750	4.0	8.1			1400	450		
TXSD 600 Y - 4E	7520	3370	2750	750	2.2	4.7			1600	360		
TXSC 700 B - 4L	7520	3370	2350	750	5.5	11.0			1600	360		
TXSD 700 A - 4E	7520	3370	2750	750	4.0	8.1			1600	426		
TXSD 800 B - 4L	7520	3370	2750	750	5.5	11.0			1600	475		
TXSE 800 A - 4E	8320	3570	2750	750	4.0	8.1			1830	475		
TXSE 900 B - 4L	8320	3570	2750	750	5.5	11.0			1830	450		
TXSF 900 A - 4E	9120	3770	2750	750	4.0	8.1			2000	450		
TXSE 1000C - 4L	8320	3570	2750	750	7.5	13.6			1830	450		
TXSF 1000B - 4E	9120	3770	2750	750	5.5	11.0			2000	450		
TXSF 1120C - 4L	9120	3770	2750	750	7.5	13.6			2000	450		
TXSG 1120B - 4E	9120	3770	3460	750	5.5	11.0			2000	450		
TXSG 1280C - 4L	9120	3770	3460	750	7.5	13.6			2000	450		
TXSJ 1280B - 4E	10720	4770	3480	1000	5.5	11.0			2135	430		
TXSJ 1400C - 4L	10720	4770	3480	1000	7.5	13.6			2135	430		
TXSK 1400B - 4E	12120	4770	3480	1000	5.5	11.0			2440	400		
TXSJ 1600D - 4L	10720	4770	3480	1000	11.0	20.1			2135	430		
TXSK 1600C - 4E	12120	4770	3480	1000	7.5	13.6			2440	400		
TXSK 1800D - 4L	12120	4770	3480	1000	11.0	20.1			2440	400		
TXSL 1800C - 4E	13720	5170	3480	1000	7.5	13.6			2745	380		
TXSK 2000E - 4L	12120	4770	3480	1000	15.0	26.7			2440	400		
TXSL 2000D - 4E	13720	5170	3480	1000	11.0	20.1			2745	345		
TXSL 2200E - 4L	13720	5170	3480	1000	15.0	26.7			2745	345		
TXSM2200D - 4E	13720	5170	3880	1000	11.0	20.1			2745	345		
TXSL 2400F - 4L	13720	5170	3480	1000	18.5	33.2			2745	400		
TXSM2400E - 4E	13720	5170	3880	1000	15.0	26.7	2745	345				
TXSM2600F - 4L	13720	5170	3880	1000	18.5	33.2	2745	400				
TXSN 2600E - 4E	13720	5170	4480	1000	15.0	26.7	2745	345				

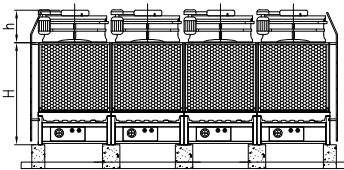
* We reserve the right to change data and specification without prior notice.

Outline And Foundation Drawing (Four Cells)

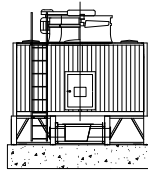


PLAN VIEW

RC FOUNDATION DETAIL

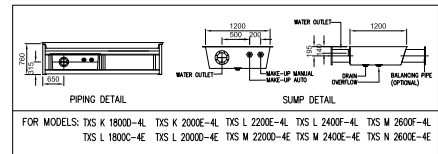
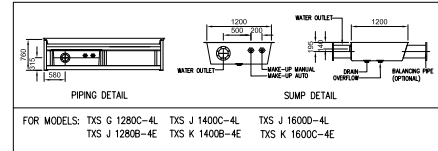


FRONT VIEW



FRONT VIEW

- TXSG 1280C - 4L TXSJ 1400C - 4L TXSJ 1600D - 4L
- TXSK 1800D - 4L TXSK 2000E - 4L TXSL 2200E - 4L
- TXSL 2400F - 4L TXSM2600F - 4L TXSJ 1280B - 4E
- TXSK 1400B - 4E TXSK 1600C - 4E TXSL 1800C - 4E
- TXSL 2000D - 4E TXSM2200D - 4E TXSM2400E - 4E
- TXSN 2600E - 4E



TXS+ SERIES LOW NOISE, SUPER LOW NOISE & ENERGY SAVING SUPER LOW NOISE RANGE

Tower Model	FOUNDATION DIMENSION					PIPING DATA			PIPING SIZE						WEIGHT (KG)	
	B	C	D	E	E1	F	G	J	External Piping	Internal Piping	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
TXSA 400 X - 4L	1580	3050	1680	1250	900	1135	840	1680	100 x 8	100 x 4	150 x 2	50 x 2	50 x 2	25 x 2	3136	7960
TXSA 500 Y - 4L	1580	3050	1680	1250	900	1135	840	1680	100 x 8	125 x 4	200 x 2	50 x 2	50 x 2	25 x 2	3160	8040
TXSB 500 X - 4E	1580	3050	1680	1250	900	1135	840	1680	100 x 8	125 x 4	200 x 2	50 x 2	50 x 2	25 x 2	3467	8520
TXSB 600 A - 4L	1580	3050	1680	1250	900	1135	840	1680	100 x 8	125 x 4	250 x 2	50 x 2	50 x 2	25 x 2	3543	8720
TXSD 600 Y - 4E	1780	3250	1880	1450	900	1235	940	1880	100 x 8	125 x 4	250 x 2	50 x 2	50 x 2	25 x 2	4041	10000
TXSC 700 B - 4L	1780	3250	1880	1450	900	1235	940	1880	100 x 8	125 x 4	250 x 2	50 x 2	50 x 2	50 x 2	3806	9600
TXSD 700 A - 4E	1780	3250	1880	1450	900	1235	940	1880	100 x 8	125 x 4	250 x 2	50 x 2	50 x 2	50 x 2	4093	10160
TXSD 800 B - 4L	1780	3250	1880	1450	900	1235	940	1880	100 x 8	125 x 4	250 x 2	50 x 2	50 x 2	50 x 2	4153	10280
TXSE 800 A - 4E	1980	3450	2080	1450	1000	1335	1040	2080	100 x 8	125 x 4	250 x 2	50 x 2	50 x 2	50 x 2	4715	11680
TXSE 900 B - 4L	1980	3450	2080	1450	1000	1335	1040	2080	125 x 8	150 x 4	250 x 2	50 x 2	50 x 2	50 x 2	4775	11800
TXSF 900 A - 4E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 8	150 x 4	250 x 2	50 x 2	50 x 2	50 x 2	5272	13160
TXSE 1000C - 4L	1980	3450	2080	1450	1000	1335	1040	2080	125 x 8	150 x 4	250 x 2	50 x 2	50 x 2	50 x 2	4827	11920
TXSF 1000B - 4E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 8	150 x 4	250 x 2	50 x 2	50 x 2	50 x 2	5332	13280
TXSF 1120C - 4L	2180	3650	2280	1650	1000	1435	1140	2280	125 x 8	150 x 4	250 x 2	50 x 2	50 x 2	50 x 2	5384	13440
TXSG 1120B - 4E	2180	3650	2280	1650	1000	1435	1140	2280	125 x 8	150 x 4	250 x 2	50 x 2	50 x 2	50 x 2	5897	14480
TXSG 1280C - 4L	2180	3650	2280	1650	1000	1435	1140	2280	125 x 8	150 x 4	200 x 4	50 x 4	50 x 4	50 x 4	5949	14640
TXSJ 1280B - 4E	2580	4650	2680	2090	1280	1790	1340	2680	125 x 8	150 x 4	200 x 4	50 x 4	50 x 4	50 x 4	7593	20200
TXSJ 1400C - 4L	2580	4650	2680	2090	1280	1790	1340	2680	150 x 8	200 x 4	250 x 4	80 x 4	50 x 4	50 x 4	7645	20360
TXSK 1400B - 4E	2930	4650	3030	2090	1280	1830	1515	3030	150 x 8	200 x 4	250 x 4	80 x 4	50 x 4	50 x 4	8822	23120
TXSJ 1600D - 4L	2580	4650	2680	2090	1280	1790	1340	2680	150 x 8	200 x 4	250 x 4	80 x 4	50 x 4	50 x 4	7766	20600
TXSK 1600C - 4E	2930	4650	3030	2090	1280	1830	1515	3030	150 x 8	200 x 4	250 x 4	80 x 4	50 x 4	50 x 4	8874	23320
TXSK 1800D - 4L	2930	4650	3030	2090	1280	1830	1515	3030	150 x 8	250 x 4	250 x 4	80 x 4	50 x 4	50 x 4	9042	23720
TXSL 1800C - 4E	3330	5050	3430	2490	1280	1990	1715	3430	150 x 8	250 x 4	250 x 4	80 x 4	50 x 4	50 x 4	10279	27400
TXSK 2000E - 4L	2930	4650	3030	2090	1280	1830	1515	3030	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	9122	23960
TXSL 2000D - 4E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	10447	27760
TXSL 2200E - 4L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	10527	28040
TXSM2200D - 4E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	11048	29280
TXSL 2400F - 4L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	10687	28360
TXSM2400E - 4E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	11288	29920
TXSM2600F - 4L	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	11834	31520
TXSN 2600E - 4E	3330	5050	3430	2490	1280	1990	1715	3430	200 x 8	250 x 4	250 x 4	80 x 4	80 x 4	50 x 4	12144	32400

* Note: 1.) For Internal Piping Detail, Please Contact Truwater's Engineer.
3.) External Piping to Open End. Internal Piping & Water Outlet to JIS10K FF Flange.

2.) Balancing Pipe Connection Is Available Upon Request.
4.) Overflow, Drain, Make Up Auto & Manual to BSP Female Thread.

RECOMMENDED UNIT LAYOUT

It is advisable to select and design the best layout or location to avoid air recirculation. Recirculation occurs when some of the hot moist discharge air leaving the cooling tower flows back into the fresh air inlet. The following guidelines will provide the best location or layout which will minimize recirculation, maximize fresh air flow and allow adequate maintenance accessibility.

A. SINGLE UNIT INSTALLATIONS

The best place for TXS⁺ Series Cooling Tower is in an open space. However, when this is not possible, correct layout guidelines must be followed to provide satisfactory installation.

Ensure that the top of the cooling tower is higher than any adjacent walls, buildings or other structures. Figure 1(a) and 1(b) are examples of incorrect installation. These conditions can be corrected by elevating the unit on structural steel/concrete plinths so that the top is higher than the wall as shown in Figure 1(c).

INCORRECT : Wind effect with top of unit lower than top of wall

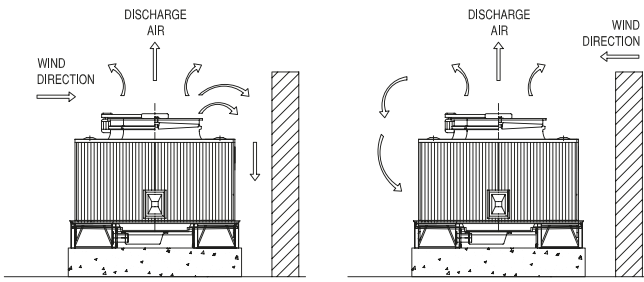


FIGURE: 1(a)

FIGURE: 1(b)

CORRECT : Installation elevated so that top of unit is higher than top of wall

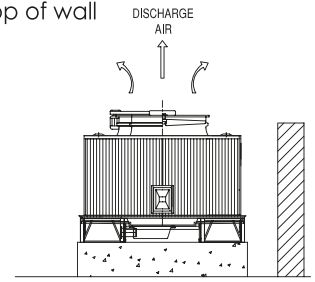


FIGURE: 1(c)

When a cooling tower is located near a wall, consideration must be given to the clearance distance between the air inlets of the tower and the wall structure(s). See Figure 2, Recommended Dimensions D1 and D2.

The minimum dimensions, D1 and D2, as shown in Table 1 must be maintained to ensure that the unit is provided adequate air flow. In some installation, consideration must also be given to access to the unit for maintenance. Room must be provided for piping, removals of access panels, etc.

Sometimes other pieces of equipment such as pumps, filters, piping etc are placed in front of the air inlets. These obstructions should not be located any closer than the minimum dimensions in Table 1.

FIGURE 2 :
Installation next to a wall.

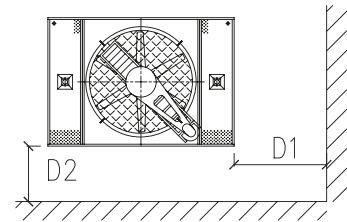


TABLE 1

Tower Model	Minimum Dimension (mm)	
TXS ⁺	D1 (At Louver Side)	D2 (At Panel Side)
100X-1L, 125X/Y-1, 150A/Y-1, 175A/B-1, 200A/B-1	1500	1500
225A/B-1, 250B/C-1, 280B/C-1, 320B/C-1, 350B/C-1, 400D-1	2000	1500
400C-1, 450C/D-1, 500D/E-1, 550D/E-1, 600E/F-1, 650E/F-1	2500	1500

TABLE 2

Tower Model TXS ⁺	End Wall Width, W mm	Minimum Dimension, mm D3 (End-to-End)
All models	All sizes	1000
Tower Model TXS ⁺	Louver Length, L mm	Minimum Dimension, mm D4 (Side-by-Side)
200X-2 to 800D-2	Below 4500	3000
800C-2 to 1300E-2 675B-3 to 840B-3	Below 7000	3500
960C-2 to 1350E-2 700A-3 to 800A/B-3	Below 10000	5000
1500D-3 to 1950E/F-3 1280B/C-4 to 2600E/F-4	Below 14000	6000

The minimum dimensions are as listed in Table 2

B. MULTIPLE UNIT INSTALLATIONS

When more than one cooling tower is installed at the same location, recirculation becomes a bigger problem.

With the installations of two cooling towers, they should be placed end to end with the narrow ends adjacent as shown in Figure 3. Another method is to locate the units side-by-side with the longer sides parallel to each other as shown in Figure 4. In either configuration, the distance between the units must provide adequate airflow as well as room for piping to the unit and access for maintenance.

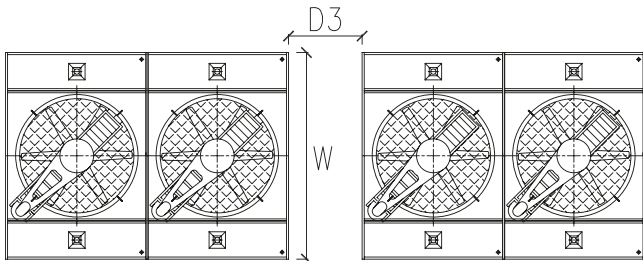


FIGURE 3: MULTIPLE UNITS PLACED END TO END

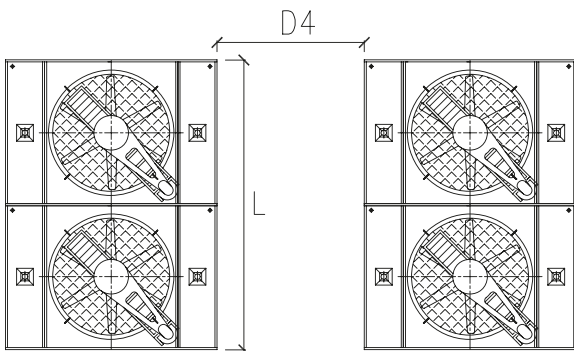


FIGURE 4: MULTIPLE UNITS PLACED SIDE-BY-SIDE

SPECIAL ENCLOSURE INSTALLATION

1) Solid Wall Enclosures or Wells

Figure 5 shown a cooling tower is installed in a well. When considering a multiple-cell unit located in a well, the D5 and D6 dimensions, found in Table 3, must be used as absolute minimums.

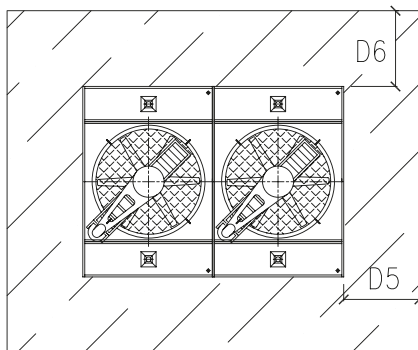


FIGURE 4: MULTIPLE UNITS PLACED SIDE-BY-SIDE

The unit should be oriented so that the air flow uniformly to the air inlets on all louver sides of the unit. The air discharge of the unit must be level with or higher than surrounding walls.

TABLE 3

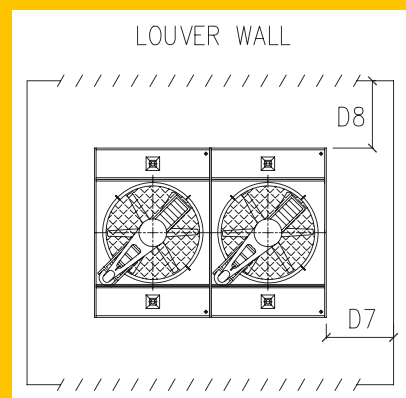
Tower Model TXS*	End Wall Width, W mm	Minimum Dimension, mm D5 (End Wall Panel Side)
All models	All sizes	1000
Tower Model TXS*	Louver Length, L mm	Minimum Dimension, mm D6 (Louver Side to Solid wall)
200X-2 to 800D-2	Below 4500	3500
800C-2 to 1200F-2 675B-3 to 1200D-3	Below 7000	4000
1200C-3 to 1500E-3 900B-4 to 1120B-4	Below 10000	6000
1500E-3 to 1800F-3 1600C-4 to 2600E-4	Below 14000	6000

Louvered Wall Enclosures

TXS+ Series Cooling Tower can also be installed in enclosures with louvered or slotted walls and an open top (Figure 6) with this type of enclosure, the air flow patterns will be a mixture of the open type and well installation. The inlet air will be drawn from the top as well as through the louvers or slots.

When considering a multiple-cell unit located in a louvered wall enclosures, the D7 and D8 dimensions, found in Table 4, must be used as absolute minimums.

FIGURE 6: LOUVERED WALL ENCLOSURE



Tower Model TXS*	End Wall Length, L mm	Minimum Dimension, mm D7 (End Wall Panel Side)
All models	All sizes	1000
Tower Model TXS*	Louver Width, W mm	Minimum Dimension, mm D8 (Louver Side to Louvered wall)
All models	All sizes	2500

TXS+ SERIES CROSSFLOW COOLING TOWER SPECIFICATION

1.0 GENERAL

The cooling tower shall be induced-draft, crossflow, rectangular, film filled, FRP Cooling Tower. Cooling tower shall be Truwater TXS+ Series or approved equivalent.

2.0 CAPACITY

Cooling Tower shall be capable of providing the thermal performance scheduled.

3.0 PERFORMANCE WARRANTY

The cooling tower manufacturer shall guarantee that the tower supplied will meet the specified performance conditions when the tower is installed according to plans

4.0 CONSTRUCTION

The cooling tower main frame structure shall be hot dip galvanized steel (HDG). The casing shall be made of FRP.

5.0 MECHANICAL EQUIPMENT

5.1 Fan(s) shall be propeller-type, incorporating heavy-duty blades of aluminium alloy. Blades shall be individually adjustable. Fan blades shall be factory balanced and assembled. Pitch angle should be variable to allow flexibility.

5.2 The V-belts shall be of rubber with fabric impregnated able to withstand the adverse ambient conditions of 50°C and 100% R.H. The pulley shall be cast iron with the grooves of standard dimensions. The entire V-belt & pulley set must be fully enclosed in a FRP molded case to protect the v-belts from in contact with the humid discharge air.

5.3 Motor(s) shall be TEFC, weatherproof sq. caged induction type suitable for 3ph/50Hz/380V or 3ph/50Hz/415V power supply and with 1450 rpm. Motor shall be installed outside the discharge air stream.



FRP Casing



HDG Steel Structure



Mechanical Equipment



Hot Water Basin

6.0 INFILL

6.1 Infill shall be Vacuum-formed film-type, rigid, corrugated PVC sheets. The hanging infill shall be resistant to rot, fungi, bacteria and organic/inorganic acids and alkali as commonly found in cooling towers. The design shall meet 0.005% drift loss of the circulation water flow.

7.0 HOT WATER DISTRIBUTION SYSTEM

The hot water distribution shall be of open gravity type basin. It shall be made of FRP material. It shall be light weight and non-corrosive to maintain stable water sprinkling effect.

8.0 COLD WATER BASIN

The cold water basin shall be of FRP and supported on HDG steel framework. The basin shall be designed with sufficient water capacity to avoid air entrainment in the outlet during operating conditions. The basin shall be equipped with suction strainer, make-up ball valve, overflow and drain. For multiple tower arrangement, equalizing pipes between basins shall be provided to maintain the same level of water in each basin.

9.0 ACCESS AND SAFETY

Ladder shall be provided for inspection & maintenance purposes. HDG steel fan guard shall be provided over each fan cylinder.

TCT/B/003

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