PAHARPUR

Series CF-II

Induced Draft Counterflow Fibreglass Cooling Towers

PAHARPUR

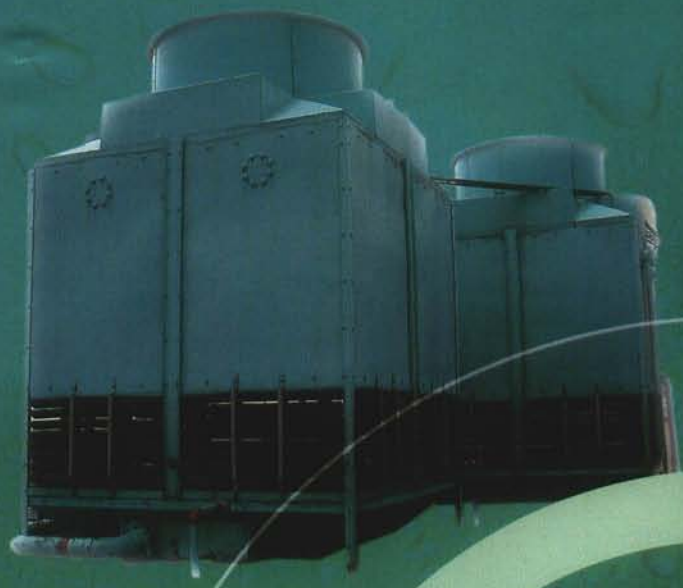
24 Standard Models • 125-1000 Nominal Tons Capacity
Option of Gear Drive and Direct Drive

Since its founding, Paharpur Cooling Towers has gained world wide recognition as the pace setter in the field of water cooling technology. Unique within its industry in the scope of products and services offered, Paharpur designs and manufactures cooling towers of virtually any capacity and configuration. More than 400 tower models are available to service the application requirements of air-conditioning, industrial processing and electric power generation.

Paharpur's Series CF-II induced draft counterflow cooling tower represents the culmination of more than 40 years of design experience. With poly vinyl chloride film type fill and glass reinforced polyester casing, Series CF-II continues a tradition of excellence progressing from Paharpur's standard towers.

All materials used in the series CF-II counterflow cooling towers are chosen specifically for cooling tower application.

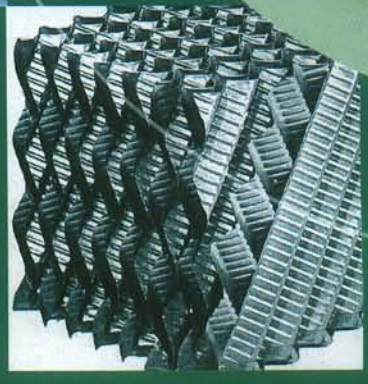
Framework : Steel Hot Dip Galvanised
Casing : Glass Reinforced Polyester (GRP)
Louvres: Anodised Aluminium
Fan Cylinders : Glass Reinforced Polyester (GRP)
Fill : Rigid PVC
Nozzles & Branch Arms : Polypropylene
Basin : Glass Reinforced Polyester
(by Paharpur) or Concrete (by Purchaser)



MECHANICAL EQUIPMENT

All the mechanical equipment used on the series CF-II cooling tower is specially designed and manufactured by Paharpur for cooling tower applications. Multi-blade fans are cast aluminium and quiet in operation. Adjustable pitch blades allow maximum utilisation of applied horsepower. Gear reducers are a proven design with overall efficiency of 95%. Mechanical equipment support is specially designed and hot dip galvanised. Note : As a cheaper option the axial flow fan may also be driven directly by a vertically mounted flanged electric motor.

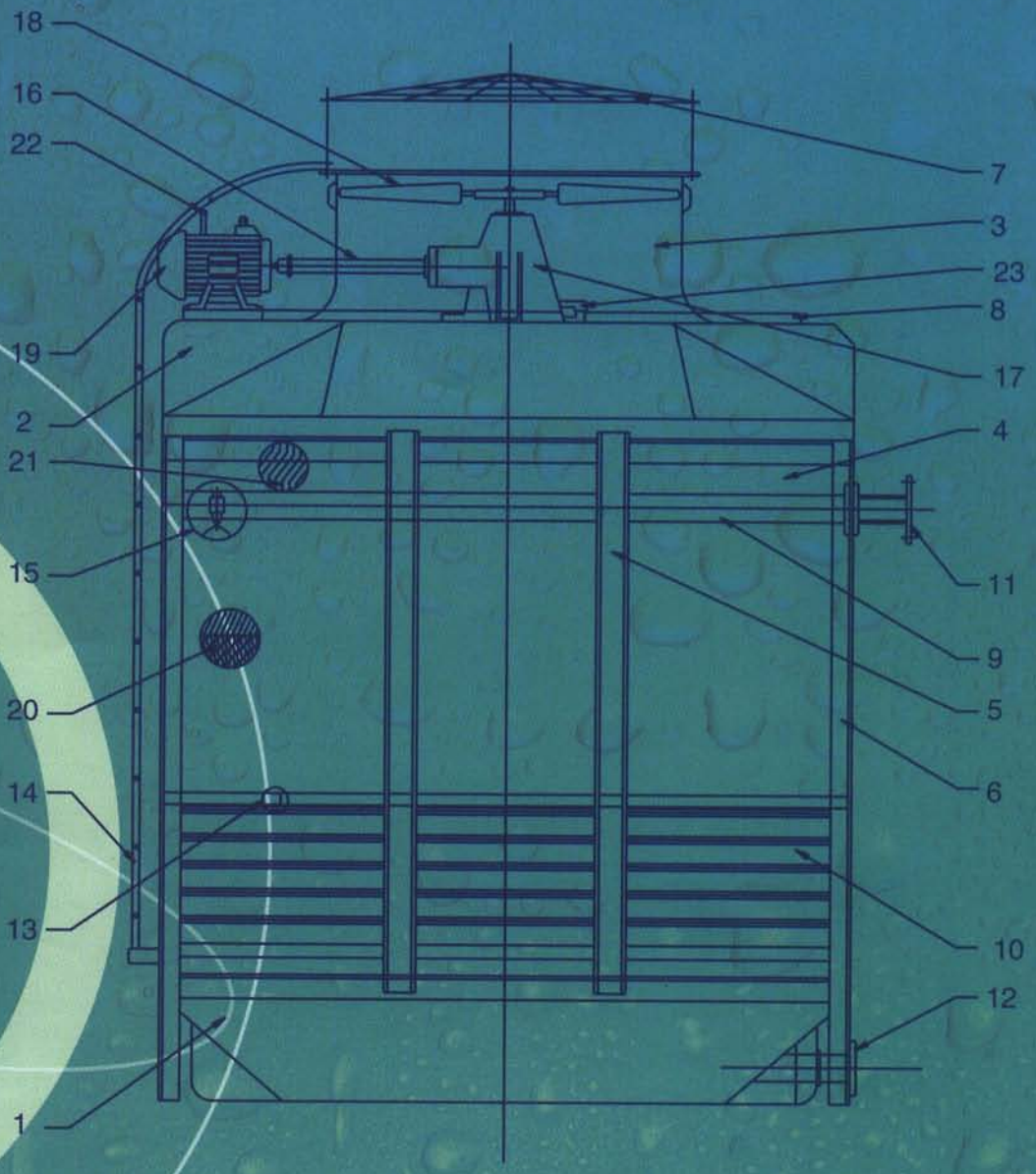
FILL & ELIMINATORS



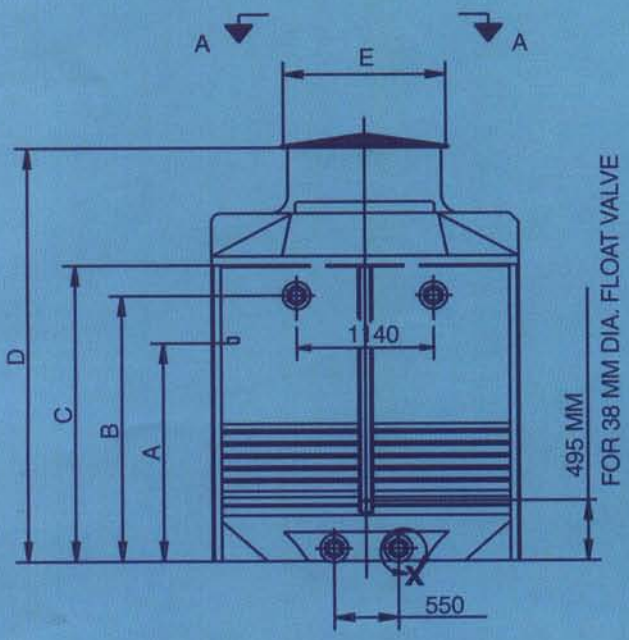
Vacuum formed poly vinyl chloride (PVC) sheets are solvent welded to provide maximum heat transfer surface with minimum pressure drop and pump head.

NOZZLES (Type P-25)

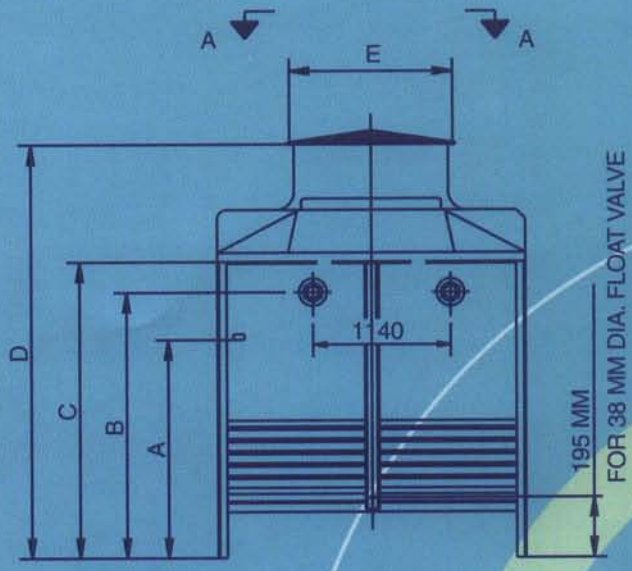
P-25 nozzles used in hot water distribution of CF-II cooling tower is specially designed to deliver required water distribution and are highly resistant to temperature and weathering damage. The speciality of this nozzle is to achieve a spray with uniform water distribution and a nearly square pattern. The spray area is obtained by twist fitting a specialy formed outlet tube. Large diameter orifices contribute to overall reduced maintenance cost.



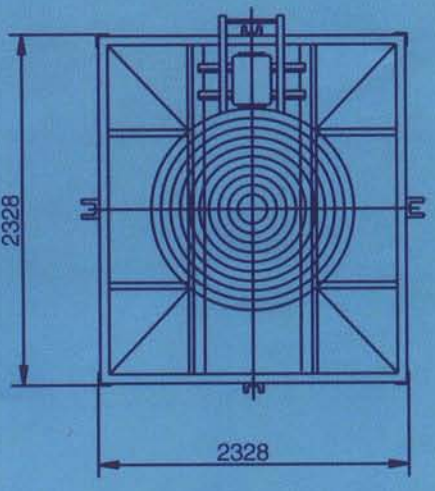
1.	Cold Water Basin (GRP)
2.	Top Section
3.	Fan Cylinder
4.	Casing Panel
5.	Side Channel
6.	Corner Support
7.	Fan Guard Assembly
8.	Motor Support
9.	Header Assembly
10.	Louvre Assembly
11.	Hot Water Inlet
12.	Cold Water Outlet
13.	Fill Support
14.	Ladder (Optional)
15.	Nozzle Assembly
16.	Drive Shaft
17.	Gear Reducer
18.	Fan
19.	Motor
20.	Fill
21.	Eliminator
22.	Oil Gauge (Optional)
23.	Oil Line (Optional)



TOWER WITH BASIN

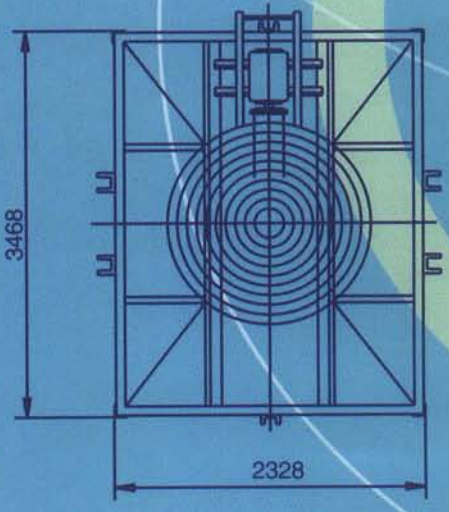


TOWER WITHOUT BASIN



VIEW A-A

Series 4000M



VIEW A-A

Series 6000M

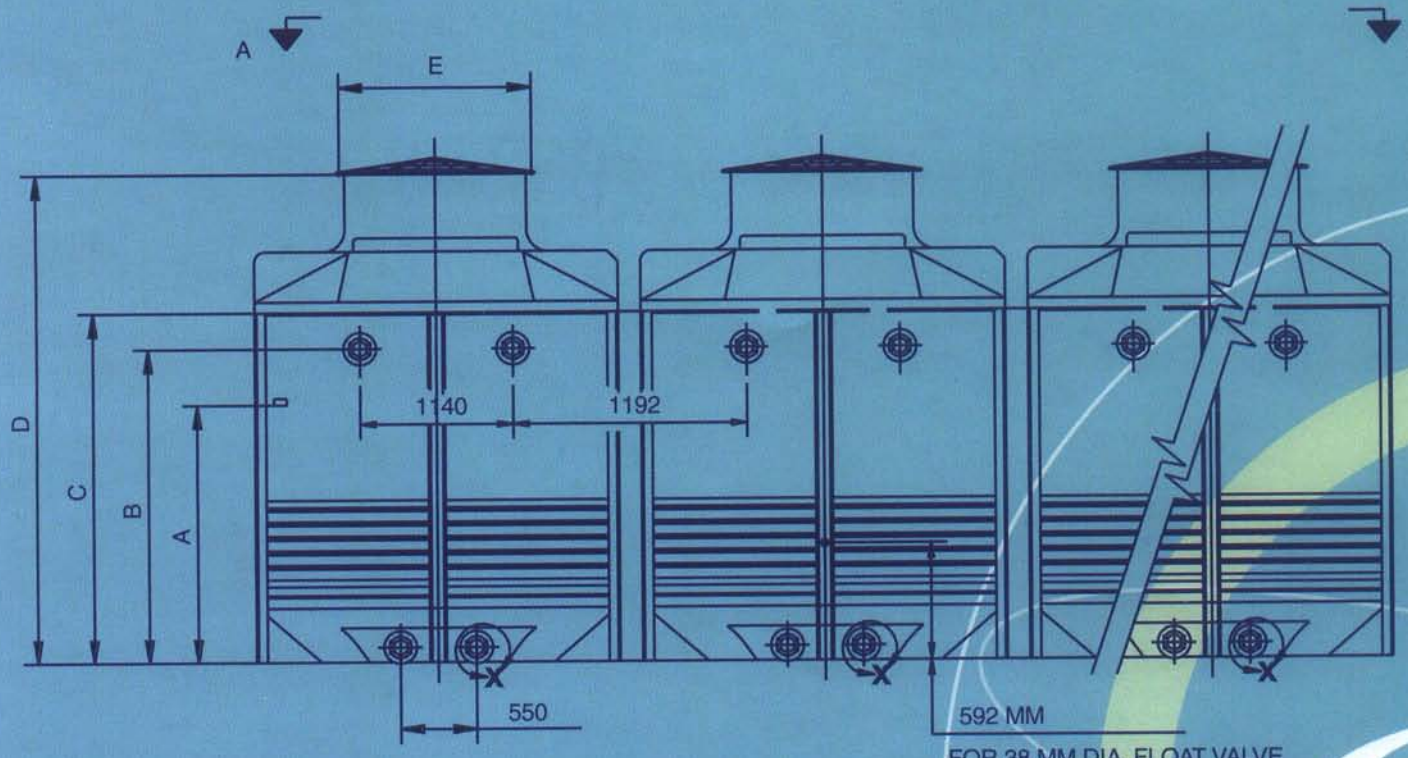
GENERAL DIMENSIONS OF CF-II TOWERS SR.4000M & 6000M SINGLE-CELL WITH BASIN

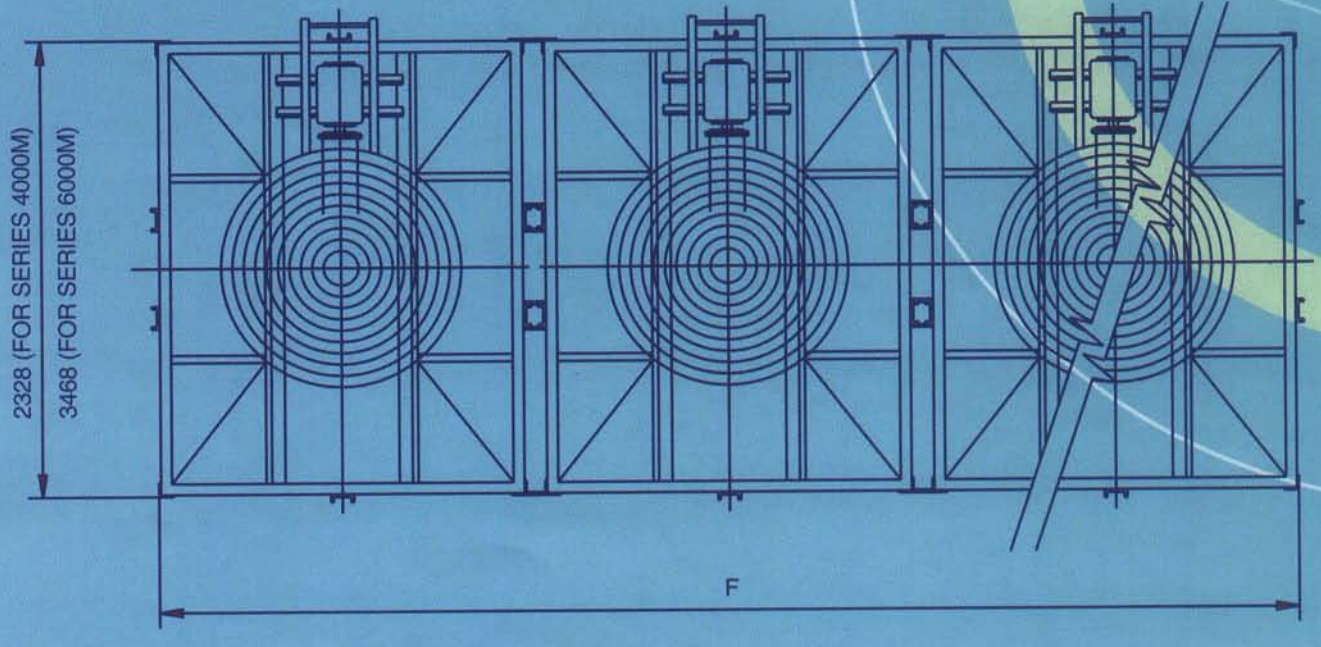
TOWER MODEL	A	B	C	D	E	DRY WEIGHT	OPERATING WEIGHT
4201M	1500	2056	2281	3311	1684	1060	2410
4301M	1750	2356	2581	3611		1210	2620
4401M	2000	2656	2881	3911		1290	2750
6201M	1500	2056	2281	3438	2030	1450	3470
6301M	1750	2356	2581	3738		1650	3770
6401M	2000	2656	2881	4038		1750	3970

GENERAL DIMENSIONS OF CF-II TOWERS SR.4000M & 6000M SINGLE-CELL WITHOUT BASIN

TOWER MODEL	A	B	C	D	E	DRY WEIGHT	OPERATING WEIGHT
4201M	1200	1734	1959	2989	1684	990	1320
4301M	1450	2034	2259	3289		1140	1550
4401M	1700	2334	2559	3589		1220	1680
6201M	1200	1734	1959	3116	2030	1350	1880
6301M	1450	2034	2259	3416		1550	2180
6401M	1700	2334	2559	3716		1650	2380

Note : All dimensions are in mm and weights in kg. Operating weights of towers without basin do not include weight of basin and water in the basin.





VIEW A-A

MULTICELL TOWER WITH BASIN

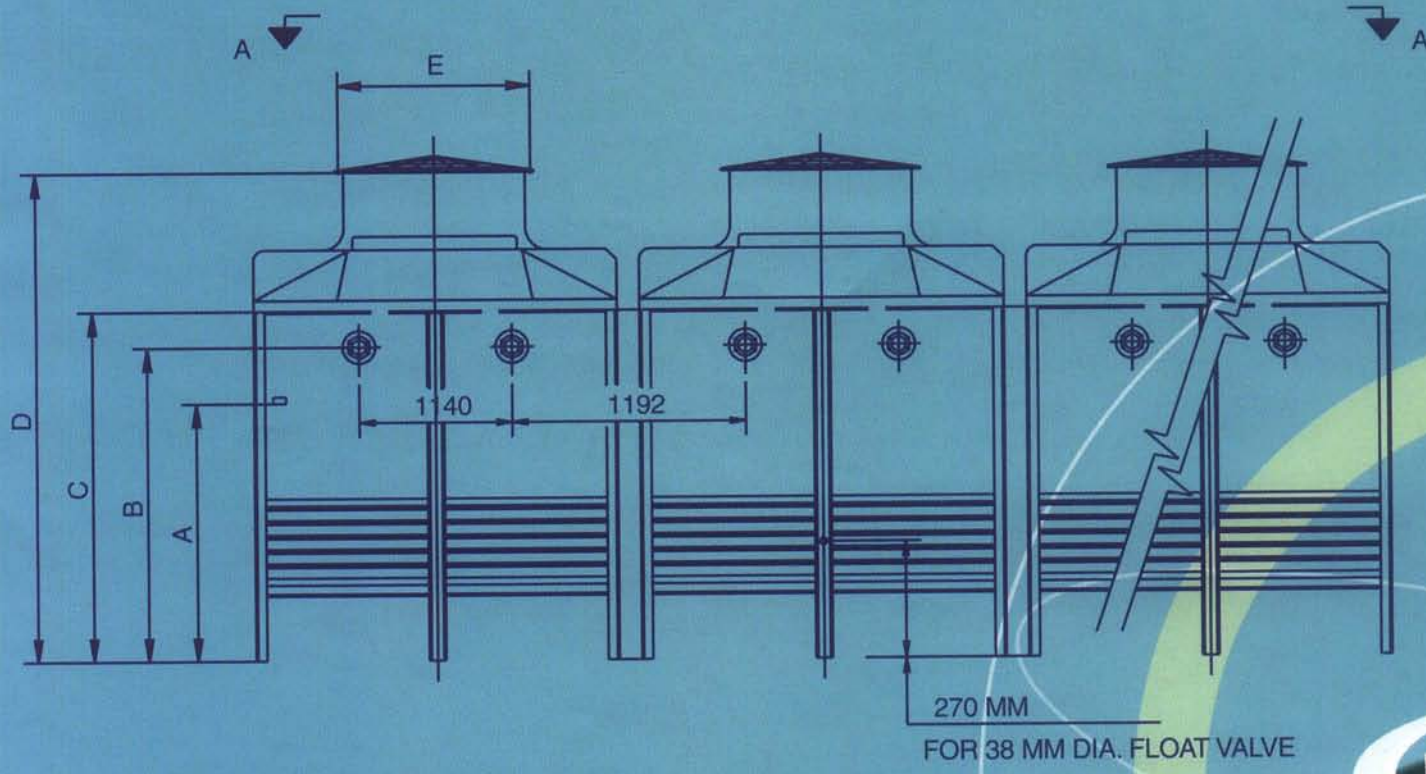
GENERAL DIMENSIONS OF CF-II TOWERS SR.4000M MULTI-CELL WITH BASIN

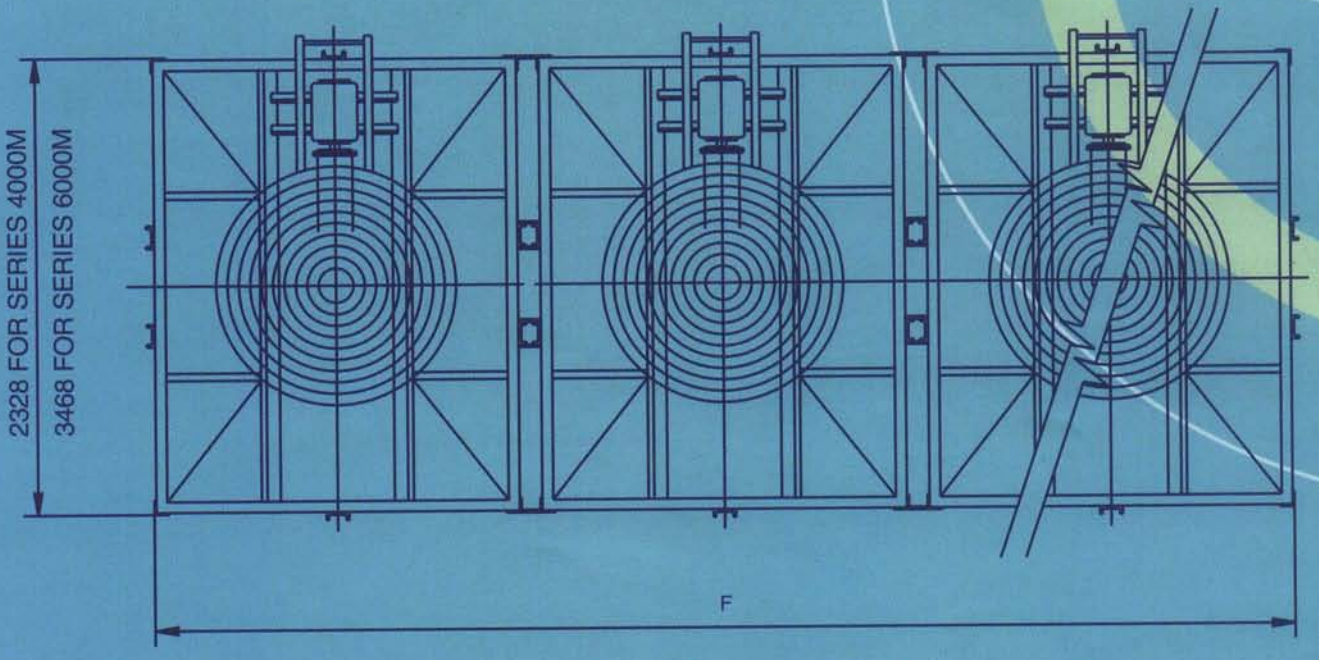
TOWER MODEL	A	B	C	D	E	F	DRY WEIGHT	OPERATING WEIGHT
4202M	2000	2584	2809	3839			2420	5190
4302M	2250	2884	3109	4139	1684	4660	2520	5365
4402M	2500	3184	3409	4439			2680	5755
4203M	2000	2584	2809	3839			3650	7800
4303M	2250	2884	3109	4139	1684	6992	3790	8060
4403M	2500	3184	3409	4439			4030	8640
4204M	2000	2584	2809	3839			4885	10410
4304M	2250	2884	3109	4139	1684	9324	5070	10760
4404M	2500	3184	3409	4439			5380	11540

GENERAL DIMENSIONS OF CF-II TOWERS SR.6000M MULTI-CELL WITH BASIN

TOWER MODEL	A	B	C	D	E	F	DRY WEIGHT	OPERATING WEIGHT
6202M	2000	2584	2809	3966			3010	7160
6302M	2250	2884	3109	4266	2030	4660	3410	7685
6402M	2500	3184	3409	4566			3610	8235
6203M	2000	2584	2809	3966			4525	10760
6303M	2250	2884	3109	4266	2030	6992	5120	11540
6403M	2500	3184	3409	4566			5425	12370
6204M	2000	2584	2809	3966			6030	14330
6304M	2250	2884	3109	4266	2030	9324	6830	15380
6404M	2500	3184	3409	4566			7230	16490

Note :- All dimensions are in mm and weights in kg.





VIEW A-A

MULTICELL TOWER WITHOUT BASIN

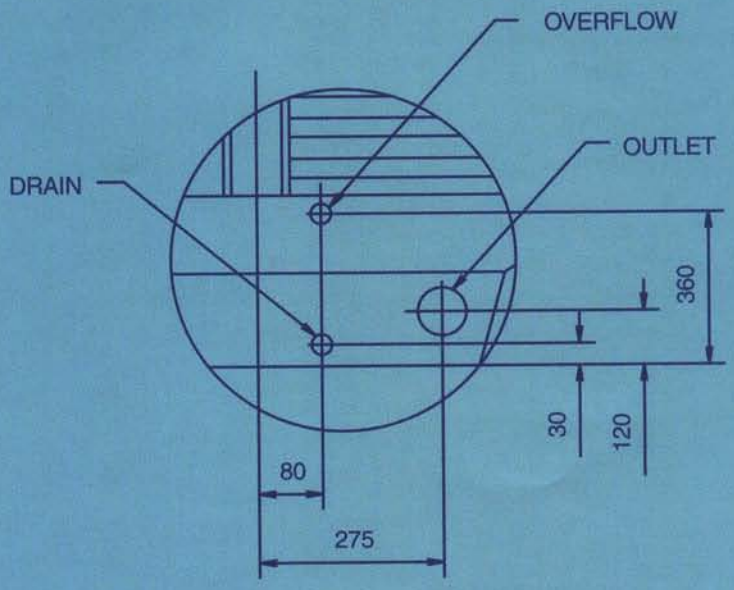
GENERAL DIMENSIONS OF CF-II TOWERS SR.4000M MULTI-CELL WITHOUT BASIN

TOWER MODEL	A	B	C	D	E	F	DRY WEIGHT	OPERATING WEIGHT
4202M	1687	2262	2487	3517	1684	4660	2280	3050
4302M	1928	2562	2787	3817			2380	3245
4402M	2178	2862	3087	4117			2540	3615
4203M	1687	2262	2487	3517	1684	6992	3440	4590
4303M	1928	2562	2787	3817			3580	4850
4403M	2178	2862	3087	4117			3820	5430
4204M	1687	2262	2487	3517	1684	9324	4605	6130
4304M	1928	2562	2787	3817			4790	6480
4404M	2178	2862	3087	4117			5100	7260

GENERAL DIMENSIONS OF CF-II TOWERS SR.6000M MULTI-CELL WITHOUT BASIN

TOWER MODEL	A	B	C	D	E	F	DRY WEIGHT	OPERATING WEIGHT
6202M	1887	2262	2487	3644	2030	4660	2830	3980
6302M	1928	2562	2787	3944			3230	4505
6402M	2178	2862	3087	4244			3430	5055
6203M	1887	2262	2487	3644	2030	6992	4255	5990
6303M	1928	2562	2787	3944			4850	6770
6403M	2178	2862	3087	4244			5155	7600
6204M	1887	2262	2487	3644	2030	9324	5670	7970
6304M	1928	2562	2787	3944			6550	9100
6404M	2178	2862	3087	4244			6950	10210

Note :- All dimensions are in mm and weights in kg.
Operating weights do not include weight of basin and water in the basin.



DETAIL - X

DRAIN & OVERFLOW

(TOWER WITH BASIN)

TECHNICAL DATA:

MODELS	MOTOR		FAN		GEAR REDUCER		AIR QUANTITY M 3/HR.	SOUND LEVEL
	KW.	RPM	DIA IN MM	TYPE	SERIES	RATIO		
4201 M	5.5	1500	1524	H-3-6	10P	2.133:1	106600	85 dBA
4301 M	5.5	1500	1524	H-3-6	10P	2.133:1	102800	85 dBA
4401 M	7.5	1500	1524	H-3-6	20T	2.71:1	104700	85 dBA
6201 M	11	1500	1829	H-3-6	20T	2.71:1	154350	85 dBA
6301 M	11	1500	1829	H-3-6	20T	2.71:1	151500	85 dBA
6401 M	11	1500	1829	H-3-6	20T	2.71:1	148700	85 dBA

4202 = 2 X 4201 4302 = 2 X 4301 4402 = 2 X 4401

4203 = 3 X 4201 4303 = 3 X 4301 4403 = 3 X 4401

4204 = 4 X 4201 4304 = 4 X 4401 4404 = 4 X 4401

6202 = 2 X 6201 6302 = 2 X 6301 6402 = 2 X 6401

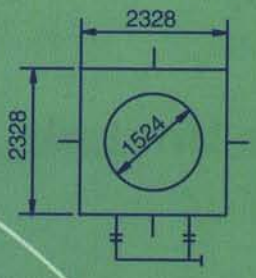
6203 = 3 X 6201 6303 = 3 X 6301 6403 = 3 X 6401

6204 = 4 X 6201 6304 = 4 X 6301 6404 = 4 X 6401

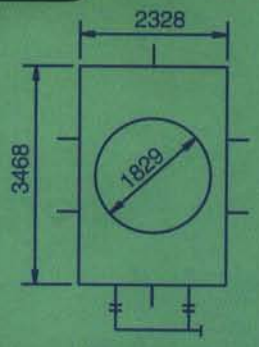
Notes:

1. Motor RPM is synchronous speed. Actual operating RPM will be slightly less.
2. Above data is for gear driven fans. Direct drive option is also available.
3. Standard motors are suitable for 415V/3ph/50Hz electric supply. Special motors are available on request.
4. Sound level depends on location and distance. For critical applications, low sound cooling towers can be engineered on request. 85dBA is maximum sound level for standard tower at 1m above fan.

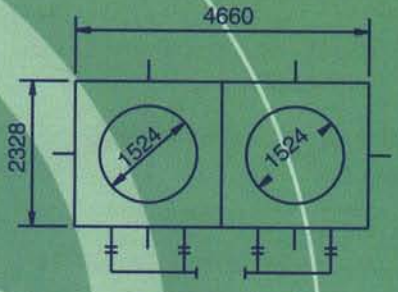
CF-II COOLING TOWERS
AVAILABLE TYPES AND MODELS



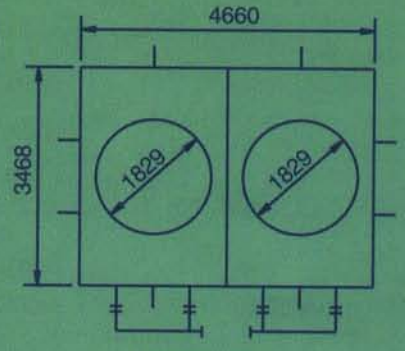
MODEL 4X01



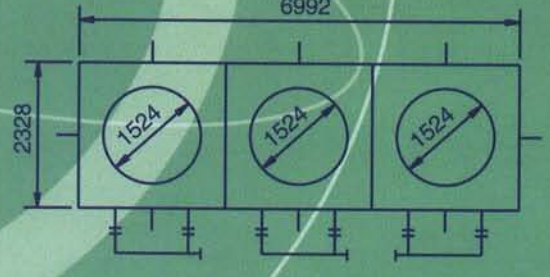
MODEL 6X01



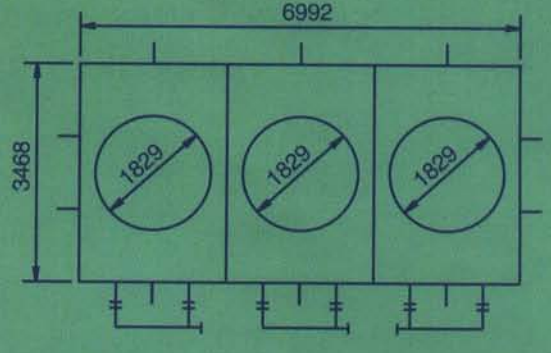
MODEL 4X02



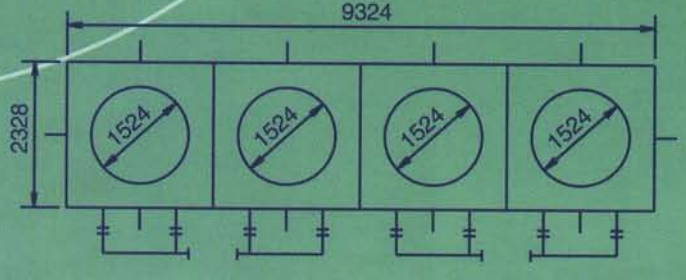
MODEL 6X02



MODEL 4X03



MODEL 6X03



MODEL 4X04

MODEL 6X04

Note : X = fill height (2=600 mm, 3=900 mm, 4=1200 mm)

PAHARPUR

An ISO 9001 Company

Paharpur Cooling Towers Limited

CORPORATE OFFICE

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