FIBREFLOW COOLING TOWERS

Product Catalogue 2023

AUSTRALIAN MADE

COOLING TECHNOLOGY INSTITUTE

Disclaimer

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Do not use any information contained in this catalogue for construction. Refer to your sales representative for certified weights & dimensions. Data subject to change for product improvement.

All installations must have the motor Variable Frequency Drive controlled.

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Proudly Australian Made and Owned

Company Profile

Fibreflow Cooling Towers was established in response to the demand for a quality HVAC manufacturer in Australia and develop and design composite products and related manufacturing methods. Various production methods include cold pressing heavy section FRP moldings and forming hollow and complex one piece FRP sections.

Our production methods use the best isophthalic, vinyl ester resins, gelcoats and high quality reinforcements. Our products are developed to stand the test of time with the quality, life-cycle and performance that goes above and beyond the expectations of our customers.

With a manufacturing experience of over 25 years in the industry, we have formed an insight as to what is required of our products, thus meeting the market with the best solutions for the application.

Typical applications include cooling tower structures and components, support assemblies, motor mounts and bearing housing mounts in a variety of materials to suit the clients' requirements.

Our range of FRP cooling towers are developed and manufactured right here in Australia. With benefits ranging from low cost of ownership to long service life, high quality materials and virtually no maintenance, we can provide a tailored solution for your application.

Fibreflow Cooling Towers™ Pty Ltd

ABN 82 155 558 268

Head office

Unit 6/36 Blanck Street,

Ormeau QLD 4208

Manufacturing Plant

19 Mayfair Close

Morisset NSW 2264

Nomenclature page for model numbers

CTCF - F - 080 – A

1 2 3 4

1. Open Cooling towers

CT	Cooling Tower
CF	Counterflow Axial

2. Material Of Construction

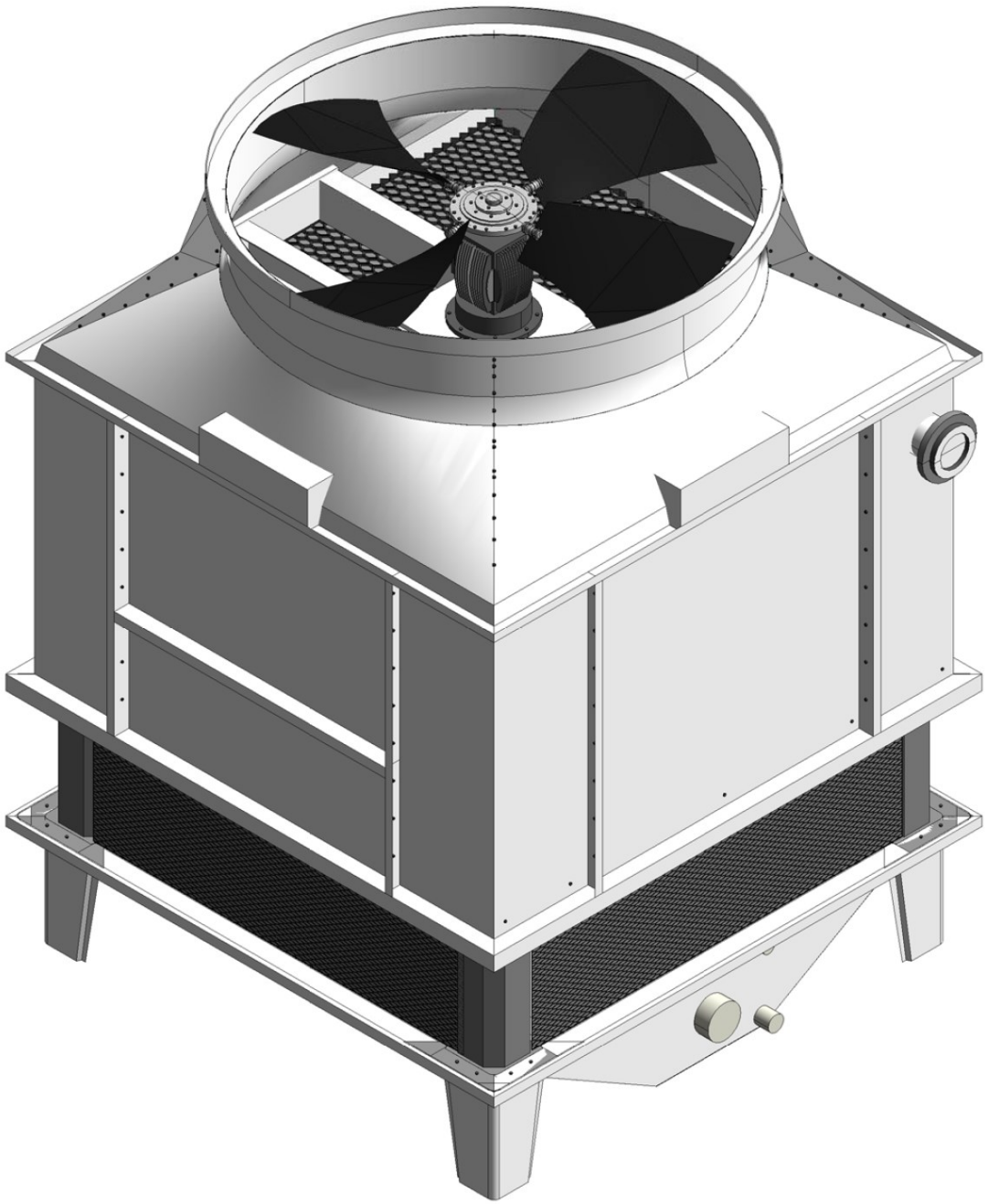
F	Fibreglass Polyester Resin
S	Steel

3. Total Heat Rejection

THR in Kw for a water flow at 35/29.5/24

4. Series

Model series



1 02-COUNTERFLOW

COUNTERFLOW COOLING TOWERS - Induced Draft

Cooling Towers are an open system design. The principle of operation is the same however cooling towers can be arranged differently. There are two basic types of tower; Crossflow and Counterflow.

Counterflow design is when the water travels vertically downwards over the cooling media and the air travels vertically upwards over the media.

Fibreflow Cooling Towers™ manufactures a large range of sizes and capacities to suit each individual application.

Range available in Fiberglass, Stainless Steel and Mild Steel.

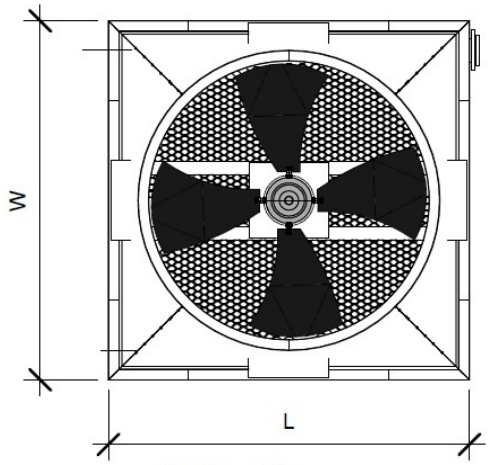
Counterflow Cooling Towers *Quick Selection* — CTCF Model

Hot Water		35	35	35	35	35	35
Cold Water		29.5	29.5	29.5	29.5	29.5	29.5
Wet Bulb		22	23	24	25	26	27
Model Number	Box Size	Water Flow in litres per second					
008	3 x 3	5	4	4	3	3	2
010	3 x 3	6	5	5	4	4	2
020	4 x 4	11	10	9	8	7	6
023	4 x 4	12	11	10	9	8	6
024	6 x 4	13	12	11	10	8	7
028	6 x 4	15	14	13	11	10	8
034	6 x 4	18	17	15	14	12	10
025	5 x 5	17	16	14	12	10	8
038	5 x 5	20	18	17	15	13	11
042	5 x 5	22	20	18	16	14	12
043	5 x 5	22	21	19	17	15	13
044	9 x 4	23	2	19	17	14	12
048	9 x 4	26	24	21	19	16	14
059	9 x 4	31	29	26	23	20	19
062	9 x 4	32	30	27	25	22	19
032	6 x 6	22	20	19	17	14	11
049	6 x 6	26	24	22	19	17	14
051	6 x 6	27	25	23	20	18	16
055	6 x 8	29	27	24	21	18	17
063	6 x 8	32	30	27	24	20	19
074	6 x 8	37	34	32	28	25	23
083	6 x 8	42	39	36	32	28	26

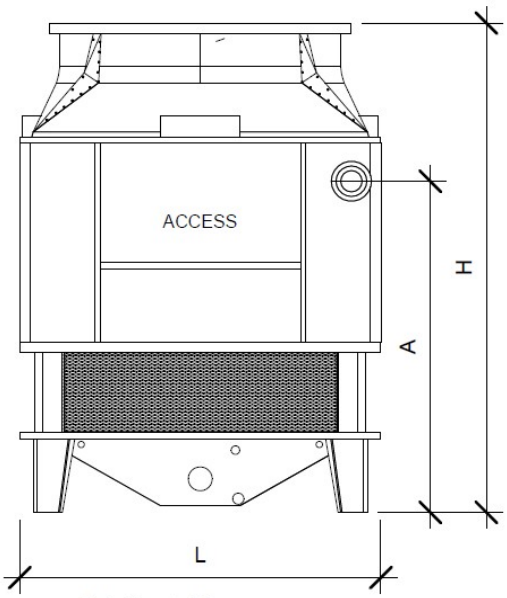
Counterflow Cooling Towers *Quick Selection Data* - CTCF Model

Hot Water		35	35	35	35	35	35	35
Cold Water		29.5	29.5	29.5	29.5	29.5	29.5	29.5
Wet Bulb		22	23	24	25	25.5	26	27
Model Number	Box Size	Water Flow in litres per second						
70A	8 x 8	37	34	30	27	25	23	19
78A	8 x 8	41	37	34	30	28	26	22
91A	8 x 8	47	43	39	35	33	31	27
98A	8 x 8	51	47	43	38	35	33	28
86A	8 x 10	45	41	37	33	31	28	24
102A	8 x 10	53	49	44	40	37	35	30
110A	8 x 10	57	53	47	42	39	36	31
130A	8 x 10	66	61	56	50	47	44	39
104A	10 x 10	55	50	45	40	37	34	29
116A	10 x 10	61	56	50	45	41	38	33
132A	10 x 10	69	63	57	51	47	44	38
154A	10 x 10	79	73	67	60	56	53	47
114A	10 x 12	60	55	49	44	41	37	32
127A	10 x 12	66	61	55	49	45	42	36
145A	10 x 12	76	69	63	55	52	48	42
170A	10 x 12	87	81	74	66	62	58	52
169A	12 x 12	79	73	73	58	54	50	44
182A	12 x 12	93	86	79	71	67	62	55
201A	12 x 12	103	95	87	78	74	69	62
205A	12 x 12	107	99	89	79	74	68	61
215A	12 x 12	110	102	93	84	79	74	66
227A	12 x 12	116	108	99	89	84	78	70
174A	12 x 14	90	83	76	68	64	59	53
198A	12 x 14	102	94	86	77	72	67	60
248A	12 x 14	120	111	102	93	88	82	74
255A	12 x 14	127	118	108	98	93	87	59

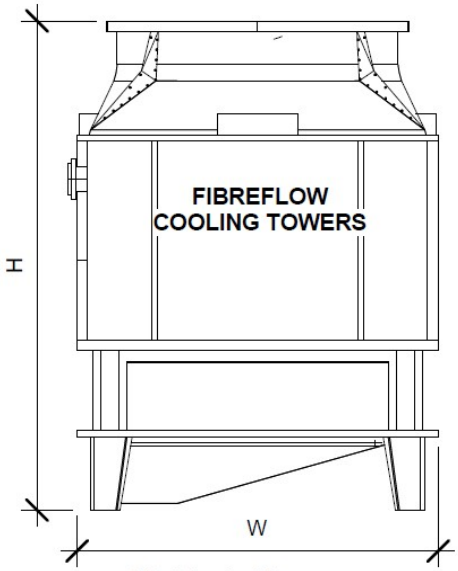
COUNTERFLOW INDUCED TOWER



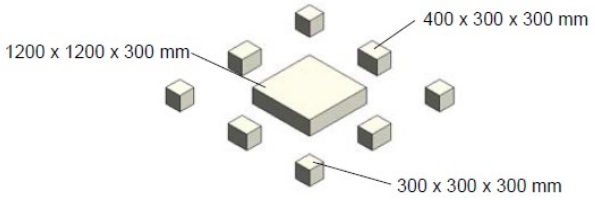
1 2D Top View
1 : 50



2 2D East View
1 : 50



3 2D North View
1 : 50



4 3D PLINTH

COUNTERFLOW COOLING TOWERS - Induced Draft

Counterflow Cooling Tower *Engineering Data*— CTCF Model

Tower Model	Length	Width	Height	Fan Diameter	Motor Size	Full Load Current	Airflow	Inlet/Outlet Diameter	Shipping Weight	Operating Weight
	L	W	H							
CTCF	mm	mm	mm	mm	kW	Amps	m3/sec	mm	kg	kg
008	1150	1150	3200	610	1.5	3.8	1.91	80	159	363
010	1150	1150	3200	610	3	6.4	2.39	80	161	365
020	1450	1450	3200	1000	1.5	3.7	4.76	80	265	605
023	1450	1450	3200	1000	2.2	5.1	5.35	80	269	609
024	2100	1450	3600	1000	1.5	3.7	5.9	100	187	777
028	2100	1450	3600	1000	2.2	5.1	6.67	100	191	781
034	2100	1450	3600	1000	3	8.5	8.03	100	210	800
025	1800	1800	3600	1220	2.2	5.1	8.14	100	199	814
038	1800	1800	3600	1220	3	8.5	8.74	100	250	910
042	1800	1800	3600	1220	4	11	9.6	100	275	935
043	1800	1800	3600	1220	5.5	11	8.89	100	307	1012
044	3000	1450	3600	2 x 1000	2 x 1.5	2 x 3.7	5.07	100	660	1413
048	3000	1450	3600	2 x 1000	2 x 2.2	2 x 5.1	5.71	100	668	1421
059	3000	1450	3600	2 x 1000	2 x 3.0	2 x 8.5	6.85	100	706	1459
062	3000	1450	3600	2 x 1000	2 x 4.0	2 x 8.5	6.4	100	752	1570
032	2100	2100	3600	1500	2.2	5.1	10.59	150	585	1240
049	2100	2100	3600	1500	3	8.5	11.47	150	650	1370
051	2100	2100	3600	1500	4	8.5	10.66	150	696	1481
057	2100	2100	3600	1500	5.5	11	11.74	150	721	1506

NOTE: Do not use for construction. Refer to your sales representative for certified weights & dimensions. Data subject to change for product improvement. All installations must have the motor Variable Frequency Drive controlled.

Counterflow Cooling Tower *Engineering Data*— CTCF Model

Tower Model	Length	Width	Height	Fan Diameter	Motor Size	Full Load Current	Airflow m3/sec	Inlet/Outlet Diameter	Shipping Weight	Operating Weight
	L	W	H							
063	2700	2100	3800	1500	4.0	11	14.83	150	875	2625
074	2700	2100	3800	1500	5.5	15.8	15.27	150	943	2780
083	2700	2100	3800	1500	7.5	22.6	17.14	150	988	2825
070	2700	2700	3800	1829	4	7.9	16.7	150	900	2750
078	2700	2700	3800	1829	5.5	10.5	18.47	150	927	2777
091	2700	2700	3800	1829	7.5	13.9	18.97	150	1021	2987
098	2700	2700	3800	1829	11	21	22.85	150	985	2835
086	3300	2700	4200	1829	4.0	10.5	20.68	200	1100	3250
102	3300	2700	4200	1829	5.5	13.9	21.45	200	1214	3509
110	3300	2700	4200	1829	7.5	21	25.73	200	1158	3308
130	3300	2700	4200	1829	11	27	26.57	200	1275	3570
104	3300	3300	4500	2440	5.5	10.5	25.02	200	1100	3250
116	3300	3300	4500	2440	7.5	13.9	27.61	200	1112	3262
132	3300	3300	4500	2440	11	21	31.12	200	1158	3308
154	3300	3300	4500	2440	15	27	31.92	200	1301	3632
114	3900	3300	4500	2440	5.5	10.5	27.51	200	1388	3888
127	3900	3300	4500	2440	7.5	13.9	30.4	200	1400	3900
145	3900	3300	4500	2440	11	21	34.33	200	1446	3946
170	3900	3300	4500	2440	15	27	35.46	200	1614	4332
169	3900	3900	4500	3048	7.5	13.9	36.21	250	1450	5050
182	3900	3900	4500	3048	11	21	38.06	250	1680	5541
201	3900	3900	4500	3048	15	27	41.91	250	1695	5556
205	3900	3900	4500	3048	18.5	32	47.99	250	1546	5146
215	3900	3900	4500	3048	18.5	32	44.68	250	1730	5591
227	3900	3900	4500	3048	22	38	47.08	250	1750	5611
174	4550	3900	5200	3353	7.5	13.9	36.8	250	2439	7074
198	4550	3900	5200	3353	11	21	41.6	250	2485	7120
248	4550	3900	5200	3353	18.5	32	46.25	250	2749	7689
255	4550	3900	5200	3353	22	38	48.78	250	2769	7709

Access & Maintenance

HEALTH AND SAFETY

Fibreflow Cooling Towers recommends local government regulations with regards to health and safety are complied to fully.

WORKING PLATFORMS

Fibreflow Cooling Towers offers a full range of working platforms with access ladders, low level and high level, multiple cell platforms and movable working platforms.

CONFIGURATION

Standard configurations are available as shown, as well as custom-made to suit a specific location.

MATERIALS

Material including hot dipped galvanized steel, aluminium, stainless steel and fibreglass.

CRANE MOUNTING

Davit cranes mounted on platforms for motor removal are also available as shown.

Cooling Towers - Sound Power Levels

The noise that humans hear covers a frequency from 20Hz to 10,000Hz. There are exceptions, however these levels have become accepted for most practical purposes. This audio band has been divided into eight bands called “octave bands”.

The noise of cooling towers is controlled by many contributing factors such as layout, adjacent structures, variable speed drives etc.

Low noise options are available. Consult your representative for further assistance.

All installations must have the motor Variable Frequency Drive controlled.

Compliance with the Standards

COMPLIANCE WITH STANDARDS

Fibreflow Cooling Towers are designed and constructed to meet the following standards:

»» AS3666 - Air Handling and Water Systems of Buildings – Microbial Control

»» AS4180.1 - Drift Test

»» AS1170 - Wind Loads

»» AS1657 - Code for platforms, ladders, stairways and walkways

»» AS3500 - Australian Plumbing Code

»» CTI STD 136 - PVC materials for use with fill, louvres and drift eliminators

PERFORMANCE GUARANTEE

»» Fibreflow Cooling Towers guarantee the **THERMAL PERFORMANCE** of our cooling towers

»» The performance evaluation is taken as per CTI Test Code ATC 105

»» The thermal performance guaranteed is that submitted in the technical data on which the purchase order was based in free field conditions unless otherwise stated.

All installations must have the motor Variable Frequency Drive

FIBREFLOW COOLING TOWERS PTY LTD

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