



# MODEL T-280 TOWER SPECIFICATIONS





Cooling Tower Systems, Inc.

# TOWER SPECIFICATIONS: MODEL T-280

Design and Operating Conditions		Water Distribution System Construction Materials	
Tower Type:	Counter Flow Induced Draft	Stand Pipe:	PVC
Water Flow Rate (GPM):	236 GPM	Sprinkler Head:	AC
Entering Water Temperature	95°F	Sprinkler Pipes:	PVC
Leaving Water Temperature	85°F	<b>Mechanical Equipment</b>	
Wet Bulb Temperature:	75°F	Fan Unit:	One Unit per Tower
Total Fan BHP:	2 HP	Type:	Axial Flow
Total Pump Head:	6.6'	Manufacturer:	CTS
Drift Loss of Water Flow:	0.1%	Diameter:	46 1/16"
Evaporation Loss of Water Flow:	0.93%	Blade Material:	AC
Design Wind Load:	41 lbs/sq. ft.	Hub Material:	AC
<b>Structural Details</b>		Nominal Air Volume:	18,900 CFM
Overall Diameter:	85 5/8"	<b>Fan Motor</b>	
Overall Height:	79 3/8"	Number of motors:	One Unit per Tower
Dry Weight:	645 lbs.	Type:	Induction
Operating Weight:	2,301 lbs.	Manufacturer:	CTS
<b>Basic Tower Construction Materials</b>		Insulation:	F Class
Tower Support Frame Assembly	-	Rated HP:	2 HP
Casing:	FRP	Voltage and phase:	220/440V/3
Casing Supporters	HDGS	<b>Piping Connections</b>	
Cold Water Basin	FRP	Primary Water Inlet Diameter	4"
Filling:	PVC	Primary Water Outlet Diameter:	4"
Filling Supports:	HDGS	Auto fill inlet diameter:	3/4"
Fan Guard	HDGS	Quick fill inlet diameter:	-
Mechanical Equipment Supports:	HDGS	Overflow outlet diameter:	1"
Inlet Louvers:	PVC	Drain diameter:	1"
Bolts, Nuts & Washers:	STS	Water Flow (GPM):	236 GPM
<b>Materials Key</b>			
FRP	Fiberglass Reinforced Polyester	STS	Stainless Steel
HDGS	Hot Dipped Galvanized Steel	AC	Aluminum Alloy Cast

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# PARTS LIST: MODEL T-280

FOR ASSEMBLY DIAGRAM			FOR TECHNICAL DIAGRAMS			
Ref. No.	Description	QTY	Item No.	Description	Material	QTY
02-01	Water Sump	1	1	Fan Motor	-	1 pcs
02-02	Outlet Nozzle	1	2	V-Belt Reducer	-	-
02-03	Inlet Nozzle	1	3	Motor Frame Assembly	HDGS	1 set
02-04	Over Flow Nozzle	1	4	Fan Blade Assembly	AC	1 set
02-05	Drain Nozzle	1	5	Fan Guard	HDGS	2 pcs
02-06	Automatic Filler Nozzle	1	6	Casing	FRP	4 pcs
02-08	Float Valve Assembly	1	7	Hand Hole	EVA	1 pcs
02-09	Over Flow	1	8	Sprinkler Head	Nylon	1 set
02-10	Suction Strainer	1	9	Sprinkler Pipes	PVC	4 pcs
02-12A	Connector	1	10	Eliminator	PVC	4 pcs
02-16	Elbow	1	11	Tension Device	-	-
02-19	Inlet Pipe	1	12	Stand Pipe	PVC	1 set
03-01	Water Basin	5	13	Filling	PVC	1 set
04-00	Casing Supporter	6	14	Stopper or Column	AC	2 pcs
05-01A	Casing	4	15	Filling Supporter	HDGS	18 pcs
05-06	Hand Hole Cover	1	16	Casing Supporter	HDGS	6 pcs
06-01	Stand Pipe	1	17	Inlet Louver	PVC	8 pcs
06-04	Stand Pipe Base	1	18	Frame Assembly	-	-
07-01	Stopper	1	19	Water Basin	FRP	5 pcs
07-02	Column	-	20	Water Sump	FRP	1 pcs
08-01	Filling Supporter - A	6	21	Ladder	HDGS	1 set
08-02	Filling Supporter - B	6	22	Strainer	PE	1 pcs
08-03	Filling Supporter - C	6	23	Flange	HDGS	2 pcs
08-04	Fill Supt. Clamping Band	12	24	Basin Supporter	-	-
10-01	Ladder (A Section)	1	<b>Materials Key</b>			
10-02	Ladder (B Section)	1	FRP	Fiberglass Reinforced Polyester		
10-03	Ladder Bracket - A	2	HDGS	Hot Dipped Galvanized Steel		
10-04	Ladder Bracket - B	2	STS	Stainless Steel		
11-02	Filling 1/2 Section	4	AC	Aluminum Alloy Cast		
11-03	Filling 1/3 Section	-	<b>Water Basin Sealing Material</b>			
12-01	Sprinkler Head	1	Fiberglass	1 Set—A		
12-02	Center Post	1	Polyester Resin	1 Keg—B		
12-03	Turnbuckle	4	Catalyst	1 Bottle—C		
12-04	Tension Wire	4				
13-01	Sprinkler Pipe	4				
13-02	End Cap	4				
13-03	Eliminator	4				
14-00	Motor Frame Assembly	4				
16-01	Fan Motor	1				
16-03	Fan Key	1				
16-04	Fasten Nut	1				
17-01	Fan Hub	1				
17-02	Fan Blade	3				
17-04	U-Bolt	6				
18-01	Fan Guard	2				
20-02	Inlet Louver	8				
20-01-A	Louver Supporter	8				
20-01-B	Down Plug	8				
20-01-C	Up Plug	8				
20-08	Wing Bolt	16				
20-09	Plastic Washer	16				
OTHERS	Bolts & Nuts	1 SET				

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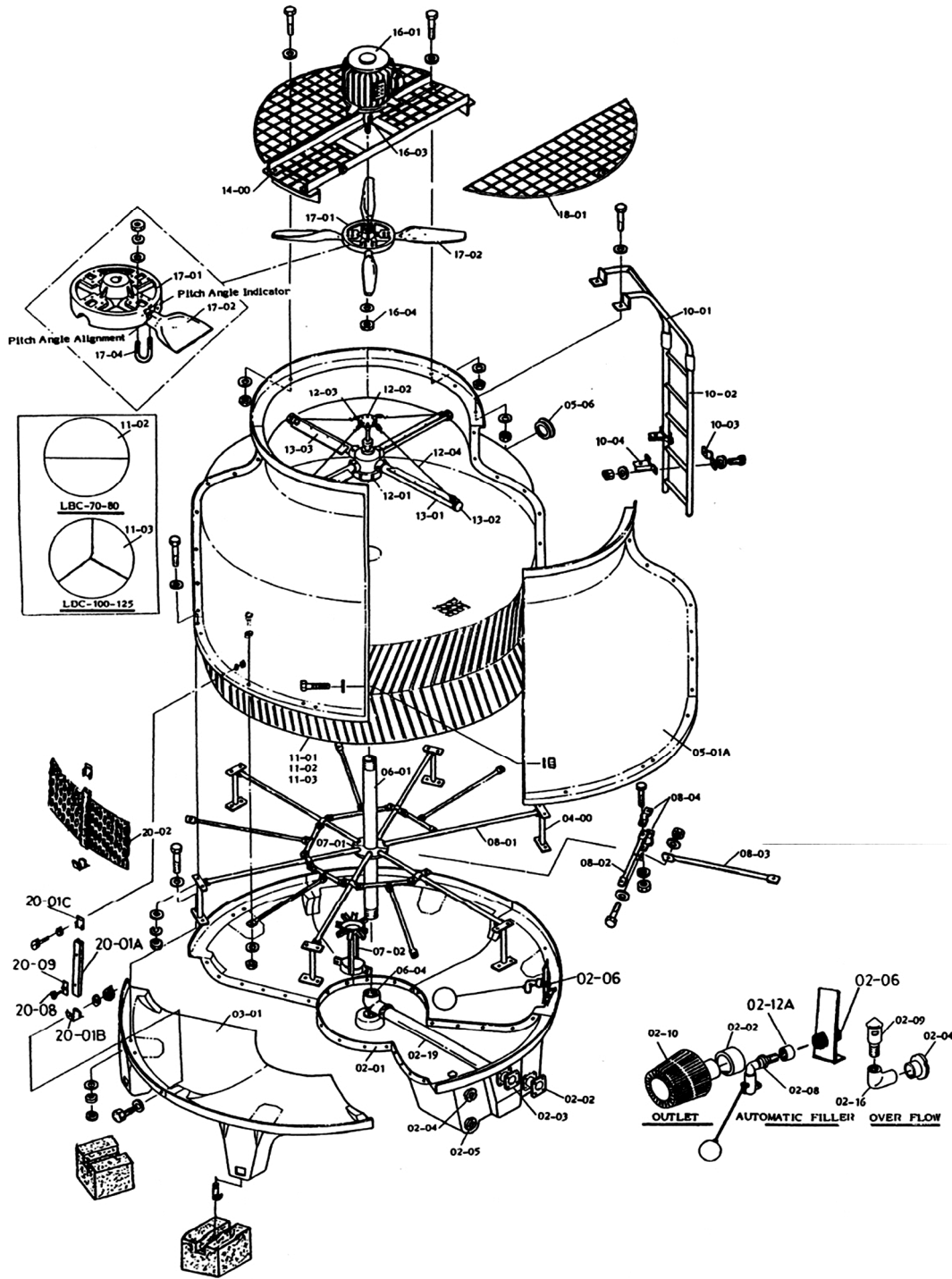
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# ASSEMBLY DIAGRAM: MODEL T-280



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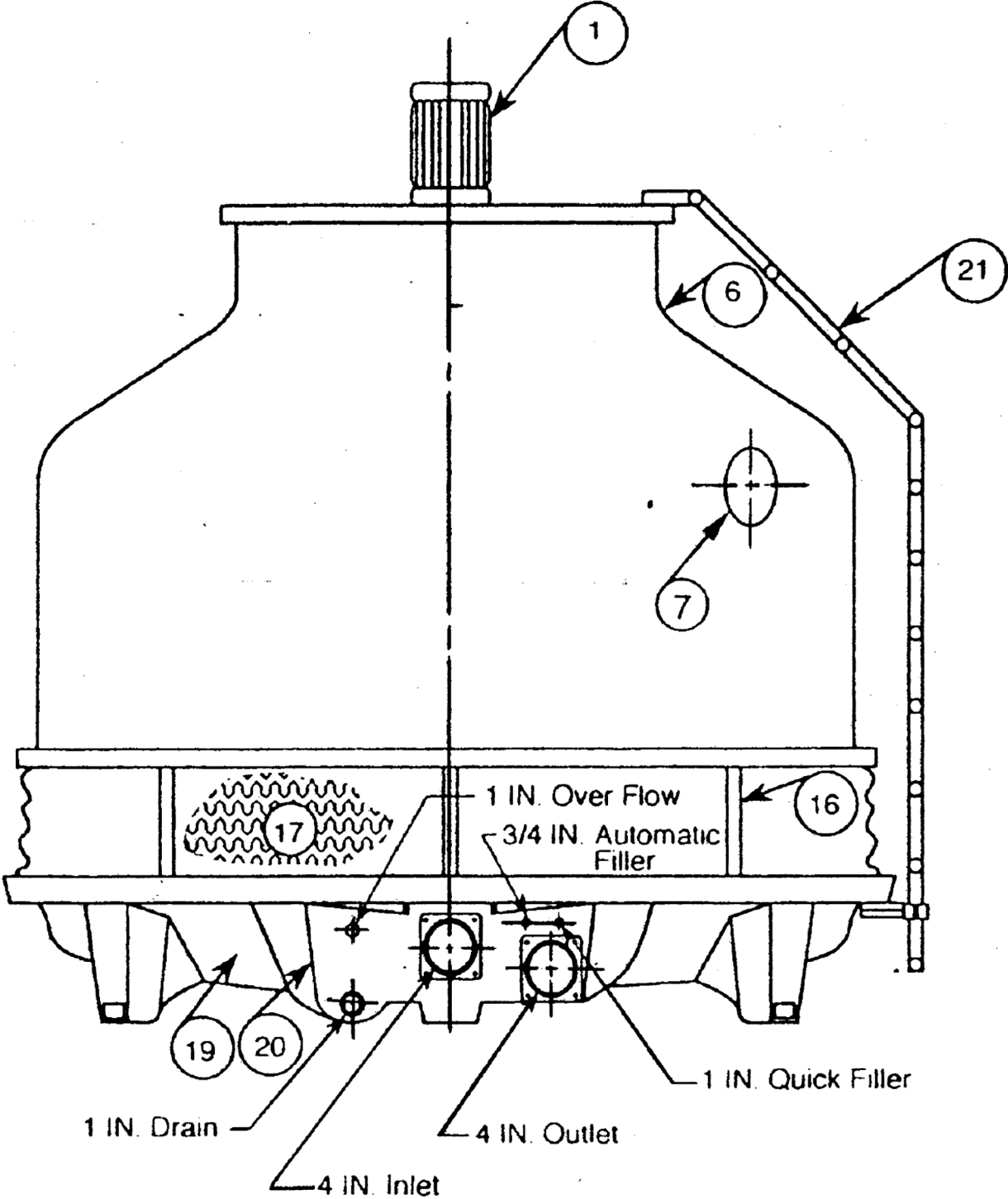
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## TECHNICAL IMAGE A: MODEL T-280



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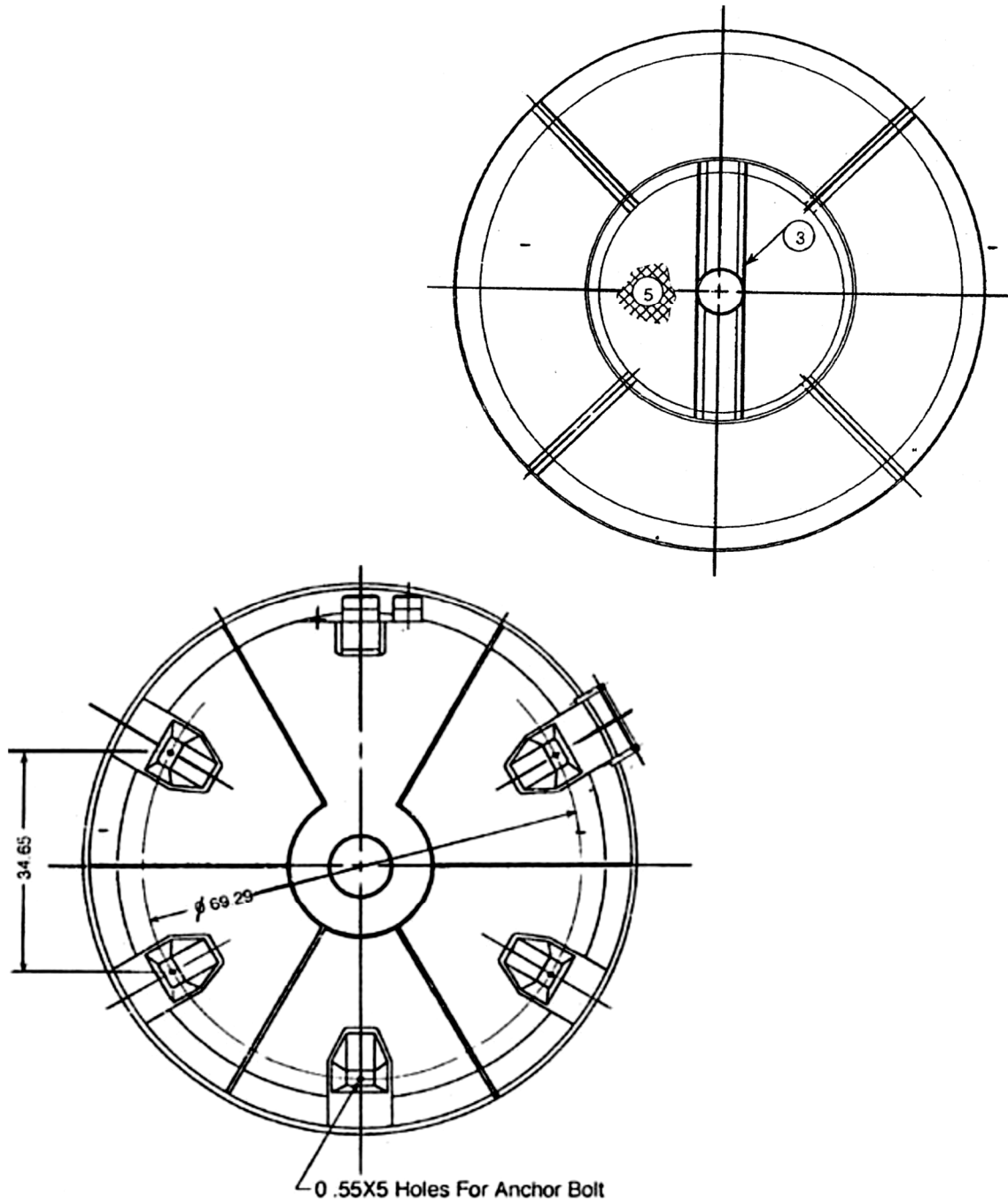
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TECHNICAL IMAGE B & C: MODEL T-280

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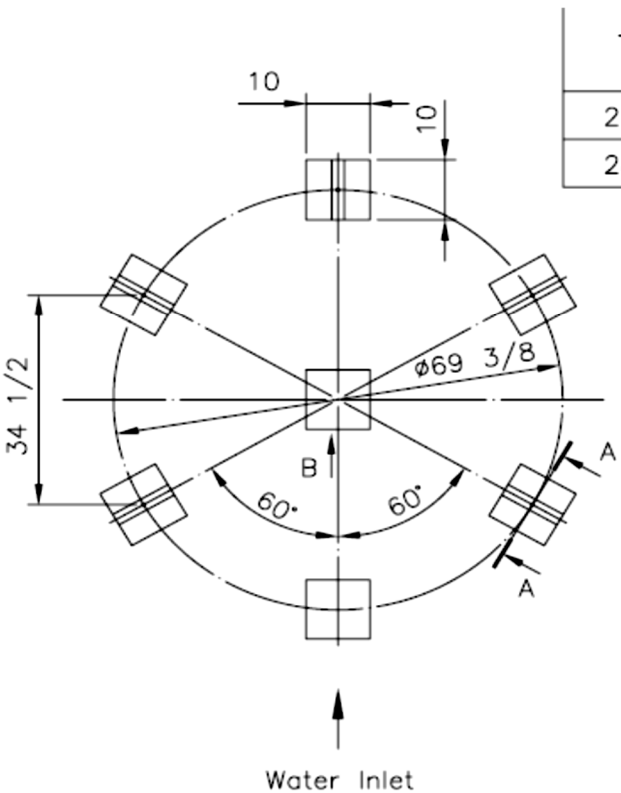
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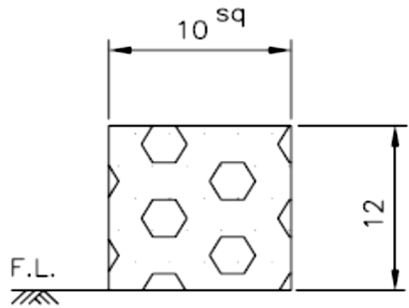


**FOUNDATION DRAWING: MODEL T-280** Cooling Tower Systems, Inc.



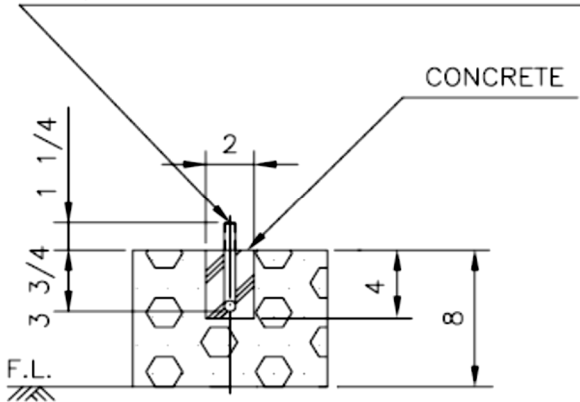
T-	L TYPE ANCHOR BOLT		
	SIZE	L	PCS
270	W 1/2	5	5
280	W 1/2	5	5

On all tower models T-270 and above, please pay close attention to recommended support foundation for center of cooling tower and outward area where inlet/outlet fittings of cooling tower exist



B VIEW

1 1/4L ALL THREAD PROJECTION  
W 1/2 X 5L TYPE ANCHOR BOLT 5 PCS



A-A SECTION