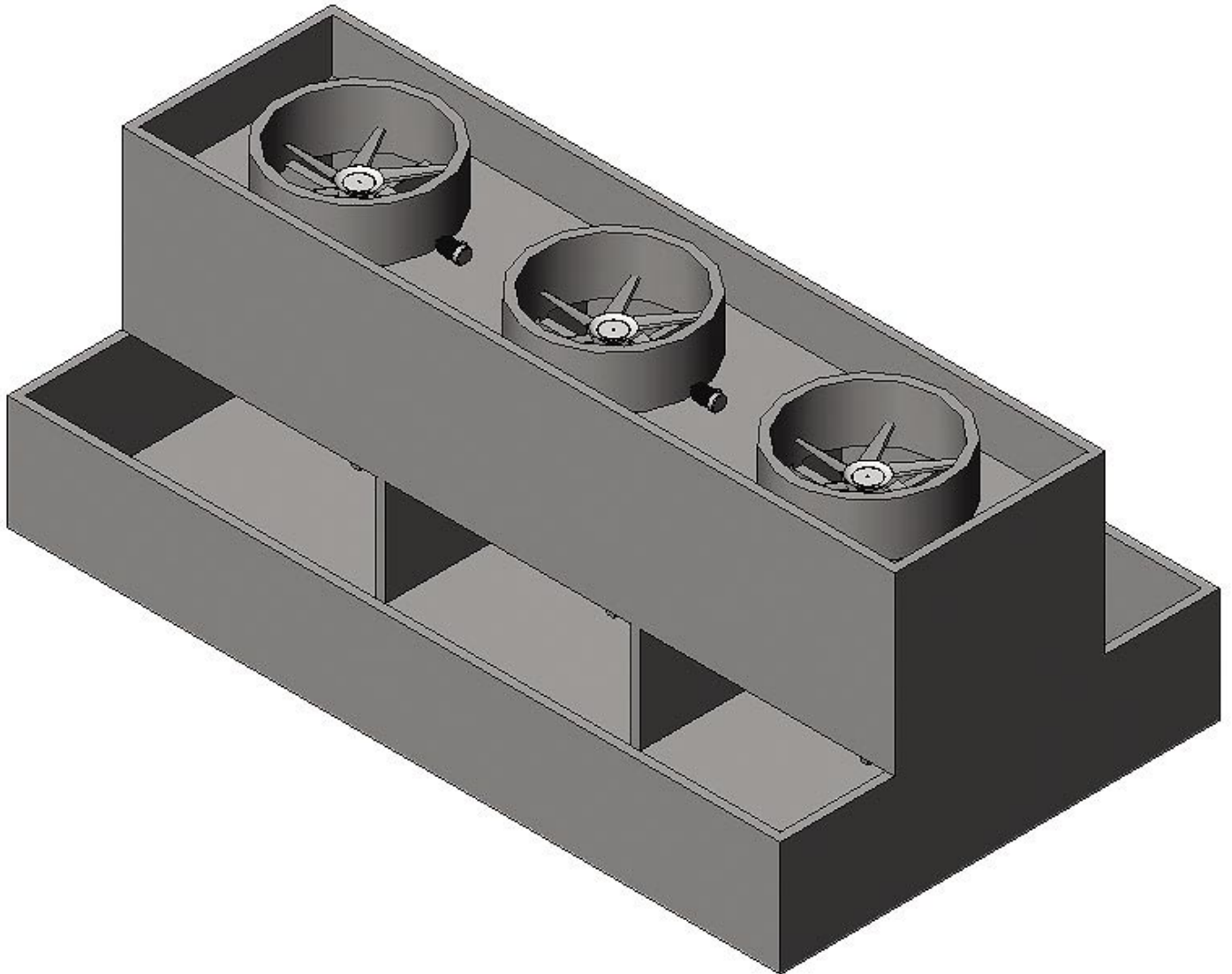


CONCRETE STRUCTURE COOLING TOWERS

CT-3000 SERIES



COMMERCIAL

INSTITUTIONAL

INDUSTRIAL

UTILITY

INNOVATIVE & ARCHITECTURALLY ATTRACTIVE

Composite Cooling Solutions, L.P. (CCS) is an industry leader in innovative design concepts for field erected cooling towers. The CCS staff is highly experienced in designing unique and visually pleasing concrete structures that make the cooling tower not only extremely functional and reliable but blends with the building design and architecture.

The concrete cooling tower can be transformed from an unattractive but necessary mechanical device to a featured part of the entire building structure.

ADVANTAGES - Long Life

CCS concrete towers provide the owner with a "permanent" cooling tower solution. The structure will remain architecturally attractive but will not prematurely fail from rust or corrosion.

MULTIPLE FILL OPTIONS

CCS offers various fill media options from PVC film fill to ceramic tile. These options allow the tower to be designed for any water quality or temperature cooling tower application.



PVC FILM FILL

TOWER LOCATION

The CCS concrete tower design, due to its attractive appearance and visual versatility, can be located in almost any available space. No need to have unsightly metal units on the roof or behind screen walls.

REDUCED INSTALLATION COSTS

By locating a concrete tower in a location that is in close proximity to the chiller plant, considerable piping costs can be reduced as well as reduced pumping losses. In addition on new construction if the tower design is integrated into the building structure, the integral cost of the tower is considerably reduced.

LOW MAINTENANCE

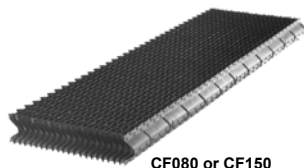
A concrete structural tower requires minimum structure maintenance. CCS designs the tower internals to the highest quality and long life standards, thus providing a permanent, long life, minimum maintenance cooling tower.

LOW NOISE

By incorporating innovative sound reducing structure and mechanical component designs, a concrete structural tower can be installed that will minimize equipment sound levels to any acceptable level.

FREE WATER CARRY-OVER OR DRIFT

The CCS concrete tower is designed with "state-of-the-art" drift eliminators that allow the tower to be placed near pedestrian or automobile traffic.



CF080 or CF150



Distribution System



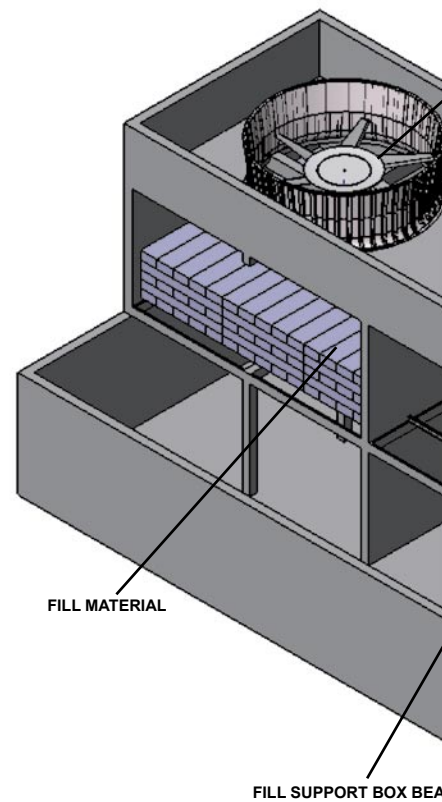
Fan Installation

UNIQUE APPLICATIONS

The concrete tower can be designed to provide other special functions that can reduce environment issues such as:

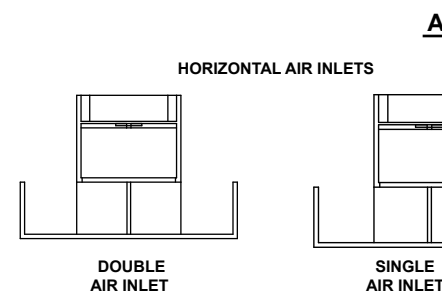
- Venting of Parking Garage Fumes
- Fogging or Plume Control

Considerable operating costs can be reduced by incorporating a "Free-Cooling" design in the tower for winter time operation.



FILL MATERIAL

FILL SUPPORT BOX BE



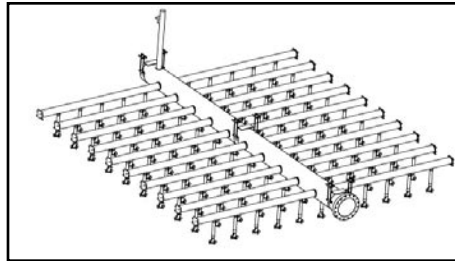
DOUBLE AIR INLET

SINGLE AIR INLET

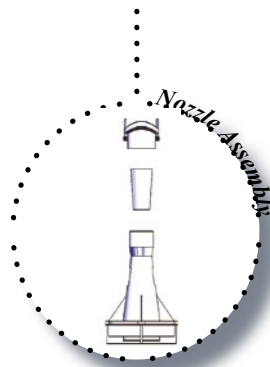
HORIZONTAL AIR INLETS

LOW PRESSURE DISTRIBUTION SYSTEM

The CCS distribution system is designed with a large nozzle opening up to 1-1/2" in diameter. The head pressure required to operate the nozzle spray pattern is 48 inches of water pressure nominal. In addition the nozzle and distribution system is designed to accept flows of 30% over design.



Standard Distribution



Multi-Fl^o STAGED DISTRIBUTION OPTION

The CCS nozzle system is designed to operate at flows of down to 50% of design. By incorporating this unique feature into the standard low pressure design, the tower water distribution system can operate efficiently at a high or low flow rate. This feature allows flow turn down ratios of 2 to 1.

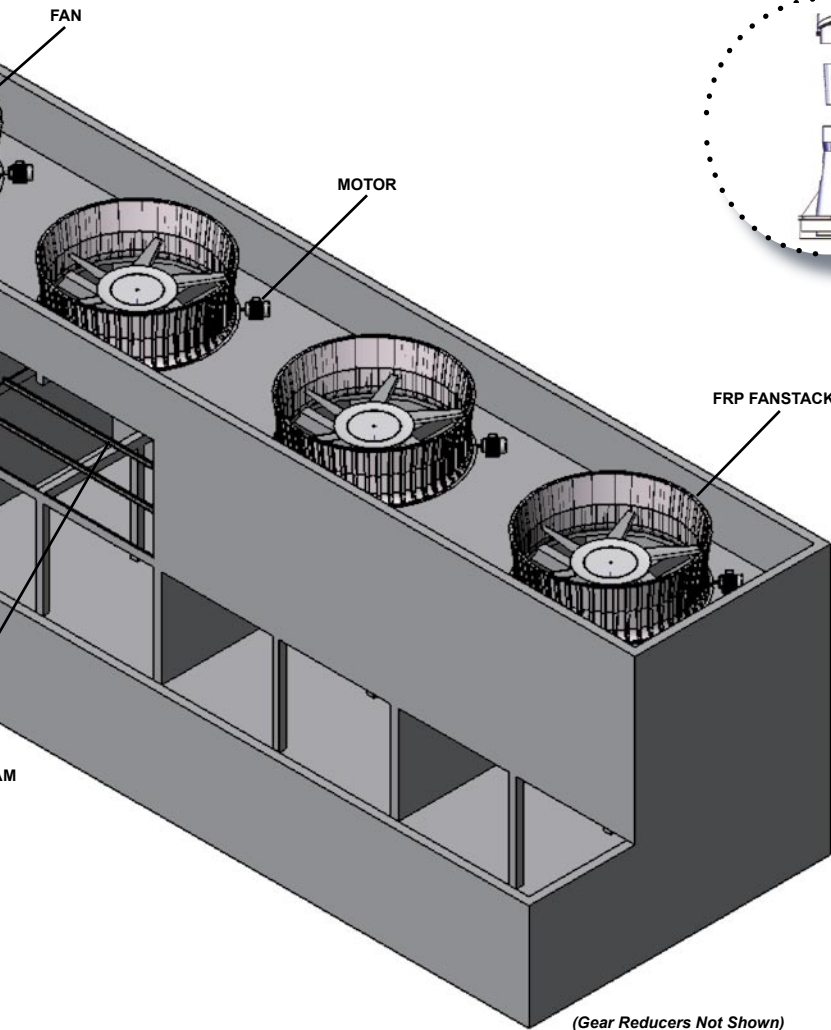
By being able to efficiently operate the tower at low flow or reduced pump operation, considerable pumping cost can be saved. This feature is perfect for summer/winter tower operation or free cooling applications.

HYBRID CONCRETE AND FRP TOWERS

To reduce the cost of a concrete structure, CCS can combine our proprietary, FRP composite structural member designs with the concrete tower shell to provide a "lower cost", poured in place, concrete cooling tower. The expensive to form overhead concrete members, such as fill and roof deck beams as well as the concrete roof deck, can be replaced with structural FRP members that are less expensive and easily installed, thus reducing cure time and labor costs.

FRP components utilized in a concrete tower include:

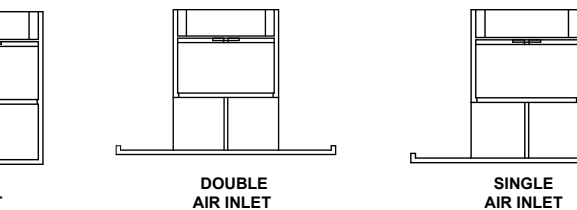
- FRP Fanstacks
- FRP Fan Decks
- Internal Columns
- Fan Deck Supports
- Distribution Supports
- Fill Supports
- Ladders



(Gear Reducers Not Shown)

AIR INLET DESIGNS

VERTICAL AIR INLETS



Concrete Structure with Fiberglass Deck



About Composite Cooling Solutions, L.P.

Founded in 2004, CCS operates on a global scale as a design/engineer and construction contractor for custom built pultruded composite and concrete cooling towers.

CCS utilizes and leverages the years of experience and expertise of its founders to focus solely on the field erected cooling tower market. These assets and focus have produced the future today . . . the Phoenix™ Building System, an innovative combination of extreme flexible design and innovative materials.

CCS has partnered with industry leaders to combine its strengths with the best in class in their respective industry segments. This allows CCS to offer its customer the most superior pultruded composite cooling tower in the market handling flow rates up to 30,000 gallons per minute per cell.

CCS is committed to innovation and new technology that allows custom flexibility unheard of in the field erected cooling tower market and providing superior product quality with reduced customer costs.

