

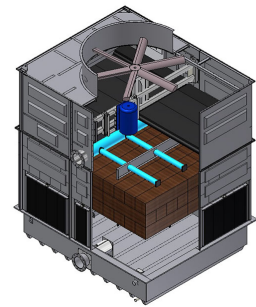
# Construction details

## Open cooling towers

### Construction details

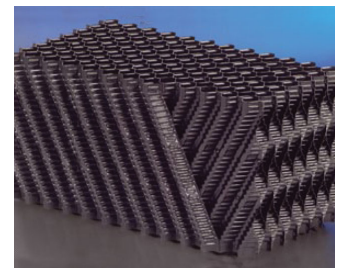
#### 1. Material options

- Structural panels and fan deck are made from hand-laid heavy duty **fibreglass reinforced polyester (FRP)**, with hot-dip galvanised fill and mechanical supports.
- **Option:** Stainless steel type 304 or 316 fill and mechanical supports for added corrosion resistance.
- Cold water basin: Mould formed, hand laid, heavy-duty **fibreglass reinforced polyester (FRP)** with smooth internal finish.
- **Option:** Tower without cold water basin for on-site **assembly on concrete tank**.



#### 2. Heat transfer media

- Our heat transfer media is cross fluted fill design in **easy to handle, lift and remove blocks**. Standard offering is a flame-retardant polyvinyl chloride (PVC) material, with sheet spacing of 12mm or 19 mm for clear water applications
- Choose high-density polyethylene (HDPE) tube fill with 65mm spacing for dirty water applications.
- For operation above 55°C, try our **optional high temperature fill**, usable with intake water up to 65°C.



### 3. Air movement system

- **Direct-drive** models are fitted with aerofoil blade fans with an aluminium hub and injection-moulded glass reinforced composite blades.  
Larger units use **V-belt drives** with aerodynamically designed, extruded aluminium blade fans. This drive system consists of heavy duty bearings, steel shaft and pulleys.
- Our high efficiency **drift eliminators** come in UV-resistant plastic, which will not rot, decay or decompose. These are assembled in **easily handled and removable sections**, for optimal internal access and maintenance.
- Easy removable UV-resistant PVC **air inlet louvres** at air inlet, block sunlight to prevent biological growth in tower, filter air and stop water splash-out.



### 4. Water distribution system

These consist of:

- **Spray branches** with non-clog plastic **nozzles** secured by rubber grommets. **Tool free branch removal** for easy inspection and flushing.
- **Flanged** inlet and outlet connections.
- Easy accessible **cold water basin**, including anti-vortexing strainer, make up and overflow connection.



Interested in the FCT cooling tower? Contact your local [BAC representative](#).