# **Construction details**

Open cooling towers

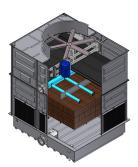
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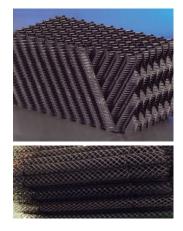
## 1. Material options

- Structural panels and fan deck are made from hand-laid heavy duty <u>fibreglass reinforced polyester (FRP</u>), 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 <u>BAC</u> <u>representative</u>.



