

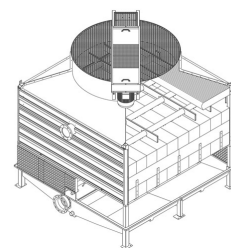
# Construction details

## Open cooling towers

### Construction details

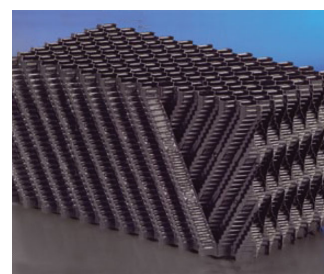
#### 1. Material options

- **High strength pultruded composite** material is used for external unit panels and structural elements.
- Mould formed, hand laid, heavy-duty **fibreglass reinforced polyester** (FRP) with smooth internal finish, is used for the cold water basin and fan cylinder.
- **Option:** Tower without cold water basin for on-site **assembly on concrete tank**. Triple fan units are always supplied without water basin.



#### 2. Heat transfer media

- Our heat transfer media is [Versapak fill](#). Cross fluted fill design in **easy to handle, lift and remove blocks**. In polypropylene, which will not rot, decay or decompose. Optional in flame-retardant material. Sheet spacing is 19 mm.
- Use **12 mm sheet spacing** for clear water applications
- Choose **FRP fill** for dirty water applications: includes individual **waved FRP panels and a telescopic fill support**. Panels are easy to inspect and clean, eliminating the need for frequent fill replacement.
- For operation above 55°C, try our **optional high temperature fill**, usable with intake water up to 60°C.



### 3. Air movement system

- **RCT fan system** features **low kW and noise axial fan(s)** in corrosion resistant aluminum, encased in FRP fan cylinder with removable fan guard. Together with the stainless steel fan shaft and heavy duty ball bearings and extended lubrication lines, this guarantees optimal and year-round operational efficiency.
- Models RCT-2118 and 2129 use **direct drive motor**. Larger units have the fan motor outside the discharge air stream and use **V-belt drives**. This drive system is encased in hot-dip galvanised steel with access door protected with the [Baltibond® hybrid coating](#).
- **Our drift eliminators** come in UV-resistant plastic, which will not rot, decay or decompose and their performance is tested and **certified by Eurovent**. They are assembled in **easily handled and removable sections**, for optimal internal access.
- Easy removable UV-resistant plastic **combined inlet shields** at air inlet. Sunlight block to prevent biological growth in tower, air filter and water splash-out stop.



### 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 **sloped cold water basin**, including anti-vortexing stainless steel strainer, make up and overflow connection.



### 5. Construction

- Easy no-tool **removal of one side panel** gives complete access to drift eliminators, spray system and fill.

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

