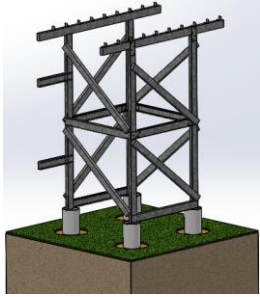


#### Step 4: Securing of Struts and Bracing

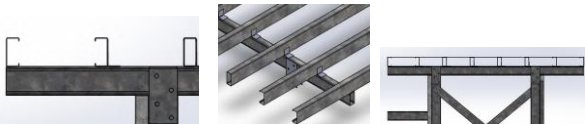


**Check again that the sleeve tops are level and there has been no settlement. Adjust as required.**

Attach the horizontal struts to the brackets on the side assemblies using the bolts provided. Ensure that they are firmly tightened.

Fasten the cross bracings on the structure as indicated using the self-drilling, self-tapping screws provided.

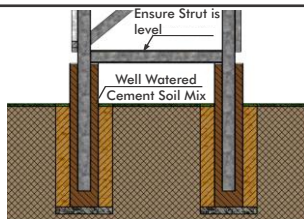
#### Step 5: Platform Assembly



Raise and locate the tank platform cross members on top of the main bearers and secure them onto the bearers brackets fixed on with self-tapping screws.

Once firmly secured attach the galvanized sheet provided to provide a firm base for the tank.

#### Step 6: Footing Backfill



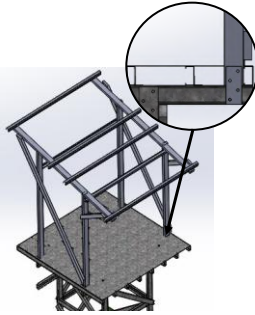
**Finally check that the structure is level by checking on the platform before backfill.**



**When backfilling it is vital to progressively compact to ensure a firm and solid filling.**

Backfill the footing sleeves with a well-watered cement/ excavated soil mix of a suggested 1:6 ratio.

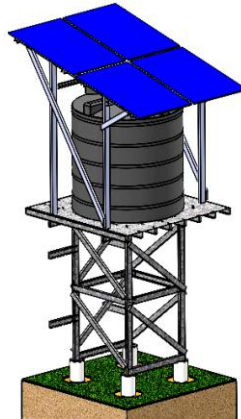
#### Step 7: Module Support



If a PV module support structure is included attach by first bolting the vertical uprights to the brackets on the main bearers, then fixing the main support beam to the uprights and finally the PV module mounting battens using the self-drilling, self-tapping screws provided using two screws for each joint.

When locating the PV module support battens it is important to ensure that the spacings align with the module fixing holes. The modules should be attached before the tank is positioned.

#### Step 8: Tank Positioning



Allow the footings backfill to cure then position the tank on the platform using a manual lifting process or a gantry ensuring central positioning on the platform. Tanks are approx. 50kgs and are easily manhandled. Leave the footings backfill at least two days to cure before filling the tank.

Ensure that the tank inlet and outlets are fitted before lifting. The piping should be secured to the brackets provided once the tank is in place.

**DAYLIFF** is a brand of **Davis & Shirliff**

for enquiries contact

**Davis & Shirliff, Ltd.**

P.O. Box 41762 - 00100, Nairobi, Kenya

Tel: 6968000/ 0711 079 000

or visit

[www.davisandshirliff.com](http://www.davisandshirliff.com)

for details of the nearest branch or stockist

# DAYLIFF

## SunTower Water Tank Tower



## Installation & Operating Guide

Congratulations on selecting Dayliff Sun Tower. They are manufactured to the highest standards and if installed and operated correctly will give many years of efficient and trouble free service. Careful reading of this Installation Manual is therefore important, though should there be any queries they should be referred to the equipment supplier.

## 1 INTRODUCTION

Dayliff Water Tank Towers are strong and robust structures to support circular roto-moulded type tanks up to 3000litre capacity and a maximum diameter of 1.6m. They are specially designed for ease of transport and site as-assembly and by carefully following these simple instructions a long lasting and safe installation will result.

Towers are manufactured from light galvanized high ten sile steel sections that need no paint finish, which are secured by mild steel brackets at the joints together with self-tapping screws. They are designed for erection in soil/cement mix footings contained in the supplied 300mm PVC sleeves that firmly anchor the tower tank stand in the ground.

For the installations, strictly follow the procedures illustrated herein with the detailed dimensioned drawing shared.

### Tools Required

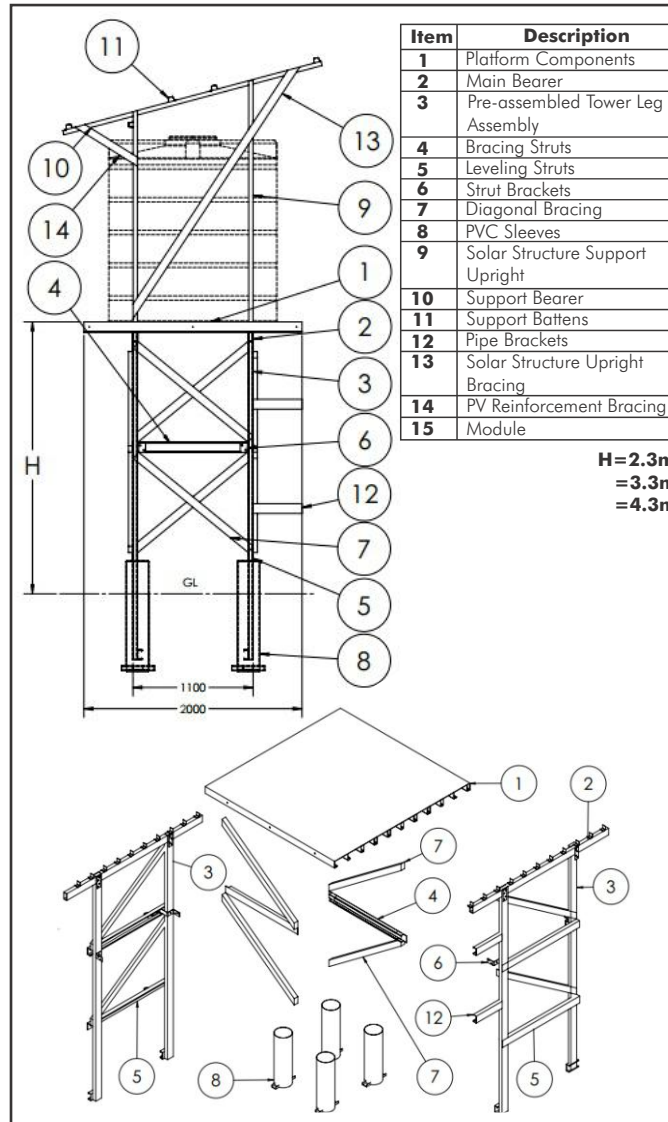
		
<b>Battery Operated Drill</b>	<b>Hex Head Socket Bit: 8&amp;10mm</b>	<b>Spanner: 8&amp;10mm</b>
		
<b>Tape Measure: 3m</b>	<b>Alignment Rope</b>	<b>Hose</b>

## 2 DESIGN

### Layout Drawing

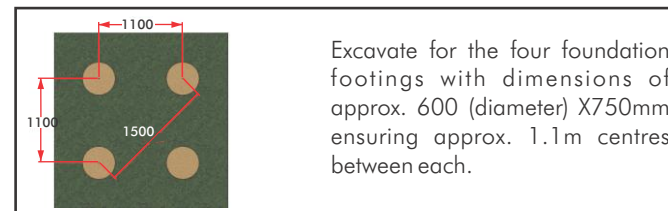
The general layout drawing of the assembly is shown with the component positions. The structure is delivered in three principal pre-assembled sections, the two sides and platform and with struts and bracing supplied loose together with bolt and self-tapping screw fasteners. The four footing sleeves are also supplied loose.

## System Overview and Components

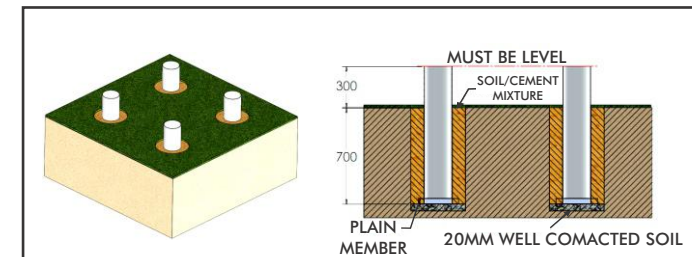


## 3 INSTALLATION

### Step 1: Foundation Preparation



### Step 2: Sleeve Location



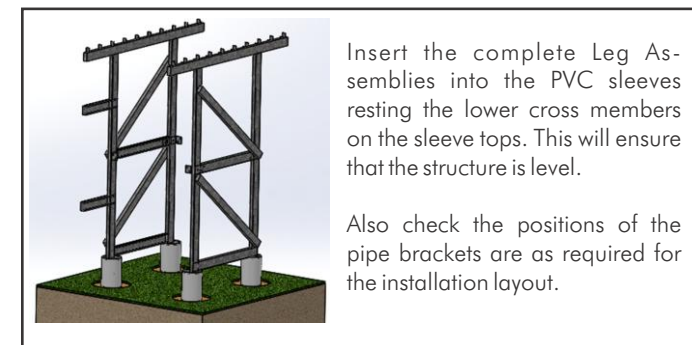
**NOTE** Correct positioning of the sleeves is extremely important that determines the correct leg location and strength of the structure.

**NOTE** Firm backfill compaction is essential to eliminate any foundation settlement.

**NOTE** At this stage it is VITAL to ensure that the top of the four sleeves are absolutely level. Any unevenness will disturb the integrity of the structure and lead to possible failure.

Place the 1m 300mm PVC sleeves into the excavated foundations ensuring spacing centres of 1.1m (1.5m on the diagonal) and that they are completely vertical and accurately square. The sleeves must rest on very firm well compacted and level founding at their base allowing for approx. 300mm protrusion above ground. Then backfill around them using a well-watered soil/cement mix ensuring firm compaction.

### Step 3: Side Assembly



Insert the complete Leg Assemblies into the PVC sleeves resting the lower cross members on the sleeve tops. This will ensure that the structure is level.

Also check the positions of the pipe brackets are as required for the installation layout.