



## Technical Bulletin # 1

### Mounting Plant on Rubber Membrane Roofs, Air Conditioning, Solar Panels

#### Situation

A construction company requires an air conditioning plant to be mechanically fixed to a low pitched rubber membrane roof.

#### Aim

To minimise the possibility of water penetration around the mechanical fixing through into the Deck substructure.

#### Execution

- 1.** Lay rubber membrane, in the normal way, right through the area where plant is to be mounted.
- 2.** Procure the appropriate length of CCA treated timber to run down each side of the plant using a single piece. Do not use LOSP or any other solvent based treated timber. Any sharp edges should be rounded off and the sides angled down to the deck (to minimise the top surface area and promote water shedding). The bottom width of the timber should be 75mm.
- 3.** Position the timber on the membrane surface - length running with the fall. Mark out the position of the mount, including bolt holes, and move timber to one side. Ensure the area is even with no humps or hollows.
- 4.** Form a gasket, to the shape of the marked area, using at least two strips of membrane and a single strip of 76mm wide lap tape "sandwiched" in between. Apply another strip of lap tape to the bottom of the gasket. Use lap primer for joining lap tapes as you would for a standard seam.
- 5.** Prime the rubber in the marked area and apply the gasket to the surface. "Roll" the gasket as you would for a standard lap seam.

6. Place the timber mounts on the gaskets and bolt them to the substructure to form a pressure seal. Apply Skellerup roofing sealant in and around the bolt holes including between the gasket and the bottom of the mounts.
7. Apply a bead of Skellerup roofing sealant around the perimeter of the mounts at its base.
8. For additional security dress over the timber mounts with rubber membrane, using lap tape - detailing as you would for normal upstands.

**Note:** *When fixing the plant to the timber mounts take care not to penetrate the gasket or surface membrane. Apply sealant in and around the fixings.*

### **Co-ordination**

Communication is required between the applicator and the construction company as to the correct location of plant. It is the responsibility of the construction company and or specifier to ensure the substructure is able to take the additional weight. In particular, regarding the effect the plant has on positive drainage i.e. ponding.

### **Administration**

#### **Materials required**

- Skellerup Rubber Membrane
- CCA treated Timber
- 76mm Skellerup Lap Tape
- Skellerup Roofing Sealant

#### **Warranty**

The above method is designed to minimise the possibility of damage caused by water penetration and is offered in an advisory capacity where mechanical fixing of plant is unavoidable. Skellerup does not warrant the membrane against damage caused by "objects penetrating the sheeting".

It is recommended that a Skellerup Approved Applicator carry out the waterproofing requirements. In normal circumstances the construction company would supply the timber mounts, bolts and labour to fix.

