SKYSPANSHADE
COMMERCIAL UMBRELLAS AND SHADE STRUCTURES

Sunset

Centre Column Umbrella Footings Installation

Method Statement

Installation

Components

Umbrella (complete)
Dome cap
Winding handle
Foam arm spacer
Umbrella strap
Base template

Required Tools and Equipment

1. **Hold down bolt assembly (consisting of 4 x M12 @ 160mm threaded rod, 8 x nuts and washers (all galvanised)**
2. **Steel cage plus 6 x plastic mounts**
3. **Small brush**
4. Chemset (Ramset 101) - 1 tube per 4 umbrellas with a nozzle per hole
5. Compressed air
6. Hammer drill / 14mm sds plus drill bit
7. Wheelbarrow
8. Spade
9. Trowel
10. Spirit level
11. Safety glasses
12. Ear muffs
13. Spanners & sockets
14. Torque wrench

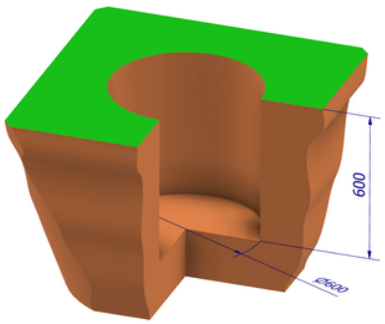
Items in bold included in installation kit

Method

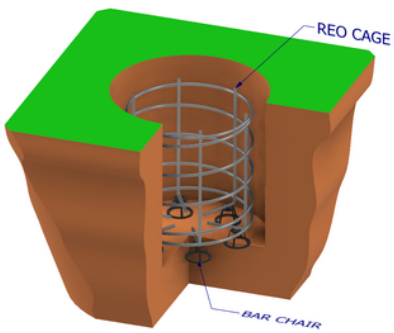
There are two main ways to install the umbrella, either by digging footings or by installing on existing slab.

Digging Footings

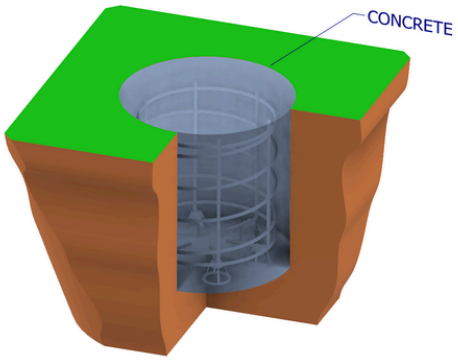
1. Determine location of umbrella base and dig a hole 600mm diameter x 600mm deep. Ensure excavation is free of loose material.



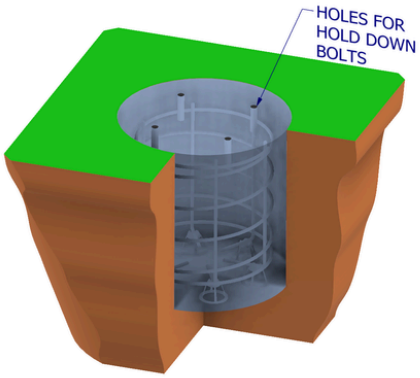
2. Put the supplied steel cage on top of 6 plastic mounts (or bar chairs) and put in the hole. The cage should be approx. 50mm below ground level. Ensure cage is centred so you will not be drilling through steel in step 4.



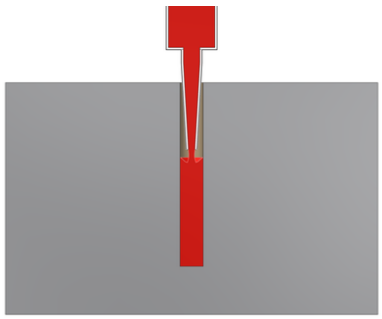
3. We recommend using a specialist concrete supplier for mixing the concrete on site. Pour concrete into the hole up to ground level. The concrete should be minimum 25 MPa with maximum aggregate size of 20mm. . Use a spirit level to ensure the top surface is level. Concrete should be vibrated after pouring and kept damp for at least 7 days to assist curing.



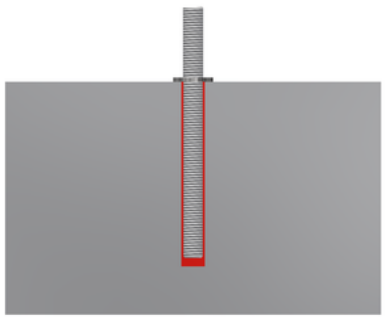
4. Mark the position of the holes using the supplied template and drill the four bolt holes to a depth of 110mm using a 14mm bit. Wear eye and ear protection as required.



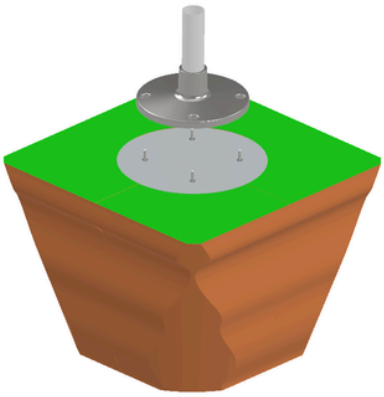
5. Clean all dust from the holes using a brush and compressed air. As per the Chemset 101 Method Statement, fit mixer nozzle to the chemical anchor tube and fill the hole to 75% from the top (i.e. around 30mm from top). Ensure the Chemset is properly mixed before use; the first few pumps may need to be discarded.



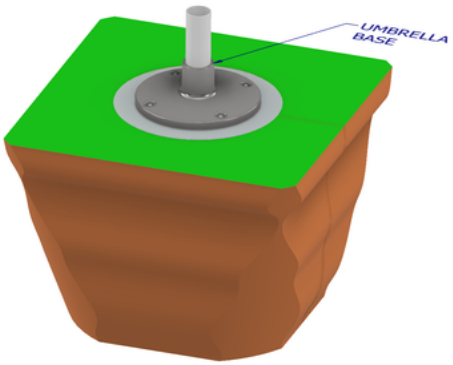
6. Wearing eye protection, insert M12 threaded rod into the hole while twisting to eliminate air pockets, leaving around 35mm of rod out of the hole to give space for the bolt hole cap. Use washers if the surface is not level. Once completed, leave bolts to set as per the Chemset Method Statement.



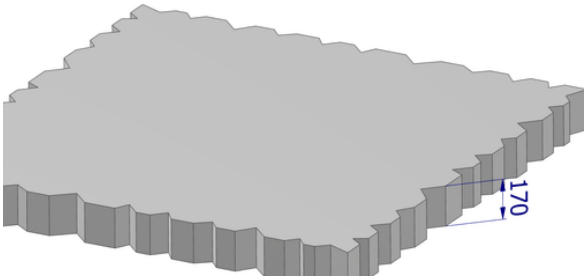
7. Umbrella can now be placed onto the bolts in the desired location.



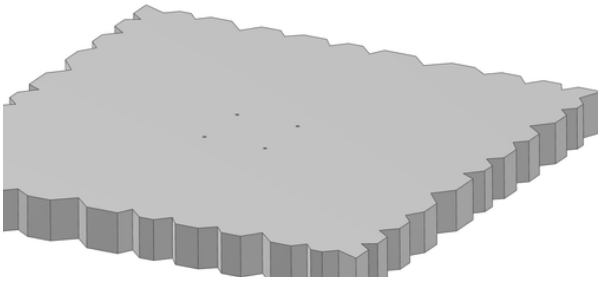
8. Place nut and washer onto each threaded rod and tighten. Insert plastic base caps over the bolt holes.



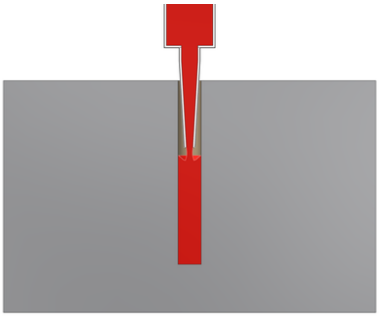
Installing on Existing Slab



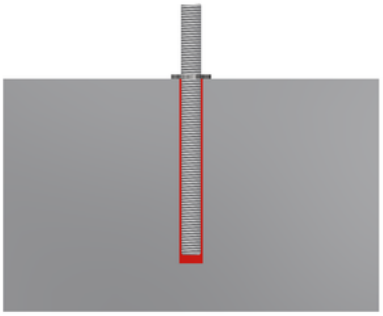
1. Slab needs to be minimum 170mm thick.



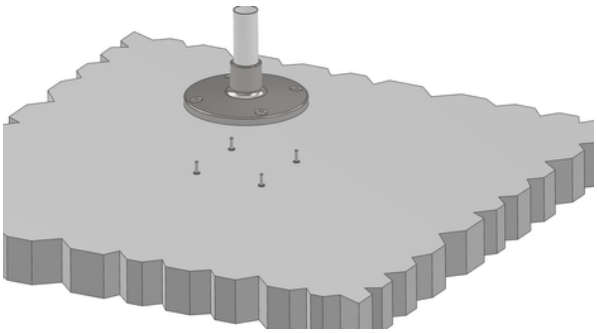
2. Determine location of umbrella base and mark the position of the holes using the supplied template. Drill the four bolt holes to a depth of 110mm using a 14mm bit. Wear eye and ear protection as required.



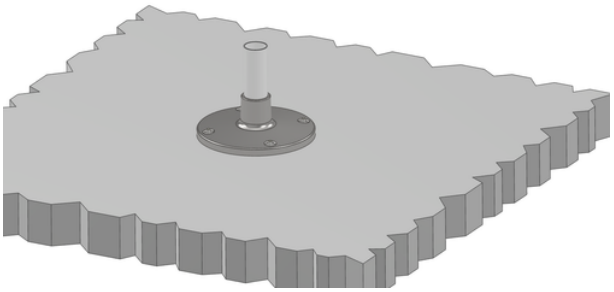
4. Wearing eye protection, insert M12 threaded rod into the hole while twisting to eliminate air pockets, leaving around 35mm of rod out of the hole to give space for the bolt hole cap. Use washers if the surface is not level. Once completed, leave bolts to set as per the Chemset Method Statement.



5. Wearing eye protection, insert M12 threaded rod into the hole while twisting to eliminate air pockets, leaving around 35mm of rod out of the hole to give space for the bolt hole cap. Use washers if the surface is not level. Once completed, leave bolts to set as per the Chemset Method Statement.



6. Umbrella can now be placed onto the bolts in the desired location.



7. Place nut and washer onto each threaded rod and tighten. Insert plastic base caps over the bolt holes.