SKYSPANSHADE
COMMERCIAL UMBRELLAS AND SHADE STRUCTURES

Vista

Cantilevered Umbrella Footings Installation

Method Statement

Installation

Components

Head Unit
Main Column
Boom Arm
Foam Arm Spacer
Winding handle
Base template

Required Tools and Equipment

1. **Hold down bolt assembly (consisting of 6x M16 @ 300mm threaded rod, 12 x nuts and square washers and 6 dome nuts**
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 / 18mm 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

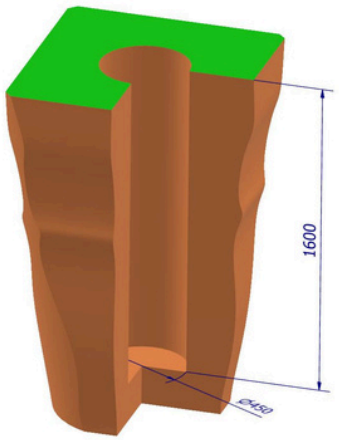
Items in bold included in installation kit

Method

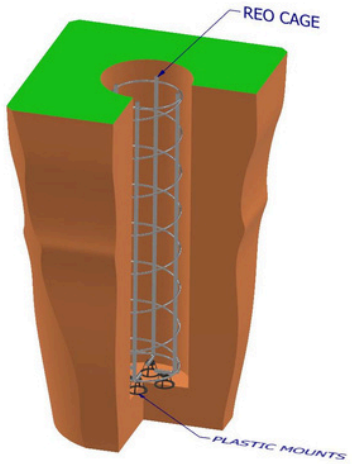
There are two main ways to install the umbrella, either by digging footings or by installing on existing slab.

Digging Footings

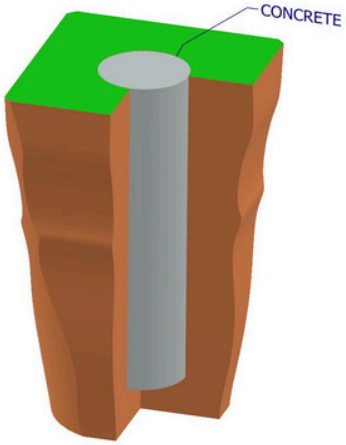
1. Determine location of umbrella base and dig a hole 450mm diameter x 1600mm deep. Ensure excavation is free of loose material.



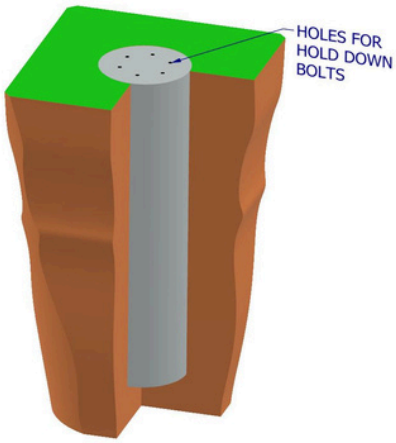
2. Put the steel cage on top of 6 plastic mounts (or bar chairs) and put in the hole. The cage should be approx. 50mm below ground level. Ensure cage is centred so you will not be drilling through steel in step 4.



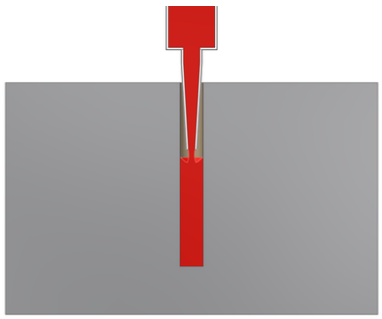
3. We recommend using a specialist concrete supplier for mixing the concrete on site. Pour concrete into the hole up to ground level. The concrete should be minimum 25 MPa with maximum aggregate size of 20mm. . Use a spirit level to ensure the top surface is level. Concrete should be vibrated after pouring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



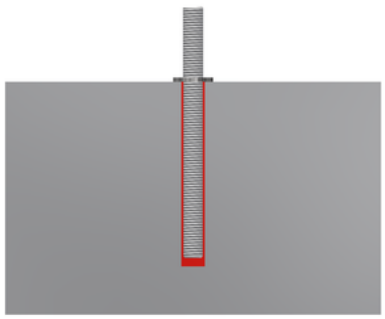
4. Mark the position of the holes using the supplied template and drill the six bolt holes to a depth of 220mm using a 18mm bit. Wear eye and ear protection as required.



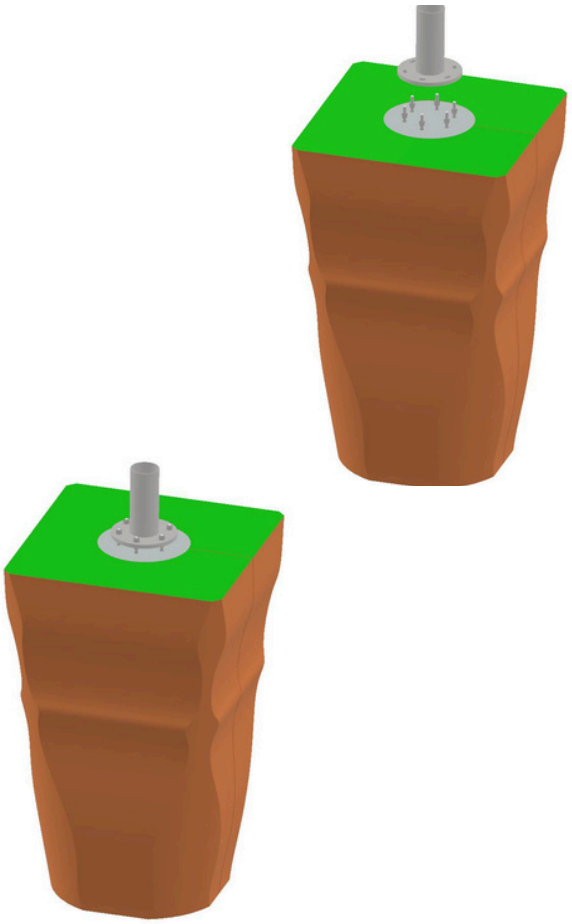
5. Clean all dust from the holes using a brush and compressed air. As per the Chemset 101 Method Statement, fit mixer nozzle to the chemical anchor tube and fill the hole to 75% from the top (i.e. around 50mm from top). Ensure the Chemset is properly mixed before use; the first few pumps may need to be discarded.



6. Wearing eye protection, insert M16 threaded rod into the hole while twisting to eliminate air pockets, leaving around 100mm of rod out of the hole. Use levelling nuts and washers to ensure the base will be level. Once completed, leave bolts to set as per the Chemset Method Statement.

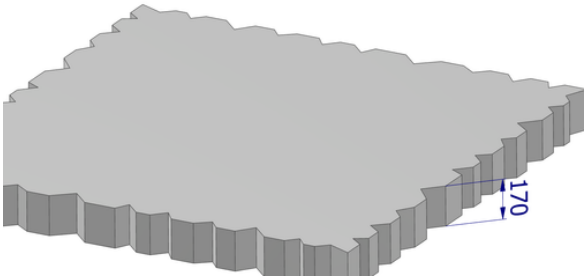


7. Wind on M16 levelling nuts/washers and set topside to be 45mm off the footing to allow for levelling and sufficient grout for structural integrity, Use the supplied thread protectors to slide over the hold down bolts to prevent any paint damage when the columns are seated on the levelling nuts (refer to Vista Installation Method Statement). Umbrella can now be placed onto the levelling nuts in the desired location. Adjust levelling nuts as necessary to ensure the base is level.

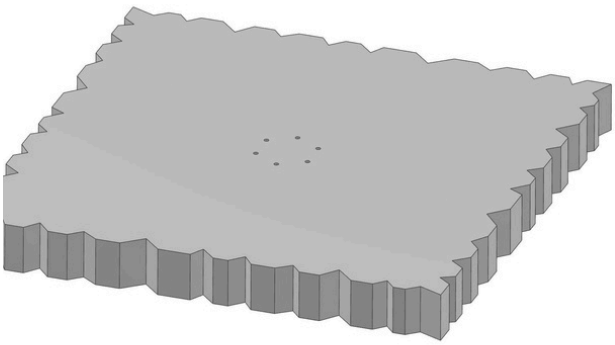


7. Approx 60mm is needed for finishing off the column fixing, This is including the thickness of column base 1 x structural washer, 1 x structural nut, 1 x dome nut.

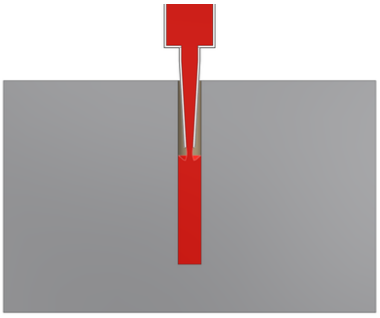
Installing on Existing Slab



1. Slab needs to be minimum 170mm thick (except 5 metre square Vista which requires 200mm) and at least 2250mm square without joints.



2. Determine location of umbrella base and mark the position of the holes using the supplied template. Drill the six bolt holes to a minimum depth of 130mm using a 18mm bit. Wear eye and ear protection as required.



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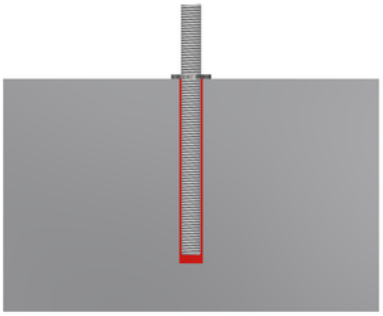

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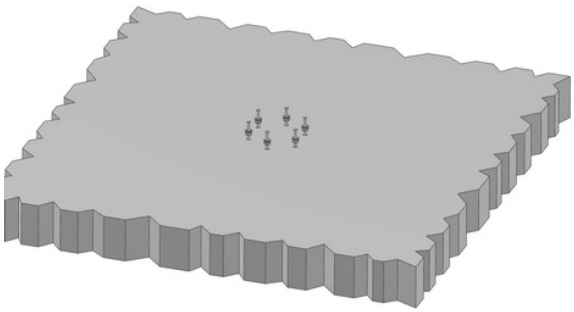

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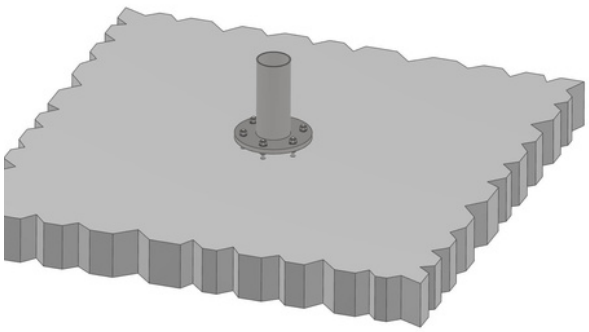

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