



C Band Pole Mount Satellite Dish Mounting Construction Specifications

This specification sheet is for constructing a well-anchored solid base for both mesh and solid petal satellite dish construction.

While the mesh dishes allow more air flow through the petals at low wind speeds and so are not subjected to wind loading to the extent of that the solid petal dishes are, at high wind speeds (when damage occurs) the mesh acts much the same as a solid petal. Therefore the specifications for these dishes are the same for mesh and solid petal.

Calculation Formula:

The calculations used to determine the amount of concrete needed in the base for the two dish types are as follows:

- **Mesh and Solid Petal satellite dishes** – Use 0.1m³ of concrete per metre of dish size.
- For example a 2.4m dish would require a minimum of 0.24m³ of concrete in the base. ($2.4 \times 0.1 = 0.24\text{m}^3$)
An example hole for this would be 450mm x 450mm x 1200mm
- For example a 3m dish would require a minimum of 0.3m³ of concrete in the base. ($3 \times 0.1 = 0.3\text{m}^3$)
An example hole for this would be 500mm x 500mm x 1200mm

Further specifications:

- It is recommended that these size dishes have the galvanized mounting pole a minimum of 1200mm into the concrete. Keep the end of the galvanized pole up off the ground so the concrete is surrounding it. This helps prevent rusting of the pole from the bottom up.
- The galvanized mounting pole must have a wall thickness of no less than 4mm.
- To further prevent the mounting pole from spinning in the concrete in high winds, a 12mm x 200mm galvanized bolt should be bolted through the mounting pole 900mm up from the bottom end. Once the pole is set into the concrete, the bolt will be 300mm below the surface.
- The concrete must be allowed to harden for no less than 24 hours before work is performed on the mounting pole and no less than 48 hours before the dish is mounted on the pole. Alternatively QuickSet concrete can be used. Follow the instructions provided for such concrete.
- There must not be more than 1500mm between the lower edge of the dish (when the dish is at 0 deg Horizontal) and a brace. The concrete base is considered to be a brace. If the height from the lower edge of the dish to the top of the concrete is more than 1500mm, the pole must have a minimum of two galvanized steel braces bolted to the mounting pole with 12mm galvanized bolts and set into the ground with concrete 200mm diameter x 900mm deep.

The braces should be at 90deg to each other and at 45deg to the ground. The fixing into the concrete should be with galvanized flat steel 4mm x 50mm set into the concrete 500mm. The section of flat steel protruding from the top of the concrete block will need a hole for the 12mm bolts attaching the braces. (see diagram below)

Galvanized steel braces of 50mm x 4mm angle iron are acceptable.



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Note: The one-piece pole runs right down into the concrete base. The part in the concrete is marked in red.



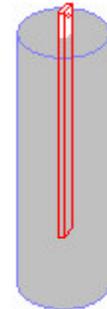
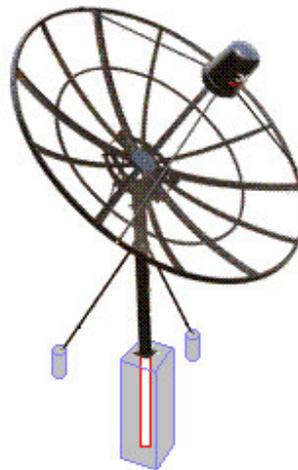
There must not be more than 1500mm between the lower edge of the dish (when the dish is at 0 deg Horizontal) and a brace. The concrete base is considered to be a brace.

The dish pictured is set at 45deg.

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The braces should be at 90deg to each other and at 45deg to the ground.

Galvanized steel braces of 50mm x 4mm angle iron are acceptable.



The fixing for the braces into the concrete should be with galvanized flat steel 4mm x 50mm set into the concrete 500mm. The section of flat steel protruding from the top of the concrete block will need a hole for the 12mm bolts attaching the braces.

For more information please visit www.hooktech.co.nz

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