

In Ground Fitting

The “Ingenua” in-ground fitting consists of 3 parts:

A: ground part (to be embedded in concrete)

B: shove in pole 75°

Or

C: shove in pole 90°

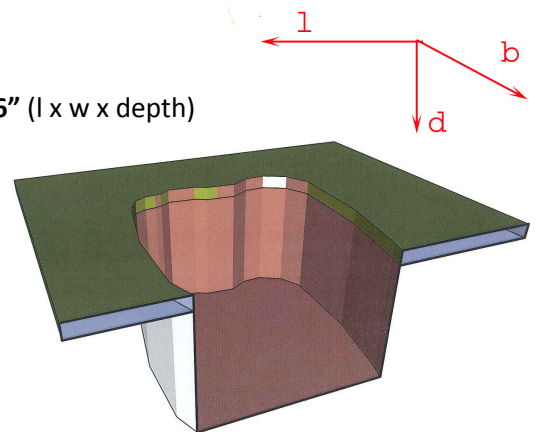
D: dome nut (to cover in wintertime)

Procedure to fix the ground part into the ground:

1. Dig a hole of about 50 x 50 x 40 cm or 20” x 20” x 16” (l x w x depth)

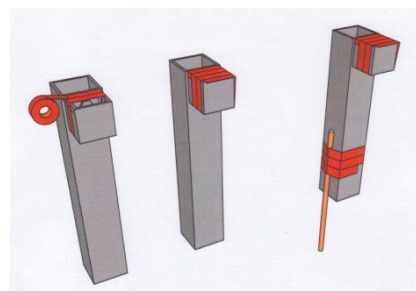
Please note general rule of thumb:

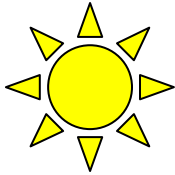
The easier it is to dig the hole, the bigger it should be, or vice versa: the more difficult it is to dig the hole, the smaller it may be.



2. Tape the side opening of the ground part to avoid it being filled with concrete

A fixed, small ingot is glued to the side of the ground part to be able to stick this into the ground

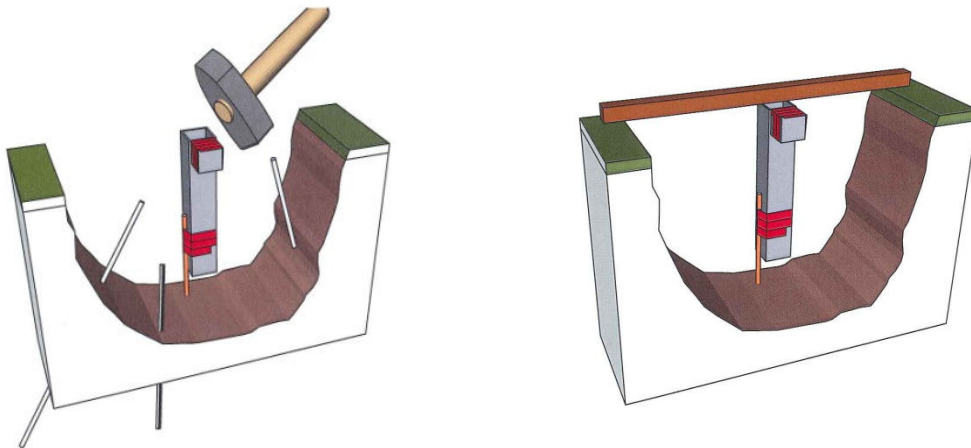




Remark: It is not the size of the hole, nor the amount of concrete, nor the weight that is of crucial importance. Still, you need to avoid the concrete coming loose in the sub-soil because of the sideways pulling forces to the pole that will be fixed onto it afterwards.

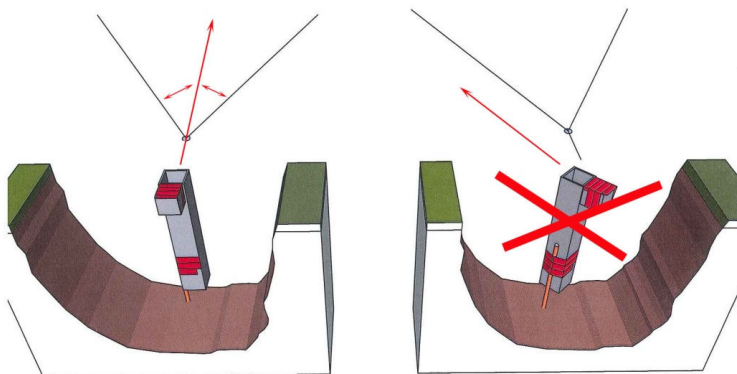
This is why it is advised to knock a **number of metal bars** (or tubes) into the sub-soil, the tail ends of which will **partly be anchored with the concrete**. In this way it will prevent the concrete from coming loose or tilting.

3. Stick the ground part with the small ingot into the reserved space and verify its depth

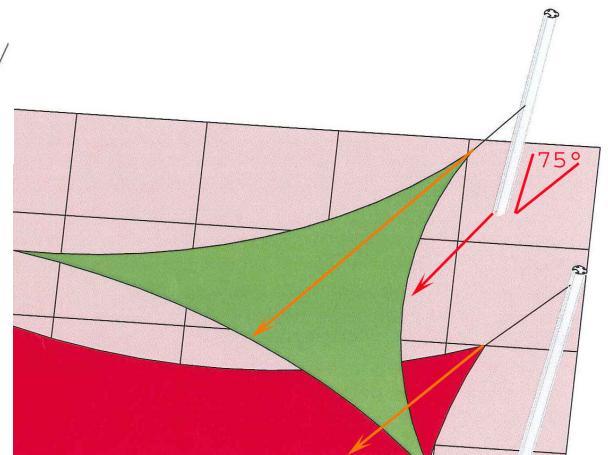


4. Point the ground part in the right direction (to ensure easier installation of the Ingenua pole and shade sail later on).

Should a pole be placed at an angle of 75°, the sloping side should be aimed at the bisecting line. (imaginary line which divides an angle into two equal parts).

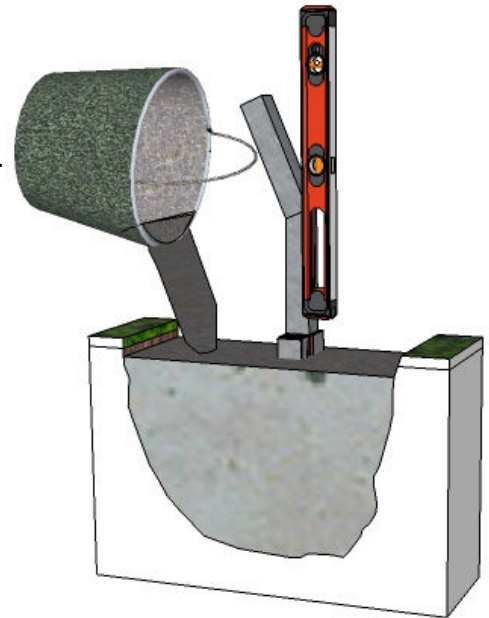


Please note: Should **more than one sail point be hooked to one pole**, this pole should be mounted onto a **90° concrete anchor**.



5. Fill the hole you made with concrete (if need be up to about 8 cm (3.25") from the upper edge).

Verify the perpendicular position by means of a level, before the concrete has totally hardened!



How to make concrete?

1. Mixing it yourself:

The ratio of cement/sand/gravel for concrete is 1:2:3, which means you have to mix 1 part of cement with 2 parts of sand and 3 parts of gravel. One part may e.g. be a shovel, a bucket or a bag. The necessary amount of clean water cannot be indicated exactly, as this depends on the type of cement, sand and gravel you use.

On average, 2.5 litres (2/3 of a gallon) of water are used for 25 kg (55 lbs) of concrete mortar. The mix gives you about 12 litres (3 ¼ gallons) of concrete mortar.

2. Buying a readymade mixture:

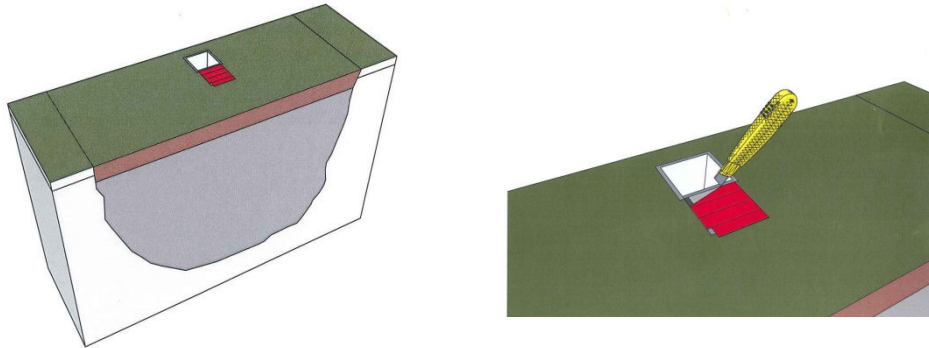
You can also buy bags of ready mix concrete. All you have to do is add water. The amount is indicated on the packaging.

3. How much concrete is needed for a concrete anchor?

A hole of 50 x 50 x 40 cm or 20" x 20" x 16" (l x w x depth), more or less corresponds with 1/10m³ or = 100 litres or = 10 buckets or = 1.2 full wheelbarrows.



6. Add sod, tiles or other materials to your liking and remove the tape that was used.



6. The concrete anchor is ready for use.

