

## Approval & Reception Procedure

| DG – Geotechnical Department            |                               |
|---|-------------------------------|
| <b>Pneumatic Drill Test of Caissons</b> | Document no. <b>ARP/DG/12</b> |
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### 1. Reference standard

Guia de Dimensionamento de Fundações, Section 5.8

### 2. Information to be submitted

- Caisson characteristics (type, diameter and verticality)
- Caisson installation records (location, contractor, top level and depth)
- Drilling equipment description (pneumatic drilling machine of 35 kg with a pressure of 7 bars) and the drilling rod diameter of 25 mm)
- Site investigation results

### 3. Preparation

- Clear the bottom of caisson of any loose material, and remove water from the bottom;
- The drilling machine and the size of the drilling rod must be approved before test;
- Fill the drill hole with pressure cement and sand grout (1:3) after completion of test.

### 4. Test amount

100% of caissons.

### 5. Acceptance criteria

The acceptance criteria are as follows:

- The test goes through a total depth of 4.5m below the base of the caisson. Wherein the necessary time is measured to drill every 300mm. Normally the base of the tested caisson is not acceptable when some measured time is less than 2 minutes;
- Further excavation is needed, if the bottom of the testing caisson is not approved.