

## Quotation SC 632/2009

### Specifications: Concrete Slab for Communication container

The concrete slab must be 200mm thick - minimum

A 6mm mesh wire sheet ref 245 must be place in the concrete for reinforcement

The Concrete Strength must be at least 25MPa

Please see specs of container, following:

### Specifications of Communication container

#### Walls

The walls of the container shall have the following characteristics

- a) The wall finish shall be 0.6mm Chromadek-silicone polyster baked enamel sheeting(Interior and Exterior, Exterior should also be brick padded for environmental friendly reasons)
- b) The insulation shall be 75 to 80mm thick, 16kg/m3 polystyrene
- c) The wall allocated for the air conditioner shall be able to sustain its weight of 150kg
- d) Any equipment, which may be required to be mounted onto walls, shall be secure enough to sustain its weight. Aluminium pop rivets should be used

#### Floor

The floor shall be constructed as follows:

- a) The floor shall be a suspended floor and be capable of carrying a weight of 500kg/sq meter
- b) The floor will be constructed from 18mm Maranti marine ply hardwood as per British standard specification 1088
- c) The floor shall be finished with MF2002, 2mm grey vinyl floor tiles or with solid vinyl sheeting as specified. The tiles must be cleaned with an appropriate stripper and sealed with two coats of sealer
- d) The finish between the floor and the interior walls as well as the roof and the interior walls will be 19 x 19 x 2mm aluminium angle edging and fixed with pop rivets and sealed with white polyurethane sealer. This is mainly for aesthetics.

#### Base frame

The base frame of the container shall be constructed as follows:

- a) The frame shall be constructed using a minimum of 2mm thick grade 304 stainless steel.
- b) The frame will not allow any water entrapment and will have adequate drainage holes. If C channel is used, it must face inwards
- c) The frame shall be supported by means of five adjustable legs. The legs must allow a minimum height of 200mm between the container slab and the bottom of the frame. A 50mm x 13mm slot in the leg will allow for adjustments on site. M12 x 40mm stainless steel bolts, nuts and washers must be used to secure the legs in position. Each leg must have a 200mm x 200mm x 3mm thick grade 304 stainless steel footplate. The leg assemblies shall be constructed using minimum 3mm thick grade 304 stainless steel
- d) Four 11mm holes must be drilled in the frame for an earth connecting point. These holes must be co-ordinated with the feeder entry panel and the AC protection box for single point protection
- e) All the fasteners i.e. bolts, nuts and washers shall be stainless steel. The pop rivets will be aluminium and must seal off to prevent water ingress
- f) A jig must be used during the construction of the frame to ensure reliable geometric tolerances ( $L/500$  where  $L$  = length in mm)

## Roof

The roof of the container shall have the following characteristics:

- a) The roof shall have a pitch fall of between 25mm and 50mm from back to front and away from the installed air conditioners
- b) All joints in the roof shall be sealed with a waterproofing material and will not allow for any standing water. A lifetime guarantee of 20 years is required on all waterproofed areas
- c) The roof insulation shall be 75 to 100mm thick, 16kg/m<sup>3</sup> polystyrene
- d) The roof exterior must be brick padded for environmental reasons

## Door

The door of the container shall be supplied and fitted as follows:

- a) The door shall be of the hinged type, opening outward in such manner that it may be retained in the open position by a stainless steel Tee catch door restrainer. The door must be 800mm ± 20mm wide by 2000mm ± 20mm high
- b) An external stainless steel grade 304 power brace lock shall be fitted and provision made for a 12mm padlock
- c) A full perimeter double silicone gasket water seal shall be supplied
- d) Tamper proof stainless steel grade 304 hinge with a stainless steel pin and a vesconite® bush or a 10mm brass pin shall be fitted
- e) The door frame must be aluminium

## Overhead Racking

Where required, the container shall be fitted with overhead cable racking as follows:

- a) Type: Wire Mesh  
Width: 300mm  
Height: 50mm  
Base aperture: 50mm x 50mm  
Side aperture: 25mm x 50mm  
Finish: Hot-dipped galvanized  
Wire diameter: 4mm
- b) Racking shall be fitted inside the container against the wall and at 90degrees to the wall
- c) The racking must run along the entire inside perimeter (except for the door area) as well as across the centre of the container
- d) The racking is to be fitted 300mm below roof height and must be able to sustain the weight of at least 1kg/m along its entire length

## Equipment stand, Cable carrier and IDF

Where requested, it is to be manufactured and supplied as follows:

- a) NO equipment stand required. We will provide 3x 25U 800mm x 600mm cabinets
- b) 2mm Aluminium plates to be fitted where cable trays are fitted against the wall
- c) 2mm Aluminium plate should be fitted below the IDF to provide a gland plate for cable access

## Ventilation

- a) One wall mount window mounted air conditioner is required for the container
- b) The air conditioner is to be at least 12000 BTU
- c) Air conditioner must be installed and tested at the factory and then removed for transportation

## Distribution Box

- a) 12-way Sarel type or equivalent
- b) 60A Single Phase Earth leakage switch
- c) 1x 15A single pole circuit breaker for plugs
- d) 2x 10A single pole circuit breakers for lights and fan
- e) 1x 30A 6KA double pole circuit breaker for battery charger. The earth leakage is to be bypassed

- f) A suitable rated double pole circuit breaker for air-conditioning
- g) 100mm x 40mm dual ducting to be used. (Gap to be allowed to facilitate the removal of the covers)
- h) Double 15A sockets are to be fitted as per drawings

Equipment room lights shall be 5 foot (dual 58Watt) vapor proof fluorescent lamp (covered) and ceiling mounted. The container must be fitted with lights.

Outside floodlight (waterproof) with external (waterproof) switch shall be fitted at an appropriate height on the door side of the container unless otherwise specified.

#### Container installations

The container shall be delivered to site and installed on the plinth and secured as follows:

- a) The container should be correctly placed as per site-layout drawing provided by Overstrand Municipality and its foot-plates secured with M10 stainless steel chemical bolts

Where the use of stay wires are required: At each corner of the container, set a M10 x 60mm stainless steel chemical eyebolt into the plinth and rooftop. Insert the thimble through the eyebolt on the top of the container. Loop one end of the 6mm stainless steel standard cable(250mm) through the thimbles and secure the looped cable using two M6 stainless steel Crosby Clamps spaced 100mm apart. Starting at the thimble tail, so that the “ U ” end is on the short end of the loop and the clamp is on the long end. Brass/Aluminium ferules may be used in place of the Crosby Clamps

**Please note:** Tenders solicited in terms of a quotation procedure:

**Clause number F.2.1 ( Standard Conditions of Tender as contained in Annex F of the September 2005 edition of the CIDB Standard for Uniformity in Construction Procurement) is applicable:**

**Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a 1GB or 1SQ or higher class of construction work, are eligible to have their tenders evaluated.**