

## **Working Site**

The site should be kept clean during the construction work period and should be thoroughly cleaned once the works are completed. Works should be carried out on site in a safe manner to all the workers on site and the people living in the vicinity of site. Disturbance to the neighborhood should be kept to a minimum. Electricity and water supply to the site, during construction period, should be provided by the contractor

## **Concrete**

1. Cement conforming to BS12 standards should be used for all concrete, masonry and plastering works. The cement intended for use should be fresh and should not have any traces of hardened cement in the bag.
2. All concrete works should be done using one brand of cement
3. Sand and aggregate used for concrete works should be well graded.
4. Concrete should be mixed in the ratio 1:2:3 which are 1 part cement, 2 parts sand and 3 parts aggregate.
5. All foundations should be cast on a lean concrete layer. The lean concrete should be placed on well compacted ground.
6. Concrete should be mixed using a concrete mixer. Concrete should not be mixed by hand. When pouring concrete into the formwork, the mix should be compacted using a mechanical vibrator.
7. Aggregate used for concrete works should not be larger than 20mm.
8. Sand and aggregate used for concrete works should be clear from dust, mud and other debris.
9. All reinforcement bars used for the concrete works should be free from rust and grease that could weaken the bonding between the reinforcement bar and the concrete. Care should be taken to use continuous bars rather than short segments joined by laps.

## **Masonry Works**

1. All masonry work should be done using Cement conforming to BS12 standards.
2. Masonry blocks should be made from imported sand or local white sand sourced from a permitted sand borrow area. The sand should be free from organic matter and other debris.

3. Masonry blocks should be made from mortar mixed at 1:5 ratio with 1 part cement to 5 part sand.
4. Average size of sand particles should not exceed 5mm.

### **Plastering Works**

1. All plastering work should be done using Cement conforming to BS12 standards.
2. Plaster mix should be made from imported or local sand white sand sourced from a permitted borrow area. The sand should be free from organic matter and other debris.
3. Plaster mix should be made by mixing Cement and Sand at a ratio of 1:3 with 1 part Cement to 3 part Sand.
4. Average size of sand particles should not exceed 5mm.

### **Structural Steel work**

1. All steel pipes obtained for the work should be new pipes and free from rust.
2. Thickness of pipes should not be less than 2.5mm

### **Roofing works**

1. All materials used for roofing work should be newly purchased for the project.
2. All screws or bolts used for roof fixing should be G-I or Zinc finish screws.
3. Gutter used should be ordinary Lysaght gutter.

### **Storage Tanks**

1. All tanks used for storage tanks should be food grade PE tanks suitable for storing drinking water.
2. All polyethylene resin material shall contain a minimum of a U.V. 8 stabilizer as compounded by the resin manufacturer. Pigments may be added at the purchaser's request, but shall not exceed 0.25% (dry blended) of the total weight.
3. Minimum tank thickness should be 4.8mm.
4. Tank should be able to withstand temperature of 38 degrees Celsius.
5. Tanks should be tested for any leaks by filling the tanks fully and leaving it in full condition for 4 hours.

**Plumbing fittings**

1. All connection pipes, valves and joints should be low pressure material, of Blue colour.
2. All pipes and joints should have a minimum thickness of 2.5mm.
3. Taps should be G.I or Brass taps.