Moore Concrete bunker walls are designed by Chartered Structural Engineers in accordance with BS8110; Part 1. Care must be taken during transport, offloading and installation to guarantee the integrity of the units.

The full design strength of the units will only be achieved after 28 days, the date of manufacture will be labelled on the unit. If this label is missing please contact Moore Concrete for advice. Unit weights are provided on the technical drawing supplied with the order acknowledgement.

The install should be completed by competent persons in line with a specific risk assessment and “Lifting Operations Lifting Equipment Regulations (NI) 1999”. If a crane is required the installation to be completed in line with the Lift Plan conducted in accordance with “Safe Use of Cranes BS 7121-1:2016”.

**Transport, Handling and Offloading**

During transport, handling and temporary storage you must ensure that:

1. Before commencing to off load or turn units, plan the lift and ensure the surrounding area is free from obstacles and that there are no overhead obstacles such as power lines.

2. All lifting equipment should be checked, before use, to ensure that it is in good condition and capable of lifting the load.

3. Ensure the lifting equipment is attached securely.

4. Bunker Walls (3m and 3.6m high) are shipped on their sides due to height restrictions. They should be stacked a suitable distance apart to ensure they are not damaged and strapped down securely with ratchet straps. Provision for lifting is made with 2nr 24mm sockets which are cast into the unit. Lifting loops can be supplied by Moore Concrete complete with safe working instructions that should be adhered to at all times.

5. Lifting Loops will correspond to the load being lifted. Loops can be subjected to a diagonal lift up to 45°, if minimum chain angles cannot be achieved, a spreader bar is to be used. (Shown in the diagram below).

6. If using a fork truck an approved fork mounted hook attachment should be used. This mounted hook should be secured to the forks to prevent movement. If fork toes are not available an approved spreader beam should be used for use with a hiab, crane or digger. The units should be laid safely on the ground on timber skids/lathes to prevent damage to the unit.
Installation/Turning
During turning/installation of the units the customer must:
1. Plan the lift ensuring the surrounding area is free from obstacles and that there are no overhead obstacles such as power lines.
2. Insert the pin as supplied by Moore Concrete through the top hole of the wall.
3. Attach to a lifting hook.
4. Lift vertically, slowly and gently, maintaining control at all times until the bunker wall is in vertical position.
5. Before approaching the upturned bunker wall ensure that it is balanced and will not tilt or fall.
6. The walls can be moved into position using the fork lift recesses cast into the units.
7. They must be placed on a firm level base and may require to be bolted down depending on the application.
Care should be taken to ensure that loading capacities are never exceeded, either during construction or during lifespan. Moore Concrete can advise at design stage what units are most suitable for your application.

The manufacturer assumes no liability for damage incurred by improper handling.

Revised – Sept 2017