



Freestanding A-Wall Installation & Lifting Guide

Introduction

Low Grange Concrete freestanding A-Walls are designed to provide robust, versatile retaining and storage solutions for agricultural, industrial, commercial, and civil engineering applications. Manufactured from high-strength precast concrete, A-Walls offer rapid installation, long-term durability, and the flexibility to create storage bays, retaining structures, and dividing walls without permanent foundations in many applications.

This guide outlines recommended procedures for the safe lifting, handling, and installation of precast concrete A-Walls fitted with integrated forklift pockets.

1. Health & Safety

- All lifting and handling operations must be carried out by trained and competent personnel.
- Appropriate PPE must be worn at all times.
- Exclusion zones must be maintained during lifting and positioning operations.
- All lifting equipment and forklifts must be certified, inspected, and suitable for the unit weight.
- Never stand beneath suspended loads.
- Installation should only be carried out on suitable stable ground conditions.
- High winds may affect safe lifting operations and should be assessed prior to lifting.

2. Delivery & Offloading

Upon delivery:

- Inspect all A-Walls for visible damage prior to offloading.
- Confirm correct unit types and quantities.
- Ensure suitable forklifts or lifting equipment are available before unloading.
- Offload units onto firm, level ground.
- Avoid impact loading or sudden movements during unloading.

Care should be taken to prevent damage to edges, corners, and fork pocket areas during handling.



3. Forklift Handling & Lifting

These A-Walls are fitted with integrated forklift pockets designed to assist with lifting and positioning operations.

Before lifting:

- Ensure the forklift has sufficient safe working load (SWL) capacity for the unit weight.
- Forks must be fully inserted into the fork pockets before lifting.
- Fork spacing should suit the pocket positions.
- Forks should remain level during lifting and transportation.
- Operators should ensure the load remains balanced and stable at all times.

Never:

- Lift units with partially inserted forks.
- Use damaged fork pockets.
- Travel at excessive speed while transporting units.
- Carry suspended loads over personnel.

Where required, additional lifting equipment may be used in accordance with approved lifting procedures.

4. Lifting & Positioning Procedure

1. Position the forklift squarely in line with the fork pockets.
2. Fully insert forks into the designated pockets.
3. Lift slowly and steadily to avoid shock loading.
4. Keep the unit low during transport.
5. Avoid sudden braking or sharp turns.
6. Carefully position the unit into its final location.
7. Lower the unit evenly onto the prepared surface.

All personnel must remain clear during lifting and positioning operations.

5. Ground Preparation

Before installation:

- Ensure the installation area is level and adequately compacted.
- Remove loose or unsuitable material from the installation surface.
- Confirm the ground bearing capacity is suitable for the intended application.



- Where required, suitable hardcore or concrete bases should be installed in accordance with project specifications.

Uneven or unstable ground may affect wall alignment and long-term performance.

6. Installation

During installation:

- Position units carefully to achieve correct alignment.
- Check units regularly for level and plumb.
- Ensure adjoining units are correctly aligned to minimise gaps.
- Use suitable levelling methods where required.

Where A-Walls are used for retaining purposes:

- Ensure loading conditions are suitable for the wall design.
- Follow project-specific engineering requirements where applicable.
- Adequate drainage may be required behind retaining structures.

For significant retaining applications, Low Grange Concrete recommends consultation with a structural engineer.

7. Storage Bay & Retaining Applications

A-Walls are commonly used for:

- Aggregate storage bays
- Silage clamps
- Recycling bays
- Waste segregation
- Material storage
- Retaining structures

Where heavy loading or impact from machinery is expected:

- Units should be installed on suitable load-bearing surfaces.
- Regular inspections should be carried out to identify movement or damage.

Where A-Walls are used to retain large quantities of material or are subject to significant loading from stored products or machinery, Low Grange Concrete recommends the use of suitable fixing down kits or restraint systems to help minimise the risk of movement.

Fixing systems should be installed in accordance with project-specific requirements and



ground conditions. For higher retaining applications or heavily loaded storage bays, consultation with a structural engineer is recommended to confirm suitability and loading requirements.

8. Final Inspection

Following installation:

- Check all units are correctly seated and aligned.
- Inspect for any visible damage.
- Confirm stability of the installation.
- Remove all lifting equipment safely.

Any damaged units should be reported and assessed before use.

9. Maintenance

Precast concrete A-Walls require minimal maintenance. Periodic inspections are recommended to identify:

- Impact damage
- Ground settlement
- Movement
- Joint gaps
- Surface wear

Any damaged or unstable sections should be addressed promptly.

Important Notes

- Installation details may vary depending on site conditions and application.
- Always refer to approved project drawings and engineering guidance where applicable.
- Only approved lifting and handling equipment should be used.
- Low Grange Concrete recommends installation by experienced personnel familiar with precast concrete handling operations.

Contact Information

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