## Installation Instructions for Rotary Lift MOD235 Series Lift

## **PROJECT DESCRIPTION:**

Lift is to be installed in an existing facility requiring demolition and removal of older lift equipment. These instructions are tailored specifically to a retrofit construction installation. The installer is responsible to adapt these instructions to the site specific installation and conditions. Any questions concerning the adaptation should be addressed to local representative or Rotary Lift Tech Support.

This 'Project" entails the following scope of work:

- Examination of the existing site to confirm that the soil condition is adequate to support the necessary loading.
- Determination of whether there are any underground or overhead utilities that might interfere with the installation or use of the lift.
- Disconnecting and isolating any electrical service, hydraulic service, air service or drainage for existing lift.
- Removal of non-embedded existing lift equipment
- Layout, saw-cutting and demolition of the existing concrete flooring and pits.
- Excavation of a trench approximately 5'-0" wide, backfilled and compacted (3000#/sq. ft.) to approximately 6'-6" deep. Length will vary by specific model type.
- Placing and suspending the lift housings in the proper locations and elevations in the excavated trench.
- Placing the lower concrete base around the lift housings.
- Backfilling to the specified elevation with pea gravel/squeegee.
- Placing 2" foam board on top of pea gravel/squeegee.
- Placing 2" EPVC chases from lift control console to lift housings.
- Placing 2" PVC chase for "Liquid Evacuation System" from lift housings to trench drain.
- Place and tie in rebar from lift housings to dowels epoxy set into surround slab.
- Placing finished floor concrete slab on grade around the unit.
- Install lift equipment in lift housings.
- Set control console, make necessary electrical connections, and overhead pendant controls.
- Test equipment.
- Train end users.

## SCOPE OF WORK:

- Before beginning any work, become thoroughly familiar with the installation requirements. Have lift components and rebar on site before opening slab or trench to minimize time the trench must be left open. The lift can be installed in a variety of configurations depending on the desired minimum wheel base. Determine the appropriate minimum wheelbase dimension for this installation, and then confirm the measurements that are model dependent.
- 2. Perform a pre-construction kick-off meeting with the Owner/Contractor to review the following. prior to commencement of work:

a) Review assumptions and procedure for communicating any deviations between the unforeseen existing conditions and the assumptions.

b) Coordinate with Owner/Contractor where debris and/or dumpsters can be stored.

- c) Review construction schedule.
- d) Review safety protocols.
- e) Review how the construction process will impact existing/adjacent operations (if any).
- 3. Layout lines for placement of lift. Determine where control console is to be placed. Layout lines for control conduits/chases.
- 4. Use ground penetrating radar or other means to determine whether there are any underground utilities or obstructions in the layout area. If anything is identified under the proposed trench excavation area, contact the local representative or Rotary Lift Tech Support for additional information.
- 5. Confirm that soil bearing capacity is at least 3000#/sq. ft. Ensure grade compaction under proposed slab / foundation.
- 6. Excavate trench for placement of lift equipment. Trench will be approximately 5'-0" wide by approximately 6'-6" deep by specified length. Most installations will use only one trench, full length of cut out area.
- Rotary Lift MOD335 Series is designed to minimize or eliminate the need to place a man in the excavated trench. Become thoroughly familiar with OSHA requirements for trenching and excavation. (Ref. OSHA 29 CFR 1926.650 - 1926.652 and others)
- Rig the housing for the rear lift unit and suspend vertically. Tie rebar as indicated on the installation drawings to the bottom of the lift housings (\*). Lower the housing into the trench and hang from a Contractor supplied 6" steel beam(s). (Ref. OSHA 1626.1400 @B and 1926 Subpart CC(1400) and others for information on rigging and lifting)
- 9. Repeat Step 8 for the front lift housing. Note that the rebar on the bottom of the individual housings are not tied together.
- 10. Suspend rear and front housing units from 6" beams (Contractor supplied) spanning width of excavation as indicated in drawing 2. Beams must be placed in diagonal orientation as indicated in drawing 2 to prevent rotation of housings.
- 11. Level and align housings, checking the placement for level and plumb. (Note: the leftright placement must be level. The longitudinal placement may have up to 1/16" slope per foot if level is not practical.)
- 12. Once the housings are in place and checked, place the concrete base under the lift housings. See Sheet 9 for mix designs. Vibrate to ensure the concrete flows under and to the center of the housings.
- 13. Backfill around all sides of both housings with pea gravel/squeegee. Place 2" rigid insulation at top of pea gravel/squeegee.
- 14. Run conduits/chases for control consoles.
- 15. Place rebar according to the drawings.
- 16. Place and finish concrete slab/foundation mat according to the drawings. See Sheet 9 for concrete mix designs.

- 17. Place control console, balance of lift equipment and make all necessary connections to provide a complete operational unit.
- 18. Start-up and ensure proper function of equipment.

\* To expedite the installation process, the installer should couple rebar to the MOD35 housings prior to lowering them into the pit. A concrete base can then be poured without the need for special shoring or cut backs. After a partial cure, the housing should be sufficiently supported by the initial base pour. The pit can then be back filled to a point to add plumbing and electrical chases. A second rebar mat is then attached to the housing at near floor level. This finished floor mat and chase work can be accessed without special requirements. A final floor pour completes the housing installation in the floor.