

## **Hydraulic Borehole (Inground)**

A Borehole (in-ground) type elevator can be utilized for front and/or front and rear openings in any configuration. Typically, the industry's standard design, it has been in use for years. A hydraulic cylinder (jack) is installed in the ground directly under the car platform. The rails are mounted to the hoistway on each side of the car. This arrangement can accommodate high and low capacity cars for passenger and service applications.

For a Hydraulic type elevator you will need an equipment room to house the equipment. This equipment room must be a minimum of 50 square feet with an out-swing door and at least 6' 0" in one direction, or, 60 square feet with an in-swing door and at least 7' 0" in one direction. Minimum clear headroom required is 7' 0" per code. Please note that keeping the equipment room adjacent to the elevator hoistway reduces cost.

See our Car Size & Weight Chart for hoistway dimensions, clear inside dimensions, pit, overhead, etc.

### **Advantages:**

- The simplest installation available in comparison to the other car types available. Standard pit 4' 0" and overhead 13' 3" requirements, no increase in construction cost.
- Most cost effective for future maintenance.
- Is applicable for 2-8 story buildings.

### **Disadvantages:**

- Oil contamination in the ground is a possibility, however, Code mandated installation protection has greatly decreased the risk.
- A jack hole is required directly under the car. Sometimes the cost of drilling a jack hole can be costly, in some geographic areas, and is sometimes impossible in certain areas or under certain conditions.
- Generally less efficient than roped holeless or traction design for travel dimension greater than 40 feet.