

4 Reasons NOT to Use a Modular Elevator

Modular elevators are a safe, cost-effective alternative to stick-built construction. However, all products have their limitations, and modular elevators are no different. We strive to make elevators easy, which requires understanding situations where modular elevators are not the best choice.

1. Height Limitations

Modular elevators are the perfect solution for any low to mid-rise project, but they are untested for high-rise use. Because modular elevator towers are stacked in 50' sections to accommodate shipping limitations, there is a point where shipping and stacking towers on top of towers no longer makes financial sense. At Phoenix Modular Elevator, we have engineered cost-effective structures for up to 15 stories, but anything over this is not recommended (yet).

2. Crane Limitations

Modular elevators must be craned into place, meaning space is needed for the crane to set up and operate. We have set elevators from cranes parked on overpasses and in courtyards accessed by driving under very low bridges. We have set them with cranes inside high-bay buildings. We even once used a crane to lift another crane into place on a hilly residential neighborhood. But despite our attempts to be creative, there are locations where a crane simply can't access cost effectively. Or the crane may need to life and reach so far that it would require an extremely large and expensive crane that would offset the savings modular would otherwise provide.

In addition, there may be overhead wires, trees, or existing buildings that impinge on the path an elevator would travel to be set. Crane companies paying a site visit or doing Google maps survey can determine feasibility.

3. Location Limitations

Modular elevators currently are installed in 34 US states and four Canadian provinces, but their reach doesn't extend beyond North America. While customers in other countries consistently reach out for more information, shipping is simply too expensive. A modular elevator is larger than a shipping container, so it is not cost-effective to transport on a container ship. The transport time also negates much of the short lead-time advantage of a modular elevator.

In addition, the US and Canada share a harmonized elevator code, and US-made equipment is readily available. Europeans operate from a different code, and equipment must be sources from Europe or China. This increases lead time significantly, again, negating the thing we love most about modular elevators: short lead times.

4. Size and Shipping Limitations

Modular elevators come in many different sizes and capacities, all built to meet ADA requirements. There are also several models that meet gurney requirements. Modular elevators are used in schools, churches, hospitals and storage facilities, to name just a few. However, every modular elevator must be shipped on a truck, and those trucks must obtain permits and pass under 13-foot bridges. So size can be a limiting factor because of shippability.