

GENERAL INFORMATION



Basics of Tilt-Up Construction

A successful Tilt-Up project begins long before concrete is poured. As with any project, the key is thorough planning. An experienced Tilt-Up contractor can be successful on a wide variety of projects. The beginner, however, should choose more carefully. The following explains the basic methods and skills required for successful Tilt-Up construction.

- Site evaluation - Planning begins with an evaluation of the site.
- Engineering - Engineering is a critical phase of each and every Tilt-Up project.
- Footings and Floor Slabs - Once planning is complete, construction can begin on the floor and footings

TILT-UP CONSTRUCTION

- Panel Forming - There are a number of ways to form individual panels.
- Surface treatments - Patterns or texture can easily be added to the face of Tilt-Up panels.
- Reinforcing - The use of plastic support chairs instead of steel chairs is recommended to avoid rusting.
- Embeds and Inserts - The next step is to install embeds and inserts.
- Concrete Placement - Concrete placement methods for Tilt-Up panels are the same as those for floor slabs.
- Panel Lifting - The lifting sequence should be determined well in advance.
- Panel Finishing - The finish of a panel is limited only by the creativity of the architect and the abilities of the contractor.
- Insulated Panels - Insulated Tilt-Up panels are a rapidly growing market.

Contractors can learn Tilt-Up on their own or work with consultants who can assist them on the entire project or just specific portions. In all cases, contractors should acquire as much background knowledge as possible and contact a professional architect or engineer who has Tilt-Up experience, including our **Tilt-Up system specialist here at Atlas Construction Specialties.**

CAUTION !

- CAUTION!** Never be in a location or permit other persons to be in a location where a tilt-up panel could fall as a result of a product failure, a mechanical failure, or due to human error. Being in such a location could injure you or damage other objects or building components that could cause you injury or death.
- CAUTION!** Never permit untrained or unqualified persons on the jobsite during the erection of tilt-up panels.
- CAUTION!** Never leave tilt-up panel partially erected, or completely erected, or completely erected tilt-up panel partially braced off. All members of the bracing system must be in place and secured before the crane releases the panel.
- CAUTION!** Never remove any bracing from the tilt-up panel until all of the building's structural connections are complete.

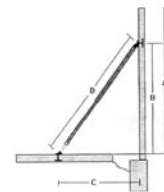
Tilt-Up Brace Safe Application Notes:

- Load ratings are without knee bracing. Consult engineering for loads with knee bracing.
- All braces must be installed at least 2'0" above the panels center of gravity.
- Braces must be installed at a 90-degree angle to plane of panel for maximum load rating.



Recommended Bracing Dimensions:

- A= Panel height above finished floor
- B= Wall brace insert dimension
- C=Floor brace insert dimension
- D=Brace length



CAUTION: Brace locations other than those shown may reduce the braces Safe Working Load drastically! Brace angles over 60 degrees from the horizontal result in poor mechanical advantage and excessive vertical kick, while brace angles under 50 degrees decrease brace buckling strength due to greater length and excessive sag.