

Design Tip: Long-Span Garage Pour Schedules

Optimize sequential pour schedules for cast-in-place garages to compress time and improve constructability.

SHAVE TIME FROM YOUR SCHEDULE

Work with your concrete contractor to improve constructability by expediting the schedule. Solutions include:

- Seek a pour sequence that minimizes pours adjacent to the previous placement.
- Perform post-tensioning as early as possible. Approvals of elongations should be made in real time.
- Use cantilevered pour/tension/delay strip bays and staged tensioning of girders to expedite finish trades and completion.
- Modify the tensioning direction to allow adjacent pours to be "pulled" away from the construction joint.
- Take advantage of external post-tensioning whenever possible.
- Separate stair and elevator cores from the parking areas to facilitate earlier project completion.
- · Standardize bay spacing, beam and column sizes.
- Minimize reinforcing congestion at beam/column intersections.

The following is a typical time schedule for sequential pours with continuous post-tensioned (PT) tendons:

Day 1: Initial pour placement.

Days 1-2: Cure time of initial pour.

Day 3: Tension PT slabs, then beams.

Day 4: Redrape continuous PT cables.

Day 5: Finalize reinforcing; subsequent pour placement.

A typical schedule for sequential pours without continuous PT tendons:

Day 1: Initial pour placement.

Day 2: Remove pour bulkhead.

Day 3: Subsequent pour placement.

