## <u>Erector's Manual – Standards and Guidelines for the</u> <u>Erection of Precast Concrete Products</u>

## **Division 2 – Practices and Procedures**

- 2.2.4 Sling and Spreader Selection
  - For erection of precast units, the sling angle shall never be less than 45 degrees.
- 2.3.3 Responsibility
  - Eccentric loads delivered to the columns by the beam reactions can cause column top deformations of 1 to 2 inches
- 2.4.2.1 Bolted Connections
  - A 1/2" diameter bolt should be the minimum used for any precast concrete connection.
- 2.4.2.4 Dowel/Anchor Bolt Connections
  - Dowel connections are not structurally sound until the grout has cured, 7-28 days for full design strength.
  - Most grouts are not designed the be placed below 40 degrees.
- 2.5.2.4 Wall Panels
  - Bracing or temporary connections shall be installed and used to plumb the panels prior to unhooking from the crane.

## <u>Division 3 – Equipment</u>

- 3.5.1.2 Telescoping Boom Cranes
  - Provides flexibility for erecting precast members where overhead obstructions occur or access restricted for other reasons.
- 3.5.4 Derrick a stationary, anchored boom structure suitable for handling relatively heavy loads, at medium radii.
- 3.8.3.2 Swinging Scaffolds
  - On swing stages designed for 500lbs, no more than 2 workers shall work at one time. Swing stages designed for 750lbs can accommodate up to 3 workers at one time.
  - Workers shall be protected by Type I or Type II guardrail systems.
- 3.8.3.3 Supported Scaffolds
  - Frame of scaffold shall be tied into the building or structure at a max of 20 ft vertically and 30 ft horizontally.