



### **ACI 318 Code Sections Relevant for Precast Wall Panels:**

14.8.4: The maximum deflection due to service loads, including P-Delta effects, shall not exceed  $L/150$ .

14.3.6, 18.11.2.2: Column ties not required when flexural tension controls

14.2.7: Maximum height/thickness ratio of 25:1 can be waived when structural analysis is done (P-Delta)

14.2.7, 16.4.2, 18.11.2.3: Minimum transverse reinforcement ratio of 0.001 can be used (instead of 0.002)

11.10.8: Shear walls do not usually need any shear reinforcement

10.11.5: Must use a 2nd order non-linear analysis including the effects of cracking to compute forces and moments due to slenderness effects when  $kl/r > 100$ .

### **Design Tips to Save \$\$:**

- Use repetition to reduce form changes
- Use precaster's library of standard connection details
- Anticipate erection sequence to minimize move-ins
- Use modules for bay spacing:   42' or 48' for 12' wide panels  
  40' or 50' for 10' wide panels
- Punched openings preferred over "pork-chops" and C-shapes