

## CODE

**4.12.3** *Composite concrete flexural members*

**4.12.3.1** This Code shall apply to composite concrete flexural members as defined in **Chapter 2**.

**4.12.3.2** Individual members shall be designed for all critical stages of loading.

**4.12.3.3** Members shall be designed to support all loads introduced prior to full development of design strength of composite members.

**4.12.3.4** Reinforcement shall be detailed to minimize cracking and to prevent separation of individual components of composite members.

**4.12.4** *Structural plain concrete systems*

**4.12.4.1** The design of structural plain concrete members, both cast-in-place and precast, shall be in accordance with Chapter 14.

**4.13—Construction and inspection**

**4.13.1** Specifications for construction execution shall be in accordance with **Chapter 26**.

**4.13.2** Inspection during construction shall be in accordance with Chapter 26 and the general building code.

**4.14—Strength evaluation of existing structures**

**4.14.1** Strength evaluation of existing structures shall be in accordance with **Chapter 27**.

## COMMENTARY

**R4.12.3** *Composite concrete flexural members*

This section addresses structural concrete members, either precast or cast-in-place, prestressed or nonprestressed, consisting of concrete cast at different times intended to act as a composite member when loaded after concrete of the last stage of casting has set. All requirements in the Code apply to these members unless specifically excluded. In addition, some requirements apply specifically to composite concrete flexural members. This section contains requirements that are specific to these elements and are not covered in the applicable member chapters.

**R4.13—Construction and inspection**

**Chapter 26** has been organized to collect into one location the design information, compliance requirements, and inspection provisions from the Code that should be included in construction documents. There may be other information that should be included in construction documents that is not covered in Chapter 26.

**R4.14—Strength evaluation of existing structures**

Requirements in **Chapter 27** for strength evaluation of existing structures by physical load test address the evaluation of structures subjected to gravity loads only. Chapter 27 also covers strength evaluation of existing structures by analytical evaluation, which may be used for gravity as well as other loadings such as earthquake or wind.