

CODE

COMMENTARY

26.7.2 Compliance requirements:

(a) Cast-in anchors, their attachments, and anchor reinforcement, shall be securely positioned in the formwork and oriented in accordance with the construction documents. Concrete shall be consolidated around anchors and anchor reinforcement using suitable means during placement.

(b) Proper consolidation of concrete or grout around shear lugs shall be verified by use of base plate inspection holes.

(c) Post-installed anchors shall be installed in accordance with the manufacturer's instructions. Post-installed adhesive anchors shall be installed in accordance with the Manufacturer's Printed Installation Instructions (MPII).

(d) Post-installed anchors shall be installed by qualified installers.

(e) Adhesive anchors identified in the construction documents as installed in a horizontal or upwardly inclined orientation to resist sustained tensile loads shall be installed by certified installers.

(f) Adhesive anchors shall be installed in concrete having a minimum age of 21 days at time of anchor installation.

knowledge and skill required to install available commercial anchor systems. The effectiveness of a written exam should be verified through statistical analysis of the questions and answers. An equivalent program should provide a responsive and accurate mechanism to verify credentials, which are renewed on a periodic basis.

R26.7.2(c) The Manufacturer's Printed Installation Instructions (MPII) contain information required for the proper installation of post-installed adhesive anchors. Additional requirements may apply for specific cases in accordance with 26.7.1(f) and 26.7.1(g). For adhesive anchors, application-dependent requirements for qualification of installers and inspection requirements may apply.

R26.7.2(e) Many anchor performance characteristics depend on proper installation of the anchor. Horizontally or upwardly inclined adhesive anchors resisting sustained tension load are required to be installed by personnel certified for the adhesive anchor system and installation procedures being used. Construction personnel can establish qualifications by becoming certified through certification programs.

R26.7.2(f) Adhesive anchors qualified in accordance with **ACI 355.4M** are tested in concrete with compressive strengths within two ranges: 17 to 28 MPa and 45 to 59 MPa. Bond strength is, in general, not highly sensitive to concrete compressive strength. The design performance of adhesive anchors cannot be ensured by establishing a minimum concrete compressive strength at the time of installation in early-age concrete. Therefore, a minimum concrete age of 21 days at the time of adhesive anchor installation was adopted.

26.8—Embedments**26.8.1 Design information:**

(a) Type, size, details, and location of embedments designed by the licensed design professional.

(b) Reinforcement required to be placed perpendicular to pipe embedments.

(c) Specified concrete cover for pipe embedments with their fittings.