

CODE

(d) Concrete materials and production methods shall be selected so that the concrete temperature at delivery complies with the specified temperature limits.

26.5.5 Concreting in hot weather**26.5.5.1 Design information:**

(a) Temperature limits for concrete as delivered in hot weather.

26.5.5.2 Compliance requirements:

(a) Concrete materials and production methods shall be selected so that the concrete temperature at delivery complies with the specified temperature limits.

(b) Handling, placing, protection, and curing procedures shall limit concrete temperatures or water evaporation that could reduce strength, serviceability, and durability of the member or structure.

26.5.6 Construction, contraction, and isolation joints**26.5.6.1 Design information:**

(a) If required by the design, locations and details of construction, isolation, and contraction joints.

(b) Details required for transfer of shear and other forces through construction joints.

(c) Surface preparation, including intentional roughening of hardened concrete surfaces where concrete is to be placed against previously hardened concrete.

(d) Locations where shear is transferred between as-rolled steel and concrete using headed studs or welded reinforcing bars requiring steel to be clean and free of paint.

(e) Surface preparation including intentional roughening if composite topping slabs are to be cast in place on a precast floor or roof intended to act structurally with the precast members.

COMMENTARY

R26.5.5 Concreting in hot weather

Detailed recommendations for hot weather concreting are given in **ACI 305R**. This guide identifies the hot weather factors that affect concrete properties and construction practices and recommends measures to eliminate or minimize undesirable effects. Specification requirements for concreting in hot weather are provided in **ACI 301M** and **ACI 305.1M**.

R26.5.5.1(a) ACI 301M and ACI 305.1M limit the maximum concrete temperature to 35°C at the time of placement.

R26.5.6 Construction, contraction, and isolation joints

For the integrity of the structure, it is important that joints in the structure be located and constructed as required by the design. Any deviations from locations indicated in construction documents should be approved by the licensed design professional.

Construction or other joints should be located where they will cause the least weakness in the structure. Lateral force design may require additional consideration of joints during design.

R26.5.6.1(b) Shear keys, intermittent shear keys, diagonal dowels, or shear friction may be used where force transfer is required. If shear friction at a joint interface in accordance with **22.9** is invoked in the design, include applicable construction requirements in the construction documents.

R26.5.6.1(c) The preparations referenced are applicable if design for shear friction is in accordance with **22.9** and for contact surfaces at construction joints for structural walls.

R26.5.6.1(d) The locations referenced are those for which design for shear friction is in accordance with **22.9**.