

## 702-R-679 STRUCTURAL CONCRETE

(Adopted 07-19-18)

The Standard Specifications are revised as follows:

SECTION 702, BEGIN LINE 124, DELETE AND INSERT AS FOLLOWS

Class C concrete shall contain either a water-reducing admixture or *both* a water-reducing *admixture and a* retarding admixture. The types used shall not be changed during any individual contiguous pour. The types of admixtures to be used ~~will~~shall be selected based on the expected concrete or air temperature. When either temperature is expected to be 65°F or above, *both* a water-reducing *admixture and a* retarding admixture shall be used. A water-reducing admixture shall be used when both temperatures are expected to be below 65°F unless retardation is required due to the structure design or the proposed pour sequence such as the requirements for floor slab pours set out in 704.04. *If class C concrete contains ground granulated blast furnace slag, the producer may propose an alternate temperature threshold for including a retarding admixture.* Air-entraining cements will not be allowed in class C concrete.

SECTION 702, BEGIN LINE 243, DELETE AND INSERT AS FOLLOWS:

Concrete that is not within the specified slump limits at time of placement shall not be used. Except as required in 702.05 for class C concrete, ~~a water-reducing admixture, chemical admixtures type A, type B, or a water-reducing and retarding admixture, type D, type F, and type G,~~ may be used in the concrete. Chemical admixtures ~~type B, type C,~~ and type E will be allowed only with prior written permission. ~~Chemical admixtures type F and type G shall not be used.~~

SECTION 702, BEGIN LINE 525, DELETE AND INSERT AS FOLLOWS:

**702.12 Consistency**

Slump will be measured in accordance with 505 and shall be no less than 1 in. and no more than ~~4~~6 in. except for concrete placed in foundation seals.

SECTION 702, BEGIN LINE 1174, DELETE AND INSERT AS FOLLOWS:

Unless otherwise specified, all other concrete shall be cured continuously 24 h per day for at least 96 h commencing immediately after the surface is able to support the protective covering without deformation. ~~If portland pozzolan cement, type IP or IP-A, or fly ash is used, the concrete shall be cured for at least 120 h.~~ In addition to the required hours, curing shall continue until the flexural strength stated in 702.13(h) *and* 702.24 has been attained.

Membrane forming curing compound may be used in lieu of protective covering curing methods. Where it has been determined that a surface treatment is to be used, the membrane forming curing compound shall not be used. *Membrane forming curing compound shall not be used on bridge decks nor on reinforced concrete slab bridges.*

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