702-R-691 STRUCTURAL CONCRETE

(Revised 09-19-19)

The Standard Specifications are revised as follows:

SECTION 702, BEGIN LINE 7, INSERT AS FOLLOWS:

## 702.02 Classes of Concrete

The following classes of concrete shall be used where specified.

Class of Concrete	А	В	С
Cement content in lbs/cu yd	564	470	658
Maximum water/cement ratio in lbs of water per lbs of cement	0.450	0.620	0.443
Minimum water/cement ratio in lbs of water per lbs of cement	0.380	0.400	0.380

SECTION 702, BEGIN LINE 116, DELETE AND INSERT AS FOLLOWS:

*Class A concrete shall contain a water-reducing admixture.* 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. *For class C concrete, Tthe types of admixtures to be used, 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 237, 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 A and* class C concrete, chemical admixtures type A, type B, type D, type F, and type G, may be used in the concrete. Chemical admixtures type C and type E will be allowed only with prior written permission.

SECTION 702, BEGIN LINE 528, 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 46 in. except for concrete placed in foundation seals.