

EXPECTED IMPLEMENTATION JULY 2023

**346 STRUCTURAL PORTLAND CEMENT CONCRETE.
(REV 6-23-22) (FA 9-19-22) (FY 2023-24)**

SUBARTICLE 346-2.2 is deleted and the following substituted:

346-2.2 Types of Cement: Unless a specific type of cement is designated in the Contract Documents, use Type I, Type IL, Type IP, Type IT, Type IS, Type II, or Type III cement in all classes of concrete. Use Type IL, Type IT, or Type II for all mass concrete elements.

Use only the types of cements designated for each environmental classification in structural concrete as shown in Table 346-1. A mix design for a more aggressive environment may be used in a less aggressive environmental condition.

Table 346-1 Cement Use by Environmental Classification			
Component	Slightly Aggressive Environment	Moderately Aggressive Environment	Extremely Aggressive Environment ⁽¹⁾
Bridge Superstructures			
Precast Superstructure and Prestressed Elements	Type I or Type III	Type I, Type IL, Type II, Type III, Type IP, or Type IS	Type II, Type IL, Type III ⁽²⁾ , Type IT or Ternary Blend
Cast in Place	Type I	Type I, Type IL, Type II, Type IP, or Type IS	Type II, Type IL, Type IT or Ternary Blend
Bridge Substructures, Drainage Structures, and other Structures			
All Elements	Type I or Type III	Type I, Type IL, Type II, Type IP, or Type IS	Type II, Type IL, Type IT or Ternary Blend
Notes:			
(1) Cements used in a more aggressive environment may also be used in a less aggressive environment.			
(2) Type III cement may be used in an Extremely Aggressive Environment for precast superstructure and prestressed elements when the ambient temperature at the time of concrete placement is 60°F and below.			