

609-B-311 RCBA SLAB OPTION FOR USE WITH SHORT TERM CLOSURES

(Revised 05-20-23)

The Standard Specifications are revised as follows:

SECTION 609, BEGIN LINE 15, DELETE AND INSERT AS FOLLOWS:

Concrete, Class ~~A~~C .....702

SECTION 609, AFTER LINE 18, INSERT AS FOLLOWS:

*Rapid Hardening Hydraulic Cement* .....901.01(d)

SECTION 609, AFTER LINE 22, INSERT AS FOLLOWS:

*The portland cement content used in the Class C concrete for the RCBA's may be increased to 752 lbs/cu yd.*

*Citric acid shall be marked "food grade" on the packaging.*

SECTION 609, AFTER LINE 32, INSERT AS FOLLOWS:

*If rapid hardening hydraulic cement is used, citric acid may be used as a retardant. The maximum content of citric acid shall be 1% of the cement weight.*

SECTION 609, BEGIN LINE 37, INSERT AS FOLLOWS:

**609.05 Joints**

*Longitudinal construction joints will only be allowed as shown on the plans. If rapid hardening hydraulic cement is used, longitudinal construction joints in accordance with 702.15(a) will be allowed at lane lines and shoulder lane lines. The type I-A joint shall be constructed as shown on the plans.*

SECTION 609, BEGIN LINE 78, DELETE AND INSERT AS FOLLOWS:

**609.10 Curing and Sealing**

*When rapid hardening hydraulic cement is used in the RCBA, it shall be water cured in accordance with 702.22(a)1 for a minimum of 3 h and liquid membrane forming curing compound will not be required.*

*When class C concrete is used in the RCBA ~~shall be wet cured in accordance with 702 or shall have~~ liquid membrane forming curing compound shall be applied and maintained in accordance with 504.04(a) to exposed surfaces within 30 minutes after the finishing operations have been completed. The edges of the RCBA shall be cured immediately upon removal of the forms. The edge shall be covered with curing materials equal to the material used on the surface or banked with soil 12 in. wide or greater.*

SECTION 609, AFTER LINE 89, INSERT AS FOLLOWS:

*The RCBA may be covered with an insulating material during the curing period. Insulating materials are not a substitute for curing and liquid membrane forming curing compound, if specified, shall be applied prior to placing insulating materials.*

*Concrete sealer shall not be used on the RCBA. The concrete mix design shall use the silica fume option in accordance with 709.05(c). Slag cement shall not be used. If rapid hardening hydraulic cement is used, silica fume shall not be added to the concrete mix.*

SECTION 609, BEGIN LINE 99, DELETE AND INSERT AS FOLLOWS:

**609.12 Opening to Traffic**

The RCBA may be opened to equipment and traffic when the flexural strength of the test beams indicates the concrete has attained a modulus of rupture of ~~550~~500 psi or greater. *When rapid hardening hydraulic cement is used, the 3 h water curing period shall also have elapsed in addition to achieving the 500 psi minimum modulus of rupture stated above.*

SECTION 609, BEGIN LINE 138, DELETE AND INSERT AS FOLLOWS:

The cost of finishing, furnishing, ~~and~~-placing curing materials, *silica fume, insulating materials, and additional cement used* shall be included in the cost of the RCBA.

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