

RFRP # 11/12-005 Slab Replacement Maturity Guidelines

Technical Questions and Responses:

Question: Will FDOT provide the slab mix designs to the individual proposers?

Response: The mixes used have incorporated many combinations of materials based on a cubic yard of concrete. The highest cement content is 950 lbs, the lowest is 840 lbs with a mean cement content of 850 lbs. The Type C admixture dosage rate has a high of 768 oz, low of 213 oz with a mean of 384 oz. The following combinations of materials have been used in mixes and illustrate typical material combinations used on projects.

Cement (lbs)	Type C Admixture (oz)
840	512
950	576
850	768
850	256

Question: Will the typical geometry of the slabs be specified ie. L:W ratios of 1:1, 2:1, 3:1, etc?

Response: The most typical L: W ratio are 0.5:1, and 1:1 with a thickness of 9 to 12". In addition, irregular sizes are not uncommon since slabs may be replaced in the radius of curves, and on/off ramps.

Question: What maturity method will the proposer be required to evaluation, the Arrhenius or the Nurse-Saul?

Response: This will be left to the researcher's discretion. It may be one or the other of the methods that best predicts the maturity of the concrete, but it may be a combination of the two methods that provides the best prediction.