

Replace introductory clause in the 4th paragraph of section 40-1.03J with:

10-15-21

Do not allow traffic or use equipment on concrete pavement before the concrete has attained a modulus of rupture of 550 psi, or equivalent compressive strength if using maturity per section 40-1.03L, based on your testing unless:

Replace section 40-1.03L with:

10-15-21

40-1.03L Use of the Maturity to Determine Opening to Traffic Concrete Strength

As an alternative to modulus of rupture testing, you can use the maturity method under ASTM C1074 to estimate the equivalent compressive strength for opening to traffic, use of equipment, and for early use of concrete pavement under section 40-1.03K.

Provide, install, and maintain all the maturity testing equipment.

Develop the strength-maturity relationship using:

1. Specimens prepared under ASTM C1074
2. Datum temperature of 14 degrees F
3. Nurse-Saul Method
4. Logarithmic best-fit curve with a R² value of at least 0.90

Develop the strength-maturity relationship in the laboratory when you are designing your mix or in the field during the test strip or first day of production and submit the results to the Engineer. During test strip and production:

1. Place a sensor at mid-depth and at 1.5 ft from the edge of pavement at the beginning and at the end of the placement.
2. Estimate in-place strength of concrete based on your strength-maturity relationship per ASTM C1074.
3. Validate once for test strip and every 15,000 cubic yards or 30 days of concrete production, whichever comes first

The maturity method is not used to estimate compressive strength for acceptance of concrete pavements.

Replace the 2nd paragraph of section 40-1.03O with:

10-15-21

Do not start corrective work until:

1. Pavement has at least a 550 psi modulus of rupture or equivalent compressive strength if using maturity under section 40-1.03L
2. Corrective method is authorized