

# What air content do we need in modern concrete paving mixtures?

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- Modern concrete specifications prescribe a certain volume of air to be used in a concrete mixture (ie 6% air in concrete by volume)
- The work done at PCA in the 1950s to establish this did not have SCMs, water reducers, and only used a Vinsol resin AEA
- ***Do modern mixtures perform the same?***

# Progress of the Research

1. Gathering published research work of others
2. Using ASTM C666 to investigate the following:
  - Vinsol resin, wood rosin, and synthetic AEAs
  - Combinations of WR and AEA
  - $w/cm$  from 0.38 to 0.45
3. Develop mechanistic based analytical models
4. Provide new recommendations on air content requirements for concrete pavement.