

But Wait There's More!!

Honoring the Legacy of Kenneth C. Hover

Monday, March 25, 2024

Presented by:

Michelle L. Wilson, FACI

Portland Cement Association



THE WORLD'S GATHERING PLACE FOR ADVANCING CONCRETE

aci CONCRETE
CONVENTION



- Researcher

- Educator

- Author



Kenneth C. Hover

pca



FROST AND SCALING RESISTANCE OF HIGH-STRENGTH CONCRETE

by Roberto C. A. Pinto and Kenneth C. Hover
Research & Development Bulletin RD122



P O R T L A N D C E M E N T A S S O C I A T I O N

- Researcher

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Frost and Scaling Resistance of High-Strength Concrete

Pinto, Roberto C.A., and Hover, Kenneth C.,

Frost and Scaling Resistance of High-Strength Concrete,

Research and Development Bulletin RD122,

Portland Cement Association, 2001, 70 pages.

Frost and Scaling Resistance of High-Strength Concrete

- The primary purpose of this work was to assess the effect of air entrainment and time of surface finishing operations on the frost durability and scaling resistance of high-strength concrete. The conditions under which entrained air is necessary to produce a frost-resistant mixture are explored, particularly in light of current ACI 318 provisions for air content.

Frost and Scaling Resistance of High-Strength Concrete

- It was observed that the ACI 318 provisions for frost durability are somewhat conservative. While ACI 318 requires air entrainment for all mixtures subject to freezing and thawing, mixtures studied here with w/c of 0.25 and no intentionally entrained air were shown to be frost resistant.
- Further, properly air-entrained mixtures with w/c of 0.50 were frost resistant, even though the w/c was in excess of the 0.45 required by the ACI 318 provisions for freeze-thaw durability.

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ACBM

**UNDERGRADUATE FACULTY
ENHANCEMENT WORKSHOP**

**TEACHING THE MATERIALS SCIENCE,
ENGINEERING, AND FIELD ASPECTS
OF CONCRETE**

- Researcher

- Educator

- ACBM/PCA Professor's Workshop

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Portland Cement Association
Education Foundation

- Researcher

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- PCA Fellowships

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Opportunities and Challenges in Concrete with Thermal Imaging

Hover, Kenneth C., Burlingame, Scott E., and Lautz, Colin H.
SN2806a, Portland Cement Association, 2004. .

Observations of Entrained Air Voids in Fresh Cement Paste

Hover, Kenneth C., Folliard, Kevin, and Ley, Tyler
SN2987, Portland Cement Association, 2006.

Observations of Air-Bubbles Escaped from Fresh Cement Paste

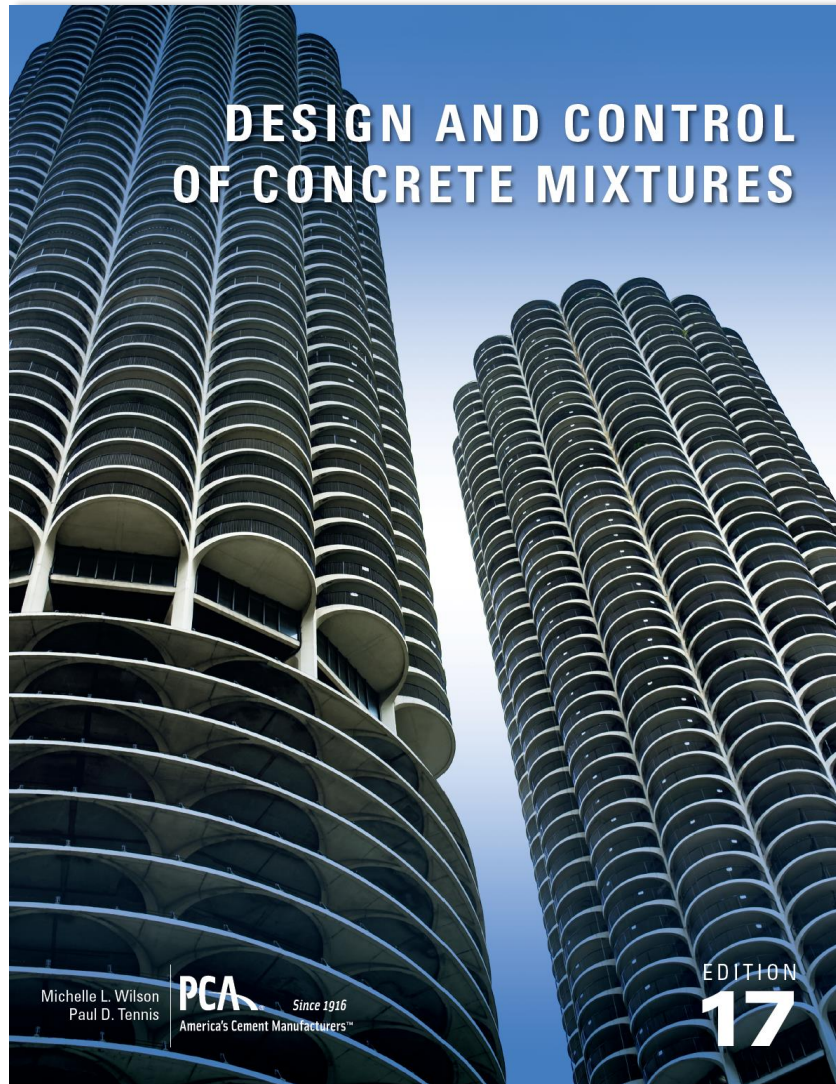
Hover, Kenneth C., Folliard, Kevin, and Ley, Tyler
SN2987b, Portland Cement Association, 2010.

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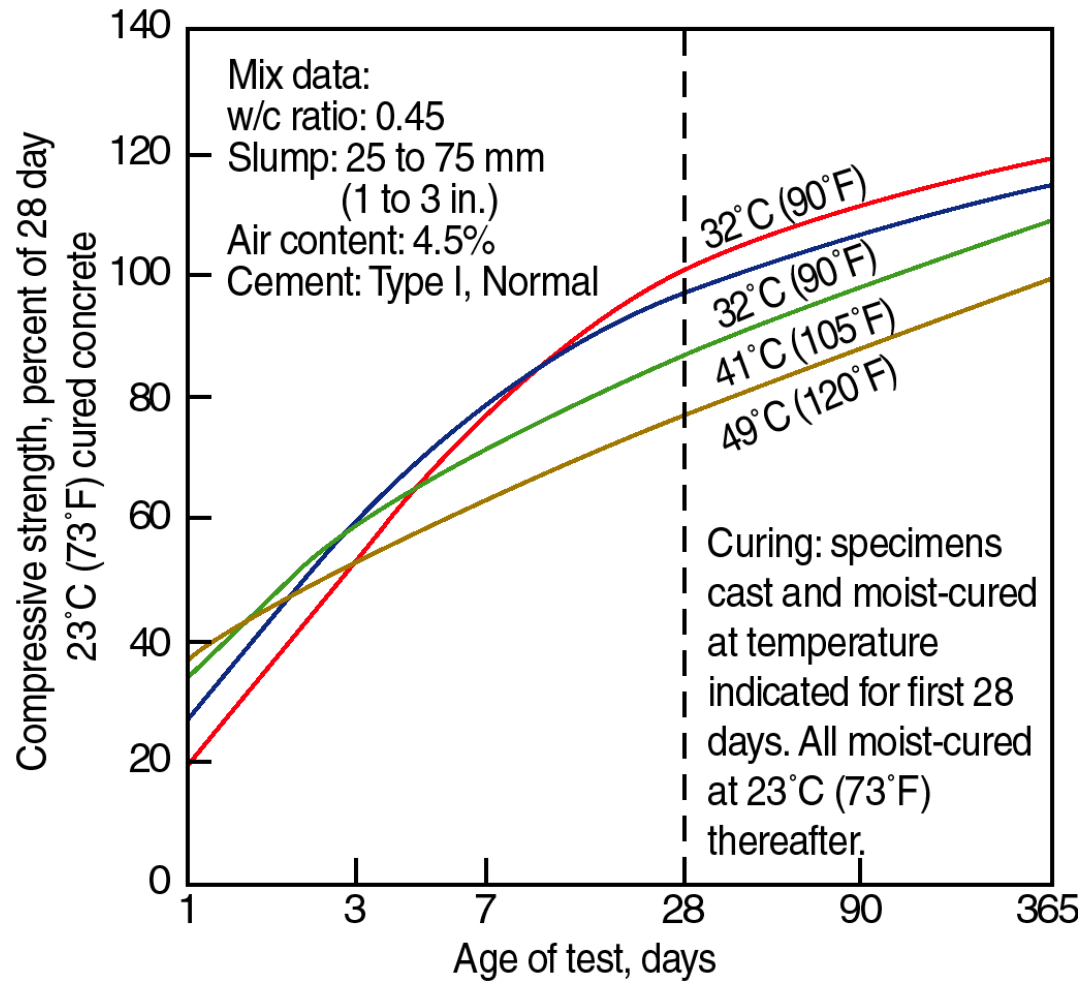
- Researcher

- Educator

- Author/Reviewer

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- Researcher

- Educator

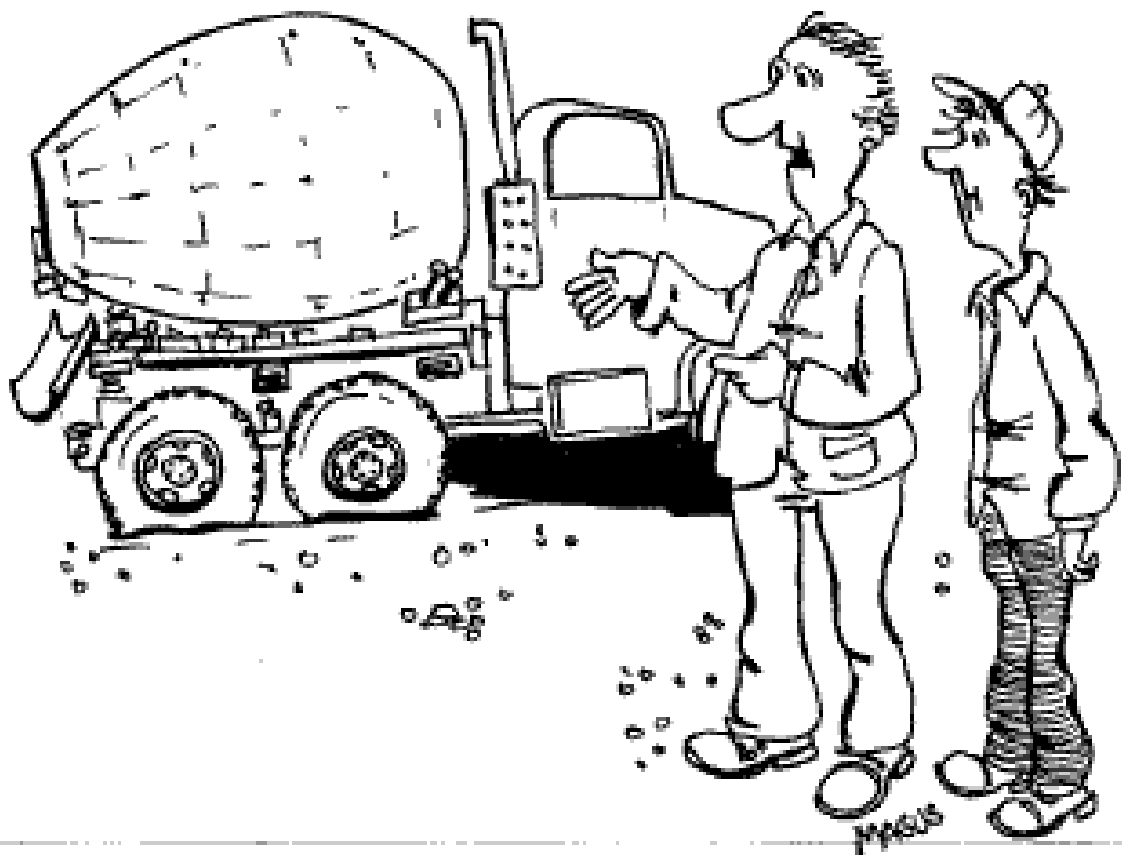
- Author/Reviewer

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TO KNOW HOW MUCH CONCRETE YOU JUST DELIVERED, SEE HOW FLAT THE TIRES ARE.

- Researcher

- Educator

- Author

- Practical

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- Researcher

- Educator

- Author

- Practical

- Taste



Thank you Ken!