

THE AGGREGATE

ACI Intermountain Chapter Newsletter

"concrete news you can use"

October 2006

PRESIDENT'S MESSAGE

old wives' tale NOUN: A superstitious belief or story belonging to traditional folklore.

This month I'm going to title the President's Message "Old Wives' Tales".

This month I went to Denver to look at a soccer stadium to see their concrete forming systems and the means and methods they were using to build it. The concrete risers were made out of HDO plywood and 2x4's. They chose to pour one riser at a time, sometimes in three or four locations and then the next day pour the next riser on top of the previous day's pour.



The risers had bug holes in them due to not enough vibration to allow the entrapped air to work its way to the surface. The concrete foreman believed that if he took the entrained air out of the concrete that the bug holes would go away.

Old wives' tale #1. Removing the entrained air will get rid of the bug holes.

Correct answer: Entrained air bubbles are microscopic; .004 to .008 thousands of an inch. Taking them out would not help to diminish the bug holes.



During the winter months when the ambient temperature drops below freezing and concrete flatwork is poured, when is the most vulnerable time for unprotected concrete to freeze? 1 - The first night. 2 - The second night. 3 - The third night.

Old wives' tale #2. No protection from freezing is needed until after the second or third night because by then the heat has left the concrete.

Correct answer: The first night is the most vulnerable, while the concrete still has the mix water in it and before it has reached 500 psi.

When you order the concrete at a four-inch slump and it comes out of the truck less than that, you can add water to the mix until you get the requested four-inch slump.

Old wives' tale #3. The water added to the truck to get the concrete to the four-inch slump should not be counted as the mix water.

Correct answer: Any water added after the design mix water is added will increase the shrinkage, decrease durability, and decrease strength. Rule of thumb: Every gallon of water added to one yard of concrete will decrease the compressive strength 200 to 300 psi.

Old wives' tale #4. After pouring a driveway in the heat of the summer, water it down a couple of times to cure it.

Correct answer: Concrete should not be allowed to dry out completely during the hydration period. The crystals that grow out from the cement particles will stop growing, therefore not interlocking and a significant amount of the concrete strength will be lost.

Ray Nelson
Chapter President

CERTIFICATION

The last **Field Testing Technician** certification program for 2006 will be October 5-6, 2006. The first certification of 2007 will be January 4-5, 2007.

Registration forms are available by calling Kristin at 801-250-3444 or send an e-mail to kristin@aciintermountain.com.

The **Flatwork Finisher** certification program is scheduled for October 4 & 11, 2006.

Strength Testing Technician and Laboratory Testing Technician certification programs will be offered November 30 and December 1, 2006.

Classes are limited to the first 30 registrants so please register early.



OCTOBER CHAPTER LUNCHEON

Topic:
Cold Weather Concrete

Speaker:
Steve Morriscal
Holcim, Inc.

We will be combining our luncheon with the AGC Ready Mix Council. Therefore, our meeting date has changed for this month only to **Wednesday, October 18**. We will meet at Cabela's in Lehi.

To register contact AGC by phone at 801-363-2753 or fax 801-363-2756, or send an e-mail to aherr@agc-utah.org.

Monthly chapter luncheon meetings are held the second Tuesday of each month (except June, July, and August). If you have a topic you would like addressed, please contact Jim Cavey at 801-973-0500.

2006 CALENDAR OF EVENTS

OCTOBER

October 4 & 11 Flatwork Finisher Certification
October 5-6 Field Testing Technician Certification
October 18 Chapter Luncheon Meeting

NOVEMBER

November 14 Chapter Luncheon Meeting
November 30 Strength Testing Tech. Certification
Laboratory Testing Technician Certification

DECEMBER

December 1 Strength Testing Tech. Certification
Laboratory Testing Technician Certification
December 12 Chapter Luncheon Meeting