

# ASHRAE BLUEPRINT

March 2007

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## PRESIDENT'S MESSAGE

### Rob deWit

Spring is on the way which means we have only two ASHRAE technical programs associated with our meetings remaining. The annual Valentine's Event was well attended on February 16, 2007 at the Olde Town Dinner Theatre in Worthing. The food was excellent and the play humorous. Thank you to all who attended!

Jim Cain, Region 9 RVC for Research, will be attending our meeting. Please help Jim feel welcome and let's show him why our chapter is the Premier Chapter in Region 9.

We will see you at the Westward Ho on Wednesday, March 7<sup>th</sup> - Social Hour 5:30pm, Dinner 6:30pm. Meeting/Program 7:15.

### CTTC Chair, Sean O'Connor

Our speaker this month is Jerry Sipes, the Vice President of Engineering for Price Industries, and Professional Engineer with more than seventeen years of experience in the HVAC field. He is the Chairman of ASHRAE Standard 130 "Methods of Testing for Rating Ducted Air Terminal Units", the Past Chairman of ASHRAE Technical Committee 2.1 "Physiology and Human Environment", and serves as both a voting member of ASHRAE Technical Committee 5.3 "Room Air Distribution" the Chairman of the Air-Conditioning and Refrigeration Institute (ARI) Air Control and Distribution Devices (ACDD) Engineering Committee and as Vice-Chair of the ACDD Section Committee. In 2001, he received the Ralph G. Nevins Physiology and Human Environment Award, which is awarded to a researcher for "significant accomplishment in the study of physiology and human response to the environment". His principle technical areas of interest are heat transfer, fluid flow, human thermal comfort, HVAC and acoustics.

Overview of presentation:

**Underfloor Ventilation** serves the same basic purpose as conventional overhead systems of providing a comfortable environment while maintaining the required fresh air ventilation and dissipating heat loads, but may provide this comfortable environment with lowered energy consumption. This presentation will discuss the following topics:

- ❖ Background Information on Underfloor Air Distribution
- ❖ Comfort Criteria
- ❖ Underfloor Displacement
- ❖ Underfloor Turbulent Flow (Mixed Mode)
- ❖ Underfloor Pressurized Plenums
- ❖ Air Quality
- ❖ Design Considerations
- ❖ LEEDS Points
- ❖ (Rules of Thumb) / (Typicals)