

# It's About Saving Energy

## September 2006

### President's Letter -

It is hard to know where to start, when so much is going on in the Industry and the Association. Probably on the forefront is the continuing work being done by the Technical Committee and the Research Task Group, into the changes that have been proposed for the upcoming code hearings. Data has been shared with contributing members as to the results of the tests, and the Task Group is now working with several experts to prepare for the upcoming hearings. By the time of the October meeting we will be able to report on the outcome of the Code Hearings and how these will affect the industry and its members.



In addition the Technical Committee has made advances on some of the new Technical Bulletins, as well as on getting the RIMA Certification program off the ground. Both are very valuable programs.

I feel that one of the most exciting upcoming events is the inaugural meeting of I-RIMA being held on the Friday October 20<sup>th</sup> prior to the committee meetings. We have had numerous positive responses to our invitations to have members of Companies from around the world join us in Atlanta to develop this International Organization. The day will encompass the setting up and running of this Association, it's purpose, goals and structure, as well as a discussion about the new challenges facing the Industry in Europe due to changes in the testing methods done by CE, and a discussion on various test methods used in other parts of the world on our types of products. I am sure this will be an exciting and interesting day, and I would encourage you to try and attend.

The Association will again be presenting at the Metalcon Show being held in Tampa in early October, and will be discussing Installation Methods for Metal Buildings, Use of R-Values on Heating and Cooling Loads, Diminishing Returns and Condensation. We expect another full house for this event.

As usual I will make my plea for everyone to get involved in the Association, especially at the Committee meetings being held on Saturday October 21st. This is where you can make a difference. Also at this meeting two of the directors' positions will be up for election. If you really want to be part of the future of the Industry and the Association, this is your opportunity. If you are interested, please contact Mary Edmondson or Tom Miller, and they will ensure your name is on the ballot.

This has been an interesting and somewhat turbulent year in our Industry, and I would like to thank everyone for really coming together, supporting the Association and its efforts, and making the future brighter than ever. On a personal



As Mike mentioned, RIMA will be presenting a luncheon/workshop at the 2006 Metalcon show in Tampa, Florida. The workshop will be held on <u>Wednesday</u>, <u>October 4<sup>th</sup></u> beginning with lunch at Noon in the Tampa Convention Center. The seminar is entitled "Benefits of Reflective Insulation & Radiant Barriers." The following is an outline of what will be covered in the session:

#### PARTI-

- How do we recommend that reflective insulation be installed? (New construction, Retrofit)
- 2. What is the big deal about air spaces (Heat flow, Thermos Jug demo, Thermal resistance)
- 3. Other benefits (Improved lighting, Condensate control, Easy to install/repair)
- 4. Do's and Don'ts (Working around electricity, Working in high wind, Lime in curing concrete, Mushroom growing, Exposure to ultra-violet light)

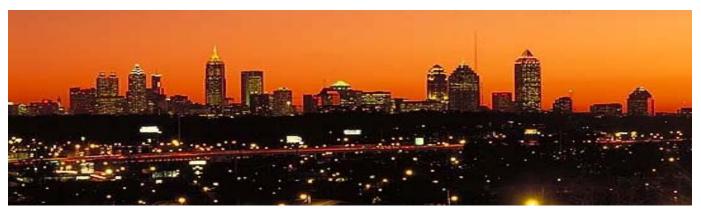
#### PART II -

- 1. Use of R-Values and U-Values to Determine Heating/cooling Loads (Loads from R, Definition of U, Loads from U)
- 2. R installed versus R nominal (Geographical location; Loads versus location; Combining HDD, CDD, Efficiency and Cost)
- 3. Diminishing Returns Example (Loads, Dollars)
- 4. Economic Factors (Simple payback, Present value of accumulated savings)

#### PART III -

1. Condensation Control (What is it, What contributes to it, Effects, Factors, Proper Installation)

To register to attend this workshop and/or for more information on the entire Metalcon 2006 event, you can visit <a href="https://www.metalcon.com">www.metalcon.com</a> or call 800/537-7765. Early-bird registration discounts are available until September 20th. Registration fees for this luncheon/workshop are \$30 in advance/\$40 after September 19 and on site.



### Association to Meet Next Month In Atlanta -

The next meeting of the Reflective Insulation Manufacturers Association will be held October 20 - 22, at the Hyatt Regency in Atlanta, Georgia. Attendance forms have been distributed and are due in to the RIMA office by **September 15**. Individuals can make room reservations by calling 888/421-1442. Be sure to tell them you're with the ASTM group to get the discount rate (\$139 single/double).



Guests from around the globe will be coming in on Thursday to attend the first formal meeting of the new I-RIMA (International Reflective Insulation Manufacturers Association). Visitors from Belgium, France, Argentina, Israel, Malaysia and more will be gathering to discuss the structure and formation of I-RIMA and share industry issues, information and ideas.

International guests will be welcomed by RIMA's Board of Directors and I-RIMA Committee. This all-day event will conclude with a group dinner at a real all-American restaurant, **Durango Oak Fire Steakhouse** in downtown Atlanta.



RIMA committees will meet on throughout the day on Saturday. These meetings are for members who have signed up to participate in a RIMA committee. If you are new to RIMA or are not yet on a committee but would like to be, please contact the RIMA office. The full membership meeting will be held on Sunday. Guests interested in learning more about the Association are welcome to attend.



Those attending Sunday's meetings are also in for a treat with a fabulous brunch scheduled at 10 a.m. complete with custom omelet station and several additional tantalizing selections. Plan to come hungry and take advantage of all the hot and cold breakfast delights. An omelet chef will be on duty with a variety of items available to customize your perfect omelet. What better way to start your day!

RIMA is also pleased to welcome guest **keynote speaker Hampton Newsome** from the Federal Trade Commission in Washington, DC, to Sunday's meeting. Mr. Newsome is an attorney with the Bureau of Consumer Protection at the FTC. His primary duties involve energy-related labeling and advertising issues.

A group dinner will be held at **Azio Downtown** on Saturday evening. After nearly ten years of in operation, AZIO has established itself as a cornerstone of Cartel Restaurants, Inc., as well as a wonderful option to diners in the downtown area. They offer a contemporary interpretation of traditional Italian cuisine in a refined yet casual setting. Offering a stunning ambience, a vast selection of Italian fare and a reputation for great service, AZIO is sure to provide guests a memorable evening of dining in downtown Atlanta.





## Retiring Directors-We Thank You



Monty

RIMA Board Director's **Monty Millspaugh**, of Reflectix, Inc. in Markleville, Indiana, and **Bobby Byrd** of Martco Limited Partnership in Alexandria, Louisiana, will be completing their two-year term as Directors at the end of 2007. Both gentlemen will be recognized for their service at the upcoming RIMA meeting in Atlanta.

Their commitment and the work they have contributed both as members and as Directors has been vital to the advancement of the reflective insulation and radiant barrier industries. We extend our many thanks to them for their dedication and generous efforts that have been a benefit to all industry professionals.



Bobby

## Quickly Estimate Heating and Cooling Loads-

By Dr. David Yarbrough, R&D Services, Inc.

Heating-Degree-Day (HDD) and Cooling-Degree-Day (CDD) data can be used to quickly estimate heating and cooling cost for practically any city in the United States. HDD and CDD data can be obtained from "Climatography of the United State No. 81". One way to find the data is "Google" – CLIMATOGRAHY OF [state name] and then select "(pdf) [number] state name". You will find the Publication 81 data for cities in the state you selected. Scroll to the section containing HDD/CDD data by city and you have the needed information.



The heating load (Q<sub>heat</sub>) and cooling load (Q<sub>cool</sub>) estimates are:

 $Q_{heat} = (A \cdot HDD \cdot 24)/(R \cdot E_{heat})$  or  $Q_{heat} = (A \cdot HDD \cdot 24 \cdot U)/E_{heat}$ 

 $Q_{cool} = (A \cdot HDD \cdot 24)/(R \cdot E_{cool})$  or  $Q_{cool} = (A \cdot HDD \cdot 24 \cdot U)/E_{cool}$ 

A is the area in ft<sup>2</sup>, R is the air-to-air thermal resistance in ft<sup>2</sup>·h·°F/Btu, U is the overall heat transfer coefficient in Btu/ ft<sup>2</sup>·h·°F, and Q is in Btu/year. The efficiencies are entered in decimal form:  $E_{heat} = 0.9$ ,  $E_{cool} = 2$  (COP=2) are typical values. To estimate utility cost you need the cost of a kwh (\$) and the cost of a therm (\$) when natural gas is used for heating.

Heating Cost =  $Q_{heat}$ ·Cost<sub>therm</sub>·0.000010 (\$ per year) based natural gas

Cooling Cost =  $Q_{cool} \cdot Cost_{kwh} \cdot 0.000293$  (\$ per year)

Example for Orlando with HDD=580 and CDD=3428, A=1500, R=5,  $E_{heat}$ =0.9,  $E_{cool}$ =2.0,  $E_{cool}$ =2.0,  $E_{cool}$ =1.50, and  $E_{heat}$ =0.0855.

Heating Cost = (1500)(580)(24)(1.50)(0.00001)/((5)(0.9)) = 69.60 \$/year Cooling Cost = (1500)(3428)(24)(0.0855)(0.000293)/((5)(2)) = 309.16 \$/year

These costs are for the section of the building envelope with area of 1500 ft<sup>2</sup>.

These estimates do not include air infiltration, lighting, water heating or other items that impact the utility bill. Highly sophisticated building simulations provide more precise estimates, but the effort is tremendous compared to the above calculation which can be done in minutes.

### Committee Updates -

In addition to the work the Technical and Research Committee is doing on fire research, code work and technical bulletins, RIMA's other committees have a full slate as well.

RIMA's <u>Radiant Barrier Software Committee</u> is working to get the proper credits for radiant barriers used in building applications in to the software programs used for Code Compliance, Energy Star, Tax Credits, etc.

The <u>Certification Committee</u> just completed a first draft outline of the new Product Certification Program, which is currently being reviewed with a 2<sup>nd</sup> draft to be completed and ready for discussion at the October meeting.

The <u>Public Relations Committee</u> has several things in the works. RIMA just announced the launch of their new website the committee has been working on. There are trade shows the committee will be submitting workshop proposals to as well, including the Pacific Coast Builders Conference (PCBC) and the Southeastern Building Conference (SEBC). Speaking assignments and outlines will be prepared for the workshop RIMA will be doing at the 2007 Frame Building Expo, February 28 – March 2 in Indianapolis. RIMA's workshop will run on Thursday, March 1 from 11 – 11:50 a.m. (For more information on Frame Building Expo, visit <u>www.nfba.org</u>.)

Membership Committee members recently invited non-member prospects to attend the October meeting in Atlanta with a couple already responding and planning to attend. Other committee tasks include developing a members-only section on the RIMA website, creating an industry award program recognizing those who have contributed above and beyond to the reflective insulation and radiant barrier industries, identifying a speaker for the April 2007 RIMA meetings in Virginia and discussing other possible member benefit/discount programs that would compliment the Choice Hotel and ICC Business Products programs already available. Just to remind members about these programs, here's a summary of what they offer:



RIMA members can <u>save 20%</u> off standard rack rates at the above listed Choice Hotels. This program is available to all member employees and can be used for both personal and professional travel. Member ID cards are available in any quantity needed so you can share the benefits of this program with all your company employees.

## > ICC Business Products Discount Program <

This program offers members up to 50% discount on manufacturer's suggested list price on such products as computer supplies, printer sales and supplies, standard office supplies, printed forms, furniture and promotional products. There's also a 2% rebate at the end of the year, which can be taken as a check or credit onto your account.

# Tt's 50/50 Raffle Time-



This fun event is open to all members whether you are able to attend the meeting or not, and the winning ticket will be drawn at the October meeting with the winner taking 50% of all revenues generated! Maybe you'd like to buy a ticket for each of your employees. Maybe you'd like to buy a ticket for each of your family members. Maybe you just want to keep all the tickets to yourself – but no matter who the tickets are for it's all for a good cause with the other 50% of revenues going to help defray meeting costs as well as adding to RIMA's general revenue fund. RIMA operates on a very tight budget so adding fun little events like this helps to create a little cushion for many various activities throughout the year.

Tickets can be purchased in advance by contacting the RIMA office or you can simply forward your check to RIMA, 4519 E. Lone Cactus Drive, Phoenix, AZ 85050. Ticket prices are as follows:

\$500.00 = 100 tickets

\$350.00 = 70 tickets

\$125.00 = 25 tickets

\$50.00 = 10 tickets

Good Luck!