

Innovative Outstanding Weatherization Assistance News

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Wishing you a Happy Spring!

From all of us in the
Weatherization Bureau
in Des Moines

Jim, Gwen, Mark, Chris, Mike
and Rosemary

Welcome

- In January, we indicated that a "Member's Only" section would soon be added to the DCAA Weatherization website. By the end of February, the site was up and running. Hopefully, you have had a chance to see what is available: DCAA Weatherization Policy and Procedures Manual, DCAA Weatherization Technical Standards Manual, Iowa Weatherization Fact Sheet, State of Iowa Forms and Waivers, Weatherization and Furnace Contract Templates, Samples of Forms from Other Agencies, and state agency Contact Information. If you have not had a chance to surf the site, go to www.state.ia.us/dhr/caa/WxPage.html and click on "Members Only." If you have misplaced your username or password, contact me at 515-281-4565 or via email at Christine.Taylor@iowa.gov.
- If you haven't had a chance, be sure to check out the January/February 2004 issue of *Home Energy*. Our very own Mark Bergmeier, the DCAA Weatherization Technical Specialist, is featured on page 8. The title of the article is "A Little Help, Please?" which you will recognize from the July 2003 edition of the *IOWAN*.
- Our office has received some wonderful client comments from many of the agencies. Keep sending them in so we can recognize the hard work your agency does. Send comments from clients to me at Fax: 515-2142-6119 or via email at Christine.Taylor@iowa.gov.

Statistics

ITEM	*QTRLY	**YTD
Houses Worked On	546	1,871
Completions	510	1,654
Closed Incomplete	36	217
Owner Occupied	503	1,756
Rentals	43	115
Elderly Occupied	183	688
Disabled Occupied	217	842
Furnace Replacements	271	786
Refrigerator Replacements	185	643
Freezer Replacements	93	249
Average Costs Per House	\$5,146	\$4,696

Totals for all agencies combined
* QTRLY (December, January, February)
** YTD (Program year through February)

Agency Spotlight – Iowa East Central T.R.A.I.N.

U. S. Secretary of Energy's Visit a Success

By: Mike Loos

Marilyn Brummit says she won't have to worry as much about her grand-daughter Maddie's comfort when she comes to play on grandma's living room floor. Marilyn was unquestionably appreciative of the weatherization work being done to her home in Bettendorf, Iowa. So much so she agreed with less than a week's notice to allow the U.S. Secretary of Energy, Spencer Abraham, to visit the work in process.

Mrs. Brummit could hardly believe all of the attention she was receiving. It was just another cold Friday afternoon in February for Marilyn until she received a phone call from the T.R.A.I.N. weatherization office. Marilyn's home had been evaluated three weeks earlier, the furnace contractor had tuned and cleaned the furnace, and we were now calling to begin the insulation measures to her home. The twist came when we mentioned that we would like to use her home as a demonstration house for the Secretary of Energy, the following Thursday. Without hesitation she agreed. Our frantic search, and the slipping away of potential sites, was over.



Weatherization Works!

Tuesday came and the crew began their work. Meetings were held with delegates from the regional office. The replacement refrigerator was ordered. Mrs. Brummit's garage door was a turnstile of visitors. Wednesday started much the same as Tuesday. The Secretary's advance team arrived, and so did the refrigerator. Furniture was moved, coordinates were planned, weatherization measures were continuing. Thursday was upon us and the stress and frantic work of the day's prior paid great dividends when the visit went off without a hitch.

On February 19, 2004, the Secretary came to Iowa to raise awareness for the federal government's Weatherization Assistance Program, and the President's proposal to spend \$1.4 billion over the next ten years to weatherize homes of low-

income families. This increase would give Iowa an additional \$1 million in 2005.



Secretary Spencer Abraham

While at the home, the Secretary, along with Assistant Secretary of Energy for Energy Efficiency and Renewable Energy David Garman, were taken on a tour of the different stages of weatherization performed. The tour gave Mike Loos, Weatherization Director for Iowa East Central T.R.A.I.N., an opportunity to demonstrate and discuss the diagnostic equipment used, the health and safety considerations taken, the live demonstration of dense-pack insulation, the appliance replacement aspects of the program, and an overall summary of a complete energy efficiency program.

While the opportunity to "show off" the program to the Secretary and those who attended from the Chicago regional office was an honor, I felt that the real benefit came from being able to demonstrate the amount of work, knowledge, dedication, and training that goes into weatherizing a home, to those at the local level. The opportunity to demonstrate the amount of work each house receives to board members, agency staff, state staff, and local media, was the best aspect of the Secretary's visit.

Many thanks must be given to all involved for this success. First and foremost to the crew of Taurus Puckett, Tony Reed, and Jack Coleman, their work was, as usual, professional. Also thanks to Dave Sexton, Kevin Petty, and Wendy Anderson of the T.R.A.I.N. weatherization department, and our Executive Director Roger Pavey for their help in bringing it all together.



Insulation Demonstration

Many thanks to T.R.A.I.N. for hosting the Secretary's visit.

News

Records Retention—As outlined in Section 20.0 of the current DOE Weatherization Contract, you may dispose of all records relating to the Weatherization Assistance Program for all program years prior to 1996.

The recent federal DOE grant period was from 1996-2003. Therefore, records from 1996 and the program years since then must be retained until 2006.

Mold Resources

www.ci.nyc.ny.us/html/doh/html/epimold.html
www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html

New York City Health Department

www.epa.gov/iaq/molds/moldguide.html
www.epa.gov/iaq/pubs/occupgd.html
www.epa.gov/iaq/pubs/bio_1.html
www.epa.gov/iaq/molds/moldresources.html
www.epa.gov/iaq/molds

United States Environmental Protection Agency (EPA)

Should you have any questions, feel free to contact Christine Taylor at the DCAA office at 515-281-4565.

New Email Addresses—In case you didn't know, the state staff have new email addresses. The old address, Firstname.Lastname@dhr.state.ia.us will no longer work beginning this Friday, April 2nd. The new email address, Firstname.Lastname@iowa.gov is already in effect. So, be sure to change your address books right away.

DOE-04 and HEAP-04 Contracts—The new DOE and HEAP contracts should be arriving in your mailboxes in the next week or so. Be sure to obtain signature right away and return them to the DCAA office as soon as possible.

For your convenience, the contracts will be posted on the Members Only page. If you have misplaced the username and password, contact Christine Taylor at Christine.Taylor@iowa.gov.

Agency Spotlight – North Iowa Community Action Organization

Carbon Monoxide Testing Saves Lives

By: Mike Creeden

As part of Weatherization we do a complete furnace safety check to begin the process. Not long ago, during a routine check of the combustible appliances at a home, it was discovered that the water heater was not drafting and all the carbon monoxide from it was released into the home. As the testing progressed it was soon discovered that a two-foot piece of flue pipe that connects the furnace to the chimney was laying on the floor. The furnace was completely disconnected so both it and the water heater were releasing carbon monoxide into the home. The situation was quite unsafe. With two adults and five children living in the residence it was very fortunate that no one was killed, although they complained that they were plagued with allergy symptoms and they simply

didn't feel well. Because of the unsafe conditions, we left a carbon monoxide detector and had the residents open a window until the problem was corrected. Once back at the office, we immediately contacted one of our furnace contractors and they fixed both problems that same day. Now, we can rest assured that the family is left in a safe environment.

Service Recognition

14 Year Anniversary

Marilyn Rodacker serves dual roles as the Weatherization Coordinator and LIHEAP Coordinator at West Central in Harlan.

Infrared Cameras

Infrared Cameras

By now, many of you have an infrared camera at your agency. Quite a few of you attended the Infrared Camera Training/Roundtable at MICA in February. If you were there, you had a chance to discuss what you have experienced in the field while working with the camera. Many of you had questions about what you were seeing and hoped to find the answers. Below, are a few things about how to operate the camera, what to expect and how to interpret what you may see in the field.

Procedures

The infrared camera should be used as a tool to check and train contractors and crewmembers. It should be used to troubleshoot problem jobs and to look for missed key junctures. Using the camera in conjunction with an infrared thermometer and a blower door can be very beneficial. The camera can help you identify walls that may not have been insulated as instructed. When the camera indicates that an area is missing insulation, the evaluator/inspector should verify that the cavity is empty by visually inspecting the area before calling a contractor back to the job-site.

If you purchased a camera, the software that accompanied the camera is SightView. If your camera came with version 1.0, be sure to go to SightView's website and download version 1.4. It seems that 1.0 had some programming errors which version 1.4 corrected.

About the Camera

The camera has an auto-ranging scheme, a self-adjusting thermal sensitivity. Because of this capability, the camera never needs adjusting, making it extremely easy to use. The camera will always adjust the display to include the warmest and coolest surfaces being scanned.

Although the auto-ranging scheme makes the camera very easy to use, the operator must carefully interpret images because the thermal sensitivity of the camera can be misleading. For example, when there is a large temperature difference and you are scanning exterior walls to find missing or defective insulation, there is a large color contrast shown on the display. If a warm interior wall is scanned and there is a very small temperature difference between the plaster that is

in contact with wall framing, and the plaster that is not in contact with framing, the camera will automatically adjust the display to show the maximum contrast in the image. The image of the interior wall may have as much contrast as the image of the exterior wall, even though the temperature difference in the two images are very different.

Another example is a case where there is a partition wall cavity with leaks into the attic. If the attic is cold and the Blower Door is turned on and the one stud space with the leak gets colder and the rest of the wall is at room temperature, this stud space will turn black on the image, whether it's temperature went down by only one degree or by 20 degrees. Again, because the camera is automatically maximizing the display contrast, it is sometimes difficult to interpret the extent of a problem when areas of uniform temperature surround it.

One remedy for this situation is to try to scan from far enough away so an exterior wall or ceiling is in the view to use as a reference. Another is to use an infrared thermometer to measure the cold and warm spots of interest and compare their temperatures with those on an exterior wall.

Using a Blower Door with the Infrared Camera

The ideal technique for finding hidden air leaks in a building is to use a Blower Door along with the infrared camera. This procedure usually involves performing two infrared scans from the interior of the building; one before turning on the Blower Door and one after the Blower Door had been depressurizing the building for 5 to 10 minutes and drawing air in through the leaks. As long as the air being brought in through the leaks is either warmer or colder than the interior of the building, the area surrounding the leakage path will change temperature and show up on the infrared video display screen.

Even if there is little temperature difference between the inside and outside of the building, an infrared scan may still be possible if the attic space has been warmed from solar radiation on the roof or the crawlspace has been cooled from the ground. A temperature difference of 5 to 10 degrees is sufficient to expose the important leaks. This technique often allows you to find significant leaks without having to enter the attic or crawlspace. Note that Pressurizing the building and inspecting from the outside can also be useful.

Upcoming Events

April 2004

- 13—14 **Mold/Moisture/Ventilation Training.** To be held at Heartland Inn, 1603 S. Shore Drive, Clear Lake, Iowa. The class will be held from 10:00am -5:00pm the first day and from 8:30am -3:30pm the second day. We have booked a block of rooms under "Weatherization Training". To reserve a room, call 641-357-5123. For more information, please contact Marcia Thompson at 515-281-3861 or Marcia.Thompson@iowa.gov.
- 21 **IWAC Meeting.** To be held at the Four Points Sheraton, Merle Hay Road, Des Moines, Iowa, from 9:00am -12:00noon. For more information, contact Mike Loos at MLoos@iowatrains.org or 563-324-3236 ext. 103.
- 26 - **Affordable Comfort Conference 2004: Advancing the Performance of Residential Buildings,** Minneapolis, MN. For more information, contact Affordable Comfort by phone at 1-800-344-4866 ext. 10 or visit their website at www.affordablecomfort.org.

May 2004

- 4—5 **Basic Furnace Training** to be held in Ireton, Iowa. For more information, please contact Marcia Thompson at 515-281-3861 or Marcia.Thompson@iowa.gov.
- 18—19 **Blower/BTL/Duct Leakage and Combustion Health & Safety** trainings to be held at MATURA, 203 W. Adams, Creston, Iowa. For more information, please contact Marcia Thompson at 515-281-3861 or Marcia.Thompson@iowa.gov.

June 2004

- 8 **High Density Insulation** training to be held at MICA, 1001 S. 18th Avenue, Marshalltown, Iowa. For more information, please contact Marcia Thompson at 515-281-3861 or Marcia.Thompson@iowa.gov.
- 22—23 **Appliance Metering/BART/TL-86 and NEAT Audit Setup** training to held at MATURA, 203 W. Adams, Creston, Iowa. For more information, please contact Marcia Thompson at 515-281-3861 or Marcia.Thompson@iowa.gov.
- 23 **IWAC Meeting.** To be held at the Four Points Sheraton, Merle Hay Road, Des Moines, Iowa, from 9:00am -12:00noon. For more information, contact Mike Loos at MLoos@iowatrains.org or 563-324-3236 ext. 103.

Be sure to check our website for training updates at www.state.ia.us/dhr/caa/WxPage.html !

Tentative 2004 PY Monitoring Schedule

April	TRAIN
May	SE Iowa
June	Community Opportunities

Tentative 2004 Fiscal Monitoring Schedule

April 26-27	Community Opportunities
April 28-29	West Central
May 24-26	UDMO
May 27-28	MATURA
June 28-29	Mid-Sioux
June 30-July 1	Siouxland

"You're among the nicest of any people I have known, and you'll never be forgotten for the thoughtfulness you've shown." — MATURA Client

Speed Bumps

- Generally when a new 80% furnace is installed the warranty requires that the chimney be lined. The manuals for all new furnaces should be left with the client.
- New furnaces need to be installed on blocks or pads. They should be at least 1½ inches off of the floor and higher if the basement gets a lot of water in it.
- Duct leakage testing is to be done when the duct work is outside the building envelope. The results of the testing need to be in the file. If the results are not in the file the home will require corrective work. Duct work that is outside the envelope of the home also needs to be wrapped in insulation (minimum of R-10) and that insulation needs to be tied or strapped on, taping it is not enough as the tape will fall off over time. If the ducts are low enough to the floor of the attic loose insulation should also be blown over them. This applies to both supply and return ducts.
- Water heater jackets are to be installed on water heaters that are older than 1980 and in an unconditioned area. They are not to be installed on newer water heaters.
- Bulkheads or soffits that are open to the attics are to be sealed from the attic not just insulated.
- Work on doors should be confined to doors that define the envelope of the home. Interior doors should only be worked on if they are used to define the envelope of the home, an example of this is the door at the bottom of a walk up attic stairway.
- Although side-by-side refrigerators have to be Energy Star rated, they still need be run through BART to ensure they are cost effective.
- The statewide average of homes requiring corrective work from April 1, 2003 to March 31, 2004 is 17%.

Please feel free to copy and distribute.

Iowa Bureau of Weatherization

Department of Human Rights
Community Action Agency
Lucas State Office Building, 2nd Floor
Des Moines, Iowa 50319

We're on the Web!!!
www.state.ia.us/dhr/caa/WXPage.html

Contact us at:

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