

Home Star Iowa 6122 Forest Meadow Ct NE Cedar Rapids, IA 52411 Phone (319) 244-8564 Rob@HomeStarIowa.com | www.HomeStarIowa.com

**DATE** February 3, 2015

Sandra Schneider 13871 Elk Run Dr West Burlington, Iowa 52655

| Description                                  | Amount |
|--|--------|
| Advanced Whole Home Diagnostic @             | \$649  |
| 13871 Elk Run Dr West Burlington, Iowa 52655 |        |
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|  |        |
| Total  | \$649  |

Make all checks payable to Home Star Iowa

If you have any questions concerning this invoice, contact Rob Novak | (319) 244-8564 |
Rob@HomeStarIowa.com



### Sandra Schneider <sjschneider7@gmail.com>

#### 13871 Elk Run

3 messages

Rob Novak <rob@homestariowa.com> To: sjschneider7@gmail.com

Wed, Feb 4, 2015 at 7:29 AM

Hi Sandra,

It was really nice meeting you.

After measuring the air flows of your home, I found it to be depressurized. This is common with a super insulated home such as yours. This can be a dangerous situation, as you found out with your fireplace backdrafting into the home. My recommendations will eliminate this dangerous situation and improve the indoor air quality.

1. According to the most widely accepted ventilation standard (ASHRAE 62.2 2013) your home needs at least 111 CFM of fresh air continuously 24 hours a day. The best way to accomplish this for your home is to install supply ventilation ducted directly into your heating and cooling system. This will prevent your home from being depressurized and provide fresh air for the occupants. AirCycler® FRV Furnace Fan Timer with a motorized fresh air damper is a great option. The exact brand is not important, several companies make devices like this that operate the same way. Check with your heating contractor for their preferred brand.

2. Your fireplace is currently pulling its combustion air from inside and further depressurizing the home. It is really important that this gets extended to the outside.



I've attached a couple of documents to this email. The required ventilation PDF confirms the need for fresh air. The action report PDF estimates your current utilities. The home humidity settings PDF can be used as your guide to control the humidity in your home.

Please let me know if you have any questions. Thanks! Rob

**Rob Novak** 

(319) 244-8564

www.HomeStarlowa.com



#### 3 attachments





Home Humidity Settings.pdf 113K

Rob Novak <rob@homestariowa.com> To: Sandra Schneider <sjschneider 7@gmail.com>

Fri, Feb 6, 2015 at 8:22 AM

Hi Sandra,

We really appreciate your feedback as you know reviews are essential to small business. If you wouldn't mind sharing your feedback please reply to this email. Let us know how your service was and how we can better service you!

Thanks! Rob

**Rob Novak** (319) 244-8564 www.HomeStarlowa.com



[Quoted text hidden]

Sandra Schneider <sjschneider 7@gmail.com>

Fri, Feb 6, 2015 at 2:05 PM

To: Rob Novak <rob@homestariowa.com>, Sandra Schneider <sjschneider7@gmail.com>

Mr. Novak:

Your services were great and more than I expected. I do have some questions related to the report you sent. I will follow up with you regarding those questions in a few days.

Sandra Schneider [Quoted text hidden]

#### ASHRAE 62.2 2013

Project Name: Sandra Schneider
Project Address: 13871 Elk Run Dr
Project City: West Burlington

Project State: lowa Project Zip: 52655

Floor area: 4216.0 Square feet

# of Bedrooms: 4

Combustion CFM Threshold: 632.40 CFM

(If the sum of highest flow rate of the two largest fans exceeds this number, make-up air must be supplied to any atmospherically vented appliance.)

Closest Weather Station: Burlington Municipal AP

Calculated N Factor: 26

Blower Door(CFM50): 1378.0
ACH50: 2.45
ACHn: 0.09

Whole Building CFM Required:

New Home 111.0

(New homes Local Exhaust ventilation must be added)

Auditor: Rob Novak Phone: (319) 244-8564

Website: www.HomeStarlowa.com
Email: Rob@HomeStarlowa.com

#### **ACTION REPORT**

Date:

February 03, 2015

Rating No.:

Building Name:

Schneider

Rating Org.:

Owner's Name:

Sandra Schneider

Phone No.:

Home Star Iowa

Property:

13871 Elk Run Dr

(319) 244-8564

Address:

West Burlington, IA 52655

Rater's Name: Rater's No .:

Rob Novak

Builder's Name:

Weather Site:

Des Moines, IA

1776865

Rating Type:

Confirmed

File Name:

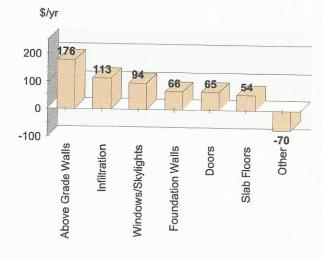
13871 Elk Run Dr.blg

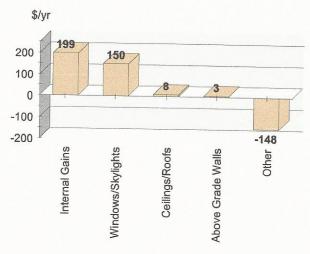
Rating Date:

02/03/15

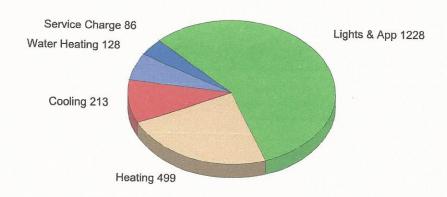
## Heating Cost (\$/yr)

## Cooling Cost (\$/yr)





## Annual Energy Cost (\$/yr)



Total 2154



# **Home Humidity Settings**

Use a <u>digital hygrometer</u> to keep track of your indoor humidity.

| Outside Air               | Indoor Relative Humidity at  |
|---------------------------|------------------------------|
| Overnight Low Temperature | 70 F Indoor Temperature      |
| -20 degrees F or below    | not over 15 percent humidity |
| -20 degrees F to -10      | not over 20 percent humidity |
| -10 degrees F to 0        | not over 25 percent humidity |
| 0 degrees F to 10         | not over 30 percent humidity |
| 10 degrees F to 20        | not over 35 percent humidity |
| 20 degrees F to 40        | not over 40 percent humidity |
| 40 degrees and up         | not over 60 percent humidity |

As an example, if the outdoor overnight low temperature is between zero and 10°F the indoor humidity should not be over 30%