# Building a Low-Energy Home

A Builder's Perspective of the Energy Rater's Role



W. Orlo Stitt, President Stitt Energy Systems, Inc.

#### The Vernon and Orlo Show

- Last presentation with Vernon . . .in KC
  - . . . Planes flying into skyscrapers
  - ... Mystery shoppers
- Definitely an interesting and educational contrast between two builders that both promote and build energy efficient homes!

# Early Building Experience

- When I was 8 . . .
- 1<sup>st</sup> experience with a home builder and my Father

"You don't need to put that stuff in the walls or two panes of glass in every window"

# Walking the Talk

- Village du Soleil, Quebec
  - Televised, '73 oil embargo
- Founded "Stitt Energy Systems, Inc."
  - Not Stitt Homes or whatever
  - Built passive solar demo home, 1978
  - Holistic approach—our mission statement is the same now as then!
- We live in a near-zero home





#### Differentiation

- We are beyond "that stuff in the walls and 2 panes of glass"
- Most builders think and tell customers they build EE homes
- Ratings prove energy quality
- Result of rating:
   verifiable differentiation



Ken & Sharla Riead, Hathmore Technologies

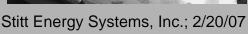
#### We Started With 5 Stars

1st rating: 1987
 FIVE STARS
 (★★★★★)

- Ron Hughes
  - Energy Rated Homes of AR









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#### **Next Came 5 Star Plus**

- First 5 Star Plus home
  - **1988**
- 11 of last 11 homes received:

"5 Star Plus" Ratings

$$(\star\star\star\star\star\star$$

with Scores: 38 - 65





#### **Our Most Efficient Home**



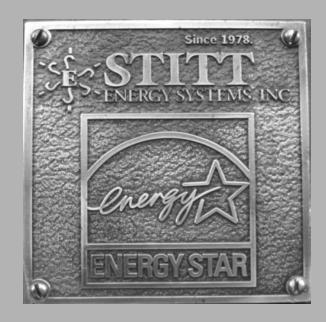
HERS Rating: 38

Rating Number: 262001 20340 S Hwy H
Certified Energy Rater: Sharla Riead
Rating Date: 00/19/2006
Rating Ordered For: Mitch Ross & Cheryl Marcum Home Energy Rating Certificate age to Outside: Total: 0.00 CFM @ 25 Pascals

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#### Assurance

- Showed and shows that we are moving forward in the right direction
- Allows adjustments for maximum efficiency
- Enables tweaking of specs for economics



#### Customer relations

- Education
  - We like the customers there
- Customers like "inspections"
  - Assurance of quality
- Energy efficiency does cost more initially
  - Rating helps customers justify cost
  - Energy efficiency = lower utility bills



- Process control
  - We tell the crews they will be tested
    - After drywall . . . like mid-term exam
    - After home is finished . . . like final exam
    - Certificate is . . . like a report card
  - -- . . so, "you better pay attention to what we are telling you, show up on time and do a really good job!"

- 3<sup>rd</sup> Party validation
  - Provides documentation for higher pre-construction appraisal
  - Confirms quality for
    - Appraisers
    - Bankers
    - Underwriters
    - Inspectors
  - Energy Star
  - IRS tax credit requirement



#### **Public Relations**

- Awards, EnergyValue and Green Building
- Energy Star—100 %

#### Advertising

Articles in newspapers and magazines







## Our Greatest Challenge

- Educate financial community
  - Appraisers
  - Bankers
  - Underwriters
- They must give objective value for energy efficiency in housing

# Summary

#### 6 reasons homes should be rated:

- 1. Differentiation
- 2. Assurance
- 3. Customer relations
- 4. Process control
- 5. 3<sup>rd</sup> Party validation
- 6. Public relations/Advertising





#### **Personal Motivations:**

- I have been very aware of the delicate balance of life on earth—between plants and animals—including MAN—from upbringing and education
- To Learn and keep on learning, and share what I know.
- To make a constructive positive difference in some way—with purpose and focus.
- To enjoy a real challenge—to "just do it". I like to see progress and things happening! In brief, "to walk the talk".
- To truly satisfy customers and employees.
- To make a good living for me and my Family but not necessarily to get materially rich.

### "Taking It To The Next Level"

Thank you for listening!

Questions? Comments?

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# "That's All for Now Folks"

#### Co-Presenter: Orlo Stitt

- Iowa State Univ.
  - worked really hard in Chem. E.
     for 3 ½ years
  - graduated in botany & ecology
- Univ. of Iowa, MBA
- President, Stitt Energy Systems, Inc.—since 1978
  - 100% Energy Star
  - 17 EVH National Awards
  - EVH Builder of the Year 1999
  - Energy-planned subdivisions

