LESSONS LEARNED: SPF IN PRODUCTION HOMEBUILDING
Founded in 1985 – 29 years of continuous operation

Headquartered in Scottsdale, AZ

Listed on NYSE:MTH since 1996

As of June 30, 2012:
- Delivered 75,000+ homes
- 9th largest U.S. homebuilder by LTM closings
- 15 markets - 7 states
- 165 actively-selling communities
- >60% move-up, >35% first time buyers, <5% other

National builder with top-5 market share in some of the best long-term housing markets
Buildings account for almost 40% of the energy and raw materials consumed in the US.

Heating and cooling homes accounts for nearly 60 percent of residential electricity usage in the United States.

Every year, building construction waste generates 136M tons, compared to 209M municipal tons.

If the US invests $520B in improving energy efficiency in homes, the country has the potential to save $1.2T.

- Personal Sacrifice:
  - Live Smaller
  - Give up comfort and convenience
  - Change Lifestyle
  - Expensive
  - Ugly

- ‘Natural’ Materials
  - Straw Bale / Rammed Earth
  - Natural Lighting
  - Reduced Amenities

Green only works if it is scalable and better than existing practices
GREEN MARKETING

- This Decade’s ‘New and Improved’
- Style Before Substance
- Undefined Terms
  - Green Certified
  - Eco Friendly
- Undefined Benefits
  - Sustainable Materials
  - Low Energy

‘Greenwash’ has confused Customers
COMPETITIVE LANDSCAPE

Used homes (90%+ of homes sold today)
- Distressed sale, no warranty, complex transactions
- Costly to operate, cost prohibitive to upgrade
- Wastes TWICE the energy and water actually needed

Conventional New Home
- Built to code (‘good enough’ bucket)
- Same old approach to building and marketing
- Reduced amenities to compete with distressed resale
- ‘Component’ approach to Green doesn’t realize synergies

Opportunity to create new market position around improved home function
THE MOTHER OF INVENTION

Single-family building permits
Three-month average, seasonally adjusted

Data: Haver Analytics/Commerce Dept.
CUSTOMER PRIORITIES

- Location
- Floor Plan
- Price
- ?
Consumer Choice drive change

TOP 5 REASONS TO BUY GREEN HOME / MAKE GREEN IMPROVEMENTS TO HOME

- Cost savings on power and heating: 94%
- Reduced use of water: 63%
- Reduce the impact I have on the environment: 60%
- Improved air quality in home: 53%
- Increase the value of your home: 50%
ENERGY CONSUMPTION

- Space Heating 31%
- Space Cooling 12%
- Water Heating 12%
- Lighting 11%
- Computers and Electronics 9%
- Appliances 9%
- Refrigeration 8%
- Other 8%
- Refrigeration 8%
ENERGY

3.5% Conduction  7%
3.5% Convection  33%
93%   Radiation   60%
CUSTOMER PRIORITIES

- Location
- Floor Plan
- Price
- ?
BE HEALTHY
BETTER IS BETTER

- Low Utility Costs (Energy Label)
- Healthier (VOCs, Merv 8, SPF, Sealed attic ...)
- More Comfortable (Low e2 windows, SPF, Conditioned attic, TStat...)
- Cleaner (Merv 8, SPF, sealed attic...)
- Quieter (Low e2 Windows, SPF, sealed attic ...)
- Safer (SPF, sealed attic, water management, Low Voc)
- Not Economically Reproducible in Resale
- Municipal Partnerships (Development Time)
- Appraisal Value / Underwriting Value / Resale Value

Without Changing Lifestyle
CREATING CHANGE

- Awareness
- Validation
- Monetization
MONETIZING THE VALUE

- Labeling
- Appraisals
- Underwriting
VALUING E(NERGY)

Additional available income for the family

5 Years:  >$7,000
10 Years:  >$15,000
20 Years:  >$37,000
30 Years:  >$65,000
### General Information:

- **Conditioned Area:** 1640 sq.ft
- **House Type:** Single Family Detached
- **Bedrooms:** 3

### Annual Estimated Energy Use

<table>
<thead>
<tr>
<th></th>
<th>Lyon’s Gate</th>
<th>New to Code</th>
<th>Average Resale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating</td>
<td>$ 49</td>
<td>$ 101</td>
<td>$ 194</td>
</tr>
<tr>
<td>Cooling</td>
<td>$ 320</td>
<td>$ 645</td>
<td>$ 987</td>
</tr>
<tr>
<td>Hot Water</td>
<td>$ 2</td>
<td>$ 254</td>
<td>$ 266</td>
</tr>
<tr>
<td>Lights / Appliances</td>
<td>$ 517</td>
<td>$ 599</td>
<td>$ 608</td>
</tr>
<tr>
<td>Photovoltaics</td>
<td>($ 347)</td>
<td>($ 0)</td>
<td>($ 0)</td>
</tr>
<tr>
<td>Service Charge</td>
<td>$ 180</td>
<td>$180</td>
<td>$180</td>
</tr>
</tbody>
</table>

**Total**  
- $ 720  
- $1,779  
- $2,235

*Your actual costs may be higher or lower than those illustrated, depending on individual lifestyle, number of persons living in the house and SRP’s fuel cost adjustment factor. SRP reviews the adjustment factor every six months, with any change made effective on July 1st and/or November 1st.*
RESIDENTIAL GREEN AND ENERGY EFFICIENT ADDENDUM

Addendum to the appraisal report for a residential property. The form includes sections for energy efficiency, insulation, water efficiency, windows, day lighting, appliances, and HVAC systems. The form provides checkboxes for various energy-saving features and spaces for inputting specific details such as dimensions, types, and brands. The form is designed to help appraisers consider the impact of energy-efficient elements on property value.

Additional resources to aid in the valuation of green properties can be found at the provided URL. The completion of this form can help appraisers make informed decisions about the value of properties with energy-efficient features.
SAVE: SENSIBLE ACCOUNTING TO VALUE ENERGY

- Senate Bill 1737
- Bipartisan Support
- Monetizes reduced cost of operation
  - Buyer Awareness
  - Offset Increased Cost to Builder
  - Opportunity to reduce $1.2B in annual waste
  - 83,000 jobs
<table>
<thead>
<tr>
<th>LOCATION</th>
<th>HVAC SIZE Comparison</th>
<th>Average Heating and Cooling Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic City, NJ EAST COAST</td>
<td>5 ton / 3.5 ton</td>
<td>$327 / $122</td>
</tr>
<tr>
<td>Breckenridge, CO ROCKY MOUNTAINS</td>
<td>5 ton / 2.5 ton</td>
<td>$477 / $186</td>
</tr>
<tr>
<td>Baton Rouge, LA GULF COAST</td>
<td>5 ton / 3.5 ton</td>
<td>$131 / $72</td>
</tr>
<tr>
<td>San Francisco, CA WEST COAST</td>
<td>5 ton / 2 ton</td>
<td>$200 / $77</td>
</tr>
</tbody>
</table>

- 2400 sq foot house; Fiberglass Insulated vs Open Cell foam
MERITAGE HOMES’ INNOVATION PROGRAM

- Superior opportunity for family Land Trust development
- Incentivize Municipal Partnerships
  - Plat revision, Permit times
- HR engagement, attraction, and retention tool
- Improve Appraisal and Underwriting Opportunities
- Credible Value to key Realtor / consumer emotional needs:
  - Reduce Cost
  - Reduce Risk (Health, Resale)
  - Advanced Options
  - Live Better
- Brand (Media / Awards / Warranty)
PROACTIVE EDUCATION

- “Too Tight”
- “Toxic”
- Fire Hazard
- Traps moisture
- “Unproven” / New
ADVANCED VENTILATION (HOT/HUMID)

- Reduced Sensible (windows, lights, insulation, attic)
- Worse w/ HRV / ERVs
- ASHRE 62.2 Latent
- Short cycle AC calls / low dehumidification
- High operating cost of dehumidifiers

- Energy efficient HVAC / Long duty calls = multispeed and advanced controls
CUSTOMER SEGMENTS
VALIDATION

- 2011 Energy Star Builder of the Year, EPA
- 2012 Project of the Year – NAHB’s National Green Building Award
- 2011 EnergyValue Housing Award (EVHA), NAHB
- 2011 Peoples’ Choice Award, NAHB Research Center
- 2013 US EPA Energy Star Sustained Excellence Award
- 2011 Builder of the Year, Builder and Developer Magazine
- 2010 Community of the Year, Green Home Builder Magazine
- 2012 CEO of the Year, Hanley Wood
- 2011 Crescordia Award (“To Grow in Harmony”), Valley Forward
- 2011 Best Green Building Program, McSAM People’s Choice Awards
- 2011 MAME “Best Energy Efficiency”, North State BIA
- 2012 MAME Green Builder of the Year, BIA Bay Area
- 2011 Green Pioneer, Phoenix Business Journal
- 1st NET ZERO Production Builder

Establishing New Brand
QUESTIONS?
THANK YOU!

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