



Build MEASURE
Build reduce
Build PRODUCE

SMART ENERGY SOLUTIONS



Sundogs Solutions, Inc

What we do:

- Energy Audit & Energy Upgrades
- New Construction & Renovations
- Solar (Solar Thermal & Photovoltaics)

Who we are:

- Training/Certifications/Affiliations: BBB, NAHB, , Energy Star, HPWES, GC, BPI, RESNETNABCEP, Advanced Energy, NCSU
- Over 30 years combined in construction (residential & commercial)



“Insanity: doing the same things over and over again and expecting different results.”

Albert Einstein

“We can't solve problems by using the same kind of thinking we used when we created them.”

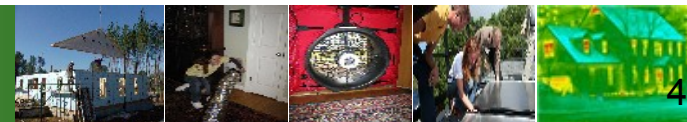
Albert Einstein



Energy Efficient Measures

US Department of Energy has established a priority list for cost effective energy efficiency upgrades for single-family homes:

1. Air sealing
2. Attic insulation
3. Sidewall insulation
4. Floor insulation
5. Seal and insulate ducts
6. Smart thermostats
7. Compact fluorescent lights
8. Refrigerator



Common Misconceptions

#1 “I need **new windows!**” - The EPA and DOE have demonstrated that the payback on windows is typically over 20 years. Rarely are windows ever a cost effective energy saving solution – comfort & function are OK.

#2 “**Tankless** water heaters are more energy efficient” – These devices require larger service, waste a lot of water and never stop costing you money. A more cost effective alternative is an efficient gas heater or better yet solar hot water.

#3 “**Radiant barriers** are a good investment” – Radiant barriers prevent heat from radiating through space from one surface to another. In North Carolina we are just about evenly split between a heating & cooling season and so gains in the summer are offset by losses in the winter. A more effective investment would be air sealing and additional insulation which works year round.



Resources

- www.energysavers.gov
- www.energystar.gov
- www.doe.gov
- www.eia.doe.gov/
- www.advancedenergy.org
- www.dsireusa.org
- www.sundogssolutions.com

