

**Small Home (1,708 sf)**

	IECC 2009 Code	Stretch Code without EnergyStar	Stretch Code - with ENERGY STAR <sup>4,5</sup> -
HERS Index Modeled in REM/Rate	86	70	70
Improvement Measures (changes relative to Basecase)	<ul style="list-style-type: none"> <li>- Unconditioned basement</li> <li>- Floor, R30</li> <li>- Walls, R21</li> <li>- Ceiling, R38 G2</li> <li>- Heating, 80 AFUE</li> <li>- Cooling, 13 SEER</li> <li>- Water Heating, .59 EF</li> <li>- Duct leakage, 8%</li> <li>- Infiltration, 7 ACH50</li> <li>- Efficient lighting, 50%</li> </ul>	<ul style="list-style-type: none"> <li>- Ceiling, R60 G1</li> <li>- Heating, 94 AFUE</li> <li>- Water Heating, .62 EF</li> <li>- Infiltration, 5 ACH50</li> <li>- Efficient lighting, 75%</li> <li>- Exhaust Only Ventilation</li> </ul>	<ul style="list-style-type: none"> <li>- Ceiling, R60 G1</li> <li>- Heating, 94 AFUE</li> <li>- Water Heating, .62 EF</li> <li>- Infiltration, 5 ACH50</li> <li>- Duct leakage, 6%</li> <li>- Efficient lighting, 80%</li> <li>- Exhaust Only Ventilation</li> </ul>
Improvement Costs		\$ 3,262	\$ 3,643
HERS Rater Fee <sup>1</sup>		\$ 700	\$ 700
HERS Rater reimbursement <sup>2</sup>		-	\$ (700)
ENERGY STAR Incentive <sup>3</sup>		-	\$ (750)
Total Improvement Costs		\$ 3,962	\$ 2,893
Mortgage Interest Rate		6%	6%
Loan Term (Years)		30	30
Annual Incremental Mortgage Payment		\$ 288	\$ 210
Annual Energy Costs <sup>6</sup>	\$ 3,754	\$ 3,171	\$ 3,159
Annual Energy Savings from Baseline		\$ 583	\$ 595
<b>Annual Cash Flow</b>	\$ -	\$ 295	\$ 385

**Baseline Home (2,672 sf)**

HERS Index Modeled in REM/Rate	IECC 2009 Code	Stretch Code without EnergyStar	Stretch Code - with ENERGY STAR <sup>4,5</sup> -
	86	70	70
Improvement Measures (changes relative to Basecase)	<ul style="list-style-type: none"> <li>- Unconditioned basement</li> <li>- Floor, R30</li> <li>- Walls, R21</li> <li>- Ceiling, R38 G2</li> <li>- Heating, 80 AFUE</li> <li>- Cooling, 13 SEER</li> <li>- Water Heating, .59 EF</li> <li>- Duct leakage, 8%</li> <li>- Infiltration, 7 ACH50</li> <li>- Efficient lighting, 50%</li> </ul>	<ul style="list-style-type: none"> <li>- Ceiling, R38 G1</li> <li>- Heating, 94 AFUE</li> <li>- Water heating, .62 EF</li> <li>- Infiltration, 4 ACH50</li> <li>- Efficient lighting, 75%</li> <li>- Exhaust Only Ventilation</li> </ul>	<ul style="list-style-type: none"> <li>- Ceiling, R38 G1</li> <li>- Heating, 94 AFUE</li> <li>- Water heating, .62 EF</li> <li>- Duct leakage, 6%</li> <li>- Infiltration, 5 ACH50</li> <li>- Efficient lighting, 80%</li> <li>- Exhaust Only Ventilation</li> </ul>
Improvement Costs		\$ 2,049	\$ 2,155
HERS Rater Fee <sup>1</sup>		\$ 700	\$ 700
HERS Rater reimbursement <sup>2</sup>		-	\$ (700)
ENERGY STAR Incentive <sup>3</sup>		-	\$ (750)
<b>Total Improvement Costs</b>		<b>\$ 2,749</b>	<b>\$ 1,405</b>
Mortgage Interest Rate		6%	6%
Loan Term (Years)		30	30
Annual Incremental Mortgage Payment		\$ 200	\$ 102
Annual Energy Costs <sup>6</sup>	\$ 3,970	\$ 3,463	\$ 3,454
Annual Energy Savings from Baseline		\$ 507	\$ 516
<b>Annual Cash Flow</b>	<b>\$ -</b>	<b>\$ 307</b>	<b>\$ 414</b>