Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Miami, FL

Project Title:
DHW-FL-56-2
Building Type: User
HERS BESTEST basecase home

TMY_City:FL_MIAMI Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:45:13

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5955 kWh	\$707
Cooling Fan	1033 kWh	\$123
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6988 kWh	\$830
Heating Electric	531 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
Total Heating	560 kWh	\$67
Hot Water	124 Therms	\$211
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$211
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	12652 kWh	\$1503
Total (Therms)	124 Therms	\$211
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$1714

Emissions (Calculated as Total - PV Produced)
SO2 = 27.76 Lbs NOX = 1168.93 Lbs CO2 = 8.27 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Miami, FL

Project Title:
DHW-FL-56-4
Building Type: User
HERS BESTEST basecase home

TMY_City:FL_MIAMI Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:45:42

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5993 kWh	\$712
Cooling Fan	1040 kWh	\$124
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	7033 kWh	\$836
Heating Electric	527 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
Total Heating	556 kWh	\$66
Hot Water	154 Therms	\$262
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$262
Ceiling Fans	0 kWh	\$0
Clothes Washer	80 kWh	\$9
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	1119 kWh	\$133
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	487 kWh	\$58
Refrigerator	0 kWh	\$0
Television	689 kWh	\$82
Total (kWh)	13227 kWh	\$1571
Total (Therms)	154 Therms	\$262
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$1834

Emissions (Calculated as Total - PV Produced)
SO2 = 29.02 Lbs NOX = 1447.59 Lbs CO2 = 8.79 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Miami, FL Project Title:
DHW-FL-62-2
Building Type: User
HERS BESTEST basecase home

TMY_City:FL_MIAMI Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:46:12

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5847 kWh	\$695
Cooling Fan	1014 kWh	\$120
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6861 kWh	\$815
Heating Electric	562 kWh	\$67
Heating Fan/Pump	31 kWh	\$4
Mechanical Vent Fan	0 kWh	\$0
Total Heating	593 kWh	\$70
Hot Water	107 Therms	\$182
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$182
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	12558 kWh	\$1492
Total (Therms)	107 Therms	\$182
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$1673

Emissions (Calculated as Total - PV Produced)
SO2 = 27.55 Lbs NOX = 1006.09 Lbs CO2 = 8.11 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Duluth, MN

Project Title:
DHW-MN-56-2
Building Type: User
HERS BESTEST basecase home

TMY_City:MN_DULUTH Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:46:35

End-Use	Energy Consumption	Annual Cost
Cooling Electric	430 kWh	\$51
Cooling Fan	79 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	509 kWh	\$60
Heating Electric	33200 kWh	\$3944
Heating Fan/Pump	1816 kWh	\$216
Mechanical Vent Fan	0 kWh	\$0
Total Heating	35016 kWh	\$4160
Hot Water	204 Therms	\$347
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$347
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	40629 kWh	\$4827
Total (Therms)	204 Therms	\$347
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$5174

Emissions (Calculated as Total - PV Produced)
SO2 = 86.01 Lbs NOX = 1966.63 Lbs CO2 = 29.58 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Duluth, MN

Project Title:
DHW-MN-56-4
Building Type: User
HERS BESTEST basecase home

TMY_City:MN_DULUTH Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:47:03

End-Use	Energy Consumption	Annual Cost
Cooling Electric	435 kWh	\$52
Cooling Fan	80 kWh	\$10
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	515 kWh	\$61
Heating Electric	33113 kWh	\$3934
Heating Fan/Pump	1811 kWh	\$215
Mechanical Vent Fan	0 kWh	\$0
Total Heating	34924 kWh	\$4149
Hot Water	263 Therms	\$446
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$446
Ceiling Fans	0 kWh	\$0
Clothes Washer	80 kWh	\$9
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	1119 kWh	\$133
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	487 kWh	\$58
Refrigerator	0 kWh	\$0
Television	689 kWh	\$82
Total (kWh)	41077 kWh	\$4880
Total (Therms)	263 Therms	\$446
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$5326

Emissions (Calculated as Total - PV Produced) SO2 = 86.96 Lbs NOX = 2511.43 Lbs CO2 = 30.23 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Duluth, MN

Project Title:
DHW-MN-62-2
Building Type: User
HERS BESTEST basecase home

TMY_City:MN_DULUTH Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:47:30

End-Use	Energy Consumption	Annual Cost
Cooling Electric	423 kWh	\$50
Cooling Fan	77 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	500 kWh	\$59
Heating Electric	33637 kWh	\$3996
Heating Fan/Pump	1839 kWh	\$218
Mechanical Vent Fan	0 kWh	\$0
Total Heating	35476 kWh	\$4215
Hot Water	184 Therms	\$312
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$312
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	41080 kWh	\$4880
Total (Therms)	184 Therms	\$312
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$5193

Emissions (Calculated as Total - PV Produced) SO2 = 86.97 Lbs NOX = 1777.67 Lbs CO2 = 29.77 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Miami, FL

Project Title:
DHW-FL-56-2
Building Type: User
HERS BESTEST basecase home

TMY_City:FL_MIAMI Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:45:13

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5955 kWh	\$707
Cooling Fan	1033 kWh	\$123
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6988 kWh	\$830
Heating Electric	531 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
Total Heating	560 kWh	\$67
Hot Water	124 Therms	\$211
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$211
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	12652 kWh	\$1503
Total (Therms)	124 Therms	\$211
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$1714

Emissions (Calculated as Total - PV Produced)
SO2 = 27.76 Lbs NOX = 1168.93 Lbs CO2 = 8.27 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Miami, FL

Project Title:
DHW-FL-56-4
Building Type: User
HERS BESTEST basecase home

TMY_City:FL_MIAMI Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:45:42

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5993 kWh	\$712
Cooling Fan	1040 kWh	\$124
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	7033 kWh	\$836
Heating Electric	527 kWh	\$63
Heating Fan/Pump	29 kWh	\$3
Mechanical Vent Fan	0 kWh	\$0
Total Heating	556 kWh	\$66
Hot Water	154 Therms	\$262
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$262
Ceiling Fans	0 kWh	\$0
Clothes Washer	80 kWh	\$9
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	1119 kWh	\$133
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	487 kWh	\$58
Refrigerator	0 kWh	\$0
Television	689 kWh	\$82
Total (kWh)	13227 kWh	\$1571
Total (Therms)	154 Therms	\$262
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$1834

Emissions (Calculated as Total - PV Produced)
SO2 = 29.02 Lbs NOX = 1447.59 Lbs CO2 = 8.79 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Miami, FL Project Title:
DHW-FL-62-2
Building Type: User
HERS BESTEST basecase home

TMY_City:FL_MIAMI Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:46:12

End-Use	Energy Consumption	Annual Cost
Cooling Electric	5847 kWh	\$695
Cooling Fan	1014 kWh	\$120
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	6861 kWh	\$815
Heating Electric	562 kWh	\$67
Heating Fan/Pump	31 kWh	\$4
Mechanical Vent Fan	0 kWh	\$0
Total Heating	593 kWh	\$70
Hot Water	107 Therms	\$182
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$182
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	12558 kWh	\$1492
Total (Therms)	107 Therms	\$182
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$1673

Emissions (Calculated as Total - PV Produced)
SO2 = 27.55 Lbs NOX = 1006.09 Lbs CO2 = 8.11 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Duluth, MN

Project Title:
DHW-MN-56-2
Building Type: User
HERS BESTEST basecase home

TMY_City:MN_DULUTH Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:46:35

End-Use	Energy Consumption	Annual Cost
Cooling Electric	430 kWh	\$51
Cooling Fan	79 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	509 kWh	\$60
Heating Electric	33200 kWh	\$3944
Heating Fan/Pump	1816 kWh	\$216
Mechanical Vent Fan	0 kWh	\$0
Total Heating	35016 kWh	\$4160
Hot Water	204 Therms	\$347
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$347
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	40629 kWh	\$4827
Total (Therms)	204 Therms	\$347
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$5174

Emissions (Calculated as Total - PV Produced)
SO2 = 86.01 Lbs NOX = 1966.63 Lbs CO2 = 29.58 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Duluth, MN

Project Title:
DHW-MN-56-4
Building Type: User
HERS BESTEST basecase home

TMY_City:MN_DULUTH Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:47:03

End-Use	Energy Consumption	Annual Cost
Cooling Electric	435 kWh	\$52
Cooling Fan	80 kWh	\$10
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	515 kWh	\$61
Heating Electric	33113 kWh	\$3934
Heating Fan/Pump	1811 kWh	\$215
Mechanical Vent Fan	0 kWh	\$0
Total Heating	34924 kWh	\$4149
Hot Water	263 Therms	\$446
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$446
Ceiling Fans	0 kWh	\$0
Clothes Washer	80 kWh	\$9
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	1119 kWh	\$133
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	487 kWh	\$58
Refrigerator	0 kWh	\$0
Television	689 kWh	\$82
Total (kWh)	41077 kWh	\$4880
Total (Therms)	263 Therms	\$446
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$5326

Emissions (Calculated as Total - PV Produced) SO2 = 86.96 Lbs NOX = 2511.43 Lbs CO2 = 30.23 Tons

Wholehouse Summary Project Title:

FSEC 111 Anywhere Lane Duluth, MN

Project Title:
DHW-MN-62-2
Building Type: User
HERS BESTEST basecase home

TMY_City:MN_DULUTH Elec Util: EnergyGauge Default Gas Util: Florida 2012 Run Date: 05/27/2015 15:47:30

End-Use	Energy Consumption	Annual Cost
Cooling Electric	423 kWh	\$50
Cooling Fan	77 kWh	\$9
Mechanical Vent Fan	0 kWh	\$0
Total Cooling	500 kWh	\$59
Heating Electric	33637 kWh	\$3996
Heating Fan/Pump	1839 kWh	\$218
Mechanical Vent Fan	0 kWh	\$0
Total Heating	35476 kWh	\$4215
Hot Water	184 Therms	\$312
Hot Water Pump	0 kWh	\$0
Total Hot Water		\$312
Ceiling Fans	0 kWh	\$0
Clothes Washer	59 kWh	\$7
Dehumidifier	0 kWh	\$0
Dishwasher	0 kWh	\$0
Dryer Electric	821 kWh	\$98
Lighting	1863 kWh	\$221
Miscellaneous	1401 kWh	\$166
Pool Pump	0 kWh	\$0
Range Electric	409 kWh	\$49
Refrigerator	0 kWh	\$0
Television	551 kWh	\$65
Total (kWh)	41080 kWh	\$4880
Total (Therms)	184 Therms	\$312
Total (Oil Gallons)	0 Gallons	\$0
Total (Propane Gallons)	0 Gallons	\$0
PV Produced (kWh) Assumes net metering	0 kWh	\$0
Total Cost		\$5193

Emissions (Calculated as Total - PV Produced) SO2 = 86.97 Lbs NOX = 1777.67 Lbs CO2 = 29.77 Tons