

Public Housing Utility Allowance Estimates

**Greer Housing Authority
Utility Allowance Estimates
2025**

SC 16-6, North Gate	
	Electric
1 Bedroom	84.00
2 Bedroom	102.00
3 Bedroom	117.00

SC 16-6
North Gate

ANNUAL ELECTRICAL CONSUMPTION ITEMIZATION (kWh)

<u>Unit Type</u>	<u>Lights</u>	<u>Refrigerator</u>	<u>Fans/Heat</u>	<u>DHW</u>	<u>Cooking</u>	<u>Misc</u>	<u>Total</u>
1 Rowhouse End	410	485	3267	1481	933	707	7283
1 Rowhouse Middle	410	485	2911	1481	933	707	6927
2 Townhouse End	456	504	3958	2233	1067	818	9036
2 Townhouse Middle	456	504	3156	2233	1067	818	8234
3 Townhouse End	469	524	4663	2688	1200	1028	10572
3 Townhouse Middle	469	524	3764	2688	1200	1028	9673

ANNUAL NATURAL GAS CONSUMPTION ITEMIZATION (Therms)

<u>Unit Type</u>	<u>Heat</u>	<u>DHW</u>	<u>Cooking</u>	<u>Other</u>	<u>Total</u>
1 Rowhouse End				0	
1 Rowhouse Middle				0	
2 Townhouse End				0	
2 Townhouse Middle				0	
3 Townhouse End				0	
3 Townhouse Middle				0	

MONTHLY ELECTRICAL CONSUMPTION (kWh)

Unit Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.
1 Rowhouse End	1092	913	746	520	375	337	335	335	353	499	746	1031	607
1 Rowhouse Middle	1010	850	701	500	371	337	335	335	351	481	701	955	577
2 Townhouse End	1341	1124	922	648	473	426	423	423	445	622	922	1267	753
2 Townhouse Middle	1155	982	821	602	463	425	423	423	441	582	821	1096	686
3 Townhouse End	1574	1319	1080	757	551	495	492	492	518	726	1080	1487	881
3 Townhouse Middle	1365	1159	967	706	539	495	492	492	513	681	967	1295	806

MONTHLY ELECTRICAL COST

Unit Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.
1 Rowhouse End	\$142	\$120	\$100	\$74	\$57	\$53	\$52	\$52	\$54	\$71	\$100	\$134	\$84
1 Rowhouse Middle	\$131	\$112	\$95	\$72	\$57	\$53	\$52	\$52	\$54	\$69	\$95	\$125	\$81
2 Townhouse End	\$174	\$146	\$121	\$89	\$68	\$63	\$63	\$63	\$65	\$86	\$121	\$164	\$102
2 Townhouse Middle	\$150	\$128	\$109	\$83	\$67	\$63	\$63	\$63	\$65	\$81	\$109	\$142	\$93
3 Townhouse End	\$203	\$171	\$140	\$101	\$78	\$71	\$71	\$71	\$74	\$98	\$140	\$192	\$117
3 Townhouse Middle	\$177	\$150	\$126	\$96	\$76	\$71	\$71	\$71	\$73	\$93	\$126	\$168	\$108

DHW Calculations

Number of Bedrooms:	1 Bedrooms
Number of Occupants:	1.1 Occupants
Consumption Rate:	10.0 Gallons/Occupant/Day
Specific Heat of Water:	0.999 Btu/lb/F
Specific Volume of Water:	62.32 lb/cf
Volume Conversion:	7.48055 gal/cf
Heuristic Exponent:	0.68
Service Water Inlet Temperature:	55 F
Hot Water Supply Temperature:	120 F
Delta T:	65 F
Calender Schedule:	365 days/yr
Daily Schedule:	24 hrs/day
Total Operating Hours:	8,760 hrs/yr
Air Temperature At Tank:	72 F
Tank Size:	40 gal
Tank Insulation (R-Value):	3 F-sf-hr/Btu
R-Value of Shell Plus Air:	0.62 F-sf-hr/Btu
System Efficiency:	100%
Standing Pilot?	No
Pilot Consumption Rate:	400 Btu/hr
Fuel Type:	Electric
Pilot Consumption:	0 kBtu/yr
Total Energy Lost:	2,884 kBtu/yr
Consumption Energy Required:	2,172 kBtu/yr
Primary Fuel Required:	1,481 kWh/Year

DHW Calculations

Number of Bedrooms:	2 Bedrooms
Number of Occupants:	2.5 Occupants
Consumption Rate:	9.6 Gallons/Occupant/Day
Specific Heat of Water:	0.999 Btu/lb/F
Specific Volume of Water:	62.32 lb/cf
Volume Conversion:	7.48055 gal/cf
Heuristic Exponent:	0.68
Service Water Inlet Temperature:	55 F
Hot Water Supply Temperature:	120 F
Delta T:	65 F
Calender Schedule:	365 days/yr
Daily Schedule:	24 hrs/day
Total Operating Hours:	8,760 hrs/yr
Air Temperature At Tank:	72 F
Tank Size:	40 gal
Tank Insulation (R-Value):	3 F-sf-hr/Btu
R-Value of Shell Plus Air:	0.62 F-sf-hr/Btu
System Efficiency:	100%
Standing Pilot?	No
Pilot Consumption Rate:	400 Btu/hr
Fuel Type:	Electric
Pilot Consumption:	0 kBtu/yr
Total Energy Lost:	2,884 kBtu/yr
Consumption Energy Required:	4,739 kBtu/yr
Primary Fuel Required:	2,233 kWh/Year

DHW Calculations

Number of Bedrooms:	3 Bedrooms
Number of Occupants:	3.5 Occupants
Consumption Rate:	9.1 Gallons/Occupant/Day
Specific Heat of Water:	0.999 Btu/lb/F
Specific Volume of Water:	62.32 lb/cf
Volume Conversion:	7.48055 gal/cf
Heuristic Exponent:	0.68
Service Water Inlet Temperature:	55 F
Hot Water Supply Temperature:	120 F
Delta T:	65 F
Calender Schedule:	365 days/yr
Daily Schedule:	24 hrs/day
Total Operating Hours:	8,760 hrs/yr
Air Temperature At Tank:	72 F
Tank Size:	40 gal
Tank Insulation (R-Value):	3 F-sf-hr/Btu
R-Value of Shell Plus Air:	0.62 F-sf-hr/Btu
System Efficiency:	100%
Standing Pilot?	No
Pilot Consumption Rate:	400 Btu/hr
Fuel Type:	Electric
Pilot Consumption:	0 kBtu/yr
Total Energy Lost:	2,884 kBtu/yr
Consumption Energy Required:	6,289 kBtu/yr
Primary Fuel Required:	2,688 kWh/Year

Heating Load Tables

Number of Bedrooms:	1	Unit Configuration:	End
Building Type:	Rowhouse	Number of Stories:	1
Window Type:	Double Hung	Window Infiltration Rate:	0.09 Btu/hr-sf-F
Window Glazing:	Double	Window Heat Loss:	3506 Btu/hr
Window Fit:	Tight	Window Infiltration:	435 Btu/hr
Window Area:	93 sf		
Storm Windows:	No		
Window U-Value:	0.73 Btu/hr-sf-F		
Door Fit:	Tight	Door Infiltration Rate:	0.07 Btu/hr-sf-F
Door Area:	38 sf	Door Heat Loss:	929 Btu/hr
Storm Doors:	No	Door Infiltration:	138 Btu/hr
Door U-Value:	0.47 Btu/hr-sf-F		
Exposed Floor Area:	725 sf	Floor Heat Loss:	1131 Btu/hr
Floor U-Value:	0.03 Btu/hr-sf-F		
Exposed Ceiling Area:	834 sf	Roof Heat Loss:	1301 Btu/hr
Ceiling U-Value:	0.03 Btu/hr-sf-F		
Exterior Wall Area:	533 sf	Wall Heat Loss	3049 Btu/hr
Wall U-Value:	0.11 Btu/hr-sf-F		
System Efficiency:	100%	Total Unit Heat Loss Rate:	10489 Btu/hr
Standing Pilot?	No	Pilot Operating Hours:	8760 hrs/yr
		Pilot Consumption:	0 kBtu/yr
		Pilot Btu/hr:	500 Btu/hr
Heating Fuel:	Electricity	Fan Operating Hours:	260 Hours
Heating System Fan?	Yes		
Fan Size:	250 Watts		
Heating Output:	42000 Btu/hr		

Heating Degree Days	
Heating Degree Days =	3272
Design Temp. Diff.(F) =	52
Correction Factor (CD) =	0.69

Fan Energy: **68** kWh
 Est. Heating System Consumption: **3202** kWh
 Total kWh: **3267** kWh

Heating Load Tables

Number of Bedrooms:	1	Unit Configuration:	Middle
Building Type:	Rowhouse	Number of Stories:	1
Window Type:	Double Hung	Window Infiltration Rate:	0.09 Btu/hr-sf-F
Window Glazing:	Double	Window Heat Loss:	3506 Btu/hr
Window Fit:	Tight	Window Infiltration:	435 Btu/hr
Window Area:	93 sf		
Storm Windows:	No		
Window U-Value:	0.73 Btu/hr-sf-F		
Door Fit:	Tight	Door Infiltration Rate:	0.07 Btu/hr-sf-F
Door Area:	38 sf	Door Heat Loss:	929 Btu/hr
Storm Doors:	No	Door Infiltration:	138 Btu/hr
Door U-Value:	0.47 Btu/hr-sf-F		
Exposed Floor Area:	725 sf	Floor Heat Loss:	1131 Btu/hr
Floor U-Value:	0.03 Btu/hr-sf-F		
Exposed Ceiling Area:	834 sf	Roof Heat Loss:	1301 Btu/hr
Ceiling U-Value:	0.03 Btu/hr-sf-F		
Exterior Wall Area:	333 sf	Wall Heat Loss	1905 Btu/hr
Wall U-Value:	0.11 Btu/hr-sf-F		
System Efficiency:	100%	Total Unit Heat Loss Rate:	9345 Btu/hr
Standing Pilot?	No	Pilot Operating Hours:	8760 hrs/yr
		Pilot Consumption:	0 kBtu/yr
		Pilot Btu/hr:	500 Btu/hr
Heating Fuel:	Electricity	Fan Operating Hours:	232 Hours
Heating System Fan?	Yes		
Fan Size:	250 Watts		
Heating Output:	42000 Btu/hr		

Heating Degree Days	
Heating Degree Days =	3272
Design Temp. Diff.(F) =	52
Correction Factor (CD) =	0.69

Fan Energy: 58 kWh
 Est. Heating System Consumption: 2853 kWh
 Total kWh: 2911 kWh

Heating Load Tables

Number of Bedrooms:	2	Unit Configuration:	End
Building Type:	Townhouse	Number of Stories:	2
Window Type:	Double Hung	Window Infiltration Rate:	0.09 Btu/hr-sf-F
Window Glazing:	Double	Window Heat Loss:	3393 Btu/hr
Window Fit:	Tight	Window Infiltration:	421 Btu/hr
Window Area:	90 sf		
Storm Windows:	No		
Window U-Value:	0.73 Btu/hr-sf-F		
Door Fit:	Tight	Door Infiltration Rate:	0.07 Btu/hr-sf-F
Door Area:	38 sf	Door Heat Loss:	929 Btu/hr
Storm Doors:	No	Door Infiltration:	138 Btu/hr
Door U-Value:	0.47 Btu/hr-sf-F		
Exposed Floor Area:	516 sf	Floor Heat Loss:	805 Btu/hr
Floor U-Value:	0.03 Btu/hr-sf-F		
Exposed Ceiling Area:	593 sf	Roof Heat Loss:	926 Btu/hr
Ceiling U-Value:	0.03 Btu/hr-sf-F		
Exterior Wall Area:	1065 sf	Wall Heat Loss	6092 Btu/hr
Wall U-Value:	0.11 Btu/hr-sf-F		
System Efficiency:	100%	Total Unit Heat Loss Rate:	12704 Btu/hr
Standing Pilot?	No	Pilot Operating Hours:	8760 hrs/yr
		Pilot Consumption:	0 kBtu/yr
		Pilot Btu/hr:	500 Btu/hr
Heating Fuel:	Electricity	Fan Operating Hours:	315 Hours
Heating System Fan?	Yes		
Fan Size:	250 Watts		
Heating Output:	42000 Btu/hr		

Heating Degree Days

Heating Degree Days =	3272	E
Design Temp. Diff.(F) =	52	
Correction Factor (CD) =	0.69	

Fan Energy: **79** kWh
 Est. Heating System Consumption: **3879** kWh
 Total kWh: **3958** kWh

Heating Load Tables

Number of Bedrooms:	2	Unit Configuration:	Middle
Building Type:	Townhouse	Number of Stories:	2
Window Type:	Double Hung	Window Infiltration Rate:	0.09 Btu/hr-sf-F
Window Glazing:	Double	Window Heat Loss:	3393 Btu/hr
Window Fit:	Tight	Window Infiltration:	421 Btu/hr
Window Area:	90 sf		
Storm Windows:	No		
Window U-Value:	0.73 Btu/hr-sf-F		
Door Fit:	Tight	Door Infiltration Rate:	0.07 Btu/hr-sf-F
Door Area:	38 sf	Door Heat Loss:	929 Btu/hr
Storm Doors:	No	Door Infiltration:	138 Btu/hr
Door U-Value:	0.47 Btu/hr-sf-F		
Exposed Floor Area:	516 sf	Floor Heat Loss:	805 Btu/hr
Floor U-Value:	0.03 Btu/hr-sf-F		
Exposed Ceiling Area:	593 sf	Roof Heat Loss:	926 Btu/hr
Ceiling U-Value:	0.03 Btu/hr-sf-F		
Exterior Wall Area:	615 sf	Wall Heat Loss	3518 Btu/hr
Wall U-Value:	0.11 Btu/hr-sf-F		
System Efficiency:	100%	Total Unit Heat Loss Rate:	10130 Btu/hr
Standing Pilot?	No	Pilot Operating Hours:	8760 hrs/yr
		Pilot Consumption:	0 kBtu/yr
		Pilot Btu/hr:	500 Btu/hr
Heating Fuel:	Electricity	Fan Operating Hours:	251 Hours
Heating System Fan?	Yes		
Fan Size:	250 Watts		
Heating Output:	42000 Btu/hr		

Heating Degree Days	
Heating Degree Days =	3272
Design Temp. Diff.(F) =	52
Correction Factor (CD) =	0.69

Fan Energy: **63** kWh
 Est. Heating System Consumption: **3093** kWh
 Total kWh: **3156** kWh

Heating Load Tables

Number of Bedrooms:	3	Unit Configuration:	End
Building Type:	Townhouse	Number of Stories:	2
Window Type:	Double Hung	Window Infiltration Rate:	0.09 Btu/hr-sf-F
Window Glazing:	Double	Window Heat Loss:	3845 Btu/hr
Window Fit:	Tight	Window Infiltration:	477 Btu/hr
Window Area:	102 sf		
Storm Windows:	No		
Window U-Value:	0.73 Btu/hr-sf-F		
Door Fit:	Tight	Door Infiltration Rate:	0.07 Btu/hr-sf-F
Door Area:	38 sf	Door Heat Loss:	929 Btu/hr
Storm Doors:	No	Door Infiltration:	138 Btu/hr
Door U-Value:	0.47 Btu/hr-sf-F		
Exposed Floor Area:	700 sf	Floor Heat Loss:	1092 Btu/hr
Floor U-Value:	0.03 Btu/hr-sf-F		
Exposed Ceiling Area:	805 sf	Roof Heat Loss:	1256 Btu/hr
Ceiling U-Value:	0.03 Btu/hr-sf-F		
Exterior Wall Area:	1264 sf	Wall Heat Loss	7230 Btu/hr
Wall U-Value:	0.11 Btu/hr-sf-F		
System Efficiency:	100%	Total Unit Heat Loss Rate:	14967 Btu/hr
Standing Pilot?	No	Pilot Operating Hours:	8760 hrs/yr
		Pilot Consumption:	0 kBtu/yr
		Pilot Btu/hr:	500 Btu/hr
Heating Fuel:	Electricity	Fan Operating Hours:	371 Hours
Heating System Fan?	Yes		
Fan Size:	250 Watts		
Heating Output:	42000 Btu/hr		

Heating Degree Days

Heating Degree Days =	3272
Design Temp. Diff.(F) =	52
Correction Factor (CD) =	0.69

Fan Energy:	93 kWh
Est. Heating System Consumption:	4570 kWh
Total kWh:	4663 kWh

Heating Load Tables

Number of Bedrooms:	3	Unit Configuration:	Middle
Building Type:	Townhouse	Number of Stories:	2
Window Type:	Double Hung	Window Infiltration Rate:	0.09 Btu/hr-sf-F
Window Glazing:	Double	Window Heat Loss:	3845 Btu/hr
Window Fit:	Tight	Window Infiltration:	477 Btu/hr
Window Area:	102 sf		
Storm Windows:	No		
Window U-Value:	0.73 Btu/hr-sf-F		
Door Fit:	Tight	Door Infiltration Rate:	0.07 Btu/hr-sf-F
Door Area:	38 sf	Door Heat Loss:	929 Btu/hr
Storm Doors:	No	Door Infiltration:	138 Btu/hr
Door U-Value:	0.47 Btu/hr-sf-F		
Exposed Floor Area:	700 sf	Floor Heat Loss:	1092 Btu/hr
Floor U-Value:	0.03 Btu/hr-sf-F		
Exposed Ceiling Area:	805 sf	Roof Heat Loss:	1256 Btu/hr
Ceiling U-Value:	0.03 Btu/hr-sf-F		
Exterior Wall Area:	760 sf	Wall Heat Loss	4347 Btu/hr
Wall U-Value:	0.11 Btu/hr-sf-F		
System Efficiency:	100%	Total Unit Heat Loss Rate:	12084 Btu/hr
Standing Pilot?	No	Pilot Operating Hours:	8760 hrs/yr
		Pilot Consumption:	0 kBtu/yr
		Pilot Btu/hr:	500 Btu/hr
Heating Fuel:	Electricity	Fan Operating Hours:	300 Hours
Heating System Fan?	Yes		
Fan Size:	250 Watts		
Heating Output:	42000 Btu/hr		

Heating Degree Days	
Heating Degree Days =	3272
Design Temp. Diff.(F) =	52
Correction Factor (CD) =	0.69

Fan Energy: **75** kWh
 Est. Heating System Consumption: **3689** kWh
 Total kWh: **3764** kWh

Lighting Tables

Bedrooms: 1
Description: Rowhouse

<u>Area Description</u>	<u># fixtures</u>	<u>watts/fixture</u>	<u>hours/day</u>	<u>hours/year</u>	<u>kWh/year</u>
basement					
bathroom	1	36	2	730	26
bedroom	1	18	2	730	13
closet					
dining room	1	18	2	730	13
hallway	1	18	1	365	7
kitchen	1	18	4	1,460	26
lamps	2	100	4	1,460	292
laundry					
living room					
pantry					
porch	2	9	5	1,825	33
stairs					
storage					
utility					

Total kwh per unit:**410**

Lighting Tables

Bedrooms: 2
Description: Townhouse

<u>Area Description</u>	<u># fixtures</u>	<u>watts/fixture</u>	<u>hours/day</u>	<u>hours/year</u>	<u>kWh/year</u>
basement					
bathroom	2	36	2	730	53
bedroom	2	18	2	730	26
closet					
dining room	1	18	2	730	13
hallway	2	18	1	365	13
kitchen	1	18	4	1,460	26
lamps	2	100	4	1,460	292
laundry					
living room					
pantry					
porch	2	9	5	1,825	33
stairs					
storage					
utility					

Total kwh per unit:**456**

Lighting Tables

Bedrooms: 3
Description: Townhouse

<u>Area Description</u>	<u># fixtures</u>	<u>watts/fixture</u>	<u>hours/day</u>	<u>hours/year</u>	<u>kWh/year</u>
basement					
bathroom	2	36	2	730	53
bedroom	3	18	2	730	39
closet					
dining room	1	18	2	730	13
hallway	2	18	1	365	13
kitchen	1	18	4	1,460	26
lamps	2	100	4	1,460	292
laundry					
living room					
pantry					
porch	2	9	5	1,825	33
stairs					
storage					
utility					

Total kwh per unit:**469**