



Appendix I

**Residential Model Good/Better/Best Measures and Cost
Scenarios**

SF Electric Base House → Good		Cost/unit	unit	qty	Cost	
Add Insulation to R38 - Grade III - Attic	Add 6" Cellulose	\$ 0.87	sq ft	960	\$ 835.20	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	32	\$ 75.20	Otter
additional labor	labor	\$ 50.00	hour	5	\$ 250.00	Otter
Doors	36" Steel Insulated Doors	\$ 913.50	door	2	\$ 1,827.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	9	\$ 144.00	Otter
CFL Bulbs	15W Spiral	\$ 8.00	bulb	16	\$ 128.00	Otter
Audit					\$ 150.00	
					\$ 3,409.40	

SF Electric Base House → Better		Cost/unit	unit	qty	Cost	
Add Insulation to Attic	Add 6" Cellulose	\$ 0.87	sq ft	960	\$ 835.20	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	32	\$ 75.20	Otter
additional labor	labor	\$ 50.00	hour	5	\$ 250.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	16	\$ 256.00	Otter
CFL Bulbs	15W Spiral	\$ 8.00	bulb	11	\$ 88.00	Otter
Windows	Double Pane Low E	\$ 400.00	window	14	\$ 5,600.00	
Doors	Slider	\$ 1,500.00	door	1	\$ 1,500.00	Otter + labor
Doors	36" Steel Insulated Doors	\$ 913.50	door	2	\$ 1,827.00	Otter
DHW	Marathon unit	\$ 600.00	unit	1	\$ 600.00	GDS/ECM
Refrigerator	ENERGY STAR Unit	\$ 1,865.00	unit	1	\$ 1,865.00	
Dishwasher	ENERGY STAR Unit	\$ 565.00	unit	1	\$ 565.00	
`	Per CFM	\$ 0.80	cfm	500	\$ 400.00	Otter
Audit					\$ 150.00	
					\$ 14,011.40	

SF Electric Base House → Best		Cost/unit	unit	qty	Cost	
Add Insulation to Attic	Add 6" Cellulose	\$ 0.87	sq ft	960	\$ 835.20	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	32	\$ 75.20	Otter
additional labor	labor	\$ 50.00	hour	6	\$ 300.00	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	12	\$ 960.00	Otter
CFL Fixtures	Exterior Fixtures	\$ 80.00	fixture	3	\$ 240.00	Otter
CFL bulbs	Capsule	\$ 16.00	bulb	8	\$ 128.00	Otter
Premium Windows	Double Pane Low E - 0.32	\$ 500.00	window	14	\$ 7,000.00	
Doors	Slider - 0.32	\$ 2,100.00	door	1	\$ 2,100.00	Otter + Premiun
Doors	36" Steel Insulated Doors	\$ 913.50	door	2	\$ 1,827.00	Otter
Air sealing	Per CFM	\$ 0.80	cfm	1000	\$ 800.00	Otter
Foam Kit	kit	\$ 175.00	kit	1	\$ 175.00	foam kit
Foam/labor to exceed air sealing	Labor attic/mech	\$ 50.00	hour	8	\$ 400.00	Otter
Ductless Heatpump	2 unit	\$ 7,000.00	system	1	\$ 7,000.00	GDS ECM
Programmable T-stat	Unit + Labor	\$ 109.02	unit	2	\$ 218.04	Otter
Remove Baseboard	labor	\$ 50.00	hour	8	\$ 400.00	Otter
drywall finish/repair	baseboard repair 6' lengths	\$ 127.33	item	21	\$ 2,673.93	Otter
DHW	Marathon unit	\$ 600.00	unit	1	\$ 600.00	GDS ECM
Refrigerator	ENERGY STAR Unit	\$ 1,865.00	unit	1	\$ 1,865.00	
Dishwasher	ENERGY STAR Unit	\$ 565.00	unit	1	\$ 565.00	
RIM	2" spray foam unc bsmt	\$ 3.50	LF	128	\$ 448.00	Retrofit - Spray Foam estimate
Insulate FW	2" Rigid Foam installed	\$ 2.38	sq ft	1024	\$ 2,437.12	
Add Insulation to Walls	Blown in Fiberglass to Cavity	\$ 1.59	sq ft	2048	\$ 3,256.32	
Ventilation	Heat Recovery Ventilator	\$ 2,400.00	unit	1	\$ 2,400.00	
Audit					\$ 150.00	
					\$	36,853.81

MF Electric Base House → Good		Cost/unit	unit	qty	Cost	
Add Insulation to Attic	Add 6" Cellulose	\$ 0.87	sq ft	666.5	\$ 579.86	Otter
Attic Hatch Insulation	R13.6 unit	\$ 200.09	unit	1	\$ 200.09	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	9	\$ 21.15	Otter
additional labor	labor	\$ 50.00	hour	3	\$ 150.00	Otter
Doors	36" Steel Insulated Doors	\$ 913.50	door	1	\$ 913.50	Otter
Air sealing	Per CFM	\$ 0.80	cfm	375	\$ 300.00	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	5	\$ 400.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	3	\$ 48.00	Otter
Audit					\$ 150.00	
					\$	2,762.60

MF Electric Base House → Better		Cost/unit	unit	qty	Cost	
Add Insulation to Attic	Add 6" Cellulose	\$ 0.87	sq ft	666.5	\$ 579.86	Otter
Attic Hatch Insulation	R13.6 unit	\$ 200.09	unit	1	\$ 200.09	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	9	\$ 21.15	Otter
additional labor	labor	\$ 50.00	hour	4	\$ 200.00	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	5	\$ 400.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	3	\$ 48.00	Otter
Windows	Double Pane Low E	\$ 400.00	window	7	\$ 2,800.00	
Doors	36" Steel Insulated Doors	\$ 913.50	door	1	\$ 913.50	Otter
Air sealing	Per CFM	\$ 0.80	cfm	625	\$ 500.00	Otter
Refrigerator	ENERGY STAR Unit	\$ 765.00	unit	1	\$ 765.00	
Dishwasher	ENERGY STAR Unit	\$ 565.00	unit	1	\$ 565.00	
Foam Kit	kit	\$ 175.00	kit	1	\$ 175.00	Foam Kit
Foam/labor to exceed air sealing	Labor attic/mech	\$ 50.00	hour	4	\$ 200.00	Otter
Seal Marriage Wall - Attic	2" spray foam	\$ 3.50	LF	34	\$ 119.00	Retrofit - Spray Foam estimate
DHW	Instant	\$ 1,200.00	unit	1	\$ 1,200.00	GDS
Audit					\$ 150.00	
					\$ 8,836.60	

MF Electric Base House → Best		Cost/unit	unit	qty	Cost	
Remove FG from Attic	Labor	\$ 50.00	hr	8	\$ 400.00	Otter
Spray Foam in Attic	6" Spray Foam	\$ 7.50	sq ft	666.5	\$ 4,998.75	Retrofit - Spray Foam estimate
Attic Hatch Insulation	R13.6 unit	\$ 200.09	unit	1	\$ 200.09	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	9	\$ 21.15	Otter
additional labor	labor	\$ 50.00	hour	4	\$ 200.00	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	5	\$ 400.00	Otter
CFL Fixtures	Exterior Fixtures	\$ 80.00	fixture	2	\$ 160.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	3	\$ 48.00	Otter
Premium Windows	Double Pane Low E - 0.32	\$ 500.00	window	7	\$ 3,500.00	
Doors	36" Steel Insulated Doors	\$ 913.50	door	1	\$ 913.50	Otter
Air sealing	Per CFM	\$ 0.80	cfm	750	\$ 600.00	Otter
Refrigerator	ENERGY STAR Unit	\$ 765.00	unit	1	\$ 765.00	
Dishwasher	ENERGY STAR Unit	\$ 565.00	unit	1	\$ 565.00	
Foam Kit	kit	\$ 175.00	kit	1	\$ 175.00	foam kit
Foam/labor to exceed air sealing	Labor attic/mech	\$ 50.00	hour	6	\$ 300.00	Otter
Ductless Heatpump	1 unit	\$ 4,000.00	system	1	\$ 4,000.00	GDS/Talbot ECM
Programmable T-stat	Unit + Labor	\$ 109.02	unit	1	\$ 109.02	GDS/Talbot ECM
Remove Baseboard	labor	\$ 50.00	hour	8	\$ 400.00	Otter
drywall finish/repair	baseboard repair 6' lengths	\$ 127.33	item	5	\$ 636.65	Otter
DHW	Instant	\$ 1,200.00	unit	1	\$ 1,200.00	GDS
Seal Marriage Wall - Attic	2" spray foam	\$ 3.50	LF	34	\$ 119.00	Retrofit - Spray Foam estimate
Add Insulation to Walls	Blown in Fiberglass to Cavity	\$ 1.59	sq ft	702	\$ 1,116.18	
Slab - Perimeter Insulation	2" Rigid - 2' Deep	\$ 2.38	sq ft	104	\$ 247.52	Otter
Site Work - for FW perimeter	Labor	\$ 50.00	hour	8	\$ 400.00	Otter
Ventilation	Heat Recovery Ventilator	\$ 600.00	unit	1	\$ 600.00	Ceiling Mounted ERV
Audit					\$ 150.00	
					\$ 22,224.86	

SF NG/LP/Oil Base House → Good		Cost/unit	unit	qty	Cost	
Add Insulation to R30 Attic	Add 6" Cellulose	\$ 0.87	sq ft	960	\$ 835.20	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	32	\$ 75.20	Otter
Duct Sealing	Mastic	\$ 33.17	gallon	1	\$ 33.17	Otter
Duct Insulation	R11 Vinyl	\$ 3.49	LF	180	\$ 628.20	Otter
Air sealing	Per CFM	\$ 0.80	cfm	1000	\$ 800.00	Otter
Attic, Bsmt -labor	labor	\$ 39.32	hour	13	\$ 511.16	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	9	\$ 144.00	Otter
CFL Bulbs	15W Spiral	\$ 8.00	bulb	16	\$ 128.00	Otter
Audit					\$ 150.00	
					\$ 3,304.93	

SF NG/LP/Oil Base House → Better		Cost/unit	unit	qty	Cost	
Cellulose 2x6 Basement Ceiling	5.5" Cellulose	\$ 1.07	sq ft	960	\$ 1,027.20	Otter
Add Insulation to R30 Attic	Add 6" Cellulose	\$ 0.87	sq ft	960	\$ 835.20	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	32	\$ 75.20	Otter
Duct Sealing	Mastic	\$ 33.17	gallon	1	\$ 33.17	Otter
Duct Insulation	R11 Vinyl	\$ 3.49	LF	180	\$ 628.20	Otter
Attic, Bsmt -labor	labor	\$ 39.32	hour	16	\$ 629.12	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	9	\$ 144.00	Otter
CFL Bulbs	15W Spiral	\$ 8.00	bulb	16	\$ 128.00	Otter
Windows	Double Pane Low E	\$ 400.00	window	14	\$ 5,600.00	
Doors	Slider	\$ 1,500.00	door	1	\$ 1,500.00	Otter + labor
Doors	36" Steel Insulated Doors	\$ 913.50	door	2	\$ 1,827.00	Otter
Add Insulation to Walls	Blown in Fiberglass to Cavity	\$ 1.59	sq ft	2048	\$ 3,256.32	
Air sealing	Per CFM	\$ 0.80	cfm	1500	\$ 1,200.00	Otter
Audit					\$ 150.00	
					\$ 17,033.41	

SF NG/LP/Oil Base House → Best		Cost/unit	unit	qty	Cost	
Cellulose 2x6 Basement Ceiling	5.5" Cellulose	\$ 1.07	sq ft	960	\$ 1,027.20	Otter
Remove FG from Attic	Labor	\$ 50.00	hr	8	\$ 400.00	Otter
Spray Foam in Attic	6" Spray Foam	\$ 7.50	sq ft	960	\$ 7,200.00	Retrofit - Spray Foam estimate
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	32	\$ 75.20	Otter
Duct Sealing	Mastic	\$ 33.17	gallon	1	\$ 33.17	Otter
Duct Insulation	R11 Vinyl	\$ 3.49	LF	180	\$ 628.20	Otter
Duct Sealing Labor	labor	\$ 39.32	hour	16	\$ 629.12	Otter
Foam Kit	kit	\$ 175.00	kit	1	\$ 175.00	foam kit
Foam/labor to exceed air sealing	Labor mech/bsmt	\$ 50.00	hour	8	\$ 400.00	Otter
Air sealing	Per CFM	\$ 0.80	cfm	1800	\$ 1,440.00	Otter
additional labor	labor	\$ 50.00	hour	8	\$ 400.00	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	12	\$ 960.00	Otter
CFL Fixtures	Exterior Fixtures	\$ 80.00	fixture	3	\$ 240.00	Otter
CFL bulbs	Capsule	\$ 16.00	bulb	8	\$ 128.00	Otter
Premium Windows	Double Pane Low E - 0.32	\$ 500.00	window	14	\$ 7,000.00	
Doors	Slider - 0.32	\$ 2,100.00	door	1	\$ 2,100.00	Otter + Premiun
Doors	36" Steel Insulated Doors	\$ 913.50	door	2	\$ 1,827.00	Otter
Add Insulation to Walls	Blown in Fiberglass to Cavity	\$ 1.59	sq ft	2048	\$ 3,256.32	
HE Furnace/Central Air	94 AFUE / 15 SEER	\$ 6,000.00	system	1	\$ 6,000.00	
Programmable T-stat	Unit + Labor	\$ 109.02	unit	2	\$ 218.04	Otter
DHW	Instant	\$ 1,200.00	unit	1	\$ 1,200.00	GDS
Refrigerator	ENERGY STAR Unit	\$ 1,865.00	unit	1	\$ 1,865.00	
Dishwasher	ENERGY STAR Unit	\$ 565.00	unit	1	\$ 565.00	
RIM	2" spray foam unc bsmt	\$ 3.50	LF	128	\$ 448.00	Retrofit - Spray Foam estimate
Insulate FW	2" Rigid installed	\$ 2.38	sq ft	1024	\$ 2,437.12	
Ventilation	Heat Recovery Ventilator	\$ 2,400.00	unit	1	\$ 2,400.00	
Audit					\$ 150.00	
				\$	43,202.37	

MF NG/LP/Oil Base House → Good		Cost/unit	unit	qty	Cost	
Add Insulation to Attic	Add 6" Cellulose	\$ 0.87	sq ft	666.5	\$ 579.86	Otter
Attic Hatch Insulation	R13.6 unit	\$ 200.09	unit	1	\$ 200.09	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	9	\$ 21.15	Otter
Duct Sealing	Mastic	\$ 33.17	gallon	0.25	\$ 8.29	Otter
Duct Insulation	R11 Vinyl	\$ 3.49	LF	84	\$ 293.16	Otter
Air sealing	Per CFM	\$ 0.80	cfm	250	\$ 200.00	Otter
additional labor	labor	\$ 50.00	hour	5	\$ 250.00	Otter
Doors	36" Steel Insulated Doors	\$ 913.50	door	1	\$ 913.50	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	5	\$ 400.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	3	\$ 48.00	Otter
Audit					\$ 150.00	
					\$ 3,064.05	

MF NG/LP/Oil Base House → Better		Cost/unit	unit	qty	Cost	
Add Insulation to Attic	Add 6" Cellulose	\$ 0.87	sq ft	666.5	\$ 579.86	Otter
Attic Hatch Insulation	R13.6 unit	\$ 200.09	unit	1	\$ 200.09	Otter
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	9	\$ 21.15	Otter
Duct Sealing	Mastic	\$ 33.17	gallon	0.25	\$ 8.29	Otter
Duct Insulation	R11 Vinyl	\$ 3.49	LF	84	\$ 293.16	Otter
Air sealing	Per CFM	\$ 0.80	cfm	750	\$ 600.00	Otter
additional labor	labor	\$ 50.00	hour	10	\$ 500.00	Otter
Windows	Double Pane Low E	\$ 400.00	window	7	\$ 2,800.00	
Doors	36" Steel Insulated Doors	\$ 913.50	door	1	\$ 913.50	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	5	\$ 400.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	3	\$ 48.00	Otter
Programmable T-stat	Unit + Labor	\$ 109.02	unit	1	\$ 109.02	GDS/ECM
Seal Marriage Wall - Attic	2" spray foam	\$ 3.50	LF	34	\$ 119.00	Retrofit - Spray Foam estimate
DHW	Instant	\$ 1,200.00	unit	1	\$ 1,200.00	GDS
Audit					\$ 150.00	
					\$ 7,942.07	

MF NG/LP/Oil Base House → Best		Cost/unit	unit	qty	Cost	
Remove FG from Attic	Labor	\$ 50.00	hr	8	\$ 400.00	Otter
Spray Foam in Attic	6" Spray Foam	\$ 7.50	sq ft	666.5	\$ 4,998.75	Retrofit - Spray Foam estimate
Seal Marriage Wall - Attic	2" spray foam	\$ 3.50	LF	34	\$ 119.00	Retrofit - Spray Foam estimate
Add wind baffles to attic	Soffit/eave air chutes	\$ 2.35	4' length	9	\$ 21.15	Otter
Air sealing	Per CFM	\$ 0.80	cfm	1375	\$ 1,100.00	Otter
Duct Sealing	Mastic	\$ 33.17	gallon	0.25	\$ 8.29	Otter
Duct Insulation	R11 Vinyl	\$ 3.49	LF	84	\$ 293.16	Otter
Sealing extra Labor	labor	\$ 39.32	hour	16	\$ 629.12	Otter
CFL Fixtures	Interior Fixtures	\$ 80.00	fixture	5	\$ 400.00	Otter
CFL Fixtures	Exterior Fixtures	\$ 80.00	fixture	2	\$ 160.00	Otter
CFL Bulbs	Capsule	\$ 16.00	bulb	3	\$ 48.00	Otter
Premium Windows	Double Pane Low E - 0.32	\$ 500.00	window	7	\$ 3,500.00	
Doors	36" Steel Insulated Doors	\$ 913.50	door	1	\$ 913.50	Otter + Premiun
Refrigerator	ENERGY STAR Unit	\$ 765.00	unit	1	\$ 765.00	
Dishwasher	ENERGY STAR Unit	\$ 565.00	unit	1	\$ 565.00	
Foam Kit	kit	\$ 175.00	kit	1	\$ 175.00	foam kit
Foam/labor to exceed air sealing	Labor attic/mech	\$ 50.00	hour	6	\$ 300.00	Otter
HE Furnace/Central Air	94 AFUE / 15 SEER	\$ 6,000.00	system	1	\$ 6,000.00	[Oil 85 AFUE/ 15 SEER]
Programmable T-stat	Unit + Labor	\$ 109.02	unit	1	\$ 109.02	GDS/ECM
DHW	Instant	\$ 1,200.00	unit	1	\$ 1,200.00	GDS
Add Insulation to Walls	Blown in Fiberglass to Cavity	\$ 1.59	sq ft	702	\$ 1,116.18	
Slab - Perimeter Insulation	2" Rigid - 2' Deep	\$ 2.38	sq ft	104	\$ 247.52	Otter
Site Work - for FW perimeter	Labor	\$ 50.00	hour	8	\$ 400.00	Otter
Ventilation	Heat Recovery Ventilator	\$ 600.00	unit	1	\$ 600.00	Ceiling Mounted ERV
Audit					\$ 150.00	
					\$	24,218.69