



# NEAT Recommended Measures

Kaw Nation Energy Audit and Recommended Measures

Agency  State  Run On  RunID   
 Client ID  Version  AuditID   
 Audit Name  Audit Date   
 Client Name  Auditor   
 Weather File  Setup Library Name

Comment

## Annual Energy and Cost Savings

Index	Recommended Measure	Components	Heating		Cooling		BaseLoad		Total (MMBtu)
			(MMBtu)	(\$)	(kWh)	(\$)	(kWh)	(\$)	
1	Infiltration Redctn		0.0	0	0	0	0	0	0.0
2	DWH Pipe Insulation		0.0	0	0	0	292	14	1.0
3	Smart Thermostat		2.4	34	0	0	0	0	2.4
4	Lighting Retrofits	LT1	0.0	0	0	0	1664	188	5.7
5	Low Flow Showerheads		0.0	0	0	0	50	2	0.2

## Energy Saving Measure Economics

Index	Recommended Measure	Components	Measure Savings (\$/yr)	Measure Cost (\$)	Measure SIR	Cumulative Cost (\$)	Cumulative SIR
1	DWH Pipe Insulation		14	15	10.5	15	10.5
2	Smart Thermostat		34	75	5.6	90	6.4
3	Lighting Retrofits	LT1	188	220	5.1	310	5.5
4	Low Flow Showerheads		2	20	1.5	330	5.2

## Materials

Index	Material	Type	Quantity	Units
1	Smart Thermostat		1	Each
2	Compact Fl.	18 Watt Flood	20	Each Lamp
3	DHW Pipe Insulation		1	Each
4	Low Flow Shower Heads		1	Each

## Pre/Post Retrofit Energy and Loads

Audit Name:

Client:

Date: 8/25/2010

Page 1 of 3

	<i>Pre Retrofit</i>		<i>Post Retrofit</i>	
	<i>Heating</i>	<i>Cooling</i>	<i>Heating</i>	<i>Cooling</i>
Annual load (MBtu/yr)	28.7	38.7	26.9	38.7
Annual Energy (MBtu/yr)	37.8	0.0	35.4	0.0
Heat loss/gain (kBtu/hr)	30.3	20.6	30.3	20.6
Output required (kBtu/hr)(ton)	34.8	1.8	34.8	1.8

### *Approximate Manual J Component Contributions to Peak HEATING Load*

<i>Component Type</i>	<i>Component Name</i>	<i>Area or Volume (Inf)</i>	<i>Pre Retrofit Load (Btu/h)</i>	<i>Post Retrofit Load (BTU/h)</i>
Wall	W1	351	1543.3	1543.3
Wall	W2	206	907.6	907.6
Wall	W3	254	1116.8	1116.8
Wall	W4	108	474.9	474.9
Wall	W5	64	281.4	281.4
Wall	W6	96	422.1	422.1
Window	WD1	15	434.6	434.6
Window	WD2	30	1008.3	1008.3
Window	WD3	30	1008.3	1008.3
Window	WD4	30	994.3	994.3
Window	WD5	30	1008.3	1008.3
Window	WD6	30	1008.3	1008.3
Door	DR1	18	581.9	581.9
Door	DR2	18	581.9	581.9
Attic	A1	1354	4483.3	4483.3
Foundation	F1	1354	7905.6	7905.6
Infiltration	Inf	10832	6503.3	6503.3
Total heat loss	Tot	0	30264.4	30264.4
Duct loss	Duct	0	4539.7	4539.7
Output required	Output	0	34804.1	34804.1

### *Approximate Manual J Component Contributions to Peak COOLING Load*

<i>Component Type</i>	<i>Component Name</i>	<i>Area or Volume (Inf)</i>	<i>Pre Retrofit Load (Btu/h)</i>	<i>Post Retrofit Load (BTU/h)</i>
Wall	W1	351	647.7	647.7
Wall	W2	206	380.9	380.9
Wall	W3	254	468.7	468.7
Wall	W4	108	199.3	199.3
Wall	W5	64	118.1	118.1
Wall	W6	96	177.1	177.1
Window	WD1	15	357.0	357.0
Window	WD2	30	2037.0	2037.0

*Audit Name:*

*Client:*

*Date:* 8/25/2010

*Page 2 of 3*

<i>Component Type</i>	<i>Component Name</i>	<i>Area or Volume (Inf)</i>	<i>Pre Retrofit Load (Btu/h)</i>	<i>Post Retrofit Load (BTU/h)</i>
Window	WD3	30	2037.0	2037.0
Window	WD4	30	2008.7	2008.7
Window	WD5	30	2037.0	2037.0
Window	WD6	30	2037.0	2037.0
Door	DR1	18	244.2	244.2
Door	DR2	18	244.2	244.2
Attic	A1	1354	3274.6	3274.6
Foundation	F1	1354	0.0	0.0
Infiltration	Inf	10832	2834.5	2834.5
People	People	0	276.0	276.0
Appliances	Appl	1	1200.0	1200.0
Total Sensible	TotS	0	20579.0	20579.0
Ducts	Ducts	0	0.0	0.0
Total (with ducts)	TotW	0	20579.0	20579.0
Size (tons)	Size	0	1.7	1.7
Latent Load (inf)	LatentI	0	1292.6	1292.6
Latent Load (occ)	LatentO	0	0.0	0.0
Latent Load (tot)	LatentT	0	1292.6	1292.6
Total Load	Total	0	21871.7	21871.7
Size (tons)	Size	0	1.8	1.8

## *Special Notes*

NOTE: Heat loss and Output required are only guides to sizing equipment.

NOTE: See NEAT User's Manual for further sizing details.

NOTE: Read cautions in NEAT User's Manual related to sizing results.

NOTE: (+) in the Materials list indicates there are more related User Defined Materials.