



197 State Route 18, Suite 3000 S. East Brunswick, New Jersey 08819  
[www.MechanicalinsulatorsLMCT.com](http://www.MechanicalinsulatorsLMCT.com)

**Pete Ielmini**, *Executive Director* 732-210-7084    **Gina Walsh**, *Deputy Director* 314-683-6136

The following pages will outline a case study, which shows the benefits in energy and cost savings of properly installed mechanical insulation.

Insulation is a proven means for conserving energy, reducing greenhouse gas emissions, increasing process productivity, providing a safer and more productive work environment, controlling condensation (which can lead to mold growth), supporting sustainable design technology and a host of other benefits.

Mechanical insulation does all of this, while providing a return on investment (ROI) rate, which is seldom rivaled. Despite the proven ROI, insulation is often overlooked and its benefits undervalued. Insulation is truly the lost or forgotten technology. Can you think of a more important time than now to think about how insulation can help you?

An insulation system is a technology, which needs to be engineered and maintained throughout the entire process. Several studies have estimated roughly 10 to 30 percent of all installed insulation is now missing or damaged.

The practice of not replacing or maintaining an insulation system in a timely and correct manner reduces the full benefits of insulation, and in return, decreases the ROI. In many cases, significant other issues - such as excessive energy loss, corrosion under insulation (CUI), mold development, increased cost of operations and reduced process productivity or efficiency - develop.

You can learn more on [www.MechanicalInsulatorsLMCT.com](http://www.MechanicalInsulatorsLMCT.com), where additional case studies can be viewed.

Please do not hesitate to contact me should you have any additional questions.  
Thank you,

Peter Ielimi

Executive Director  
Mechanical Insulators Labor Management Cooperative Trust

# ENERGY AUDIT HAMPTON HIGH

Total Heat Loss  
5 year savings of  
\$ 3601.95

CO<sub>2</sub> Reduction of  
4.32 MT/Year



## Benefits:

- Simple payback period
- CO<sub>2</sub> Reduction
- Personnel safety

*Audit Done By:  
Joshua Sherrard  
Certified Thermographer  
Certified 3E Plus Auditor*

## Vent Room B



Operating Temperature,	111°F	Emittance of Surface	0.95
Ambient Temperature,	70°F	Expected Useful Life of Insulation System	20 yrs.
Insulation selected	Fiberglass	Operating hours per year	8760
		Efficiency of fuel Conversion%	85%

THICKNESS	HEAT LOSS	FUEL COST \$/yr	1styr SAVINGS.	5yr. SAVINGS	CO2 EMMISSIONS
0	8604	\$ 441.36	\$ 441.36	\$ 2206.80	2.52
1	1980	\$ 98.28	\$ 343.08	\$ 1715.40	0.36
1.5	1575	\$ 77.04	\$ 364.32	\$ 1821.60	0.36

## Janitor Room

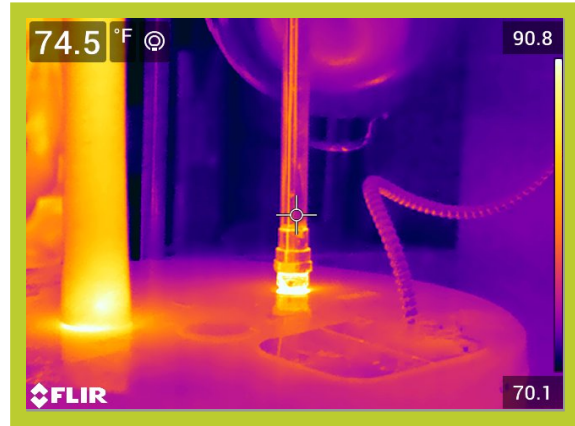


Operating Temperature,	111°F	Emittance of Surface	0.95
Ambient Temperature,	67°F	Expected Useful Life of Insulation System	20 yrs.
Insulation selected	Fiberglass	Operating hours per year	8760
		Efficiency of fuel Conversion%	85%

THICKNESS	HEAT LOSS	FUEL COST \$/yr	1styr SAVINGS.	5yr. SAVINGS	CO2 EMMISSIONS
0	3585	\$ 183.90	\$ 183.90	\$ 919.50	1.05
1	825	\$ 40.95	\$ 142.95	\$ 714.75	0.15
1.5	675	\$ 32.10	\$ 151.80	\$ 759.00	0.15



## Culinary Tech Room



Operating Temperature,  
Ambient Temperature,  
Insulation selected

120°F  
69°F  
Fiberglass

Emittance of Surface  
Expected Useful Life of Insulation System  
Operating hours per year  
Efficiency of fuel Conversion%

0.95  
20 yrs.  
8760  
85%

THICKNESS	HEAT LOSS	FUEL COST \$/yr	1styr SAVINGS.	5yr. SAVINGS	CO2 EMMISSIONS
0	5712	\$ 292.53	\$ 292.53	\$ 1462.65	1.47
1	1134	\$ 58.17	\$ 234.36	\$ 1171.80	0.21
1.5	924	\$ 47.67	\$ 244.86	\$ 1224.30	0.21