

*As seen in...*

# REAL ESTATE WEEKLY

WEDNESDAY, JULY 8, 2009

## Are you a candidate for heating oil conservation?

By LOU ROMANO, CEO,  
INFORMA ENERGY, INC.

There was a time when people thought that by hanging a new blue or yellow box on the wall in the boiler room, they were doing all they could to save energy in their buildings. In the good old days, when oil was \$0.40 per gallon that was more than enough to get some savings and you could feel good about yourself.

Having been in the oil business for over thirty years, I now know that the old standards just don't cut it any longer. It was customary to tell people that burning 600 to 700 gallons of oil annually per apartment was about where they should be and we would budget deliveries accordingly. Well, times have changed and I have seen buildings that operate at less than half the "old standard" amount.

The easiest way to know if you are a candidate for fuel savings is to look at your annual fuel use; gallons divided by the number of apartments in the building. Your fuel use should be 350 gallons or less per apartment for maximum efficiency. The higher the number of gallons per apartment, the more you will benefit from a fuel conservation program. For example, if your consumption is 700 gallons per apartment, you have the potential to reduce your fuel use by 40% or more. The easiest way to find out your annual

fuel use is to contact your oil company and ask them for a "fuel consumption report" for the previous twelve months. This report is a statement of your account. It lists all the deliveries to your building and gives you a total for the year.

OK, so you found out that you are using too much oil. What do you do now? Excessive fuel use is governed by several factors, the most controllable being reduction of waste. There are many ways to spot waste. The simplest way is what we call the "Jacket Method". If you walk into a boiler room during the dead of winter and the boiler room is so hot that you have to remove your jacket, you have a serious waste condition. Excessive heat in a boiler room can account for 5% or more of your annual fuel consumption.

Case in point: A 300 unit apartment building in White Plains. We sent out one of our BPI Certified Energy auditors to this building when the new client complained of too much fuel use. Our auditor practically had to strip to his underwear in the boiler room because it was so warm. The heat was this intense despite the fact that the client was running two exhaust fans, twenty-four hours a day in an attempt to get rid of the heat and make the boiler room temperature tolerable.

The auditor took out the infrared thermal imaging camera and it revealed the

source of heat to be an un-insulated boiler base. An infrared thermal camera shows a picture of a targeted area in the boiler room with colors corresponding to the surface temperature. In this case, the camera showed that the boiler base was all red indicating a surface temperature of 157 degrees. That's plenty of heat waste being exhausted to the outside of the building (see the attached picture).

Stopping this waste was simple once we knew where it was coming from. The solution was the installation of an additional boiler insulation jacket with special accommodations for the high heat output of the boiler base. After the insulation jacket was installed, it took over 24 hours for the boiler room to cool down. The client was amazed that the next day she had to wear a jacket in the boiler room because it was so cool.

In addition to the boiler, we insulated all the heating and domestic hot water pipes, installed a state of the art heat master control system and installed ultra high efficiency domestic hot water heaters. The net result was a reduction

in annual fuel consumption by over 40% with net fuel use of less than 328 Gallons per apartment.

The client was also advised to switch to a different grade of fuel oil for additional cost savings. The reduction in fuel use was sufficient enough to qualify for rebate monies from the NYSERDA Multi Family program. We are currently filing for grant money amounting to over 50% of the total project cost

I'm often asked, "How come no one ever told me this before?" or "Why didn't the burner service company ever tell me this stuff?" The fact is that until very recently, there seemed to be no reason to

focus on fuel conservation. Fuel providers were happy to sell you more oil or gas, service people only cared that the boiler was running, and most property owners thought that energy conservation was a waste of money since the commodity was relatively inexpensive. With continued volatility in the energy markets, we recommend exploring all avenues to attain fuel efficiency and thereby reduce expenditures. ■

*"If you walk into a boiler room during the dead of winter and the boiler room is so hot that you have to remove your jacket, you have a serious waste condition."*