



Energy Efficient Multifamily Buildings

A One Day Class for Management, Maintenance, and Fiscal Staff
May 9th or May 30th, 2007 :: Genzyme Amphitheater, Cambridge, MA

This class easily translates into a more comfortable building which is less expensive to run!

Session attendees will leave knowing, at minimum:

1. Ten low-cost measures that can begin saving the building owner money *tomorrow*
2. Simple ways to extend the life of building systems ... a punch list for any property owner
3. Adverse relationships that show up in higher utility bills and how to correct

Time	Agenda Item	Topics Covered
9:30- 10:15	Introduction to Energy Usage Analysis	Understanding energy usage in a building Identifying wasted energy usage in typical buildings Calculating Base Energy Usage Defining different types of fuels Understanding typical bills for fuel usage Understanding Heating Degree Days Calculating BTU/ft ² /HDD for a building Energy Measure cost effectiveness
10:15-10:30	BREAK	
10:30-12:30	Whole Building Systems Approach	Understanding of building as interrelated components Introduction of basic theories of Thermodynamics Building Envelope Understanding the components of a building envelope. Knowing proper window types and installation; knowledge of NFRC ratings
	Lighting, Appliance & Electricity Usage	“Real world” costs of lighting Lighting controls; Light level Timers and motion sensors Motor electrical usage Appliances; Refrigerators; Freezers Dishwashers; Washing machines; Dryers Air Conditioners Electric Heaters Analyze electric bills, usage, demand load and patterns Communication topics w/ manager & residents in this area
	Water Usage	Understanding major uses of water in a multi-family building Inspection and basic repairs of plumbing systems Water conservation Detecting and repairing water leaks
12:30-1:30	LUNCH	
1:30-3:00	Heating, Ventilating, and Air Conditioning Systems (HVAC)	Introduction to different types of heating plants Typical atmospheric gas appliance Modular gas boilers; Modular atmospheric gas boilers Typical scotch marine boilers; Power vented/sealed combustion systems System operations & maintenance:



		reference HCCA, ASHRAE, ACCA, PHCC and RSES Identifying and Understanding different heating controls. Boiler controls: Outdoor temperature reset Burner modulation controls; Pressuretrols vs Vaporstats EMS systems; thermostatic radiator valves
	Building Controls	Heating Laws and Client Comfort Reducing overheating Boiler/Burner Modulation Controls Modulating and Step firing controls Chronic “Modular” Boiler problems Thermostats Thermostatic Radiator Valves Energy Management Systems (EMS) The importance of instructions Procure, Read, Follow
3:00-3:15 BREAK		
3:15- 5:00	Health and Safety	Tobacco smoke; Carbon Monoxide CO Detecting & responding to high CO levels Low VOC paints Mold - Prevention, Identification, Mitigation Asbestos - Identification, Mitigation Lead - Identification, Mitigation Pest control; Fire safety Elevator safety Material Safety Data Sheets OSHA Guidelines

Registration:

Cost:
\$50.00

Please specify which date you will be attending, May 9th or May 30th

Send Check to:

Steven Winter Associates, Inc. Attention: Gwen Sheinfeld
307 Seventh Avenue, Suite 1201 New York, NY 10001

Questions:

Gwen Sheinfeld, 212-564-5800 x17 or gsheinfeld@swinter.com

