

Baxi Luna SAT

Innovative HVAC with submetering system for apartment buildings



ENERGY CONSERVATION PRACTICES PRODUCE 30% MORE SAVINGS

Construction of multi-family housing is leading the building industry again this year, and it is becoming more common practice for each apartment suite owner or tenant to pay their own utility bills, based on their actual use. Baxi, a leading European manufacturer and exporter globally of high efficiency heating and hot water solutions, offers a proven heating, air conditioning, solar water heating, hot and cold water system with submetering that appears to be right for the times.



Baxi Luna SAT is an integrated HVAC system for an apartment complex that also features a submetering network, with hot and cold water meters, as well as BTU heating meters located outside each unit. The submetering eliminates guesswork from the arduous task of energy use measurement, facilitates accurate per-suite utility bills processing, and also promotes conservation practices.

While Baxi Luna SAT is new to North America, it has a proven track record in Italy. European installations show significant savings generated by high efficiency heating equipment and solar water heating. Plus, the submetering system promotes conservation practices that are generating an additional 25 to 30% in utility cost savings.

CENTRAL MULTIPLE BOILER PLANT

Baxi Luna SAT installations in condominium apartment buildings near Milan feature a central high efficiency hydronic heating plant of three modulating, condensing Baxi wall-hung boilers, cascading with a staging controller. The boilers share a common vent system, and there are no natural gas lines running throughout the complex, where radiators provide ample heating for each suite.

With a heat output modulation range of 348 MBTU/hr down to 106 MBTU/hr each, the boilers achieve up to 98% energy efficiency, and emit 90% less NO_x and CO₂ emissions than conventional heating systems. The apartment building's hot water is provided largely by a solar water heating system, backed up by the boilers; there is one Baxi solar panel for each apartment adding further energy efficiency.



SUBMETERING NETWORK WITH BTU AND WATER METERS

Submetering boxes are located in hallways throughout the apartment building, with BTU and water meters visible to tenants so they can view up-to-the minute readings of their actual energy consumption. Transmitters and receivers allow for remote data transmission and collection, giving a property manager 24/7 computer access to all system data, including common areas as well as individual suite energy consumption data. The meter box located outside of suites, so any maintenance may be done without any disruption to the tenants.

As the Baxi Luna SAT track record in Europe underscores, less can indeed be more in apartment living- more efficient, more affordable and more desirable for everyone.

For further information, please visit www.wallhungboilers.com



INTEGRATED HEATING AND SUBMETERING INSTALLATIONS IN APARTMENT BUILDINGS IN ITALY INSPIRE BETTER ENERGY CONSERVATION PRACTICES THAT ARE GENERATING AN ADDITIONAL 25 TO 30% IN SAVINGS [1]. A CENTRAL BOILER PLANT OF THREE HIGH EFFICIENCY WALL-HUNG BOILERS SERVES AN ENTIRE 72-SUITE APARTMENT COMPLEX NEAR MILAN, AND REQUIRES JUST ONE GAS LINE AND ONE FLUE TERMINATION [2]. LOCATED OUTSIDE SUITES IN A SHARED CABINET, THE BTU AND WATER METERS IN A HEATING BOX ACCURATELY MEASURE EACH UNIT'S ACTUAL FUEL AND WATER USE, WHICH CAN BE MONITORED REMOTELY [3]. LEGISLATION IN ITALY REQUIRES THAT 50% OF A NEW APARTMENT BUILDING'S COMBINED TOTAL DOMESTIC HOT WATER USE IS SUPPLIED BY RENEWABLE ENERGY SOLUTIONS, SUCH AS A BAXI SOLAR SYSTEM [4].