

Casein Point

The Famous "Sleeper House" Gets a Lochinya Futuristic New HVAC System with Knight®

The Sculptured Home, a Colorado house featured in Woody Allen's 1973 sci-fi comedy Sleeper, recently underwent a green makeover that made its HVAC system as futuristic as its architecture.



hoto Courtesy of The Kentwood Company

The home's current owner, Larry Winkler, purchased the 7,500 square foot structure in 2010. After realizing that it was operating incredibly inefficiently and losing up to 60 percent of its heat every hour, he decided to transform it into an energy-efficient smart home. Now, not only does the remote-controlled house coordinate its lighting, A/V and security systems from flat screen TVs in a state-of-theart utility room, it also uses the same technological approach for its boiler system.

A State-of-the-Art System for a **Spaceship-Shaped Home**

Winkler hired Mark Eatherton of Mark Eatherton & Associates in Denver, to modernize the spaceship-shaped home's boiler system and improve its insulation. Eatherton found that the original system was undersized by approximately 50 percent in terms of Btu/hr, resulting in the system's inability to provide adequate heat for the expansive house when outside air temperatures dropped below 40 degrees Fahrenheit.



Eatherton chose to install two 285,000 Btu/hr KNIGHT Wall Mount Heating Boilers to increase the system capacity as well as its efficiency. The fully modulating KNIGHT adjusts heat output according to demand, offering up to 99 percent thermal efficiency.

PROJECT:

SCULPTURED HOUSE AKA SLEEPER HOUSE -EFFICIENCY UPGRADE

LOCATION: GENESEE MOUNTAIN, CO

LOCHINVAR PRODUCTS INSTALLED:

2 - KNIGHT WALL MOUNT BOILERS (KBN285)

INSTALLER:

Mark Eatherton of Mark Eatherton & Associates of Denver, CO



The two KNIGHTs service sixteen different radiant loads: 11 zones of baseboard heat emitters, four zones of radiant in-floor heating, and one snow melt zone servicing the driveway. The KNIGHT's SMART SYSTEM operating control features three set point temperature inputs, all of which are utilized to exact efficiency.

After installing the new system, Eatherton and his team had to make a transition within a day to avoid freezing and breaking the pipes. "It was crisis management at its finest," stated Eatherton.

With his advanced new system, Winkler can monitor the temperature of the boilers, outside air and domestic hot water from an LED TV in his Star Trek-style "command center." The SMART SYSTEM software, which is installed on a dedicated PC connected to the TV, provides graphs with minute-by-minute data and allows for reprogramming of boiler setpoints. Winkler also has the system programmed to send an alarm to his smart phone should any issues arise with the boilers.



Lighting, A/V, security systems and the Smart System control can be monitored in this state-of-the-art "command center".

According to Eatherton, "This past winter was extremely mild and the house was under construction, so while comfort in the home increased significantly, we haven't gotten an accurate read on the fuel bill savings yet. However, with all of the improvements made to the house, I expect to see a decrease in energy consumption of up to 30 to 40 percent this winter."

For more information, visit www.Lochinvar.com.









ABOUT LOCHINVAR

Lochinvar, LLC is a leading manufacturer of highefficiency water heaters, boilers, pool heaters and storage tanks. Based in Lebanon, TN, with facilities in Chicago, Detroit, Orlando, Tampa, Pompano Beach, Dallas and Phoenix, Lochinvar stocks all products in all locations.

