by Phil Sprague

Housekeeping and engineering work together to save energy

The latest trend among both large and small hotels is to have one manager in charge of both engineering and housekeeping. Sometimes this manager's title is Director of Property Operations or Director of Services. It is no secret in the lodging industry that housekeeping and engineering sometimes have different opinions on how to save energy and implement a good preventive maintenance program. A good synergy between these departments can significantly improve efficiency of employees and the quality of the product by implementing guestroom repairs in a speedy manner.

Preventive maintenance program

Obviously, housekeepers generally go into all guestrooms in the hotel on an almost daily basis. Engineers are lucky to get into all of the guestrooms twice per year. This means that housekeepers observe maintenance items much quicker than do the maintenance engineers. With one department head, this encourages housekeepers to report potential guest complaints much more efficiently. Leaking faucets, burned out lights, mold in tubs, broken towel bars, etc., can go on for months if not reported to maintenance. This directly affects energy use and the guest experience.

As discussed in previous TRC articles, a preventive maintenance (PM) program can range from an index card system to a computerized system, such as one provided by a company known as Espresso. PM systems can be extremely effective if implemented properly and have the cooperation of both the engineering and house-keeping departments. This is the area where the result of having one manager can be most effective. Rather than each department blaming each other for potential problems, the responsibility lies with the manager of the total operation.

The housekeeping department and the engineering department literally control about 90% of the energy consumed in a hotel. The efficiency of energy and water use is directly related to how well these departments administrate the operation and maintenance of all components in the hotel.

The engineering department operates on the theory of preventive maintenance. This requires lists of items in the hotel that must be maintained at predetermined intervals. The housekeeping department identifies problems throughout the guestrooms that are more related to current maintenance problems in the guestroom. By blending current and predicted maintenance, a significant improvement will be noticed by the guest and all the components in the guestroom.

Both housekeeping and engineering must be involved in the preventive maintenance program, regardless of its type. Housekeepers should be capable of processing preventive maintenance work orders in a quick and easy manner. If a toilet is overflowing, a housekeeper should be capable of reporting it to maintenance very quickly and easily. In order to overcome bilingual problems, a simple numerical code checklist should be developed. For example, a leaking showerhead could be code number 6. In the simplest form, the housekeeper can dial engineering and say code 6 in guestroom 102. In a more technical manner, computer software can enable a housekeeper to dial a specific extension from the guestroom phone and enter the code for repair. The computer will automatically generate a work order for engineers to respond to as quickly as possible.

The preventive maintenance program should also incorporate participation of the guest. Procedures should be developed whereby the guest can call one source, be it the operator or a predetermined extension, to report a problem that can be inserted into the preventive maintenance system immediately in order to ensure that the problem is corrected within a matter of less than 30 minutes. As one can see, there are significant overlapping responsibilities between housekeeping and engineering with regard to maintaining the quality of the hotel and conserving energy.

Energy conservation

As previously mentioned, both engineering and housekeeping have firm control of the amount of energy the hotel consumes by implementing procedures. It is the responsibility of engineering to provide the proper temperature of water to the guestroom, while it is the responsibility of housekeeping to make sure the water is not leaking in the guestroom or being wasted in other ways. This partnership of services to the hotel further supports the theory of having one manager over both departments.

Depending on the type of hotel, the guestroom block typically consumes anywhere from 50% to 80% of the energy consumed in the total hotel. Both housekeeping and engineering have a direct responsibility for the energy consumed in these areas. The manager of the housekeeping department should develop firm procedures for housekeepers to set controls in guestrooms properly and follow other procedures.

For example, housekeepers should not set air conditioning on "max" while they are cleaning the room and housekeepers should set the thermostats properly after the room is cleaned. The housekeeping/engineering manager should be responsible for informing housekeepers on a daily or weekly basis how thermostats should be set in rooms. This is a frequent and severe problem with regard to wasting energy in hotels. Numerous on-site audits always discover guestrooms set to maximum cooling while they are unoccupied, or maximum heating during unoccupied periods.

One concept to eliminate this problem is a weatherboard. This involves the use of a placard in housekeeping where house-keepers pick up their carts or are issued keys and room assignments every morning. This placard will depict a sketch of how the thermostat should be set for that given day.

Obviously, housekeepers can implement many other simple procedures that will save a significant amount of energy and improve comfort in the guestroom. Blackout draperies should be closed to within 6 inches after the room is cleaned to provide some light, yet save energy due to heat lost through the windows. Housekeepers should not leave water running in sinks while they are cleaning the bathroom. And, it is always a poor idea to leave the television on while the housekeepers are cleaning the rooms. This affects energy consumption and the efficiency of the housekeeper.

Synergy equals more control

From a global perspective, one can see that both housekeeping and engineering have the same Mission Statement related to their overall responsibilities. They are to maintain the property as efficiently as possible and control and reduce energy and water use wherever this can be accomplished without affecting guest comfort. The formal preventive maintenance system and specific procedures are the primary method of implementing this concept. Standardized procedures with regard to lighting, thermostats and other basic items are critical. The synergy between these two departments is almost instantaneously noticed by a guest upon entering the guestroom portion of the hotel. This concept will also provide the General Manager with a more direct link with regard to monitoring the performance of these two departments. ✧

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