



HOTEL/MOTEL HARDWARE AND KEYING

This Tech Talk deals with important factors to consider when selecting hardware and keying systems for hotels and motels. The term "key" as used herein applies in the broadest sense and includes cards used to operate electrified locks.

Hardware selection should be considered primarily from the following points:

- Life safety of guests and the public
- Security of guests and the public
- Usage
- Maintenance by management

Other than medical facilities, there is practically no other public facility operating 24 hours a day that is as varied in its use as hotels and motels. These facilities not only must provide for the protection and safety of individual guests, but also for groups using public areas, such as dining rooms, ballrooms and conference rooms.

THE GUEST ROOM

The primary consideration for the guest room is the lock, which should be of heavy duty construction to stand up under years of hard usage. Maintenance also is a very important factor. If a room cannot be rented due to an inoperative lock, management suffers loss of income. In addition, the lock must operate reliably in an emergency, even after prolonged usage.

Whether it is a heavy duty bored, interconnected, preassembled or mortise lock is a matter of choice on the part of the architect and the owner. All are available with the hotel/motel function. This function provides for a fixed or rigid outside

knob or lever (always locked) and a panic feature inside knob or lever (always operable.) This will be covered in more detail under the keying portion of this Tech Talk.

A hotel/motel lock should always have at least a 1/2" throw deadlocking latch bolt. It should include an outside indicator that shows the room is occupied when the guest depresses or turns a button inside. At the same time, it should shut out all keys except the Emergency Key. This key allows management to gain entrance in case of emergency or to shut out all other keys from operating the lock, thus preventing unauthorized entry.

Some local codes require 1" throw deadbolts in conjunction with a deadlocking latch bolt. This detail should be carefully checked before writing a specification or supplying locksets, if there is any doubt as to what is required.

Hotel management has been plagued for years by the loss of keys and, all too often, subsequent thefts. For this reason, when the order for locks is placed, extra cylinders should be purchased and kept in the owner's safe. This way, if keys are lost or not returned, it is easy to remove the existing cylinder or plug and replace it with a new one.

Cylinder replacement may be facilitated by using an interchangeable core cylinder. The removed cylinder need not be discarded. It can be switched to a lock on another door or rekeyed. Most important is that management and guests can be assured of a higher level of security.

It is imperative that a key control system of the proper size and style be furnished.

Management should control whether or not communicating doors between guest rooms are put into a usable privacy mode. A button lock can be

used, so each guest can lock the door for privacy deadlock should be used, which can only be locked or unlocked by management. Many locks on the market combine these two functions.

Communicating doors should also employ some method of sound control. A simple vinyl, felt or neoprene seal at the head, jambs and floor or one of the more sophisticated sound seal and automatic door bottom systems can be used.

Hinges used on guest room doors are also an important consideration. Always use three to a door unless the door height exceeds 7'6". Due to fire regulations in some major cities all guest room doors must be self-closing. In air-conditioned rooms, door closers help to hold down operating costs, as well as make the rooms more comfortable. The same holds true for retaining heat within the rooms.

NON-GUEST ROOM DOORS

Storage closet and utility areas are generally located on the guest room floors of a hotel. The lock functions for these areas should be rigid outside knobs or levers (always locked), operable only by key, and should always have deadlocking latch bolts, unless they have separate deadbolts.

ADMINISTRATIVE AND PUBLIC AREAS

The administrative area of the hotel or motel should be treated as any office building would be handled as it relates to lock functions, closers, etc. Always keep in mind that management must have control. This area is also subject to the same fire and safety requirements as all other floors.

The dining and public rooms should be treated the same as any other restaurant or public hall. Particular attention should be paid to proper hardware for labeled fire door conditions. Check local regulations for room capacity and for exit device and closer requirements. Pay particular attention to function or conference rooms. Many times such rooms are overlooked as to total capacity allowed and have only a lockset (and flush bolts for pairs) when exit devices may be required.

FIRE, SMOKE AND EXIT DOORS

Don't forget the stair towers in high-rise buildings, particularly the doors at the basement and ground levels. These should have anti-friction hinges, exit devices and door closers. Each of the doors between the stairs and each floor must have

when the two rooms are used jointly. Also, a cylinder antifriction hinges, a heavy-duty latch with at least a 1/2" throw (or, if labeled, an approved) latch and a non-hold-open door closer.

In certain large buildings some corridors will have smoke and fire barrier doors. Check carefully with the local authority having jurisdiction before specifying or supplying hardware for these doors, as some authorities have stringent requirements.

Often such doors are in pairs and held open at all times to facilitate traffic flow. They must be equipped with bearing hinges, magnetic holders, smoke detectors and/or heat rise indicators, door closers, either fire exit or automatic flush bolts on one leaf, and an approved heavy-duty latchset for the active leaf.

Also it is possible that one door could swing one way and the other the opposite way (double egress.) Treat these doors with a vertical rod exit device on each leaf.

The operation of the magnetic holders and detectors is such that when the heat or smoke reaches a certain level, the doors will close automatically. A break in the electric circuit will also close the doors, thereby making them fail-safe.

HOTEL KEYING

Hotels and motels, having a variety of functions and a multitude of employees, require key systems that are flexible but easily maintained. The major function of the buildings involves boarding transient guests from all walks of life. The management, therefore, is responsible for providing these people with the best possible protection during their stay.

Remember, in this Tech Talk the term "key" is used in the broadest sense and includes cards used to operate electrified locks. The following keying procedures generally are used:

<i>Guest Key</i>	Operates the cylinder(s) in the lock of a guest room.
<i>Maid's Key</i>	Operates a given number of locks on an entire guest floor or a particular area.
<i>Floor Master-key</i>	Operates most or all locks on an entire guest floor.
<i>Grand Master-key</i>	Operates most or all locks on all floors, except shops.
<i>Emergency GMK</i>	Operates all guest room door locks plus any other locks selected.

Proprietary information from



Door Security +
Safety Professionals

14150 Newbrook Drive,
Suite 200, Chantilly, VA 20151

Access compliments of



Display Key Issued to guests for protection of valuables, such as jewelry or fur samples. Locks door against all other keys except the Emergency Key and the Display Key.

Engineer's Key A designated masterkey used by maintenance personnel to operate selected locks under different masterkeys in a system using three or more levels of keying. Sometimes called a Maintenance Key.

All guest room doors should have a lock commonly referred to as a Hotel Guest Room Function. It has a fixed outside knob or lever, a deadlocking latch bolt and, preferably, a deadbolt. The inside knob or lever always operates and retracts both the latch and the deadbolt simultaneously. It should also have a feature that operates from the inside to shut out all keys except the Emergency Key, which is available only to management.

To enhance the security of the building as well as to allow for special conditions, the following recommendations should be considered:

- If guest rooms have a closet with a keyed lock, the Guest Key and Grand Masterkey should operate the cylinder. The Maid's Key or the Floor Masterkey *should not*.
- Cylinders in communicating door locks should not be operated by Guest Keys. The Floor Masterkeys and Grand Masterkeys should operate them and, at management's discretion, the Maid's Masterkey.
- Offices and shops under outside

management should not be on the hotel key system. Retail areas may be on a completely separate masterkey.

- In areas where guest rooms can be rented on an individual basis or as suites, key control must be rearranged to allow for these two optional conditions. When rooms are rented on an individual basis, guests are issued keys that will operate the individual room door locks ("B" or "C"). Each room door key will also operate door lock "A" leading from the corridor to the suite entry hall. (In some instances door lock "A" may be locked open and not require individual room keys to operate.)

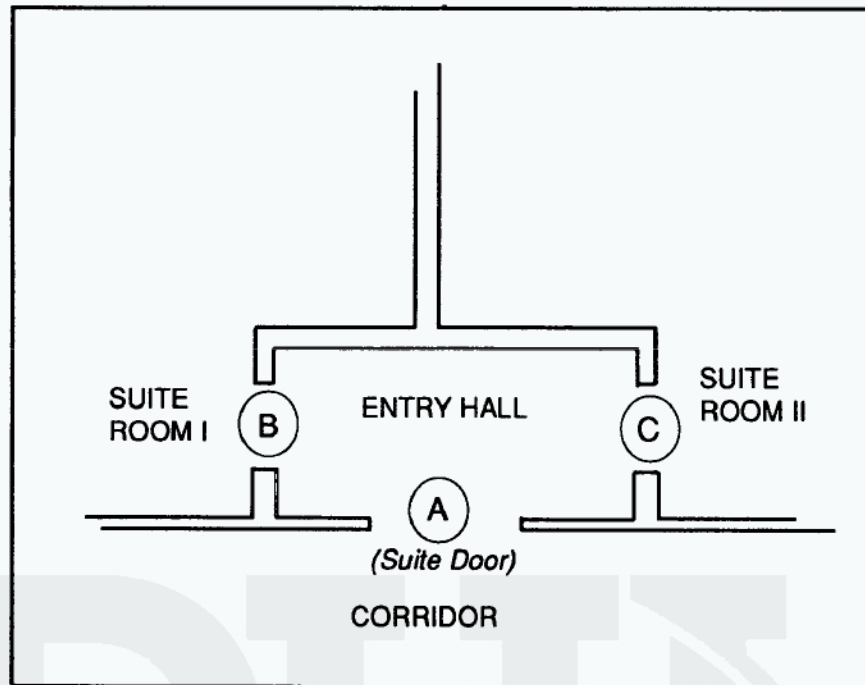
- When rooms are rented as a suite, the guest may be issued a suite masterkey to operate door locks "A", "B" and "C". Frequently, however, the guest is issued individual keys to door locks "B" and "C" for security reasons.

- The Building Maintenance Department should be encouraged to keep an inventory of parts, such as cylinders, key blanks and spare locks, for normal lock servicing as well as for emergencies.

- Instruction plates should be attached to the door or frame at approximately eye level height for guest convenience.

Hotel management can provide additional guest protection by switching cylinders periodically from one floor to another. This will confuse any previous guests who have duplicated their room keys with the thought of returning later to steal.

A follow-up visit with the hotel maintenance person will pay dividends. You become the source for supplies that very well could include more than hardware items. The fact that you cared enough to drop by will put you in good stead with your customer.



[NOTE: The preceding Tech Talk is the result of the merger of two former Tech Talks - *Hotel Keying* (Dale Cobb, AHC) and *Hotel/Motel Hardware* (Edward H. McCulloch, DAHC). These were combined to produce a single more convenient document. Additional contributors include members of the Technical Literature Review Committee.]

This document cannot guarantee the validity or accuracy of any data, claim, or opinion appearing in it. It is designed to provide accurate and authoritative information on the subject matter covered. The information is presented with the understanding that the publisher is not engaged in rendering legal, technical, or other expert professional services. If such assistance is required, the service of a competent professional should be sought. Product or service information does not constitute an endorsement, nor a DHI position concerning suitability.

Door Security +
Safety Professionals

Proprietary information from



14150 Newbrook Drive,
Suite 200, Chantilly, VA 20151

Access compliments of

