

# Material Planning: Administration of Equipment and Supplies



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The executive housekeeper's time appears thus far to have been occupied only with people matters, giving the impression that other forms of planning are of no consequence. Although staff planning may require great human engineering and is assuredly the most costly part of housekeeping operations, it is also necessary to plan for and become organized in material administration. **Administration** refers to the selection, purchasing, use, and control of items; **material** refers to the various product items that will be used by the department, all of which must be properly classified and categorized.

Planning for material acquisition and use parallels staff planning and must also be initiated when the new executive housekeeper joins the organization. In the case of linen and **software items**, it would be expected that some initial planning and procurement might already have taken place due to long lead times required for acquiring such material. In this chapter, we will continue planning for the opening of the model hotel. However, all knowledge gained through understanding these procedures and concepts is applicable to ongoing operations. We will begin with a discussion about budgeting and inventory control and will then present a complete analysis of materials.

## Material Budgets

**Budgets** are the plans by which resources required to generate revenues are allocated. There are many different types of budgets. Some allocate personnel; others deal with person-hours or with dollars. Plans that allo-

## CHAPTER OBJECTIVES

After studying the chapter, students should be able to:

1. Describe the role of the executive housekeeper as a materials administrator.
2. Differentiate between capital expenditure budgets and operating budgets.
3. Describe the use of the preopening budget.
4. Describe the management function of inventory controls.
5. Describe classification of materials in the hotel.
6. Describe the handling of materials in the opening of a property.
7. List and describe criteria for the selection of mattresses and beds.
8. List and describe criteria for the selection of furniture.
9. Describe the recent developments in lighting for the guestroom.
10. Describe developments in guestroom safes, in-room refreshment centers, and audiovisual equipment.
11. Describe ADA requirements for public accommodations.

cate material resources associated with generating revenue are a significant part of many budgets.

Two types of budgets most commonly used in hotel operations are capital expenditure budgets and operating budgets. When new properties are opened, preopening budgets are designed to guide the expenditure of resources through the event. Budgets should be prepared by the management of the departments to which they will apply. A review procedure normally takes place whereby upper levels of management comment, return for revision, and finally endorse departmental budgets for top management's approval. Once budgets are approved, they are used to guide departments to successful operations over the course of the year or period of time to which they apply.

### Capital Expenditure Budgets

**Capital expenditure** budgets allocate the use of capital assets that have a life span considerably in excess of one year; these are assets that are not normally used up in day-to-day operations. Because such items of material are capital in nature, they are considered to add to the capital investment of the company and are therefore subject to some form of **depreciation**. The hotel building is a capital asset that may be depreciated over a period of 25 or 30 years. **Furniture, fixtures, and equipment (FFE)** are capital assets whose depreciation schedules are somewhat shorter (3, 5, or 7 years) but are nonetheless depreciable. In hotel operations, the term **software** is sometimes used to describe certain types of depreciable fixtures.

In ongoing operations, once each fiscal year there is a call for capital expenditure budgets from the various departments. At this time the housekeeping department management is required to specify needs for funds to purchase FFE. Capital expenditure budgets might also include requests for funds to support renovation and modernization programs, since both add to the asset value of the property. Once budgets are approved and funds are made available, capital expenditure budgets are implemented by the various departments.

If unexpected needs arise for FFE during the budget year, the general manager usually must submit supplementary justification to ownership before making such expenditures. Depending on company policy, some general managers have authority to spend a finite amount of money in excess of capital expenditure budgets, but such spending is quite constrained. As an example, for one major hotel corporation whose capital expenditure budget may range in the millions of dollars for a given property, the authority of its general managers for excess spending without approval from higher authority is limited to \$500.

Before a specific item of equipment may be **capitalized**, there could be a requirement that the item have a life expectancy in excess of one year and that the cost be in excess of \$100. Should a specific item not meet these criteria, it would be **expensed** (converted into the cost of doing business) rather than capitalized.

### Operating Budgets

**Operating budgets** are prepared annually for a fiscal year period. Operating budgets relate day-to-day

**operating costs** to the **revenue** resulting therefrom. **Labor costs** (salaries and wages), **employee costs** (health, welfare, and benefit programs), and **controllable costs** make up the total expenditure relating to specific revenue being generated; **control profit** (or **loss**) is the result of the comparison.

Revenue is generated by a hotel rooms department, and costs are incurred by two subdepartments—front office and housekeeping. The front office manager and the executive housekeeper are therefore responsible for controlling the costs associated with revenue generated from the sale of guestrooms. That portion of controllable cost administered by the executive housekeeper includes but is not limited to items such as cleaning supplies, guest supplies, linen expense, uniform costs (for staff), and laundry costs. A detailed analysis of a rooms department operating budget is given in Chapter 11.

Because department managers are charged with holding operating costs in check in order that profit may be maximized, the purchase of small items of equipment on a one-at-a-time basis should be curtailed. Foresight in planning can and will maximize departmental control profit.

## Preopening Budgets

**Preopening budgets** are usually thought of as allocating money and resources to opening parties, advertising, and initial goodwill. Preopening expenses actually go far beyond such expenditures and usually include initial cost of employee salaries and wages and supplies, food, china, glass, silver, and similar items. Recall that in our hypothetical opening, many managers have been on the payroll for several months. Other employees will soon be on the payroll for training and orientation. Preopening budgets normally include the cash and inventory requirements to meet these needs, along with others for getting the property open and operating. Preopening budgets are quite sizable and as a result are usually amortized over a three-year period from the date of opening. Preopening expenses are therefore not quite so devastating to corporate profits in the first year of operation. Most professionally sound hotel companies understand the need for substantial preopening budgets and plan such expenses into **pro formas**. Hotel companies that do not plan ahead are plagued with unplanned-for last-minute costs, and departments end up undersupplied and underequipped. The preopening budget forces the planning necessary for a smooth opening. The executive housekeeper can play a major role in establishing sound preopening budgets.

## Inventory Control

**Inventory control** is the management function of classifying, ordering, receiving, storing, issuing, and accounting for items of value. The executive housekeeper for new and ongoing operations must not only perform tasks in

controlling various classifications of inventories but must also be technically competent in the selection, use, and maintenance of material items such as textiles, sleep equipment, furnishings, department equipment, and supplies. In addition, top management might dictate the degree of quality of certain material items to be used in the hotel guestroom. In some cases, for example, the room rate charged will be an indicator of expected quality of items such as bath towels or of the number and type of bars of soap to be found in each guestroom.

As initial planning for opening takes place, systems and procedures must be designed to facilitate inventory control, and personnel training plans must be generated to familiarize the staff with how to care for equipment, use supplies, and account for items of value. Storage must be organized and allotted to the various categories of material; **pars** (required on-hand amounts) must be established, accounting methods must be coordinated with the controller's office, and fiscal inventory rules and procedures must be established. Most of all, organization, system, and forethought (inventory control) are needed to preclude unnecessary loss and waste. (We discuss more about inventory control in Chapter 11.)

## Material Classification

### Basic Application to Principles of Accounting

The **classification of material** is the first step in the process by which items of value will be accounted for and controlled. Recall the general principles of accounting where **assets** of the company are stated. Under the broad term assets, there are current and fixed assets. **Current assets** include items such as cash, accounts receivable, and inventories. **Fixed assets** include land, building, and equipment. (In the case of hotels, the broad term **equipment** also includes furniture and fixtures—FFE.) **Inventories** are assets until they are *used*, and FFE are carried as assets until they are fully depreciated. Capital expenditure budgets are the plans by which fixed (depreciable) assets are acquired; operating budgets are the plans by which inventories are acquired.

As portions of inventories are used up in day-to-day operations to generate revenue, they are expensed and will appear as subtractions from revenue on income statements.

Table 4.1 lists some material items under the control of the executive housekeeper that are normally carried on the hotel **books of account** as fixed assets. These items are listed under various depreciation categories indicating their **life expectancy**. Since these items are fixed assets, they are not charged against routine day-to-day operations.

Table 4.2 lists material items that might be found in inventory assets under the control of the executive housekeeper. These items are regularly used up in the

**TABLE 4.1** Material Classification of Fixed Assets for the Housekeeping Department

Guestroom Furniture and Facility Equipment	Software	Department Equipment
<b>7-Year Category</b>	<b>5-Year Category</b>	<b>7-Year Category</b>
Carpet	Roll-away beds	Laundry equipment
Sleep equipment	Accent drapes	Permanent shelving
Box springs	Blackout drapes	Glass washer
Mattresses	Sheer curtains	<b>5-Year Category</b>
Sofa beds	Pillows (regular and nonallergenic)	Maid's carts
Studio couches	Bedspreads	Corridor vacuums
Chair-beds	<b>2-Year Category</b>	Space vacuums
In-wall beds	Blankets	Pile lifter
Furniture	Shower curtains	Wet vacuum
Chests of drawers		Rotary floor scrubbers
Tables		High-pressure hot water carpet shampoo equipment
Chairs		Sewing machines
Desks		Convertible mobile linen shelving
Fixtures		<b>3-Year Category</b>
Paintings		Maid's vacuums
Accessories		Backpack vacuums
Lamps and lighting fixtures		Electric brooms
Other equipment		Rubbish-handling conveyors
Telephones		Wheelchairs
Radios		Baby beds
Message equipment		
Televisions		
In-room safes		
Minibars		

course of generating revenue and are therefore considered cost items and are carried as period expenses on operational and financial performance statements.

As inventory items are purchased, their invoices become payables (**liabilities**) that must be paid for with cash from the asset account cash. The result is the conversion of one asset, cash, into another form of current asset, inventories. As material is requisitioned from inventories to support day-to-day operations, inventory assets are used up and period expenses are recognized through adjusting entries. We hope that revenue is being generated in the process. Even though the executive housekeeper is responsible for control and use of both fixed and current assets, it is the day-to-day expenditure of current assets (cash for wages and inventories for material) as guided by operating budgets that will have the greatest effect on the department control profit.

**Ongoing Operations**

Classification of material accounts for ongoing operations is similar to that for new operations. In ongoing operations, preopening budgets do not come into play, but capital expenditure budgets and operating budgets

are presented on an annual basis. If the hotel has been in operation for some time, first operating budgets are planned and approved, and then capital expenditure budgets follow. The executive housekeeper should remember that income statements reflect progress toward attainment of the operating budget. Minor or small items of equipment that will be capitalized should not be purchased so as to be charged against operating costs (miscellaneous expenses). This type of purchase should be planned far enough in advance so as to be charged against capital expenditures.

Ongoing operations will include the routine and periodic purchase of all inventory items, requiring that systems for research, ordering, receipt, storage, issue, and the accounting for use of items of value be developed.

**Preopening Operations**

**Temporary Storage**

By now the executive housekeeper has been involved in selecting and purchasing items of material that are arriving daily for the opening of the hotel.

**TABLE 4.2** Material Classification of Inventory Assets

Cleaning Supplies	Guest Supplies	Linens	Uniforms
All-purpose cleaner	<b>Guest Expendables</b>	Sheets	Section housekeeper
Disinfectants		Pillowcases	Senior housekeeper
Germicidals	Matches	Bath towels	Section housekeeper aide
Window cleaners	Laundry bags	Hand towels	Other supervisors
Acid bowl cleaner	Laundry tickets	Washcloths	
Metal polishes	Stationery	Bath mats	
Furniture polish	Pens	Specialty towels	
(lemon oil)	Notepads		
Applicators (all kinds)	Postcards		
Spray bottles	Magazines		
Rubber gloves	Plastic utility bags		
Scrubbing pads	Disposal slippers		
Steel wool	Emery boards		
Brooms	Table tents (in-house advertising)		
Mops	Individual packs of coffee		
Cleaning buckets	Candy mints		
Mop wringers	Toilet tissue		
Floor dust mops	Toilet seat bands		
Cleaning rags	Facial tissue		
	Sanibags		
	Bath soaps (bar)		
	Facial soaps (bar)		
	<b>Guest Essentials</b>		
	Clothes hangers		
	Plastic trays		
	Ice buckets		
	Water pitchers		
	Fly swatters		
	Glass (or plastic drinking cups)		
	Ashtrays		
	Waste baskets		
	Shower mats (rubber)		
	Do-not-disturb signs		
	Bibles		
	<b>Guest Loan Items</b>		
	Ironing boards		
	Irons		
	Hair dryers		
	Heating pads		
	Hot water bottles		
	Razors		
	Electric shavers		
	Ice packs		
	Alarm clocks		
	Bed boards		

Although preopening budgets do not include the cost of fixed assets (FFE), it will be necessary to prepare to receive and temporarily store *all* materials ordered, regardless of whether they are capital items (Table 4.1) or part of inventories (Table 4.2). Some hotel companies arrange for the contractor to install guestroom furniture and equipment before acceptance of the facility by operations. In any case, furniture items are relatively easy to safeguard since they are either massive in size or are attached to the facility. Smaller movable (or removable) items are much more pilferable and should be kept in secure storage until operations is in control of the facility.\*

### Moving into the Property

Several days before opening (after operational personnel have moved into the facility), a **move-in day** is established for all material. The move-in day requires detailed planning for the staging of material (from warehouse to ballroom to permanent setup and storage) so that nothing is misplaced or lost. Every item of inventory or equipment that has been purchased and placed in temporary storage must now be accounted for as it is transferred into the hotel. Depending on the size of the hotel, this process may take several days. The planning for move-in day will determine the efficiency and effectiveness by which the operation will take place and whether or not significant losses will occur.†

### Disposition of Spares

Because guestroom furniture fixtures and equipment will normally be put in place by the contractor, many hotel companies buy capital items with a 1 to 10 percent **spare component**. Spares are turned over to operations, and inventory responsibility must be assumed at that time. Storage is then allotted and future use controlled.

\*I participated in the opening of a major 1000-room hotel in which there was no provision for temporary storage of movable equipment and items of initial inventory. As these items were received, they were stored in the open, in the hotel garage, and in hallways as arranged for by the contractor. After operations took control of the building, it was determined that material valued in excess of \$60,000.00 had disappeared, far outweighing the expense of having provided temporary storage in a bonded warehouse.

†I participated in several move-ins while employed by Marriott Hotels. The Marriott system requires that bonded warehouses be used for temporary storage and that move-in day use hotel ballrooms to stage all movable equipment and inventory items temporarily. From ballroom staging areas, equipment is assembled, marked as necessary for identification, and, with other inventory items, moved to permanent storage. All this takes place according to detailed plans. Hundreds of thousands of items were thus controlled with an absolute minimum of loss. For example, in 1973 move-in day for the Los Angeles Marriott Hotel involved the staging of more than a million-dollar material inventory into two ballrooms of more than 20,000 square feet without the reported loss of a single corn broom, vacuum cleaner, or bed sheet.

In many cases, the chief engineer of the hotel will be held accountable for inventory and storage of items such as carpet and furniture spares. The executive housekeeper is usually responsible for designating replacement of such items when the need arises in the future. Because carpet is a large bulk item, it is not uncommon for hotels to employ carpet companies for carpet repair and, in such cases, have these carpet companies hold spare carpet and provide periodic inventory of spares to the hotel for validation.

## Guestroom Furniture and Fixtures

The items listed in Tables 4.1 and 4.2 are typical of those found in most hotel material inventories. Executive housekeepers in new and ongoing operations are involved in the purchase of such material inventories and are expected to research current literature, study samples, investigate sources of supply, decide characteristics and quality issues, and know the reputations of selected vendors for service and repair. The executive housekeeper must have a general knowledge of materials. The information in the rest of this chapter on guestroom furnishings, and the information contained in the following three chapters, can be used as a reference for housekeeping-related materials and their use.

### Mattresses and Beds

Most hoteliers would agree that one of the most important elements of a guest's comfort is the quality of the bed. There is little that the hotel can do to make up for a guest's discomfort caused by a sleepless night on an uncomfortable bed.

Unfortunately, there is no unanimity of thought as to what makes a comfortable bed. Although some guests might disagree, the prevailing thought holds that a comfortable bed is one that is firm on the inside, but has a soft exterior.

### Mattress Construction

Three types of mattresses are used in hotels today: innerspring, foam, and water. Mattresses range in size from twin to Eastern king, as shown in Table 4.3. Average- to high-quality hotels are using the oversize double as a standard in most rooms because of the extra 4-inch (10.2 centimeter) length. It is better to have a mattress that is at least 6 inches (15.2 centimeters) longer than the average height of the sleeper.

Mattresses may be medium, firm, extra firm, or super firm. Innerspring mattresses are constructed like a sandwich, with insulating material and padding on both sides of a coil unit. Each coil should give support and at the same time conform to body contours. The number of springs in a coil unit can range from 150 to as many as

**TABLE 4.3** Mattress Sizes

	Width (in.)	Length (in.)	Width (cm)	Length (cm)
Twin	38	× 74	96.5	× 188.0
Double	54	× 74	137.2	× 188.0
Oversize double	54	× 80	137.2	× 203.2
Queen	60	× 80	152.4	× 203.2
California king	72	× 84	182.9	× 213.4
Eastern king	76	× 80	193.0	× 203.2

1000 coils, with 250 to 300 being the standard, depending on degree of firmness desired.

Design of the coil unit is important in mattress construction. The resiliency, temper, number of turns in each coil, gauge of steel in individual springs, and the manner in which the springs are tied are of great importance in evaluating the quality of an innerspring mattress. Independent spring action and latex or baked enamel coating of coils provide longevity and noiseless operation. There should also be ventilators on the side of the mattress to ensure a fresh airflow into the coil unit.

Good mattresses have a layer of tough insulation to separate padding from springs. A layer of upholstery cotton or foam before ticking is applied provides a smooth surface and complies with government flame-spread regulations. The current federal fire-safety standard for mattresses holds that a lighted cigarette should not be able to ignite the mattress's insulation or ticking.

Mattress manufacturers have responded to the industry's and the public's concern over fire safety by developing mattresses that do not release toxic fumes when flame is applied; other manufacturers have created mattresses that will not support direct flame.

Ticking is the upholstered cover used in mattress construction. Ticking is found in all colors and patterns. It should be a tightly woven fabric that is well quilted to improve wearing qualities. Good-quality innerspring mattresses should last for more than ten years.

Foam mattresses are found in two types of materials—latex foam and urethane. Latex foam is a slab of 100 percent pure rubber, formed in one of two types of molds—pincore (small) holes or honeycomb (larger hole pattern). Polyurethane is less expensive than latex. Both are usually manufactured in ¼- to 6-inch (10.8- to 15.2-centimeter) thickness, depending on the height of the foundation and box spring unit. The advantage of foam over regular innerspring mattresses is that foam is nonallergenic, less expensive, and easier to roll up for storage. Foam, however, does not have the longevity of innerspring mattresses.

Ordinary foam mattresses should not be confused with the high-end foam mattresses. These use space age viscoelastic memory cell materials developed by NASA in the 1970s for the astronauts. This material is temperature-sensitive and will conform to the individual sleeper.

Manufactured under a number of labels including the most famous, Tempur-Pedic,<sup>®</sup> these mattresses are definitely not inexpensive. Initial cost can reach to well over a thousand dollars for just one mattress. However, they promise the sleeper a lack of pressure points often found in ordinary mattresses and no hammock or wave effect associated with waterbed construction. These mattresses are definitely only for luxury properties. They are also sturdier than their more inexpensive cousins. Limited warranties of 10 to 20 years are now offered.

Water-filled mattresses, or “waterbeds,” made their debut onto the hotel scene during the 1960s. They were not well received initially because they leaked, the water had to be heated, they required special (and costly) sheets, and they were prohibitively heavy for some multistory structures. Waterbeds were soon relegated to bridal suites and “theme” guestrooms.

Waterbeds today bear little resemblance to their 1960's predecessors; in fact, many of them resemble the traditional innerspring mattresses in appearance. Mattress manufacturers such as Simmons have designed waterbeds that have water-filled cells in the center of the mattress. The cells are covered with a vinyl-covered urethane foam, and the perimeter of the mattress has a row of innerspring coils that provides support to an occupant sitting on the side of the bed. The mattress uses standard sheets, and the water-filled cells do not have to be heated because of the insulating foam layer. The ticking can be removed via a zipper on the top of the mattress so that the cells can be serviced.

All mattresses should have reinforced sides to prevent sagging caused by people sitting on the sides. Such reinforcement is formed by tape being stitched to the top and bottom edges and sides of the ticking.

When purchasing new mattresses, the executive housekeeper should insist on viewing a cutaway model of the mattress prior to purchase.

### Box Springs

Box springs and mattresses should be purchased simultaneously. Box springs are like shock absorbers. They cushion the weight and sleep movements of the sleeper and provide a large portion of the experienced sleep comfort. Box spring coils are much heavier-gauge steel than that found in mattresses. Springs are positioned on

wooden or metal slats running laterally across the frame, giving fixed support to the underside of the unit. Box spring coils should be tied to the base, sides, and each other. The best test for a set of box springs is to stretch out on it and see if you experience firm support in all areas of the body.

### **Bed Frames**

There are two basic styles of bed frames available to the housekeepers—metal and platform. The metal frame consists of four lengths of angle iron and a metal leg attached to each corner. Queen-size, king-size, and waterbeds will also have one or two crossbars added for extra support.

Platform frames are made from either metal or solid wood and provide the box springs and mattress with a platform or box on which to rest. The advantage to platform frames is twofold: carpet does not have to be laid under the platform, thus saving a considerable amount of carpet in a large hotel, and housekeepers need not worry about cleaning under the box frame. The sides of the frame are often carpeted to eliminate unsightly scuffing by vacuums.

### **Care and Maintenance of Beds**

Preventive maintenance begins with mattress covers. Every bed should be covered with a moisture-proof mattress cover. The better-quality mattress covers are made of vinyl materials and are stain-resistant, nonallergenic, and flame retardant, as well as being moisture-proof. A washable mattress pad that is also nonallergenic and flame retardant is placed above the mattress cover. Its purpose is to provide the guest with a cushioning layer between the sheets and the mattress. Many mattresses, especially tufted mattresses that have buttons, need mattress pads.

Innerspring mattresses should be turned regularly; head to foot for one turn, and side to side for the next turn. Mattresses that are turned regularly may have their life expectancy extended by as much as 50 percent. To help monitor mattress rotation, labels can be affixed to the corners of the mattress. On one side, the label “January, February, and March” can be affixed to one corner with “April, May, and June” affixed to the opposite corner. On the reverse side of the mattress the label “July, August, and September” can be sewn, and on the opposite corner the label “October, November, and December” can be affixed. Inspections can then reveal whether or not a particular mattress has been rotated.

### **Roll-Aways, Cots, and Cribs**

The demand for mobile beds will vary in proportion to guest type. Vacationing families and youth groups will generate the greatest demand for these items.

Cots or folding beds have disappeared from the scene because they are cumbersome to transport from storage to the guest’s room. They have been replaced by the roll-

away, a bed on wheels. The quality of roll-aways varies greatly by model and manufacturer. Standard roll-aways have a latex foam mattress that rests on flat bed springs attached to a folding frame. The better roll-away beds have specially designed innerspring mattresses. Roll-aways should have plastic covers to protect them from dust while in storage.

Cribs should meet all federal construction guidelines. Most hotel cribs are collapsible in order to save storage space. To ensure that they do not collapse while occupied by an infant, they should be inspected regularly, and the staff should be instructed on how to prepare the crib. The lowest mattress level should always be used when setting up a crib to forestall the possibility of an overactive toddler crawling over the side and tumbling onto the floor.

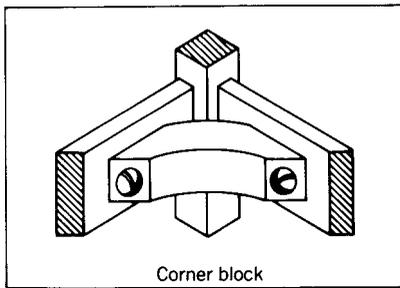
### **Dual-Purpose Sleep Equipment**

Dual-purpose sleep equipment provides extra sleeping capacity in guestrooms that otherwise would become crowded with a roll-away bed. Sofas, love seats, and formal chairs with ottomans convert into sleep equipment at night. There are basically five types of dual sleep equipment:

1. The sofa bed converts from a sofa into a bed by removal of the cushions. A small handle in the center of the seat unit releases the bed, which unfolds revealing a full (double-size) mattress. This type of equipment may be found in either sofa or love seat configuration.
2. The jackknife sofa converts to sleep configuration by dropping the back to the level of the seat.
3. The single studio couch converts by removing the bolsters and cover.
4. The chair bed and ottoman back drop to form a bed that is about 28 inches wide.
5. In-wall beds are becoming more the rule than the exception. Many hotels are now using the in-wall bed to conserve area in rooms normally used as sitting rooms and parlors during daytime. Outstanding queen-size sleep equipment may now be found concealed in a wall, which by day gives the appearance of a paneled wall, with table and chair placed against it. Well-balanced swing equipment allows the foot of the bed to drop to the floor with a gentle pull on a handle usually concealed in a picture frame. In-wall beds provide outstanding sleeping comfort, with no possibility of retracting into the wall with the sleeper, regardless of the impression given by old comedies.

### **Furniture**

Furniture must be both functional and attractive. It should be well constructed and easy to maintain. The variety of furniture available for hotel use today is as great

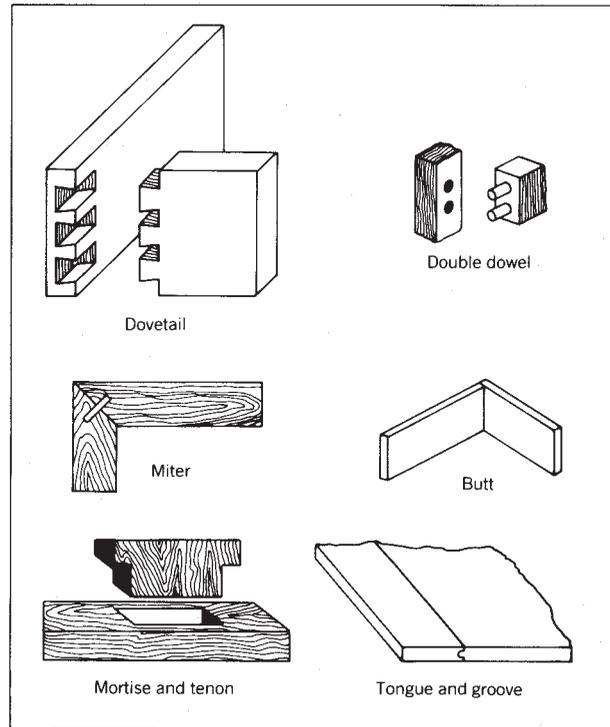


**Figure 4-1** Corner block used in the construction of well-made chairs.

as the number of companies manufacturing institutional furniture.

Most hotel furniture is a combination of wood and plastics made to look like wood. (Many times, close examination of the facades of what looks like French provincial carved wood will reveal a molded plastic exposure.) Hardwoods are scarce and expensive; therefore, substitutes such as surfaced plywood and pressed particleboard are used extensively in the manufacture of institutional furniture. Little if any metal furniture will be found in hotels.

The executive housekeeper should examine samples to ensure that furniture is well designed, constructed with corner blocks (Figure 4.1) to withstand hard and abusive use, well finished, and refinishable. Joints are major factors in the strength and durability of well-made furniture. Figure 4.2 shows examples of various types of furniture joints. Mortise and tenon joints or double-doweled joints are used in well-made furniture. Desks,



**Figure 4-2** Methods of joining wood in furniture construction.

luggage racks, chests of drawers, and pieces that provide storage are known as case furniture or **case goods**, and are primarily constructed with dovetail joints. Some metal pieces will be used in the construction of case furniture for drawer guides and luggage receivers. Drawer

**Figure 4-3** Standard junior suite furnishings with an English countryside flavor. Note the use of fabric on the end tables. (Photo courtesy of Bellagio MGM Mirage, Las Vegas, Nevada.)





**Figure 4-4** A far more formal sitting room in one of the Bellagio's Villa Suites. The second photo is of the same room with the doors of the entertainment center opened. (Photos courtesy of Bellagio, MGM Mirage, Las Vegas, Nevada.)

construction in case furniture should always have concealed dovetail joints in the front piece to ensure that constant motion of the drawer will not cause the drawer front to become detached. Laminated tops are an essential element of most institutional furniture. Spilled drinks and beverage rings would quickly mar the finish and stain ordinary wood furniture.

Figures 4.3 through 4.6 are photographs of guestroom furniture at the Bellagio, Las Vegas, Hotel and Casino. The furnishings here range from the merely tasteful to the sublime.

### **Upholstery Fabrics**

Most fabrics are constructed of fibers, which are of two general classifications—natural fibers and synthetic fibers. Table 4.4 lists examples of each type of fiber. Most

synthetic fabrics are made from either cellulose or coal tar derivatives.

Natural fibers are strong, long wearing, available in many finishes, and easily dyed. They must, however, be treated for insects and should not be allowed to remain wet. Natural fibers are usually expensive when woven into fabrics for upholstery. Synthetic fabrics are less expensive, not subject to damage by insects or moisture, and clean easily, but they are more likely to create static electricity and are difficult to dye. Dark-color synthetics also show lint badly.

Many upholstered fabrics are blends of natural and synthetic fibers. Industrial upholstery fabrics are being woven into stretch knits that are dense, full bodied, and strong. Some are double-knit and are woven into a jacquard texture; others are woven into fine-textured materials.



**Figure 4-5** An opulent dining room in the same suite featured in Figure 4.4. Note the Chinese influence in the furnishings. (Photo courtesy of Bellagio, MGM Mirage, Las Vegas, Nevada.)

**PLASTIC FABRICS.** Plastic fabrics have a leatherlike finish and are used in furniture construction. They may be wiped clean with a soapy cloth or sponge. Plastic fabrics may also be found in mattress ticking and blackout drapes.

**Fixtures**

The broad category of fixtures associated with hotel guestrooms includes decorative accessories, pictures and paintings, and lighting treatment.

**ACCESSORIES, PICTURES, AND PAINTINGS.** Most often, the designer who is responsible for the appearance of the room will have planned the accessories and paintings. The best use of accessories is for there to be a few that give the desired impact. Accessories, like furniture, must be selected to conform to the size of the room and should not be overdone.

A balance of color and fundamental style is essential to achieve the proper feeling. *Formal balance* is a term used to describe a formal appearance (for example, two candlesticks flanking a similar-style bowl of flowers). *Informal balance* occurs when dissimilar, unequally sized and shaped objects are assembled into groupings that appear balanced.

Framed hanging mirrors (with pronounced frames) give glamour to a room and are effective. Such a mirror might be used in place of a picture or painting. Usually the room designer will also select paintings that conform to the room decor. Most hotel paintings are lithographs in order that economy may be attained through purchasing in volume. Colors in wall hangings are used to make the room decor a pleasing experience.

The universal rule about hanging mirrors and paintings is that the geometric center of the item should be at eye level. Since viewers are of different heights, discretion must be used so as to balance the room properly.

**Lighting**

Proper lighting heightens the beauty of a room and adds to guest comfort. Lighting can create a desired effect by flattering the occupant as well as the room furnishings. Lighting should never be an afterthought, but should be considered in the total design of the room.

In many modern decors the source of lighting is concealed. Contemporary decors also use table, wall, and hanging lamps, which are securely fastened to the facility to reduce theft and avoid accidents. Table lamps should have their on/off switches located at their bases.

**TABLE 4.4** Fibers Used in Upholstery Fibers

Natural Fibers	Synthetic Fibers
Cotton	Rayon
Wool	Acetate
Linen	Acrilan
Silk	Arnel
	Dacron
	Dynel
	Fiberglass
	Nylon
	Orlon
	Vicara



**Figure 4-6** Assistant Executive Housekeeper Raynette McGiness updates the status of the Villa at Bellagio. Note that the large chest at the end of the bed in the first photograph is actually a large-screen television that pops up on command from a console located on the nightstand. (Photos courtesy of Bellagio, MGM Mirage, Las Vegas, Nevada.)

This reduces the possibility of scorched fingers and the prospect of groping about in the dark for the switch. Floor lamps are seldom, if ever, used in modern hotel construction because of the space used and the tripping hazard created by unsightly cords.

Fluorescent lighting used in concealed lighting fixtures should never be of the cool variety because of the resulting harshness in the tone of light. Only warm fluorescent lighting should be used. Fluorescent lighting, like incandescent lighting, may be controlled by rheostat to create a feeling of comfort and softness. Pink incandescent bulbs provide warmth and give a rose-colored glow to skin tones. Orange or amber incandescent lighting causes an unflattering harsh gray skin tone. Warm fluorescent (approximately 2,700° Kelvin) bulbs controlled by the proper type of rheostat can be energy-saving and reduce power consumption by as much as 75 percent.

Furthermore, they can last up to ten times longer than ordinary incandescent bulbs. A typical compact fluorescent lamp (CFL) will have a color temperature of 2,700° K, an average rated life of 8,000 to 10,000 hours, produce 800 to 1,000 lumens, and consume 13 to 18 watts of electricity. Compact fluorescents will screw into almost any light socket (see Figure 4.7). Finally, sufficient light for reading must be provided in the room. Both hanging lamps over work tables and bed lamps for reading should have bulbs of sufficient wattage.

### Guestroom Safes

A recent newcomer to the guestroom fixture scene is the guestroom safe. Introduced for the first time in 1983 by Elsafe, guestroom safes are now available from companies offering dozens of models with hundreds of



**Figure 4-7** A “twist” CFL from Feit Electric. This new design will fit into almost any standard fixture designed for an incandescent lamp. However, these lamps consume only one-fourth the wattage that a standard incandescent would consume. Average rated life is 10,000 hours, as compared with less than 1,000 in an incandescent. (Photo courtesy of Feit Electric, Inc. Pico Rivera, California.)

features. There are two main varieties available: electronic and manual. Access to many electronic safes is monitored from a panel at the front desk, and if the hotel charges a fee for their use, the system can electronically post the charge to a guest’s folio. Guestroom safes come wall-mounted, floor-mounted, and hidden inside nightstands and armoires (see Figure 4.8). Normal access to the safe may be through a common key, a keypad, the use of a special card, or even a standard credit card. Other features to look for when selecting guestroom safes are interior dimensions and fire ratings.

### In-Room Refreshment Centers

A new and potentially very profitable fixture in the modern guestroom is the in-room refreshment center or minibar. Stocked with sodas, juices, liquor, and snacks, the minibar is a tempting convenience that few guests can resist. As with guestroom safes, there are dozens of companies and hundreds of models from which to choose. Minibars can either be leased or purchased outright by the hotelier. A number of companies lease the



**Figure 4-8** A dressing area closet with a built-in guestroom safe and a cedar lining. (Photo courtesy of Bellagio, MGM Mirage, Las Vegas, Nevada.)

equipment to the hotel for a fee and/or a share of the profits. In-room refreshment centers range from manual systems to fully automated units.

The fully automated systems can electronically sense when an item is removed from the shelf and can automatically post the charge for the item to the guest’s folio (see Figure 4.9). At the same time, it can print out a stock list for each room, thus letting the staff know what needs to be restocked in every room. Automated systems can also be electronically locked when the room is rented to minors or when the room is rented to paid-in-advance guests.

Other systems require housekeeping to take a physical inventory and relay the information via a hand held computer to the front desk. The manual systems often rely on the honor system, which may or may not be effective, depending on location and guest profile. Stories abound of guests having filled vodka bottles with water or running out to grocery stores the next day to replace used sodas and beers.

### Audiovisual Equipment

Audiovisual guestroom equipment includes telephone systems, radios, televisions, video cassette recorders (VCRs), and digital video disk (DVD) players.



**Dometic**  
*AUTOclassic*

**Figure 4-9** This Dometic® auto classic™ refreshment center with see-through glass comes with an infrared sensing system that records each item removed that is not replaced within a preset time period. Its absorption cooling system is superquiet and has no moving parts to wear out. It can link to the front desk through existing television cables.

The room telephone with its red message light has undergone immense technological changes at some properties over the past few years. Now, the telephone serves as a communication and room control system. The television, radio, heat, lighting level, and air-conditioning can be controlled from one central console. The telephone can be directly linked to the hotel's property management system, allowing housekeepers to inform the linen room and the front desk of the status of the room directly through the guest's telephone (see Figure 4.10).

Televisions have changed over the years as well. Although 19-inch color televisions are still the normal size, the television of today is commonly equipped with a guest-pay programming device that allows first-run movies to appear on the guestroom television.

Guestroom televisions often come with no on-set secondary controls that can be broken. All tuning is done through the anchored remote on the nightstand or through a special setup transmitter that the hotel controls so the color and tint cannot be altered by guests. Many guestroom TVs have AM/FM clock radio modules attached to the set, and others have installed compact video cassette recorders. Many hotels rent recently released movies either from the front desk or from special cabinets located inside the guestrooms.

However, the trend is toward full automation for in-room movies. The guest selects a film from the menu on the television, and it is automatically billed to the guest's room. Such pay-per-view companies as IN DEMAND

are now found in hotels and motels throughout the country.

## The Americans with Disabilities Act (ADA)

All facilities, furniture, fixtures, and equipment used in public accommodations should be considered in relation to the requirements of the Americans with Disabilities Act (ADA). The ADA made discrimination against people with disabilities illegal in the United States. The ADA, signed into law July 26, 1990, is the first federal law that requires privately financed businesses to make themselves accessible to people with disabilities. There are two sections of the ADA that apply to places of lodging.

1. Title I, which deals with the equal employment opportunity for disabled persons in the workplace (not a part of this presentation).
2. Title III, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," which requires places of lodging, and other "Public accommodations," to remove barriers and provide accommodations for guests with disabilities. (See Appendix A for full disclosure of conditions that meet the requirements of ADA in public accommodations.)



**Figure 4-10** In the Villa Suites at Bellagio, a state-of-the-art communication and control system has been installed for the guest's convenience. It can do everything from opening the drapes to summoning the butler. These touch pads are conveniently located throughout the suite, from the night table, as shown in the first photo, to the wall of the dining room shown in the second photograph. (Photos courtesy of Bellagio, MGM Mirage, Las Vegas, Nevada.)



## Summary

The executive housekeeper must be not only a planner but also an administrator with a basic knowledge of budgeting procedure, furniture, fixtures, equipment, cleaning products, and supply inventories. Material planning for hotel operations begins with an understanding of budgeting systems by which material resources will be allocated. Capital expenditures, operating budgets, and preopening budgets were defined and discussed in this chapter. Classification of material resources must be understood. Knowledge of those material items that are part of the fixed assets and of other items that are part of inventories that will be used up in the generation of revenue is also important if costs are to be controlled. Inventory control is more

than the mere counting of items; it is the entire process by which material is classified, ordered, received, stored, issued, and otherwise accounted for. The executive housekeeper involved in opening a hotel is involved not only with establishing certain material accounts and inventories, but also with arranging physical layouts to store materials, developing systems to account for supply use, making arrangements to purchase products, and establishing relationships with vendors and purveyors.

In this and the following three chapters, a complete analysis of the material inventories with which the executive housekeeper may be involved is presented. A continuation of the topic of inventory control will be presented as the management functions of direction and control are developed.

### KEY TERMS AND CONCEPTS

Administration	Operating costs	Assets
Material	Revenue	Current assets
Software items	Labor costs	Fixed assets
Budgets	Employee costs	Equipment
Capital expenditure	Controllable costs	Inventories
Depreciation	Control profit	Books of account
Furniture, fixtures, and equipment (FFE)	Control loss	Life expectancy
Software	Preopening budgets	Liabilities
Capitalized	Pro formas	Move-in day
Expensed	Inventory control	Spare component
Operating budgets	Pars	Case goods
	Classification of material	ADA

### DISCUSSION AND REVIEW QUESTIONS

- Some items of material are *capitalized*; others are *expensed*. What is the difference between these two terms?
- Explain the difference between capital expenditure budgets and operational budgets. In an ongoing operation, how many times in a fiscal year is each prepared? Which is usually prepared first? Why?
- Preopening budgets usually include items such as funds for opening ceremonies and parties, advertising, and public relations. List several other important items that should be funded in a preopening budget. Why should the preopening budget be amortized, and over what period of time?
- A disabled person wants a room on the top (suite) floor. According to ADA, must you accommodate that guest? The first alarm sounds (elevators become inoperative). How would you evacuate this disabled person from the top floor? (Hint: Visit <http://www.evachair.com> on the Web.)
- Define these terms:
  - Inventory control
  - In-room refreshment center
  - Material classification
  - Dual-purpose sleep equipment
  - In-room safe
- Explain the concept of using temporary storage when opening a hotel.
- Visit a store that sells innerspring mattresses, a store that sells waterbeds, and a store that sells foam mattresses like the Tempur-Pedic mattresses. Lie down on each one, decide which one is more comfortable, and compare your decision with those of other students. Discuss the advantages and disadvantages of each mattress from an executive housekeeper's perspective.