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# buying mattresses for comfort

MYRA ZABEL

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Myra Zabel is an associate professor and extension specialist, home furnishings.

Mention of commercial names does not imply endorsement of those named nor criticism of those not named.

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## INTRODUCTION

If you live to be 75 years old, you will spend 25 or more years of your life in bed. Because we spend about one-third of our lives sleeping, we must have comfortable beds to help restore physical well being. Each member of your family should sleep on a mattress that allows him good quality rest.

A good mattress supports all parts of the body equally. It is resilient, durable, buoyant, well tailored, and free from noise. It is soft enough to allow normal body movement, yet hard enough to support complete relaxation.

Sleep equipment, among the most complex of furnishing merchandise, is fabricated from wood, wire, steel spring, felted cotton, and woven fabric. Some bedding items also include foam rubber, urethane foam, sisal, hair pads that may be rubberized, and sometimes cellulose and synthetic fiber-fills. To complicate things further, each bedding manufacturer has his own construction methods, some of which are patented.

Inner construction varies with price. The quality and intricacy of inner components in a \$39 mattress are quite different from those of a \$79 one.

Because construction features are hidden, buying a mattress is much like buying a "pig-in-a-poke." The information in this bulletin should enable you to select the best mattress and springs you can afford.

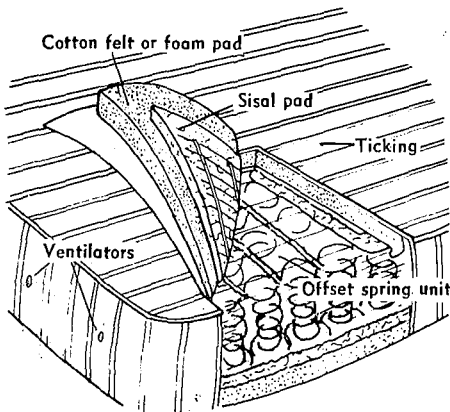
## TYPES AND CONSTRUCTION OF MATTRESSES

Three types of mattresses on the market today are innerspring, foam, and solid.

### Innerspring Mattresses

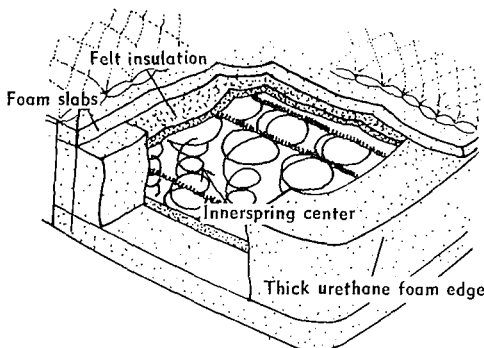
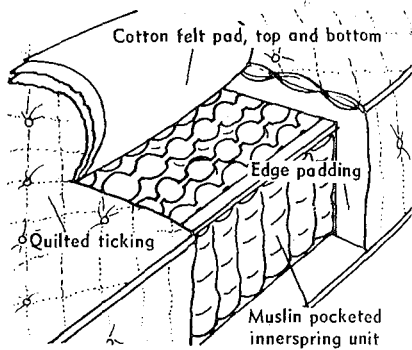
Innerspring mattresses, first introduced on a large scale in 1924, now outsell all other types. Innersprings are made in layers, much like a sandwich. The springs, which make up the middle layer, are made into a complete unit with reinforced wire edges. The spring unit forms a platform for a layer of insulating material that may be sisal pads and foam slabs or quilted cotton felt with a cloth backing. The purposes of the insulating material are to keep the padding from working down into the coils and to completely cover the coils. The next layer consists of a thick blanket of cotton, called a bat, which weighs 12 to 27 pounds per side. The final layer consists of a ticking with which the bat is covered. Both the insulating material and the bat surround the spring unit. Each of these layers is secured to the mattress frame.

The two main types of innerspring construction are Bonnell and Marshall. A third and less common type is a combination of springs and foam.



Bonnell construction consists of hourglass shaped wire coils, with knotted ends to hold them in place, and helical coils that form and integrate a flat spring surface. Helical coils are closely wound, strong, and small in diameter. Bonnell constructed mattresses are relatively inexpensive and more commonly used than any other type. There are from 180 to 360 large, heavy gage coil springs in a Bonnell standard size double bed.

Marshall construction consists of cylindrical springs inclosed in individual muslin pockets. Each spring is joined to its neighbor. Quality in Marshall construction varies with wire quality, coil count, and the method used to join coils. The advantages of this type of construction are in its independent coil action and support, especially desirable when two sleepers occupy the same bed. Marshall mattresses have from 510 to 1,020 coils, with an average of 800 in a standard size double bed.



Mattresses with combination construction have both springs and foam, utilizing the advantages of the two construction components. The innerspring center unit is covered with an insulating material. Foam slabs cover the top and bottom, and the mattress has thick foam edges.

## Foam Mattresses

There are two types of foam mattresses, foam rubber and urethane.

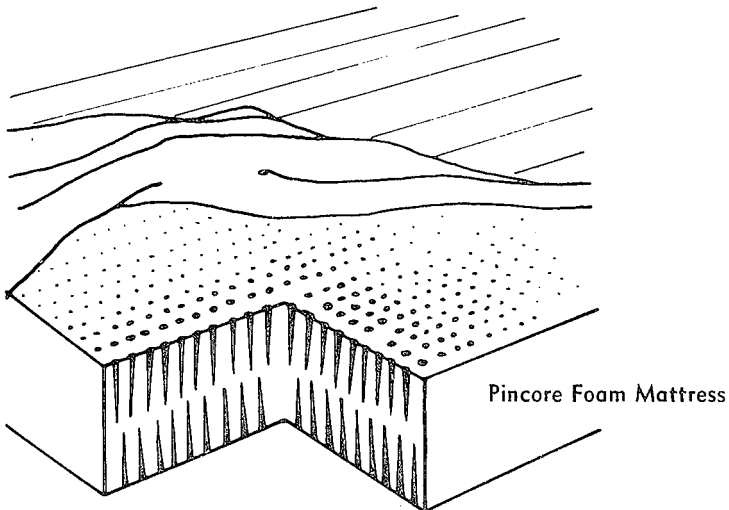
Foam rubber is made from the milk of rubber trees and synthetic additives. Its chief characteristic is its ability to spring back into place after use. Some foam rubber mattresses are smooth on one side and cored on the other. The manufacturer controls the firmness of the mattress by the size, number, and placement of the cores. Rubber mattresses weigh about half as much as innerspring mattresses. Most foam mattresses are 4 inches thick; some are 6 inches thick, the depth of a regular mattress. Six-inch foam does not necessarily make a better mattress than 4-inch foam, because firmness, not thickness, determines mattress comfort.

A foam rubber mattress is too soft if you can feel a board or box spring through the mattress by kneeling or leaning on it. Its resilience, or spring-back, sometimes is considered undesirable. If the rubber does not conform to parts of the body to give support, two people of different weights find it difficult to sleep together on a foam mattress.

Urethane foam is composed of various chemicals whipped and poured into a mold. Lighter in weight than foam rubber, urethane is unaffected by cleaning solvents or detergents and is resistant to sunrays and to surface abrasion. It is especially useful for sofa-bed combinations because it can be tacked, sewed, and fastened. Urethane mattresses usually are less expensive than foam rubber mattresses.

Twin size urethane foam mattresses weigh from 10 to 15 pounds. Because of their weight, these mattresses are desirable for people unable to handle heavy units.

Rubber and urethane foam mattresses share common characteristics. They are dust and lint free, nonallergenic, lighter than innerspring constructions, and can be bent around corners readily when they are moved. They "breathe" with the movement of the user and do not collect or retain odors.



## Solid Mattresses

Solid hair mattresses are filled with hog hair, horse mane hair, or horse or cattle tail hair. Horse or cattle tail hair is best, horse mane hair is next best. Hog hair is stiff, bristly, and less resilient than horse or cattle hair. Hair mattresses gain their comfort from the resiliency of the stuffing and the spring foundation used with them. You will not find good hair mattresses in many stores because they are exceptionally high priced. All-hair mattresses are special order merchandise.

Good cotton-filled mattresses are made of long-fibered cotton felted into layers or woven into a large bat. Inexpensive cotton mattresses have airblown short fibers packed in the center.

## COVERS AND OUTSIDE CONSTRUCTION DETAILS

### Mattress Covers

Every year, bedding manufacturers use over 100 million yards of tickings, drills, satens, printed sheeting, and damasks to cover mattresses, box springs, and pillows.

Good tickings must be strong enough to take hard wear and to hold the units of the product together. A tightly woven ticking that is strong yet light enough in weight to be easily workable is ideal. Ticking that weighs 8 ounces per yard is good. Fabric weighing less than 5 ounces per yard will not wear well. Lightweight sheeting fabrics are used on inexpensive products. Since a mattress never is exposed to view, a luxurious covering is an unnecessary expense. Closely quilted covers are good.

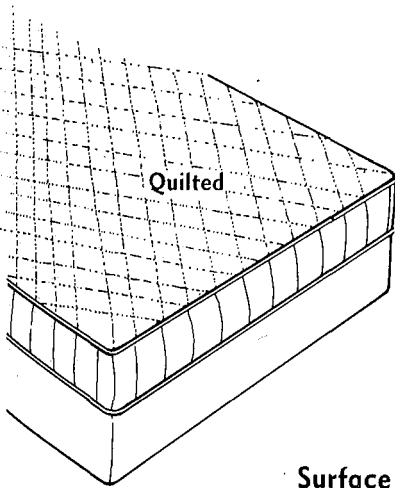
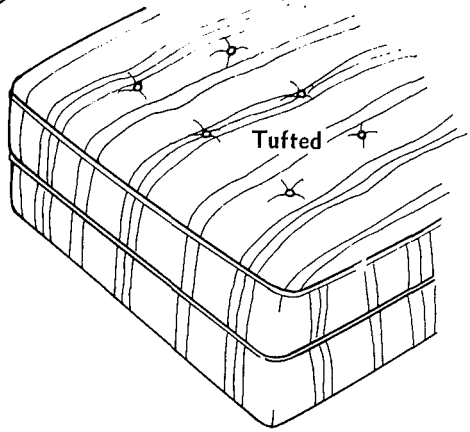
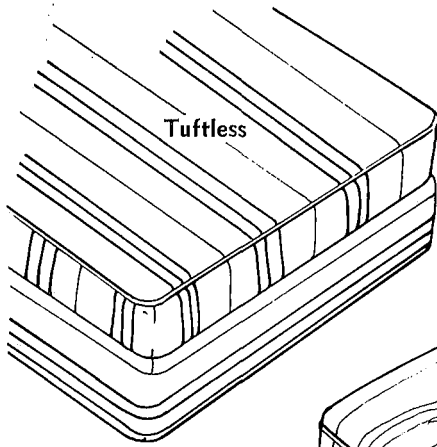
Mattresses for children should be covered with water resistant fabrics.

Two types of fire resistant mattresses will be on the market soon. The one for retail sale features an asbestos fiber pad directly under the ticking on both sides. The second type, made for institutional use, has a plasticized glass fiber ticking over the asbestos fiber pad.

A new mattress cover, "Wonder-Shield," is made of Beta Fiberglas yarn. Its manufacturer claims that the mattress:

- Can be sponged clean with soap and water.
- Is impervious to insects.
- Is nonallergenic.
- Is unaffected by mildew.
- Is highly durable.
- Resists stains and won't absorb moisture.
- Won't shrink or stretch.
- Has a high porosity that eliminates body heat buildup.

Another new fabric finish, "Meticoat," has a slick and shiny surface. The manufacturer of this finish claims it is staticproof, has a germicidal treatment, is waterproof, and "breathes" through perforations. This tough finish, pliable in the coldest weather, is guaranteed for 10 years. It presently is being used on hospital mattresses.



## Surface Treatments

You can recognize a tufted surface by the buttons on it. These buttons are held in place by twine, cords, or tape and pass vertically through the mattress. They hold the filling in place. Some manufacturers consider tufting to be the best surface treatment for getting maximum life from a mattress.

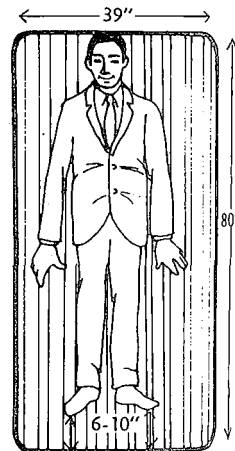
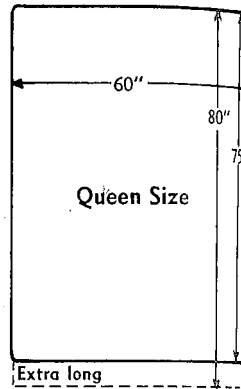
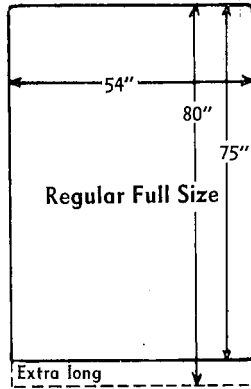
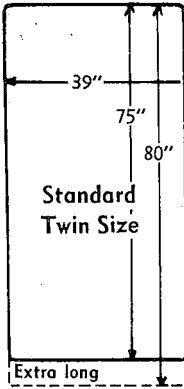
Tuftless surfaces are completely smooth. No buttons or tape bows show. Any anchoring of cover to mattress is done on the inside.

The newest type of mattress surface is the quilted surface. Some quilted treatments are single-needle, others are multi-needle quilts. Patterns vary widely.

## Edges and Borders

Rolled edges on the outside of mattresses are an indication of low quality construction. Inner-rolled edges form a smooth-surfaced mattress and are found on good quality items. Taped edges also are an indication of good quality.

Well tailored borders help preserve the shape of a mattress. A pre-built border has a cotton felt or foam back stitched to the ticking. This border is installed around the sides of the mattress and attached firmly to the wire edges. Some mattresses have a spring edge border beneath the fabric-covered outer edge to keep the mattress trim through years of use.

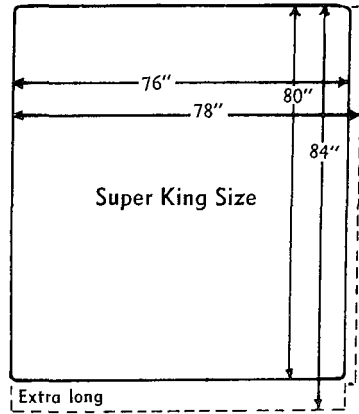
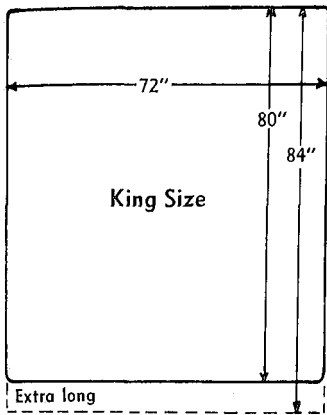




## Handles and Ventilators

Mattresses should have firmly attached handles to facilitate turning and moving them. The handles may be fabric loops, cords, or metal. Metal handles are firmly secured through finished metal gromets, lie flat against the border, and are neat in appearance. You'll find metal handles on good quality items.

A good mattress has some provision for interior ventilation. A mattress should have four or more ventilators in its sidewalls. Some manufacturers use eyelet-embroidered ticking panels for ventilation.



## MATTRESS SIZES AND FIRMNESS

Since men and women in this country are larger than their forefathers, standard size bedding no longer is large enough for many people. But there are mattress sizes for almost everyone's needs (see illustrations).

To be comfortable, every sleeper should have a sleeping area 39 inches wide and 6 to 10 inches longer than his height. A standard size double bed provides just 27 inches of width for each person. People who are 5 feet, 10 inches tall or taller should consider bedding that is larger than standard size. A restless sleeper also needs more sleeping area than a quiet sleeper. Normally, a person changes his position 20 to 40 times each night.

Degrees of mattress firmness vary from firm, medium firm, to extra firm. These designations apply to both foam and innerspring mattresses. Whatever firmness you prefer, firm, no-sag support is vital for comfort.

The best mattress for you is the one that meets your ideas of comfort. The only way to test a mattress for desired firmness is to lie on it. Children

whose skeletons still are developing should have very firm mattresses. Heavy adults need firm bedding; light individuals may prefer soft beds.

## MATTRESS COSTS

Price never can be the single evidence of quality in a mattress. Instead, you should study mattress construction thoroughly and decide if each product you see meets quality standards. Also, you should buy from a reliable dealer who will stand behind the products he sells.

Standard size double mattresses vary in price from \$39 for a low quality product up to \$79 for a good quality one. The springs made to go with a mattress usually are the same price as the mattress.

Many times, mattresses on sale are specially constructed and brought in as sales promotion items. The quality of a \$39 sale mattress is not the same as that of a regularly priced \$59-\$69 mattress.

Price should be your last consideration when you buy sleep equipment. When spread over 10 to 15 years, the expected life of good quality bedding, the cost per day for good sleep equipment averages only a few cents.

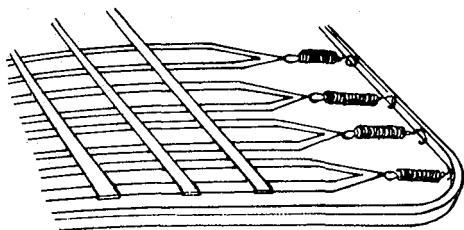
### Approximate price range, mattress and box spring sets\*

Type and size	Low	High
<b>Innerspring</b>		
Twin or double .....	\$ 60	\$160
Queen .....	\$100	\$200
King .....	\$130	\$300
<b>Foam rubber</b>		
Twin or double .....	\$110	\$180
Queen .....	\$150	\$200
King .....	\$300	\$400
<b>Urethane foam</b>		
Twin or double .....	\$ 55	\$135
Queen .....	\$120	\$150
King .....	\$150	\$200

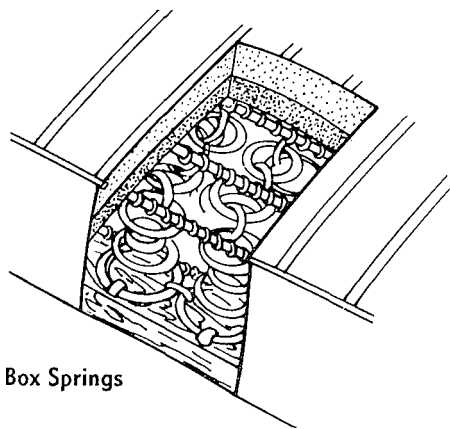
\* Mattresses or box springs alone usually are half the set price. Not all dealers will sell one of a pair. For extra long (80-inch) units, add \$10 to the price of each unit.

### Convertible unit prices

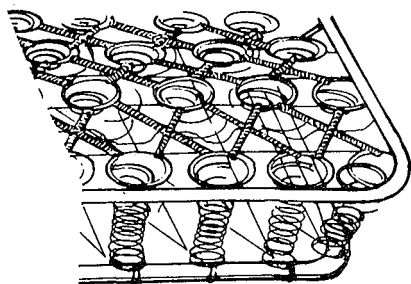
Type	Sleeping area size (inches)	Price range
Trundle or three-way beds .....	Top—33 x 79; bottom—31 x 74	\$ 80-\$180
Corner groups .....	33½ x 77 (each unit)	\$125-\$200
Single sleep lounges .....	28 x 73	\$ 60-\$130
Dual purpose sofas .....	30 x 52-58 (loveseat size)	\$150-\$250
Dual purpose sofas .....	30 x 72-78 (full size)	\$130-\$250
Dual purpose sofas .....	30 x 80-100 (oversize)	\$300-\$500
Chair beds .....	26 x 70	\$ 60-\$ 75
Sleep chairs .....	26 x 73	\$ 65-\$ 90



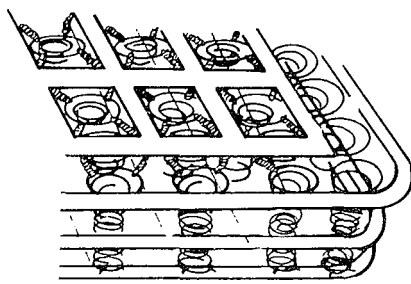
Flat (Link) Springs



Box Springs



Open Coil Springs



Platform Top (Open Coil) Springs

## SPRINGS—A FIRM FOUNDATION

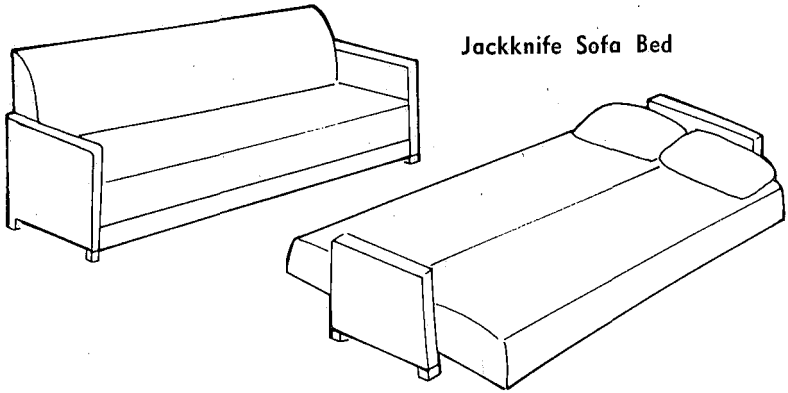
When you buy a mattress, you should buy the box spring made to accompany it. There are three types of bedsprings: flat bedsprings, open coil bedsprings, and box springs.

*Flat bedsprings* are made of flat strips or links of steel wire that run horizontally and are attached to the frame with helical springs. Flat bedsprings are widely used for bunk beds and baby cribs.

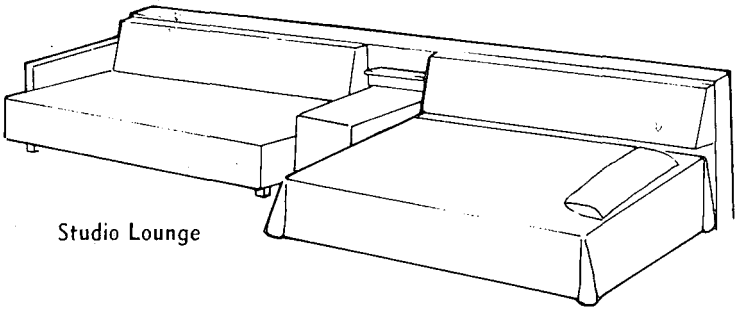
*Open coil bedsprings* are similar to box springs, but they have no upholstery or ticking covers. Double-deck models are preferable to the single-deck ones.

*Box springs* have coils that are tied to each other and mounted on a wooden frame base. The top of the unit is insulated, padded, and covered with fabric to match the mattress. Box springs have a dust cover on the bottom. Good quality box springs have from 72 to 80 coils.

Bedding manufacturers recommend that a new mattress be used with the spring built for it. They especially stress that a foam mattress be used with an excellent box spring, because a foam mattress will conform readily to any imperfections in old springs.



Jackknife Sofa Bed



Studio Lounge

## DUAL PURPOSE BEDDING

Convertible bedding can provide extra sleeping space for large families and for guests. There are five types of convertible bedding available.

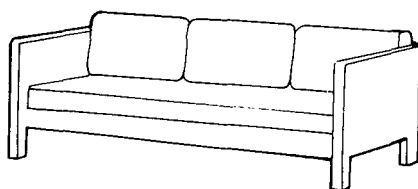
1. *Jackknife sofa beds* are the least expensive sofa-bed combinations. They have backs that drop down level with the seat. They also have a storage space underneath the seat.

2. *Single day beds* are 30 to 33 inches wide and may have pillow arms, backs, and bolsters. A more elaborate version of the day bed is the studio lounge, a pair of 39-inch beds with frames that support bolsters for back and sitting comfort. These beds can be shoved under the frames for sitting and pulled out for sleeping. Single day beds are inexpensive, but complete studio lounges are quite high priced.

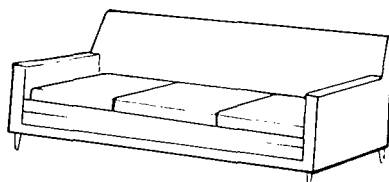
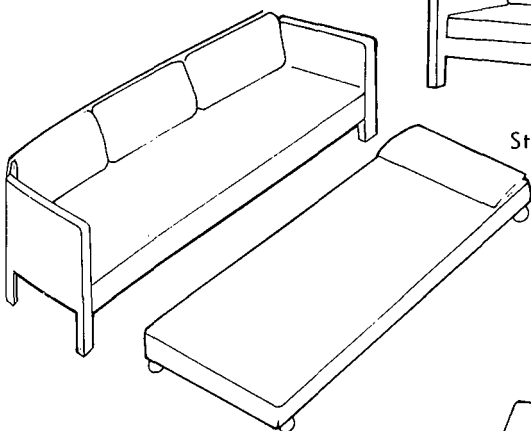
3. *Convertible chairs* open into narrow beds. The mattresses fold or break into three sections. These units are adequate for occasional guests but not for steady use.

4. *Studio couches* or trundle beds consist of two separate beds. One bed is slightly smaller than the other and slips into its own space underneath the larger one. Some studio couches have mechanisms to raise the lower bed to the level of the other unit. Studio couches have sleeping surfaces like regular mattresses.

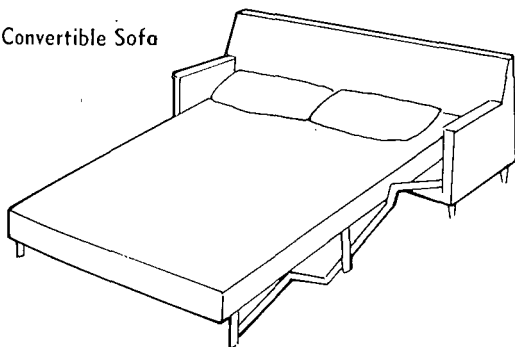
5. *Convertible sofas* have comfortable innerspring or foam mattresses that fold under the seating area. Available in a number of widths, convertible sofas commonly are used in living rooms and dens for daytime seating and as beds every night.



Studio Couch (Trundle Bed)

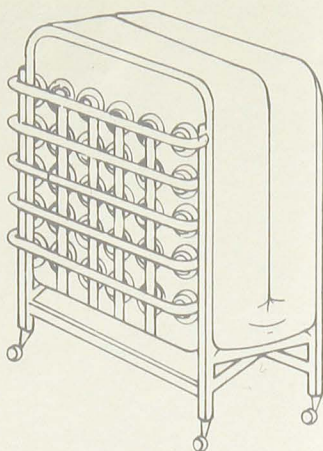


Convertible Sofa



Though not classified as dual purpose bedding, *rollaway beds* commonly are used for every night sleeping and for guests. Select a good quality rollaway bed if you plan to use it often.

Kind	Price
<b>Compact</b>	
36 x 26 x 7 inches, folded	\$15
Urethane foam pad (bed on casters)	\$25
<b>Regular</b>	
30-inch	\$30
39-inch	\$40
48-inch	\$50



## MATTRESS CARE

Given the right care, a good mattress will last many years. Some authorities claim that the best foam rubber mattress will last a lifetime, while the best innerspring mattress will last 25 to 35 years.

You can use removable covers to protect your mattress fabric and help keep it clean. Use washable quilted mattress pads between the mattress and sheet to give added protection.

For surface cleaning, use a vacuum cleaner or whisk broom. Use dry detergent suds to sponge mattresses. Sponge a small area at a time, then wipe it off. Use a minimum of water and dry the mattress with an electric fan.

Try to air bedding weekly between linen changes. Though sunlight will help restore cotton's buoyancy, direct sunlight will fade a mattress cover.

You should turn new innerspring and solid mattresses completely end for end and top to bottom every month or two. After the 1st year, turning a mattress every 6 months is adequate. Foam rubber mattresses never need turning.

Never bend, roll, or beat an innerspring mattress. Sitting on the edge of an inexpensive mattress will break it down.

## BUYING GUIDES

1. Buy from a dealer who you know will stand back of his merchandise.

2. Study information about mattresses and bedding before you shop. Then you will be prepared to ask questions and recognize quality or the lack of it in mattresses you see.

3. Determine your needs before you shop.

4. Decide which type of mattress—foam, innerspring, or combination—will fill your needs.

5. Know the indications of mattress quality—prebuilt borders, inner-rolled edges, 8-ounce cover, ventilators, button top, and sturdy, securely attached handles.

6. Look for durable fabric coverings. Striped, closely woven ticking is a good buy. Luxury fabrics are not too durable and are expensive.

7. Select the best size mattress for your requirements.

8. Read any labels sewn to the end of a mattress for information on inside components, mattress type, and manufacturer's guarantee.

9. Be sure that the mattress you buy adequately supports and conforms to your body. Take a mattress "rest test" to determine the firmness suitable for you.

10. Place your mattress on a firm foundation—the box spring built to go with it.

11. Select the mattress that most nearly meets your particular needs for the money you have to spend.

12. Let price be your last consideration, but don't expect the same quality merchandise for \$39 that you get for \$79.

