a single pair of draperies to cover them.

Consider using several pairs of ruffled curtains placed side by side to create an entire unit covering multiple windows and connecting wall areas. Another solution may be to use one long cafe curtain covering the lower half of the windows and a single valance at the top.

When dealing with separated windows on a wall, alternating sections of draperies and sheer curtains may be used to cover the entire wall. Place the draperies over the wall sections between windows; use the sheer curtains over the windows. This technique will give a unified appearance over the entire area.

If light and privacy are needed in the breakfast or dining room, you may want to use a cafe curtain which covers the bottom of the window and panels at the top separated to admit light. Be innovative in your use of available materials to create the desired illusion.

The window treatment that you choose should depend on your personal taste and style of life. Factors to be kept in mind include the desired visual effect, care requirements, and environmental conditions present in your geographical location.

Indoor Lighting—Lamps, Lumens, And Fixtures

Cécile Scott stood amid the store's enormous lamp department utterly confused. Which lamp to buy? She had thought it would be simple to select one but was perplexed by the variety of styles, shapes, and sizes from which to choose. Some didn't resemble a lamp at all. The wide variety of designs made Cécile have second thoughts about what she wanted.

Cécile had made two common mistakes. First, she had not thought of the lighting for the room as a whole. She needed to consider all the lighting in the room so the results would be attractive, yet effectively provide her with comfortable light for all needs. After all, the primary function of most lamps and fixtures is to provide useful light.

Her second mistake was that she had not decided if she wanted the lamp to be decorative or functional or both. Did she want the lamp to be a decorative element or an accessory? Or did she want it to provide good light for seeing?

Needless to say, lamps can be attractive as well as furnish enough comfortable light for difficult tasks such as sewing or studying. Finding these lamps requires knowledge of the requirements of good lighting as well as some knowledge of interior design.

You, too, may be like Cécile when you shop for lighting equipment if you don't first decide what you want it to do.

You will be wise to think of lighting for the entire room, and select equipment that contributes to an effective overall lighting system. If you are building a new home, the design for the lighting should be part of the plans. Therefore, you may want to seek help from someone who knows how to design a good lighting system. Your electric utility or county Extension Service office may be able to refer you to such a person.

A well designed lighting system need not be expensive since modest priced lamps and fixtures can be attractive and effective. However, the lighting may be designed as elaborately and expensively as you want and can afford.

How do you plan your lighting? By providing enough light of the right kind in the right place.

It is not simple to achieve this, and we will be able to discuss only a few of the considerations. Many points will have to be omitted, and some of those included must be oversimplified.

“Enough” light means an adequate

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amount of light to enable you to see easily and quickly. Although our eyes are very adaptable to low levels, we see better with more light than is found in most homes. Lighting authorities of the Illuminating Engineering Society have determined the minimum amounts of light needed to do different tasks. These amounts are given in terms of foot-candles, which are measured by light meters.

Light meters are not readily available, so you may have to rely on other guides.

Place sources of light everywhere they are needed for seeing, then include others to balance the room lighting. Also include sources for accent and as decorative elements if these fit into your decorating scheme.

Plan for a source of light where you read or study, at the bathroom mirror where you shave, at the kitchen sink where you work, and anywhere you need to be able to see.

Include enough sources so that no part of the room has to be in darkness. Shadows add interest to a room, but too deep shadows become uncomfortable when you are doing difficult seeing over a period of time. USDA Home and Garden Bulletin No. 138 recommends: “Most living rooms need at least five portable lamps, most bedrooms three.”

Lamps are no longer considered the only source of task lighting, for fixtures hung on the wall or ceiling or recessed in the ceiling can also provide required light.

Artful use of accent lighting can be an element of the decoration by emphasizing an art object, a picture, a planter, a brick wall, or a mural. This accent lighting adds a touch of glamour and beauty to the room and contributes to the overall amount of light. In addition, lamps or fixtures may be used merely as decorative elements. Since lamps or fixtures to be used primarily for seeing should be effective light sources, you will have to be selective when you buy.

Choose a table lamp with a minimum of 100 watts; 150 watts would be better. Table lamps used for prolonged periods and floor lamps need 200 or 300 watts. This wattage is in addition to other sources of light in the room. The bulb should be low in the shade so the light strikes the task.

Select a table lamp of good proportion. The size of the lamp should be in relation to the table and chair where it will be used, as the bottom of the lamp shade should be about level with the eyes of a person seated in the chair.

“Enough” light is not the only criterion. The “right kind” or good quality lighting is equally important. Lighting should be comfortable.

Select lamps or fixtures that produce “soft” or diffused light to eliminate glare and contrasts which cause distraction and difficulty in seeing. This is not to imply that “hard” or bright light does not have a place in lighting your home, but it should not be used as a primary source of light.
All primary sources should have bulbs shielded in some manner, except in sources such as the new see-through lamps or chandeliers which are un-shielded. These latter need low wattage bulbs and are often placed on dimmers in order to be visually comfortable.

Look for lamps with under-the-shade devices to provide the comfortable light needed for prolonged difficult tasks. Under-the-shade devices may be diffusing bowls of milk glass or plastic, plastic diffusers, or refracting bowls. Such lamps are not easy to find, but keep looking.

Left, reflector-type fixtures highlight a dining table. Dimmer controls lighting level in these downlights. Valance lighting enhances scenic wallpaper and drapery. Below, flexible lighting for bedroom includes lighted cornice, swing wall lamps, ceiling fixture.
LIGHTING FOR THE HOME

RECOMMENDED FOOT-CANDLES

<table>
<thead>
<tr>
<th>Seeing Task</th>
<th>Primary Task Plane</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dining</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Grooming, Shaving, Make-Up</strong></td>
<td>50</td>
</tr>
<tr>
<td><strong>Handcraft</strong></td>
<td>70</td>
</tr>
<tr>
<td>Ordinance seeing tasks</td>
<td>70</td>
</tr>
<tr>
<td>Difficult seeing tasks</td>
<td>100</td>
</tr>
<tr>
<td>Very difficult seeing tasks</td>
<td>150</td>
</tr>
<tr>
<td>Critical seeing tasks</td>
<td>200</td>
</tr>
<tr>
<td><strong>Ironing</strong></td>
<td>50</td>
</tr>
<tr>
<td><strong>Kitchen Duties</strong></td>
<td></td>
</tr>
<tr>
<td>Food preparation and cleaning, involving difficult seeing tasks</td>
<td>150</td>
</tr>
<tr>
<td>Serving and other non-critical tasks</td>
<td>50</td>
</tr>
<tr>
<td><strong>Laundry Tasks</strong></td>
<td></td>
</tr>
<tr>
<td>Preparation, sorting, hand wash</td>
<td>50</td>
</tr>
<tr>
<td>Washer and dryer areas</td>
<td>30</td>
</tr>
<tr>
<td><strong>Reading and Writing</strong></td>
<td></td>
</tr>
<tr>
<td>Handwriting, reproductions, poor copies</td>
<td>70</td>
</tr>
<tr>
<td>Books, magazines, and newspapers</td>
<td>30</td>
</tr>
<tr>
<td><strong>Reading Piano or Organ Scores</strong></td>
<td></td>
</tr>
<tr>
<td>Advanced (substandard size)</td>
<td>150</td>
</tr>
<tr>
<td>Advanced</td>
<td>70</td>
</tr>
<tr>
<td>Simple</td>
<td>30</td>
</tr>
<tr>
<td><strong>Sewing</strong></td>
<td></td>
</tr>
<tr>
<td>Dark fabrics</td>
<td>200</td>
</tr>
<tr>
<td>Medium fabrics</td>
<td>100</td>
</tr>
<tr>
<td>Light fabrics</td>
<td>50</td>
</tr>
<tr>
<td>Occasional—high contrast</td>
<td>30</td>
</tr>
<tr>
<td><strong>Study</strong></td>
<td>70</td>
</tr>
<tr>
<td>Table Games</td>
<td>30</td>
</tr>
</tbody>
</table>

Select a lamp shade that blends with the background and transmits some light through the sides. Usually light colored translucent shades are preferred because opaque shades create spots of uncomfortably high brightness above and below the rim of shade. Too thin shades show “hot spots” that are distracting. Avoid narrow, deep shades or those which are too shallow. Be sure the lining is white.

Most lamps will be chosen for decorative suitability and for the amount and quality of light produced. Occasionally you may need a lamp that is primarily functional. One type functional lamp is designed for study desks.

Standards have been established for study lamps in order to meet the Illuminating Engineering Society requirements for comfortable seeing. These include an adequate amount of light (70 foot candles) with light distributed upward, and low contrasts in amounts of light around the task. The lamp should be capable of casting diffused rather than sharp, pencil shadows. The amount of light shining through the shade should be limited (50-150 foot-lamberts, the measurement of brightness) for eye comfort.

Lamps made by any manufacturer that meet these standards are tagged Better Light, Better Sight, study lamps.

You may decide to do-it-yourself and make your lamp or fixture from “scratch.” You can buy parts in some hardware, variety, hobby, and lighting equipment stores. Lamp making kits are also available.

You are limited only by your imagination. You can make attractive, unique equipment inexpensively that is decorative, functional, or has both of these features. If the end product is to be functional, consider many of the points that have been discussed previously.

Light in the “right place” is critical if it is to be used for difficult, prolonged tasks. Lighting authorities have worked out measurements for placement of sources in relation to the tasks to be lighted. One rule of thumb for placing a lamp is that the bright inner surface of the shade should never be visible to the user. Tall table lamps and floor lamps are placed at the right or left rear corner and close to the chair.

Don’t forget that lamps are not the only way to provide lighting, even task lighting. Consider other ways: pendants, downlights, wall washers, valances, coves, or wall brackets, to name a few.

Ceiling fixtures in the middle of a room became so unpopular they have disappeared from many rooms.

General lighting from other sources
must be provided to compensate for this loss of light.

Fixtures are being moved toward the edges of the room and now may provide both general and task lighting. Chandeliers used in living areas are placed over baby grand pianos, sofas, or other appropriate large pieces of furniture. Pendants, singly or in clusters, placed off center, may be used for task or accent lighting.

Recessed fixtures can create dramatic effects, but you need more fixtures and more total wattage than when other fixtures are used. If a high percentage of light for the room comes from recessed fixtures, you need to nearly double the total wattage. Designed and installed properly, recessed fixtures can light a room attractively and effectively.

Structural lighting, too, is effective if properly designed and installed, but is often disappointing when done without the correct know-how.

Select a fixture that is decoratively suitable for the surroundings, provides enough light without distracting glare or brightness, has enough wattage for the task, and is designed to allow the light to get out and be distributed where it is needed. No part of the fixture should be so bright that you are uncomfortable when you view it directly. There should be no great contrast between the brightness of the fixture and background.

The bulb used in a lamp or fixture is critical to achieving "enough" light of the "right kind." The wrong color fluorescent tube can "kill" the colors in an attractive room. A too small incandescent bulb does not provide the amount of light needed, and a bulb too large for the equipment causes "hot spots" and can melt plastic.

Colored and decorative bulbs need to be used with caution. Inside frosted or white bulbs are preferred for most lamps and fixtures.

A word must be said about fluorescent tube colors: Deluxe warm white (WWX) and deluxe cool white (CWX) are most frequently used in homes. Warm white enhances warm colors and flatters complexions, but cool white is preferred if blues and/or greens are predominant in the color scheme.

Size of the incandescent bulb is determined by the equipment in which it is to be used.

The wise consumer today takes advantage of information included on the "sleeves" or jackets in which bulbs are packed. Labels list initial "lumens" and bulb life, as well as wattage.

Lumen may be a new word. It means light output—what you get out of the bulb, initially. Fluorescent tubes are more efficient than incandescent bulbs:

- 40 watt fluorescent = 2,080 initial lumens,
- 40 watt incandescent = 450 initial lumens.

Quite a difference! Some incandescent bulbs of the same wattage are more efficient than others.

Lumens increase as wattage increases—a 100 watt bulb produces 1,700 lumens, while a 200 watt bulb produces 3,900 lumens.

Consumers investing in long life bulbs may not realize they are sacrificing light for a long life. You get longer life, but lose light and pay the same for electricity.

Restrict longer life bulbs to such hard-to-reach spots as a stairwell, attic, or fixture in a high ceiling. Where longer-life bulbs are the primary source of light, use a higher wattage bulb (provided the equipment can accommodate the size and heat) to compensate for the reduced output.

The bulb sleeve includes the average expected life of the bulb before it burns out.

New bulbs on the market are reported to last longer than standard bulbs, with less loss in light output. One, a bulb filled with Krypton gas, is called a "Super Bulb"; another bulb utilizing a "power-coil" filament is called "Soft-White Plus." Both cost more than standard bulbs.

Check lumen rating as well as bulb life before making a choice.

Selecting bulbs and lighting equipment may require more know-how and time than you anticipated.

But the results—more attractive
rooms with comfortable, adequate, visual conditions—make it worth the effort.

To obtain more information on lighting consult your county Extension Service's home economist or the electric utility that serves you.

For further reading:


Illuminating Engineering Society, Design Criteria for Lighting Interior Living Spaces, 345 East 47th Street, New York, N.Y. 10017. $4.50 plus $1 service charge on single-copy orders.

Sylvania Lighting Center, Bright Ideas Series, Sylvania Electric Products, 100 Endicott Street, Danvers, Mass. 01923. Single copies free.

Portable Storage, Room Dividers

General basic storage in housing units is needed by all families, and different life styles require some individual adaptation of storage. Often there is a sparsity of storage in even the more expensive houses and apartments. Homes occupied by low-income families almost without exception have inadequate storage. The biggest reasons for inadequate storage in residential units are the added cost and a lack of planning at the time of building.

Fortunately, something can be done to improve household storage in owner-occupied and rented units. Portable or movable storage can be designed to fill the need, and constructed either by a cabinetmaker or by a family member who has some knowledge of hand tools and likes to work with his hands. Portable storage units can also be moved with other household goods when the family changes its place of residence.

The following suggestions for storage designs with do-it-yourself construction techniques may be helpful in planning and keeping costs down. Ideas for portable room dividers also are discussed later in the chapter.

Base-type storage units are useful in the home in at least two ways. They serve to store items at the place of use, and the counter top can serve as a work surface for meal preparation and serving, as a dressing table, or as a place for working on or displaying hobbies.

A base cabinet with simple design that will have the fewest parts, and proper use of the least expensive materials may interest families with a small amount of money to invest. Others may elect to use more expensive materials, add drawers and hinged doors for convenience, and apply a fine finish.

A low-cost counter-type storage unit 3 feet high, 2 feet deep and 4 feet long can be used in the kitchen, utility room, bedroom, dining, or living room. A simple design with sliding doors, wood counter top, and no drawers can be relatively inexpensive and easy to construct.

Sides, floor, shelf, and back may be of %-inch particleboard, or plywood—which is more expensive. The base providing toe space is a 1-x 4-inch No. 2 pine or fir board.

Parts should be sawed accurately, using an electric saw with a carbide-