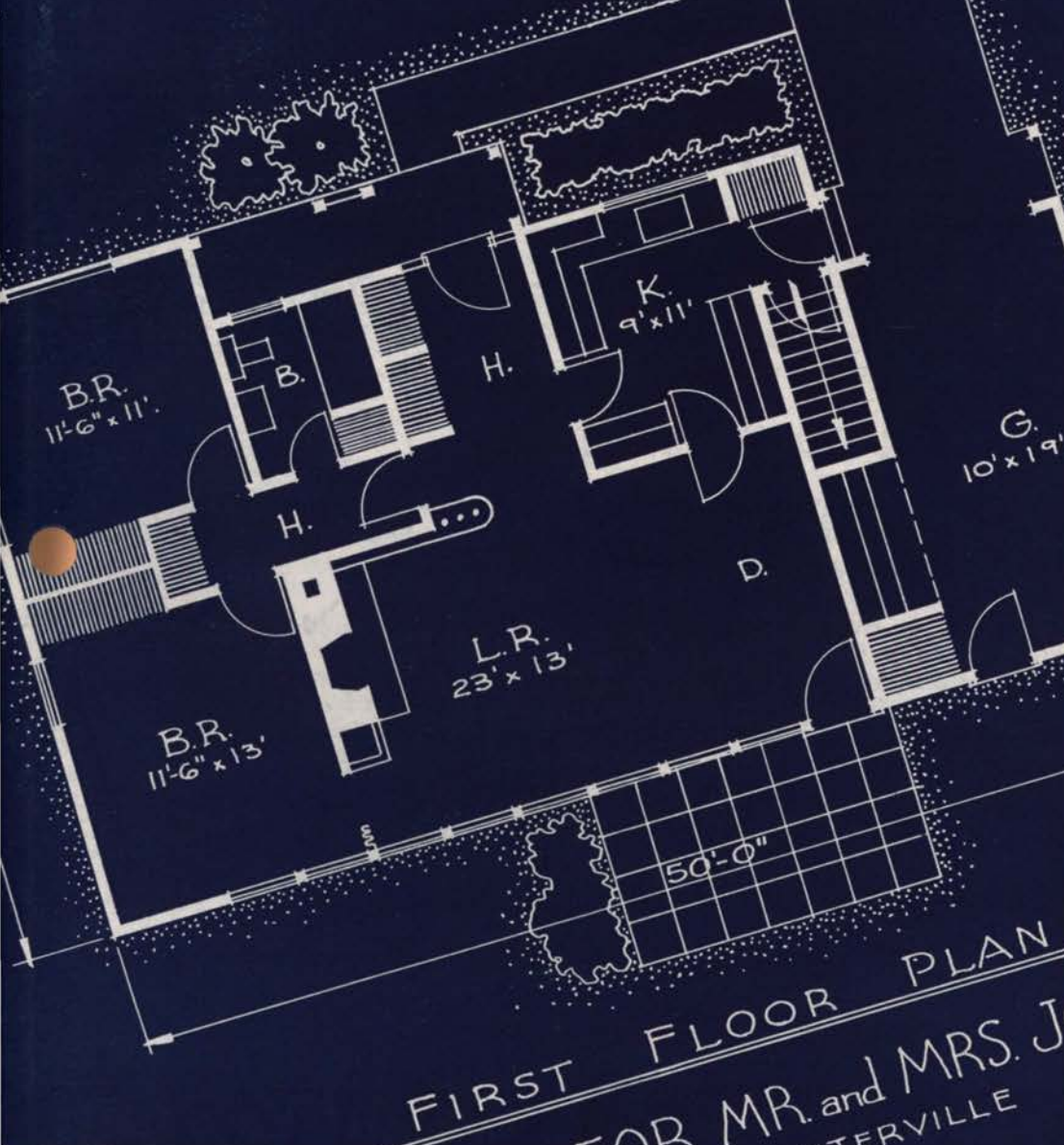


# DESIGNING THE HOME

## How to Select a Plan



CIRCULAR SERIES

INDEX NUMBER **C2.1**

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ISSUED BY THE SMALL HOMES COUNCIL

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DESIGNING THE HOME  
SMALL HOMES COUNCIL  
**C2.1**

# THREE WAYS TO SELECT A PLAN

Selecting the plan is one of the first and most important steps in obtaining a home. The value of your home to your family will depend upon the merit of its plan.

- Part I of this circular will help in analyzing your family's needs to find what space you will require for housing. Part II is a discussion of the factors involved in arranging this space into desirable living areas. Part III analyzes three plans from the points of view presented in Parts I and II, to help you to judge a plan to find whether it is suited to your family's particular needs and desires.

- There are several ways of selecting a plan, but regardless of the method used, it must be chosen primarily because it suits your family's living needs.

**1. ARCHITECT'S PLANS:** If you employ an architect, he will prepare preliminary sketches conforming to your finances, your site, and your family's tastes and habits. When you approve these, you will have selected a plan for which he will then prepare working drawings and specifications for construction.

**2. HOUSE FOR SALE:** Some families will select their plan by actually buying a completed home in a new development or elsewhere. In such cases the plan is built, and you may see its virtues and defects in reality. However, choice is restricted with this method, depending upon the number and variety of homes for sale.

**3. PLAN SERVICES:** Many families select their plan directly from the books of a plan service, and depend upon a materials dealer, contractor, realtor or lending agency for advice. If you do this, use a well-known plan service which furnishes complete working drawings and specifications and which has a reputation for well-designed homes. Select the plan which most nearly suits your needs. If changes are necessary, they must be made by an experienced draftsman before the contract is let. Beware of amateur, homemade sketches by anyone, including yourself. As final plans they are never adequate for actual construction, and may be the cause of unnecessary and costly mistakes.

## FOUR MAJOR CONSIDERATIONS

LIVING SPACE, cost, site, and appearance are the four major factors in planning for any home. This circular will deal with the most important of these — the arrangement of space for family living. The other three considerations can receive only brief mention here.

**COST:** The cost of your home will be governed by the amount which your family is able to finance. This amount in turn will determine the size of the house you can build. Keep in mind cost of the site and other costs of home ownership, especially that of upkeep. (See *Small Homes Council Circular A1.3—"Financing the Home."*)

Good planning that minimizes waste will cut your cost. In general, simple rectangular plans are cheaper than rambling, irregular plans. Dimensions which permit the use of stock sizes of materials eliminate wasteful cutting. The cost may be influenced considerably by the nature of building materials; for instance, shingles, wood siding, concrete, and masonry are all good for exterior walls, but they vary in original cost and upkeep. Get advice on these matters from an architect or builder. **Remember that a plan can be good or bad regardless of the cost of the home.**

**EXTERIOR APPEARANCE:** Architectural "styles" are influenced by climate, availability of building materials and by the customs and living conditions of the times. The plans of many historical "styles" of architecture do not suit today's modes of living; their exteriors, if truly reproduced, require unnecessary and expensive ornament. On the other hand, there is no such thing as a "mod-

ern" or "modernistic" style. You should not forsake livableness for novel appearance.

It is a common American fallacy to begin planning the home with a preconceived exterior in mind; then to force the plan for family living into this shell, often at the expense of good second-floor rooms, adequate windows, or even workable room arrangements.

Simplicity is always best for the small house. A small home which attempts to be pretentious, with an overgrand entrance, unnecessary gables, or storybook ornament wastes money and usually is ugly.

Any home can achieve domestic beauty with an exterior which honestly expresses the plan, depending upon good proportions and truthful use of building materials. Enough variation is possible to suit every type of good taste. Landscape design is important to the exterior appearance of a home, and the lot should be planned together with the house itself. (See *Small Homes Council Circular B3.0—"Fundamentals of Land Design."*)



COMPLICATED STYLING USUALLY IS COSTLY AND OFTEN IS IN BAD TASTE.

**THE HOMESITE:** If you already own a lot, select a plan which suits its conditions. If you have not yet bought a lot, it is wise to form a general idea of your house plan as a guide to selecting the site needed for it. (See *Small Homes Council Circular B2.1—"Selecting the Homesite."*)

# PART I—FAMILY LIVING NEEDS

The selection of a plan involves, first of all, a list of your family's actual needs, figured with an eye to the future, when children grow older and other conditions change. Below is a check list of the activities of the normal American family and the rooms or areas which may accommodate them.



## HOUSEWORK

### Food Preparation

- Kitchen

### Laundry

- Basement
- Utility Room
- Kitchen-Laundry Combined

### Sewing

- Utility Room
- Kitchen-Laundry Combined
- Dining Space
- Bedroom

### Housecleaning

- Proper Storage

### Garden and Yard Work

- Basement or Utility Workshop
- Garage or Utility Workshop

### Maintenance (Tools, Paints, etc.)

- Basement Workshop
- Garage Workshop

### Domestic Help

- Servant's Room
- Lavatory or Bath



## FAMILY GROUP LIFE

### Dining

- Dining Room
- Part of Living Room
- Part of Kitchen

### Family Leisure

- Living Room
- Bedrooms
- Study or "Quiet Area"

### Outdoor Living-Dining

- Porch or Terrace
- Lawn

### Recreation and Entertaining

- Living-Dining Areas
- Kitchen
- Basement Game Room
- Utility-Game Room
- Terrace, Porch or Yard

### Small Children's Activities

- Utility-Play Room
- Living Room
- Play-Bed Room Combined
- Terrace, Porch or Yard



## FAMILY PRIVATE LIFE

### Sleeping and Dressing

- Bedroom or Other Area
- Clothes Storage
- Bath

### Hygiene

- Bath
- Lavatory

### Individual Work, Hobbies

- Study or "Quiet Area"
- Bedrooms
- Basement Workshop
- Utility Room Workshop
- Garage Workshop

### Isolation (Infants or Sick)

- Quiet Bedroom

### Guest Accommodations

- Guest Room, or
- Sleeping Facilities in
  - Study
  - Living Room
  - Utility Room
- Convenient Lavatory

## EXAMPLES OF FAMILY REQUIREMENTS

An abstract "check list" of family activities means something only when it is applied to an actual situation. A few of the conditions which influence home planning for some families may indicate the way in which you should analyze the needs of your own family:



1. Small children of opposite sex will need *two bedrooms* when they grow older.

2. When teen-agers take over the living room, parents need a study or "*quiet area*" which is accessible without going through the living room.

3. Equipment for sports such as hunting, fishing, and golf should have its own *storage space*.

4. Parents and children who like to work with tools need a place for a *workshop*.

5. Even if overnight guests are a rarity, a place for a *convertible bed* furnishes extra sleeping space when needed.



6. A lavatory and a *place for muddy shoes* near the service entrance are handy for the "gardener" or the children.

7. A *dining space in the kitchen* is preferred by many families; but people who entertain frequently will want a dining room.

8. An aged family member may be unable to use stairs; must have a *first-floor bedroom*.

9. When Mother has her bridge club, Dad should be able to *get to his room* unobserved.

10. New ideas for *dividing the bath* may help to solve the morning rush for busy families.



• When planning a home, consider the possibility of selling it in the future. It is unwise to let minor family habits influence the planning to the extent of making a "freak" house which other families might not want.

## CHECK YOUR FAMILY'S NEEDS FIRST

In analyzing your needs, remember that family life is happiest when the home provides facilities for both group and individual activities. The relative importance of different activities will vary with the size and habits of the family. Major activities should be given greater space than minor ones.

When you have checked the areas required by your family's living needs (above), you will have an idea of the space which you must look for in choosing plans for a home.

## PART II—HOW TO JUDGE A PLAN

Having chosen several plans with the areas which you require, you are now ready to go about selecting the particular plan best suited to your needs and desires.

Let us assume that you have before you one or more plans which appear to answer your needs. These plans may be preliminary sketches from an architect, or from the books of a plan service; or you may be considering the plan of a house which you are interested in buying.

By this time you should have established the approximate limitations of cost and size, and should know the possibilities of available homesites. Now you must judge the plan for its faults and virtues. You may never find a perfect plan, but you want to be sure that the one you choose will have a minimum of faults. You should discover and avoid mistakes before the house is built.

**SPACE FOR LIVING**—Your first major consideration must be the suitability of the plan to the list of your family's needs. Just as you would "try on" a dress or a suit before buying it, so you must try this plan. It must be more than just "a house with so many rooms" if it is to be judged on the basis of meeting your space requirements.

You should put your family into the plan, and visualize living in the house when it is built. Does it have the proper rooms and areas for the activities you have listed? If it does not, the plan is unsuitable and should be rejected.

### A. FLEXIBILITY

• People today spend more for the better construction and maintenance of their homes. Insulation, heating, wiring, appliances, and cabinet-work are "musts" in today's well-built house, and without these improvements it will have a poor resale value. Because of these improvements, small houses now cost as much as larger ones did several decades ago. Nevertheless, this reduced amount of living space can and must serve the family whose budget is limited as adequately as a larger but older house.

• The smaller the house, the more complicated the assignment of "space for use" becomes. An expensive house may have separate rooms for guests, dining or study. In the small home which cannot afford this space, a plan which calls for a few large areas is always better, more livable and more adaptable to change than is one with a number of small rooms.

• Good plans solve this problem by making each room-area serve as many activities as possible. A plan which does this is said to have "flexibility." This is particularly necessary in areas where "family group living" is carried on. New designs make multi-use of service areas also. Well-designed storage space and cabinet-work play an important part in providing flexibility. The sketches show some of the principles involved.

• "Flexibility" in home design does not mean movable walls for quick changes of space. Folding doors, screens, and demountable partitions will be used more frequently in future homes and there is a trend toward the elimination of interior load-bearing partitions to permit more flexible planning.

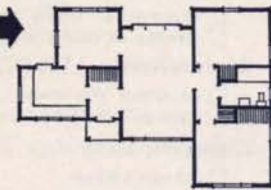
**OTHER FACTORS**—The plan itself is essentially an arrangement of living spaces, and as such it must be both workable and buildable. When the plan was made the designer had to consider several important factors. They are: a) flexibility, b) circulation, c) orientation, d) furniture arrangement, e) storage space, and f) utilities.

You also must judge the plan for each of these points. If it has serious faults in any one of them, it will not be satisfactory. The following discussions will describe these factors and will tell you what to look for in selecting your plan.

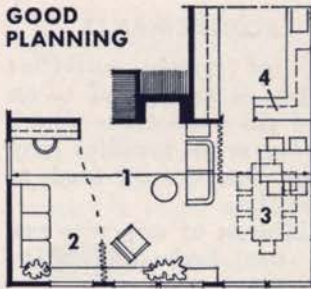
#### AN INFLEXIBLE PLAN

Rooms are small and isolated. The plan allows no opportunities for combining areas for various uses.

**BAD**



#### GOOD PLANNING



#### FLEXIBLE LIVING AREA

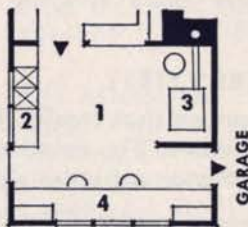
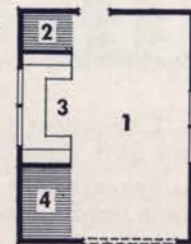
Space can be more useful in a large, well-planned single area.

1. Large room for family group living activities.
2. Quiet area for books, desk, or convertible couch.
3. Area for family dining or for entertaining guests.
4. Serving counter.

#### MORE USE FOR THE GARAGE

The addition of 3 or 4 feet to width or length of the garage greatly increases its usefulness.

1. Car space—storage racks overhead.
2. Garden tools.
3. Workbench and tool cabinets.
4. Bicycle or wagon rack—Storage locker or screen rack above.



#### A GOOD UTILITY ROOM Is Planned Flexibly . . .

1. Work and children's play.
2. Laundry.
3. Furnace or boiler and water heater.
4. Counter and cabinets for sewing, children's play and hobby workshop.

## B. CIRCULATION

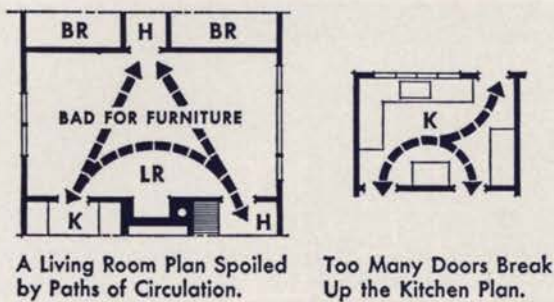
### EXCESSIVE HALL-SPACE MAY MEAN BAD PLANNING



### STAIR PLANNING IS NOT FOR AMATEURS



### IMAGINARY PATHS THROUGH ROOMS



A Living Room Plan Spoiled by Paths of Circulation.

Too Many Doors Break Up the Kitchen Plan.

### DOOR "SWINGS" AFFECT THE PLAN



Proper Door Swing for Most Rooms.

Doors Waste Floor and Wall Space.

Corner Doors Take Cabinet Space.

### SERVICE EXITS



## C. ORIENTATION

Good orientation means the placement of the home on the site to take advantage of sunlight, breezes, views, and desirable surroundings. It has been discussed in "Selecting the Homesite" (SHC Circular B2.1), "Fundamentals of Land Design" (SHC Circular B3.0), "Solar Orientation" (SHC Circular C3.2), and will be mentioned in other circulars because of its importance in planning today. In judging your plan, look for such points as:

1. **Relation of rooms to parts of the lot.** The living-dining area and bedrooms should have direct access to or look out upon your own garden or lawn. The kitchen, laundry, and utility areas should have direct access to the driveway, which should be on the least desirable side of the site. The plan should not require a waste of ground for service walks, drives, and garage.
2. **Relation of rooms to breeze and light.** The major rooms must have windows toward the sunlight and prevailing breezes. Bedrooms should always have adequate ventilation. Rooms which face upon narrow sideyards may be shut off from light, breeze, and views.

(Part II continued on Page 8)

• The term "circulation," when applied to planning, refers to the means of getting from one part of the house to another — or to the outside. In judging a plan, you should be able to recognize good or bad features of circulation.

1. **Halls** in small homes serve no purpose other than that of circulation. Therefore they should occupy as little space as possible, and be eliminated when unnecessary. Furniture-moving requires a hall-width of 36" to 40".

2. **Stairs**, although purely for "circulation," may sometimes require design for beauty. In judging the plan they must be studied for safety and economy of space. Steep or winding stairs are dangerous; absence of a handrail makes them more so. Stairs must be at least 36" wide to permit moving furniture.

3. **Imaginary paths** of circulation exist through some rooms which have more than one doorway. These paths may turn a room into little more than a hallway, interfering with the placement of furniture or cabinetwork, and causing unnecessary steps. Trouble of this kind may be a sign that the whole house is poorly arranged.

4. **Doors** are a part of the circulation scheme which depend upon the general plan arrangement. If there are many bad door locations, it indicates that the arrangement of the plan is bad. The swing of a door uses a considerable amount of space. Doors usually stand open in a home and the effect of an open door upon usable wall area in this position should be observed. A small hall or stair hall with several doors leading into it may be almost unusable because of conflicting door swings. Although a person can walk through a doorway only 18" wide, moving furniture into a room requires a width of at least 2'8".

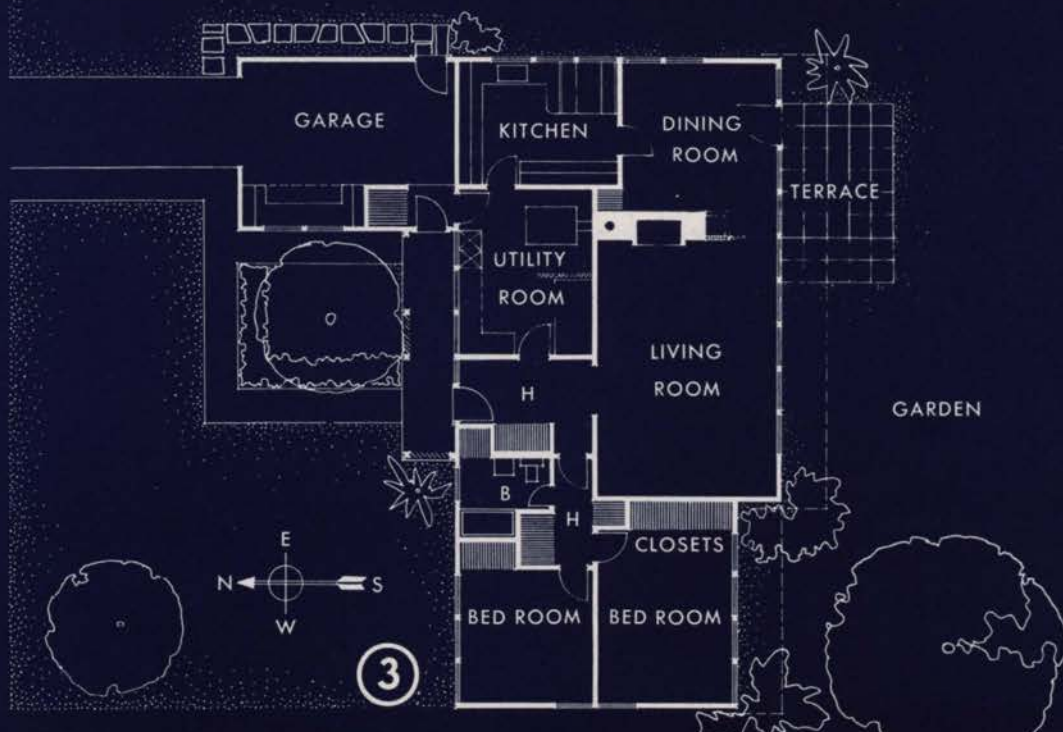
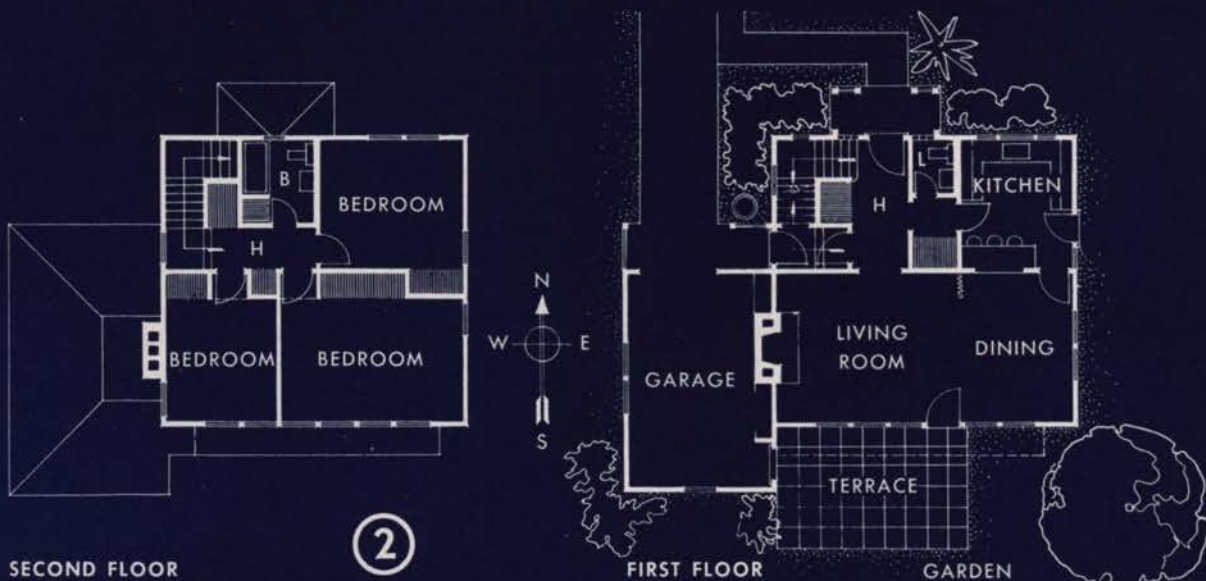
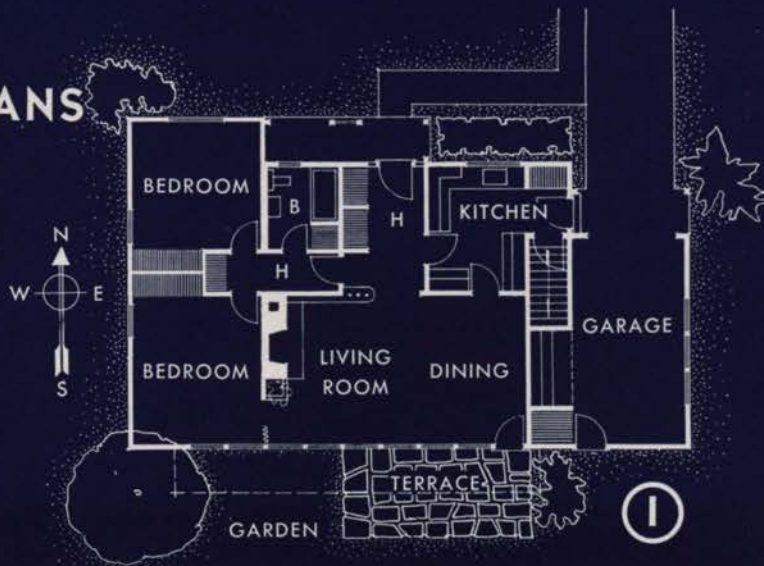
5. **Exits** from the interior to the exterior are most important in connection with service functions. The business of taking ashes or laundry from the basement to the outdoors may be very unsatisfactory if improperly planned. Direct circulation is required for delivery of groceries to the kitchen and for removal of garbage from the kitchen to outdoor containers.

# PART III

## ANALYSIS OF 3 PLANS

• These plans were selected because they show unusual merit in all of the major planning principles discussed in this circular. They represent three possible solutions for one type of orientation.

• The analyses on the opposite page will serve as a guide to you in studying other plans which may be better adapted to your own needs and to your homesite. You should judge your plan on its own merits, but using these principles.



## 1. ONE-STORY HOUSE WITH BASEMENT

The plan for this small home is compact and uncomplicated, permitting simple gabled roof lines and economical framing (interior partitions form straight lines through the plan). The shape of the house permits maximum use of the lot.

**FLEXIBILITY:** Living and sleeping areas are large and adapted to multi-use. One bedroom may be used as a study or "quiet area." Size of bedrooms could be changed by moving the storage wall.

**CIRCULATION:** Even with the ample entrance hall, very little hall space is required to provide ideal circulation. Kitchen or bedroom may be reached from outside or from any part of the house without entering the living area. The basement stair has direct access to the service entrance.

**ORIENTATION:** Living area faces south to the garden. Bedrooms have excellent ventilation. Service areas are convenient to the drive.



**STORAGE:** Good storage space is provided in bedrooms, halls, bath, kitchen, service entrance, and garage. Note workshop in the garage.

**UTILITIES:** Basement heating plant is easily serviced. Areas with plumbing are well grouped for economical piping.

**FURNITURE:** Adequate wall areas and proper door "swings" allow for good furniture placement. Sill heights must be checked where furniture is to be under windows.

## 2. TWO-STORY HOUSE WITH BASEMENT

The compact, rectangular plan insures economical framing and roofing. Second-floor partitions are in line with those on the first floor. A minimum amount of the lot area is occupied by the house.

**FLEXIBILITY:** The living-dining-kitchen areas are suitable for private life or for entertaining. Size of two south bedrooms could be altered easily.

**CIRCULATION:** Excellent and adequate circulation is provided with minimum hall space. Stairs are safe and well lighted. As in plan No. 1 the living area is undisturbed by circulation. Basement has direct access to exterior service facilities.

**ORIENTATION:** Two bedrooms and the living-dining area face the garden. All bedrooms have cross ventilation. The kitchen, though separate, is accessible to other "service areas."



**STORAGE:** The house and garage have abundant storage space, well-planned and located.

**UTILITIES:** Basement laundry, first-floor lavatory and kitchen, and second-floor bath are located over each other for economical piping. Direct service of basement heating plant is assured.

**FURNITURE:** Door swings are carefully planned; good wall areas are plentiful.

## 3. ONE-STORY HOUSE WITHOUT BASEMENT

This house is large in all of its dimensions and would require a deep lot because of the placement of the garage. It is very simple in over-all shape, economical for framing and roofing.

**FLEXIBILITY:** The plan is unusually flexible. The first-floor utility room, convenient to the kitchen and bath, is ideal for laundry, sewing, children's activities or even extra sleeping space. The living-dining area and kitchen are well adapted to many activities. The dining room can serve as a "quiet" or study area separated from the living room by a folding partition. Workshop and storage in the garage perform functions usually assigned to the basement.

**CIRCULATION:** This plan has all the merits of those above in respect to circulation.

**ORIENTATION:** All areas are ideally located for orientation to both view and sunlight.



**STORAGE:** Closets are ample and well located.

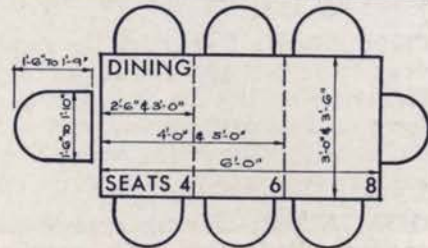
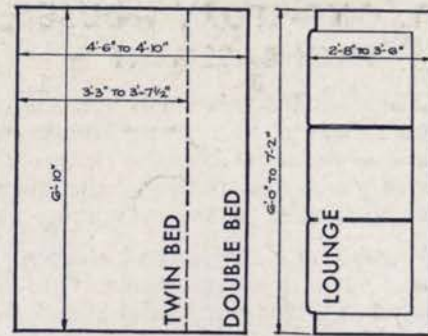
**UTILITIES:** All areas requiring plumbing are located within one third of the plan. Because of its location in the utility room, the heating plant should be operated with fuel that can be automatically handled. The position of the heater in the center of the house insures economical installation and efficient operation.

**FURNITURE:** All rooms are designed for good use and arrangement of furniture.

## D. FURNITURE PLACEMENT

• When you have found a plan which satisfies your needs for space and which stands the tests for other factors, you should consider the placement of furniture. Furniture is the equipment which makes empty rooms livable. Sizes for furniture are established by human use; and beds, tables, and chairs are relatively standard. On your plan you can see floor areas and wall dimensions, the location of windows and the "swing" of doors. One thing is not apparent, however — the height of window sills. Check these carefully to see whether your chest of drawers or dressing table actually can be placed under a window if you would like to have it there.

You should "live in the plan" for a while with the furniture you expect to have in your new home. One of the best ways to do this is to cut out paper patterns of the furniture, scaled to the proper size, then place them on the plan which you have selected. (The patterns sketched at the right are scaled  $\frac{1}{4}$ " to 1'. They have been inked heavily so that you can trace them onto cutout paper and arrange them on your plan.)

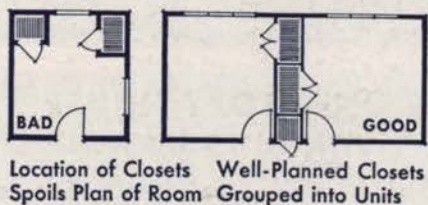


## E. STORAGE SPACE

• Every housewife insists that her new home must have "lots of storage space." (Like all features of planning, storage space deserves and will have a complete circular devoted to its discussion.)

Storage space must be designed specifically for the articles to be stored, and storage units should be located near the areas where these articles are used. In judging a plan several important points should be kept in mind:

- 1. Size of storage space.** You must not leave waste room behind or above stored articles. Deep, dark closets or inaccessible overhead storage shelves are inconvenient and wasteful of space.
- 2. Sloping ceilings,** usually on second floors, may render useless a closet which looks adequate on the plan. Be sure you know what the closet will look like when it is built.
- 3. Location of closets** should not spoil room arrangements by chopping off corners or by destroying open wall space with closet doors. Closets for adjoining rooms should be grouped in storage units. In future homes such "storage walls" may be demountable and adaptable to change in location or arrangement.
- 4. List carefully** articles to be stored and check your plan for storage space. Some items frequently overlooked are: card tables, vacuum cleaners, sports equipment, tools, and luggage. Lockers in the garage provide an excellent place for storing a variety of articles, if the garage plan provides enough space.



## F. UTILITIES

• **Mechanical equipment,** piping and plumbing fixtures are necessities in American homes. A good plan will keep the cost of these items at a minimum by locating them for efficient and economical installation, and by allowing only the amount of space actually needed for the equipment.

**Heating.** The type of fuel to be used will influence the planning. Coal or oil must be delivered, and the fuel storage space should be convenient to the driveway. The removal of ashes from the heater room must be convenient and direct. It is a good idea to plan for such conveniences even though you do not expect to need them; a change of fuel may be found necessary at some future date. Be sure to check *safety* requirements for fuel storage and heater rooms.

**Plumbing.** Rooms in which plumbing fixtures are located may be planned for economy as well as convenience. The cost of piping is reduced when lavatory, bathroom, kitchen, and laundry are located near each other in a one-story plan, or above each other in a two-story plan. However, such economies are of secondary importance except in small, low-cost homes.

**Electricity.** Wiring does not affect room arrangement, but it must be adequate. The location of appliances and lighting fixtures is very important in planning for today's needs.