

HIS IS THE SECOND in a series of plans on the use of available research material related to housing space requirements.<sup>1</sup> The floor plan, as developed in this leaflet, demonstrates how available research data may be used effectively to develop floor or basic study plans which the prospective builder or home owner may present to an architect or engineer for development into working drawings.

The problem presented here involves planning a house to meet the needs of a growing family while using, wherever practical, limited space recommendations. Facilities included in the plan are those suggested by the Southern Regional Research Committee in Housing as the minimum recommendations for comfortable family living. These are listed in the legend for Figure 5. Other plans and combinations of areas are possible and perhaps even desirable, depending on an individual's preference and past experience.

Families are faced with the problem of providing adequate housing space for family members at a cost they can afford to pay. For most families, the stage in the family life cycle requiring the largest housing area also is that period requiring the largest expenditures for other goods and services. If young families try to provide this extra space early in the family life cycle, they are apt to overexpend their income while it is small. This basic study plan for a family dwelling has been approached with these situations in mind.

# CONCEPTS IN PLANNING

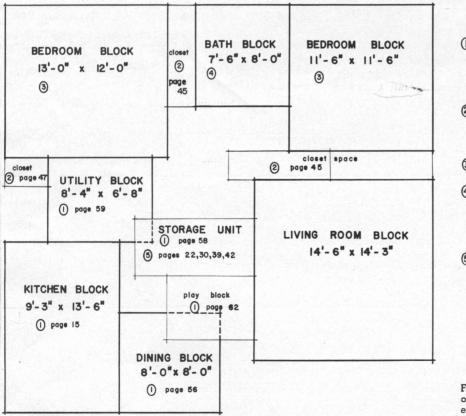
Some of the basic concepts that should be considered in developing a home plan are:

### A. Management of Family Finances

- 1. Identify family characteristics of level of living and goals for housing.
  - a. Recognize housing as a part of total family financial planning.
  - b. Study available income and plan housing within it to maintain the level of living and attain goals in other areas.
- 2. Consider the needs at different stages through which a family passes from formation, through child rearing to the aging adult couple; and the relation of housing and its cost to each of these stages.
  - a. Determine the areas to be provided for the beginning family.
  - b. Plan to provide additional areas, such as bedrooms and family rooms, for the growing and maturing family.

#### B. Points of General Emphasis

- 1. Make a list of storage needs before beginning the plan.
- 2. Plan for possible dual use of space—guest sleeping in living room, hall space incorporated in living and work areas and other combinations.
- 3. Use storage units planned for specific needs —bed closet, sewing closet, cleaning supply closet, linen closet, heating unit and others.



# LEGEND

- () <u>PLANNING GUIDES FOR SOUTHERN</u> <u>RURAL HOMES</u> SOUTHERN COOPERATIVE SERIES BULLETIN NO. 58
- (2) ROD CLOSETS FOR SOUTHERN FARM HOMES BULLETIN NO. 325
- 3 UNPUBLISHED DATA
- YOUR FARMHOUSE PLANNING THE BATHROOM U.S.D.A HOME AND GARDEN BULLETIN NO. 19
- (5) <u>SPACE DESIGN FOR HOUSEHOLD</u> <u>STORAGE</u> HELEN E. McCULLOUGH UNIVERSITY OF ILLINOIS AGRICULTURAL EXPERIMENT STATION

Figure 1. Block design of a floor layout showing the relation of rooms to each other and to storage units.

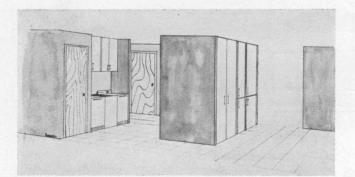


Figure 2. Perspective detail showing the storage unit between the dining and utility areas. Cabinets on the dining side provide storage space for sewing supplies, clean unironed clothes, toys, china and miscellaneous food service equipment.

> Follow research recommendations for planning the individual storage unit.

- Plan private living and work areas on the outside perimeter of the house. These may be grouped around a central storage core.
- 5. Plan traffic routes to avoid crossing the center of the living area. Keep routes to one wall. If traffic must pass through any work

area, provide extra space for passing—a minimum of 4-foot width should be provided in such passageways.

6. Plan each sleeping area with storage space and floor area to accommodate two people. Consider location of furniture and free floor space for moving about.

# C. Structural Planning

- 1. Plan structural details so changes necessary for future additions will be nominal in cost and easy to carry out.
- 2. Plan an attractive design keeping structural spans within the more common lengths for lumber. Rectangular plans are less expensive than irregular shapes.
- 3. Select materials for durability and design the home for ease of maintenance, as well as for attractiveness.

### PROCEDURE

STEP 1. The initial size was limited by planning a two-bedroom house with provisions made for adding a third bedroom and, if desired, a family room. Major areas of the house were drawn in block form and used to develop a rectangular house around a central storage core, Figure 1. The

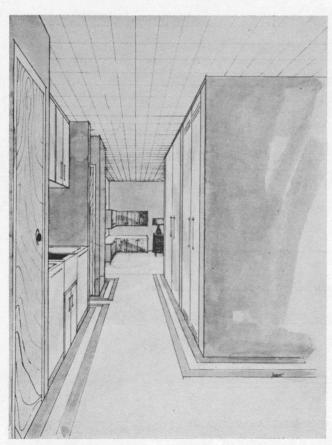


Figure 3. Perspective of the utility area looking from the garage door toward the living room area. Wall unit on the right provides storage space for heating and cooling systems, water heater, roll-away bed and guest closet.

Figure 4. Cut-away perspective showing the bathroom arrangement with the soiled clothes bin under the counter on the left and bath supplies and bath linens in the closet on the right.

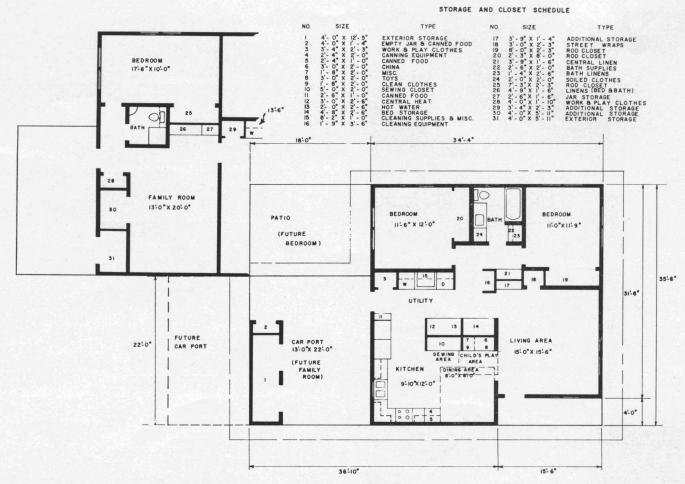


Figure 5. A floor layout developed from the block layout. This house may be expanded later, using the additions suggested in the upper left hand corner of this illustration.

block units roughly show the total house area, indicating the relationship of sleeping, living and work areas to each other and to all storage units. Storage units were selected according to the space recommendations available in research publications.<sup>2-8</sup>

The basic kitchen plan was selected from Southern Regional Bulletin 58 page 15.<sup>7</sup> A storage closet near the living room has been included, based on research from the University of Illinois.<sup>8</sup> The closet provides space for a roll-away bed, storage of luggage and hanging space for guest's clothing. This storage provides the closet space necessary to make the living area serve the dual function of living room or guest bedroom. The room may be closed for privacy without interfering with the normal flow of traffic in other areas of the house.

Information on bedroom and living room space needs is limited. Two publications, "Your Farmhouse . . Cutouts To Help in Planning"<sup>9</sup> and "Space Requirements for a Living—Sleeping Room,"<sup>10</sup> were used as guides in planning these areas. Floor space needs for various pieces of furniture are given in these publications. Bedroom and living room space needs were determined from the information. Size of bedroom areas depends on the number of people to be housed, rod storage space needed and space required for a comfortable arrangement of furniture. Each bedroom in this house was planned for two people.

STEP 2. Available research recommendations were incorporated to provide for present needs and future expansions. Rod closet space for bedroom areas was based on recommendations for moderate rather than limited individual wardrobes. This provides for future changes in the family's level of clothing inventory. The initial plan provides for one bathroom. A laundry tub is included in the utility area, and also may be used for a wash-up basin for people coming from outdoor work or play. A closet for storage of outdoor work or play clothes is planned in the utility area. Storage for canned food has been placed in the kitchen and in the carport. Miscellaneous storage space for small electrical appliances is available in the diningkitchen area. Clean clothes storage is in the dining area near the sewing-ironing unit, Figure 2. Soiled clothes storage is in the bathroom and opens into the hallway between the two bedrooms. Figures

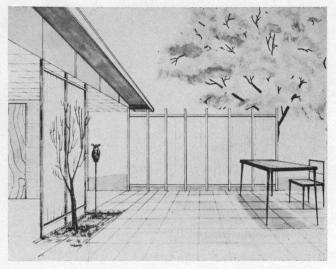


Figure 6. The patio as seen from the bedroom window looking toward the carport on the left.

3 and 4 show the perspective details of these storage units. Location of specific storage units provides for optimum utilization of space for family activities. Limited over-all space has been maintained as far as possible in the initial two-bedroom plan.

Space for children's toys is provided in the dining area near the living room. This space, at some stages in the family life cycle, might be used for storage of recreational supplies for teenage and adult activities. A miscellaneous storage unit for books, trophies, art objects and similar home accessories is provided in the living area of the house.

STEP 3. A floor plan was developed from the block layout by providing needed hall and wall space. Most of the hall space in this house is part of a room area or has a dual use as a work and storage wall access area. In the latter case, a 4foot hall width is provided, Figure 5. By recessing the living room, a more pleasing exterior design is possible for this almost square house. This house is planned for rural family living, but also may accommodate family needs in urban and suburban communities. The plan has about 1,257 square feet of heated area.

A patio, Figure 6, for outdoor family living will increase the total living area at minimum cost. This patio may be enclosed later for additional bedroom space when the carport is enclosed for family room space. At that time, a new patio may be provided in the same relation to carport and bedroom areas. With the addition of a third bedroom, a second complete bathroom and a family room, the total living area becomes 1,808 square feet. This house later may become a contracting house in the latter stages of the family life cycle by making the third bedroom and possibly the family room into living space for a separate household unit.

This plan represents the interpretation of research data by personnel of the Texas Agricultural Experiment Station. Unlimited possibilities exist for the application of these data in the development of various study plans to meet individual preferences.

#### ACKNOWLEDGMENTS

Appreciation is expressed to members of the Technical Committee of the Southern Regional Housing Project, S-8, for their suggestions and evaluation of this material as it was developed, to Price Hobgood for his continued interest, suggestions and encouragement, and to W. S. Allen, Charlotte Tompkins and Eula Newman for reading and evaluating the manuscript.

#### BIBLIOGRAPHY

1. Moderate Size House Plan for Southern Living— Study Plan 1. Texas Agricultural Experiment Station — Texas Agricultural Extension Service Leaflet 543. College Station, Texas. August 1961.

2. Rod Closets for Southern Farm Homes. Auburn Agricultural Experiment Station Bulletin 325. Auburn, Alabama. March 1960.

3. Storage Space Requirements for Household Textiles. ARS 62-2. USDA, Washington, D. C. September 1955.

4. Space Requirements for Home Sewing. Georgia Agricultural Experiment Station Bulletin N.S. 69. Athens, Georgia. July 1959.

5. Your Farm House—Planning the Bathroom. Home and Garden Bulletin 19. USDA. 1958.

6. Home Activity Centers. Miscellaneous Bulletin 34. Cornell University, Ithaca, New York. September 1959.

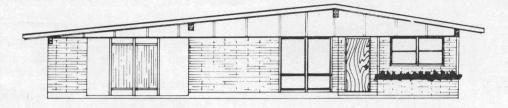
7. Planning Guides for Southern Rural Homes. Southern Cooperative Series Bulletin 58. June 1958.

8. Space Design for Household Storage. Illinois Agricultural Experiment Station Bulletin 557. Urbana, Illinois. August 1952.

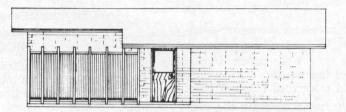
9. Your Farmhouse—Cutouts to Help in Planning. USDA Home and Garden Bulletin 22. 1952.

10. Space Requirements for a Living-Sleeping Room— unpublished data.

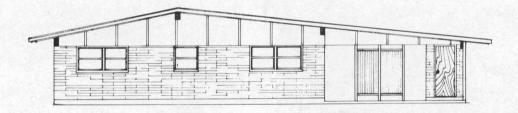
11. Evaluation of Construction. Material and Livability of Five Expansible Farmhouses, ARS, 42-45. USDA. April 1961.



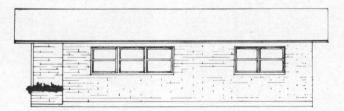
FRONT ELEVATION



LEFT SIDE ELEVATION



BEAR ELEVATION



RIGHT SIDE ELEVATION

Cooperative Extension Work in Agriculture and Home Economics, The Texas A. & M. College System and United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914.