YOUR FARMHOUSE . . .

CUT-OUTS
TO HELP IN PLANNING

U.S. DEPARTMENT OF AGRICULTURE  HOME AND GARDEN BULLETIN NO. 22
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CUT-OUTS TO HELP IN PLANNING

Good house planning is a family job. Needs of individual members and of the family as a whole are best met when every member of the family has a part in deciding on the kind of house to be built or the changes to be made in remodeling the present house.

Make plans carefully, by easy stages—not hastily. Think about future as well as immediate needs. Keep in mind that as the family changes in number and age, there may be changes in housing needs—in the number of bedrooms, for instance, and in space for dining, social activities, work, and storage.

The first step in planning is to make a list of the features the family wants in the house. Such a list would include—

- Number of stories
- Number and location of bedrooms and bathrooms
- Size, location, and orientation of living room and kitchen
- Amount and location of dining space
- Location of laundry area or utility room
- Location for sewing facilities
- Power and space for modern labor-saving equipment
- Special provisions for aged, infirm, or very young members of the family and for easy care of the sick

Be sure to consider also water and sanitation systems, central heating, insulation, ventilation, and electric lighting.

Put your plan on paper

With the needs listed, the next step is to translate them into a plan on paper. In doing this you will want to consider the orientation of the important rooms of the house to take advantage of pleasant views, sunlight and breezes, and desired views of the highway entrance drive and other farm buildings. Locate your front entrance so that guests coming in the drive will use it. Place the entrance to the work areas of the house for convenient access from the farm court or other farm buildings.

This bulletin is designed to help you work out your plan. It gives floor plans for different types of houses, showing major traffic lanes, which may offer suggestions that you can use in building or remodeling. It also gives typical lay-outs for the different rooms in a house and indicates clearances needed for passage and work space between pieces of equipment or furniture and walls. Included are pages of cut-outs of furniture and equipment, drawn to a scale of ¼ inch to represent 1 foot. With your plan drawn to the same scale, you can use these cut-outs to test the plan. Illustrated directions showing just how to proceed are given on the next four pages.
Planning the New House

In planning a new house do it the easy way. Make basic decisions and put them on paper in logical order. To make the preliminary plan use circles—not rectangles. With this method you will not become involved, in the early stages of planning, with confusing details such as placement of windows, doors, and furniture.

Let the choice of site for the farmhouse and the location of rooms be governed by the features of the farm plot that you cannot change—its location with relation to highway, direction of prevailing winds, and views. The site may depend also on the nature of the land and the location of the drive, the other farm buildings, and fields.

In locating the rooms, if you want a view of the highway and the farm drive and a pleasing outlook from the kitchen windows, start with the kitchen. If the view from the living room and its exposure is of major importance, choose the location for that room first.

Make a rough sketch of the general farmstead layout, with the highway, farm court, and farm driveway shown. Indicate the direction of the prevailing winds, slope of the land, and view. Locate the site for the house between the highway and court so that prevailing winds do not blow from the barns toward the house, and where a desirable view will not be blocked by the barns. If the highway is dusty set the house well back from the road.

With house site settled, you can locate rooms to suit your family preferences. Suppose that from the kitchen you want to see the highway, the farm drive, and the approach from the farm court. Draw a circle to show kitchen location that will provide for this. Then draw the workroom circle next to the kitchen, near the court and a yard for drying, but not obstructing the kitchen view. For the dining room put another circle beside the kitchen, not interfering with the room’s view but with a pleasant outlook of its own. Locate living room circle for desired connection with other rooms, to take advantage of the best view or needed protection from winter winds and summer sun.

Put in the bedrooms and bath. Plan them so that you won’t have to go through the living room to reach them from the rear entrance. Locate porches and entrances.

Finally, connect all rooms with a compact hall or halls. Halls placed to keep major traffic out of rooms reduce cleaning problems and increase usable space in rooms. You are now ready to use the cut-outs.

How to use cut-outs in planning a new house

Tools needed:
- Cut-out bulletin
- Table
- Large sheet of paper or cardboard
- Measuring tape
- Pencil, notebook
- Tablet of plain paper about 8" x 11" (or larger if house has large rooms)
- Pins or gummed tape
- Scissors

1. Decide on the approximate size you want for each room shown by the circles.

2. Lay out a room to the desired size, following the instructions on the ruler card on the inside of the back cover.

3. Cut out the room as marked and label it with its name and dimensions. Continue until every room is cut out.
4. Assemble the rooms on a sheet of paper or cardboard to form the plan you sketched with circles. Leave \( \frac{1}{4} \)-inch space between rooms for walls.

5. The rooms as cut out may make an irregularly shaped plan that would be unattractive and costly to build. Change the size or shape of rooms to form a house of the size and shape you want.

6. Now, using the cut-outs, check the size of rooms with the furniture and equipment. Observe clearances shown in typical room lay-outs (pp. 8-15). Make any necessary adjustments in sizes of rooms.

7. Put in doors and windows. Check the plan carefully, using the checklist on back of cover, to be sure you have included everything you want. If you have forgotten something correct your plan.
8. Fill in the outside walls. You now have a rough lay-out of the house that fits your farmstead and your needs. Take this rough plan to an architect, if possible, and have him prepare your final design and working drawings. With his expert knowledge of planning and design, materials, construction, specifications, contracts, and costs, he can usually save you more than the cost of his services, and you will have a better home.

Instead of having your final plan prepared by an architect, you may prefer to use a ready-made plan. Select one that is suitable for your section of the country and as near like your cut-out plan as possible. Sources of farmhouse plans are suggested on page 6.

How to use cut-outs in planning remodeling

In using cut-outs to plan remodeling you will need a plan of your present house to work from.

1. Measure the inside length and width of each room of your present house, hallway, porch, stairs, the size of windows and doors, and length of wall spaces. Record these measurements under the name of the room in a notebook.

2. Cut out each room and lay out on paper according to the instructions in steps 2, 3, and 4, for planning a new house, following the room arrangement of your present house.

3. With the lay-out before you, discuss with the family the changes wanted. Make rough sketches on paper, adding or removing rooms or changing their location, if necessary, until the plan meets your family’s need.

4. Make a new cut-out lay-out of this final plan. Check rooms with furniture and equipment cut-outs and then make any necessary adjustments in the sizes of rooms and the location of the doors and windows.

5. Submit the completed plan to a qualified architect, if possible, and have him prepare the final plan. Or get the best help available to make sure your plans are practical. Get estimates of costs before starting construction.
Where to get help

If you cannot employ an architect, look for other help in developing your final plans. The kind and amount of help you will need will vary with the problems and with your own skill in planning and construction. Good farmhouse plans are your best guide. Your State agricultural college has plans designed to meet regional needs. You can see these at the office of your county agricultural or home demonstration agent.

Many desirable farmhouse plans are published in farm magazines. Plans of urban houses in architectural, popular home, and builders' magazines may give you ideas that you will want incorporated in your new or remodeled farmhouse.

Another source of plans is a local builder or building supply dealer. He can also help on problems of construction and figuring costs, as well as on the actual building. If you intend to contract for the building, it is advisable to have complete plans, specifications, and a signed agreement with the builder covering the work to be done, kind and quality of materials and equipment to be furnished, and cost of the finished job. If the work is not to be contracted for, you still want complete plans and probably a bill of materials.

The following publications of the U. S. Department of Agriculture offer additional help in planning a new house or remodeling an old one.

Selected List of U. S. Department of Agriculture Publications on Housing

Your Farmhouse . . . How to Plan Remodeling, MP-619.
Farmhouse Plans for Northeastern States, MP-658.
Four Farmhouses for the South, L-285.
Farmhouse Plans for Minimum Budgets, L-287.
Expansible Farmhouses, L-301.
Southern Farmhouses, L-303.
Farmhouses for the North, L-311.
Your Farmhouse—Planning the Bathroom, G-19.
Your Farmhouse—Planning the Kitchen and Workroom, G-12.
A Step-Saving U Kitchen, G-14.
Closets and Storage Spaces, FB-1865.
Your Farmhouse—Insulating and Weatherproofing, MP-633.
Electric Light for the Farmstead, FB-1838.
Planning Your Farmstead Wiring and Lighting, MP-597.
Your Farmhouse . . . Heating, MP-689.
Planning the Electric Water System and Plumbing for Your Farmstead, MP-674.
Foundations for Farm Buildings, FB-1869.
Making Cellars Dry, FB-1572.
Selection of Lumber for Farm and Home Building, FB-1756.
Fire-Protective Construction on the Farm, FB-1590.
Fireplaces and Chimneys, FB-1889.
Roof Coverings for Farm Buildings and Their Repair, FB-1751.
Safe Water for the Farm, FB-1978.
Sewage and Garbage Disposal on the Farm, FB-1950.
The checkered areas indicate the traffic lanes planned to give easy access to all rooms from the most used entrance and to reduce the heavy traffic through work and living areas.
In living rooms a minimum of 3 feet should be allowed between pieces of furniture or between furniture and walls where regular passage is necessary.
Dining rooms and dining areas

**Small Dining Room as Extension of Living Room**

- Dining Room
- Living Room
- Door to Porch or Terrace

**Dining Alcove Next to Kitchen**

- Dining Alcove
- Kitchen

**211881 O—52 2**

**Dinettes**

- Minimum space to allow between wall or tall furniture and table:
  - For pushing back chair and getting up from table: 2 feet
  - For passage behind occupied chair: 2 feet 6 inches
  - For passage behind chair for serving: 3 feet

**Large Dining Room**

- Buffet
- High Windows
- Extension to 10 Places
- Extra Chairs
- To L.R. or Hall

**Small Dining Room as Extension of Living Room**

- Dining Room
- Living Room
- Coat Closet

**Dining Alcove**

- Dining Alcove
- Kitchen
- Serving Counter

**Bench**

- Bench
- 5' 4" Min

**Dinette Sets**

- Bench
- 4' 0"
Minimum clearances and dimensions of cabinets and work surfaces are specified. In many instances the plans show more desirable dimensions.
The clearances for passage and work space between various pieces of equipment shown are the minimum recommended.
Bedrooms

A minimum of 3 feet is necessary for passage between furniture and walls and in front of furniture with drawers. A minimum of 2 feet is necessary between the foot of a bed and wall or furniture without drawers. For making beds allow at least 15 inches at the sides.

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These drawings show suggested arrangements for the use of large families or where plenty of space is available.
Arrangements shown are for very small bathrooms. Clearances shown are the minimum recommended.
The sum of riser and tread measurements (less nosing) should be approximately 17\(\frac{1}{2}\)". Usually 13 to 16 risers (12 to 15 treads) are needed between floors, depending on height of ceiling. Twelve risers are needed between floor and landing if passage or standing room is wanted under landing.
MINIMUM STRAIGHT RUN STAIR (CUT-OUTS)

MINIMUM STAIRS

SECTION THROUGH TYPICAL STAIR SHOWING IMPORTANT VERTICAL DIMENSIONS

HAND RAIL

NEWEL

BALUSTER

DESI RABLE STAIRS

CARRIAGE

DETA ILS OF STAIRS

STAIR

MINIMUM STAIRS

TREAD

MINIMUM STAIRS

SECTION THROUGH TYPICAL STAIR SHOWING IMPORTANT VERTICAL DIMENSIONS

HAND RAIL

WALL STRINGER

DESI RABLE STAIRS

MINIMUM STAIRS

BASEMENT FLOOR
Living room furniture (cut-outs)
Living room furniture (cut-outs)
Cut table and chairs in one piece.
Cut table and chairs in one piece.
WALL CABINETS - TYPES AND SIZES
WALL - 15", 18", 21"
WALL - 24", 30", 36"

BASE CABINETS - TYPES AND SIZES
BASE - 15", 18", 21", 24"
BASE - 24", 27", 30"
BASE - 30", 36"

(cut-outs)

KITCHEN CABINETS
This page shows the use of cut-outs in planning work areas. The elevations of the cabinets are illustrated in order to give necessary vertical dimensions and to show what the cabinet and equipment look like in elevation.

Types and sizes of cabinets shown are standard with most manufacturers. If special sizes or types are needed, consult manufacturers' catalogs. Wall-30" indicates a wall cabinet 30" wide. Base-21" indicates a base cabinet 21" wide. See page 37 for types and sizes of sinks. See page 35 for types and sizes of ranges.
Ranges, stoves, and water heaters (cut-outs)

**ELECTRIC AND GAS RANGES**
Allow 1" clearance at sides and back of a range. If burner end of gas range is next to wall allow an additional 2" at that end. For an uninsulated range allow 6" of space around sides and back.

**COAL OR WOOD RANGE**
18"
24"

**COAL OR WOOD SPACE HEATER OR LAUNDRY STOVE**
18"
21" x 24"

Safety from fire requires clearances as shown between cooking or heating equipment burning coal or wood and combustible walls, cabinets, or other surfaces.

**KEROSENE STOVES AND RANGES** vary widely in size. Find the size of the one you will use and allow 24" clearance between burners and all combustible surfaces.

**WATER HEATERS**

- **ELECTRIC**
- **GAS**
- **KEROSENE**
- **CABINET TYPE**

ELECTRIC OR GAS
Sinks, tubs, and laundry equipment (cut-outs)
Refrigerators and home freezers (cut-outs)

Refrigerators (Electric or Gas)

These refrigerators are for use at right of counter. For use at left, door should open on other side. Allow 6” between hinge side of refrigerator or small upright freezer and wall to permit door to be opened wide for pulling out shelves or drawers. Dimensions of freezers vary widely. If in doubt as to the dimensions of the one you will use, allow maximum space for the size you are likely to have.

Upright Home Freezers

Chest-Type Home Freezers

Example - 4 cu. ft. 34” x 26”
Beds (cut-outs)

Leave at least 15” and preferably 18” between wall and side of bed for ease of making.

Leave 2’ 0” between wall and foot of bed.
CLOSETS BETWEEN BEDROOMS—SLIDING DOORS

NARROW CLOSET

CLOSET WITH HOOKS AND RODS

WALK-IN CLOSET

MIN. CLOSET FOR GENERAL USE

WALK-IN CLOSET

CUT-OUTS TO USE IN PLANNING CLOSET SPACE. ESTIMATE THE NUMBER OF GARMENTS TO BE HUNG IN CLOSETS. THE AMOUNT OF SPACE REQUIRED CAN BE DETERMINED BY THE FOLLOWING TABLE. CUT STRIP TO PROPER LENGTH. ARRANGE IN ANY OF THE WAYS SHOWN ABOVE.

MINIMUM ROD SPACE NEEDED FOR GARMENTS ON HANGERS:  
1 Foot—3 Men's or Boys' Overcoats 
1 Foot—8 Dresses or Shirts 
1 Foot—6 Skirts or Suits 
1 Foot—4 Jackets or Children's Coats

1 Foot—2 Women's Coats with Fur Collars 
6 Inches—1 Small Garment Bag

8 Inches—1 Large Garment Bag

0 FEET 1 2 3 4 5 6 7 8 9 10 11 12 13

FRONT OF SHELF

ROD
Shelves should be 10" apart in linen and bedding closets.

LINEN ONLY

LINEN ONLY

LINEN AND BEDDING

LINEN AND BEDDING

BATHROOM TOWEL CLO.

BATHROOM TOWEL CLO.

LAUNDRY CLOSET

CLEANING CLOSETS

CAPACITY—A
Aa—minimum cleaning equipment
Ab—minimum cleaning equipment and carpet sweeper
Ac—minimum cleaning equipment and carpet sweeper and 8" step stool
Ad—minimum cleaning equipment and carpet sweeper and 12" step stool

CAPACITY—B
Cleaning equipment, ironing board, and 3 table leaves

CAPACITY—C
Vacuum cleaner, stepladder, ironing board, and 5 table leaves
Bathroom fixtures (cut-outs)

TOILET

LAVATORY

SHOWER

TUB

SQUARE TUB 4'0" x 4'0"

2'-8"

3'-0" x 3'-0"

3'-0" x 3'-4"

3'-0" x 3'-4"

2'-6"

1'-6"

19" x 17"

19" x 17"

18" x 15"

18" x 15"

17½" x 17½"

17½" x 17½"
Doors (cut-outs)

In planning allow clearance for doors to open wide.

ABBREVIATIONS
L.R. Living room
D.R. Dining room
B.R. Bedroom
CLO. Closet
EXT. Exterior
LIN. Linen
WOOD DOUBLE-HUNG WINDOWS

Sizes of windows are modular and those most commonly used. See manufacturers’ catalogs for other types and sizes.

METAL CASEMENT WINDOWS
Some fireplaces and some central heating plants need 13" x 13" flues. Most stoves and ranges require 8½" x 8½" or 8½" x 13" flues. Most central heating plants need 8½" x 13" flues. See Farmers' Bulletin No. 1889, Fireplaces and Chimneys, for more exact information.
SCALE AND RULER CARD

1/2 inch = 1 foot

TO MAKE A CUT-OUT OF A ROOM
(Do not cut this card)

1. Place this card on a sheet of paper so the number for the width of your room is exactly at the left edge of the paper and the number for the length of room is exactly at bottom edge of paper.

2. Be sure the card is square with the paper. Then draw a pencil line on the paper along the top and right edges of the card.

3. Cut the room from the sheet of paper with two straight cuts.

You can also place cut-out rugs and furniture on this squared card. In this way you can select the right room size before making a room cut-out.
Checklist for farmhouse plans

Check these important points:

In general, have you planned—

- Enough rooms for your family's needs?
- Rooms neither too large nor too small?
- Good lighting and ventilation in all rooms?
- Good exposure and view for living and work areas?
- Doors and windows in every room well located for placing furniture?
- Outside entrances protected from weather?

Houses, like highways, have traffic problems.

Are—

- Entrances convenient to the drive?
- All rooms easily reached from the back door?
- Work and living areas free from traffic?
- Bedrooms and bath opening from a hall?
- Stairways and halls wide enough?
- Stairways safe and easy to use?

Well-planned kitchen and other work areas save time and energy. Have you provided for—

- Work areas arranged to save steps?
- Elbowroom for more than one worker?
- Storage space for supplies and equipment where they are used?
- A closet for men's work clothes?
- A place, other than the kitchen sink, where men can wash?

Since we all have to eat, is—

- The dining area handy to the kitchen?
- Seating space adequate for everyone regularly served, and for company?
- Storage space handy for dishes, silver, and linens?

In living areas, have you provided comfortable space, with equipment and storage, for reading, writing, studying, farm business, sewing, games, hobbies, and entertainment?

We spend one-third of our lives sleeping. Have you made provision for—

- Separate rooms for parents, boys, and girls?
- Not more than two persons to a room?
- Space on first floor for aged or ill?
- Space for overnight guests?
- Enough wall space and clearance around furniture?
- Enough storage for clothing and bedding?
- Bedrooms placed to get cooling summer-night breezes? Cross ventilation?

Does your modern house include—

- An adequate water supply?
- Sewage disposal?
- Hot and cold running water in kitchen, bath, and laundry?
- A heating system that will keep your house warm?
- Properly located registers or radiators?
- Enough well-located lighting fixtures, switches, and outlets for plugging in equipment such as toaster and iron?

Are you sure your house will have—

- A pleasing appearance, both inside and outside?
- Good proportions and simple lines?

The $64 question—

- Is the cost of remodeling less than for building a new house?

For further information, consult your county agricultural or home demonstration agent, or write to your State agricultural college.