

Chapter 26

A RANCH HOUSE

THIS particular style of architecture is at the present time the most popular type for small and low-cost homes throughout the country, with the possible exception of the New England states, where the traditional Cape Cod cottage still remains out in front.

The ranch-house type of dwelling had its origin, of course, in the southwest part of this country, and it is to the type of terrain found there that it is most suited. It has been built, however, in every state in the union, and with a little variation here and there to suit local requirements, it makes a very efficient as well as attractive home.

Any housewife who looks at the floor plan of the Ranch House will be struck by the fact that all the rooms are on one floor. This does away with climbing up and down stairs a hundred times a day, which, as everyone knows, is extremely exhausting. The one flight of stairs that is shown in the floor plan leads to the basement. There is an access panel to the storage space in the attic.

The attic is not intended to be made into living quarters as it does not have

enough headroom. As far as the basement goes, there is no reason at all to build a full basement or even a half-basement—it would simply be a waste of both time and money. A room large enough to contain the various necessary utilities will be perfectly adequate.

The floor plan indicates that this house contains three bedrooms. Two of them are single and one is double. There is a large living room, which has been designed so that a portion of it can serve as a more or less permanent dining room.

There are one large bathroom off the bedrooms and a lavatory off the kitchen. You will note that between the kitchen and the lavatory, space has been set aside for a laundry. If this is not required, the space can be rearranged so that a utility room is made out of the lavatory and the laundry becomes a lavatory that directly adjoins the kitchen. Under these conditions, there will be no need for a basement at all.

The garage has been designed for two cars, but part of it can be set aside for storage purposes.

There are many variations possible in this Ranch House. Each family will suit itself. But be sure that you have carefully considered your particular way of living before you make changes.

Designed for Outdoor Living

A ranch house requires a good-size plot, not only because of its length, which is naturally greater than that of a two-story house with the same amount of floor space, but also because it is designed for outdoor living. It is not the kind of house that can be crowded into a small plot or close up against adjoining houses. You should have sufficient room in back of the house for a good-size terrace, and you should also have a certain degree of privacy because, as you can see from the plans, almost the entire back of the house is window area. The area in front of the house is not so important as that in the back because it is not used so much for living purposes.

This is the sort of home that should appeal to a family that enjoys being outdoors as much as possible. Even during the cold weather, the large amount of window area will give the impression that you are out of doors.

One of the things about this house that might worry the owner-builder is the roof. Because of the gables over the living room and over one bedroom and bath, the roof appears to be a very complicated structure to build. This is not really the case, and you will find that when the time comes to frame the

roof, the job will not be any more difficult than when there is a dormer or two to be built in.

Foundations; the Basement

The foundations for both the house and the garage can be poured in one operation. As mentioned before, there is very little point to making an excavation for a full basement. It will be quite sufficient if enough earth is removed to allow the various utilities to be installed. The best position for the basement utility room is under the laundry and kitchen, so that access to it can be had by means of the stairs located on the first floor. The heating equipment should be located rather close to the fireplace and chimney since it will have to be connected to the latter.

One other possible arrangement is to move the basement utility room out towards the front or back wall and install a flight of outside stairs, thus completely eliminating the indoor stairs.

When the footings and foundations are being poured, be sure to install a footing for the fireplace and a foundation for the main bearing partition, which runs through the approximate center of the house. This partition, as you will note from the floor plan, forms the rear wall of the stair well and the front wall of the two rear bedrooms.

The porch at the front entrance to the house can be made of poured concrete set over a base of gravel or cin-



The Ranch House

ders. It can be poured at the same time as the foundations or finished after the house itself has been completed.

Framing

The sill used on this house can be a box sill with a 2"x6" base. It should be securely anchored to the top of the foundation wall. The sill on the main bearing partition can be a 2"x4". The joists used for the first floor should be 2"x10's, and they should be spaced 16" on center. They will rest on the foundation wall and the main bearing partition.

After the joists are in place, the sub-flooring can be installed, and you can then go on and frame the walls.

Openings for the windows and doors can be framed while the studding is being put up or they can be cut out later. In any event, before these openings can be made, you will need to get the rough-opening dimensions for the type of casement windows you intend to use.

The ceiling joists can be 2"x8's spaced 16" on center. If you do not feel that you will require a great amount of attic storage space, it is possible to frame the areas over the kitchen, dining room, living room, laundry and lavatory with 2"x8's and to use 2"x6's for the remaining portions of the house. If this is done, the direction in which the joists are laid should be varied so that they will run between the partitions that are nearest to each other. This means, of course, that before the ceiling joists can be in-

stalled, the interior partitions will have to be erected. Since these partitions are going to carry a load, the floor joists under them should be doubled.

In any case, the main bearing partition must be erected before any of the ceiling joists can be installed.

The Roof

Now comes the task of framing the roof. The best way to do this job is, for the time being, to forget about the gables over the bedroom and bath and over the living room and to proceed with the framing of the main house roof, leaving unframed the points where it will join the gables. After the main roof has been framed, install the studding at the ends.

Now you can put up the two roof rafters at the front of the living room, and then run a 2"x6" ridge board from these to the ridge of the main roof. As you can see from the rear elevation, the ridges of the main roof and of the living-room gable join in the same plane. After the living-room ridge board is up, install the remaining common rafters for the gable. The next step is to take two 2"x6's and run one down from each side of the point where the ridges of the living room and the main roof join. This procedure will form two valleys. The 2"x6's are the valley rafters. Now cut short rafters and fit them between the valley rafters and the ridge of the gable.

The same method of construction is used for the gable over the bedroom and bath.

The Chimney; the Plumbing System

Once the roof has been framed, cover it with roofing boards, but leave an opening for the chimney.

Now you can go to work and cut out the openings in the walls for the windows and doors. After that, you can cover the four outside walls with sheathing.

The building of the fireplace and the chimney follows. The fireplace dimensions are the same as those used in all the other houses covered in this book, and the method of construction is identical with that given in the chapter on the fireplace and chimney.

When the chimney has been completed and the flashing has been installed, apply the roofing. Shingles of wood or asbestos or asphalt will do nicely. With the roof weathertight, the interior partitions can go up and the walls and the ceiling can be insulated.

Installing the plumbing system, and especially the drainage system, is somewhat complicated by the fact that there is a considerable distance between the main bathroom and the kitchen and lavatory. The best solu-

tion is to install two vent stacks, one for the bathroom and the other for the kitchen and lavatory. The second vent stack should be installed in the lavatory with a 2" cast-iron line running under the floor from the kitchen sink. The equipment in the laundry can be connected into the line in the lavatory.

Siding

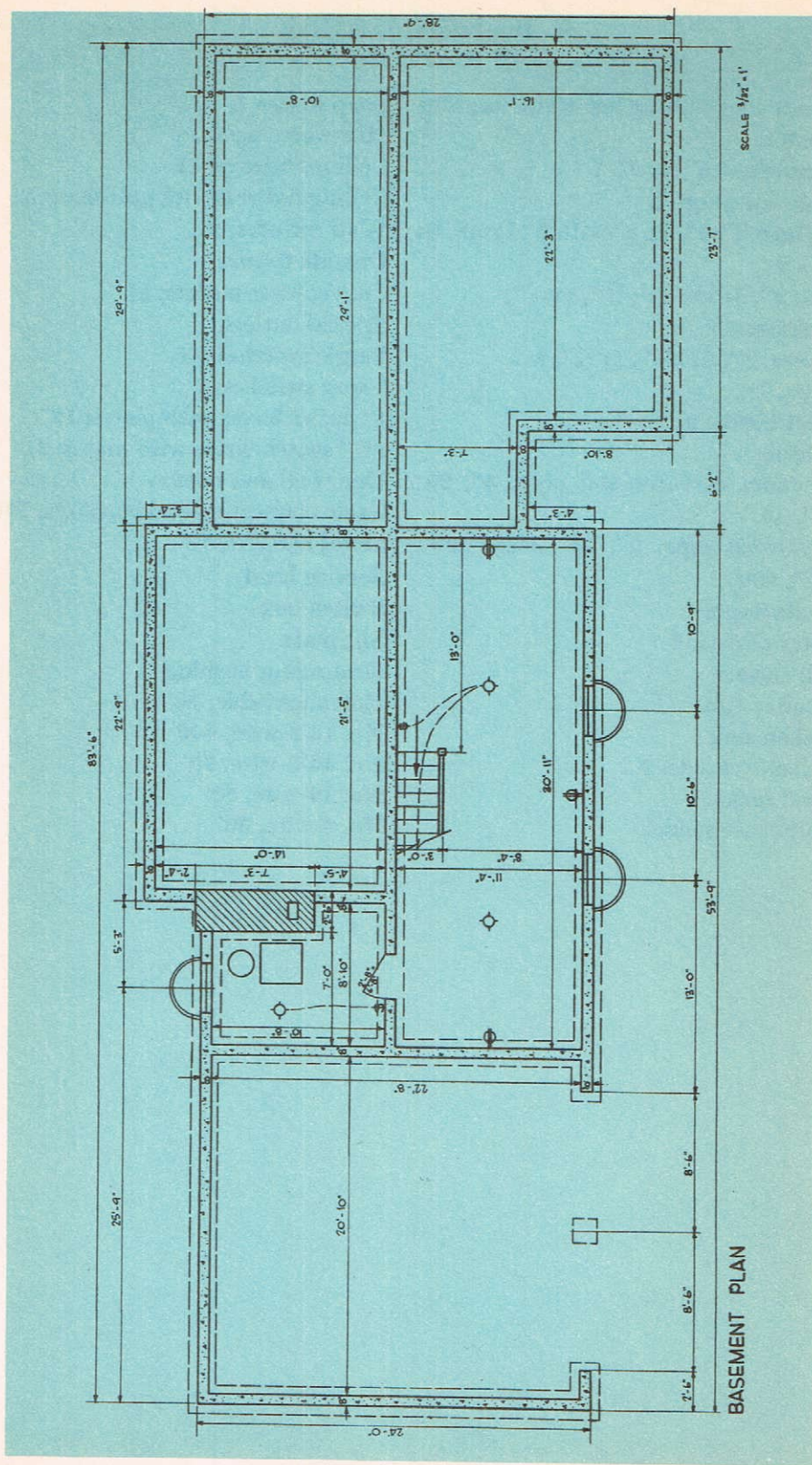
When it comes to the exterior siding, you have a wide choice of materials that are both suitable for construction purposes and in keeping with the architectural style of the Ranch House. It may be possible to get hold of some old, weathered boards that can be used to good advantage. If obtainable, they should be installed over the sheathing in an upright position and the vertical joints between them should be covered with strips of wood. The house pictured in the accompanying plans is covered in part with bevel siding. The remainder of the house is covered with sheets of exterior plywood. Strips of wood nailed over the plywood at 16" intervals give the effect of wide individual boards.

RANCH HOUSE MATERIALS LIST

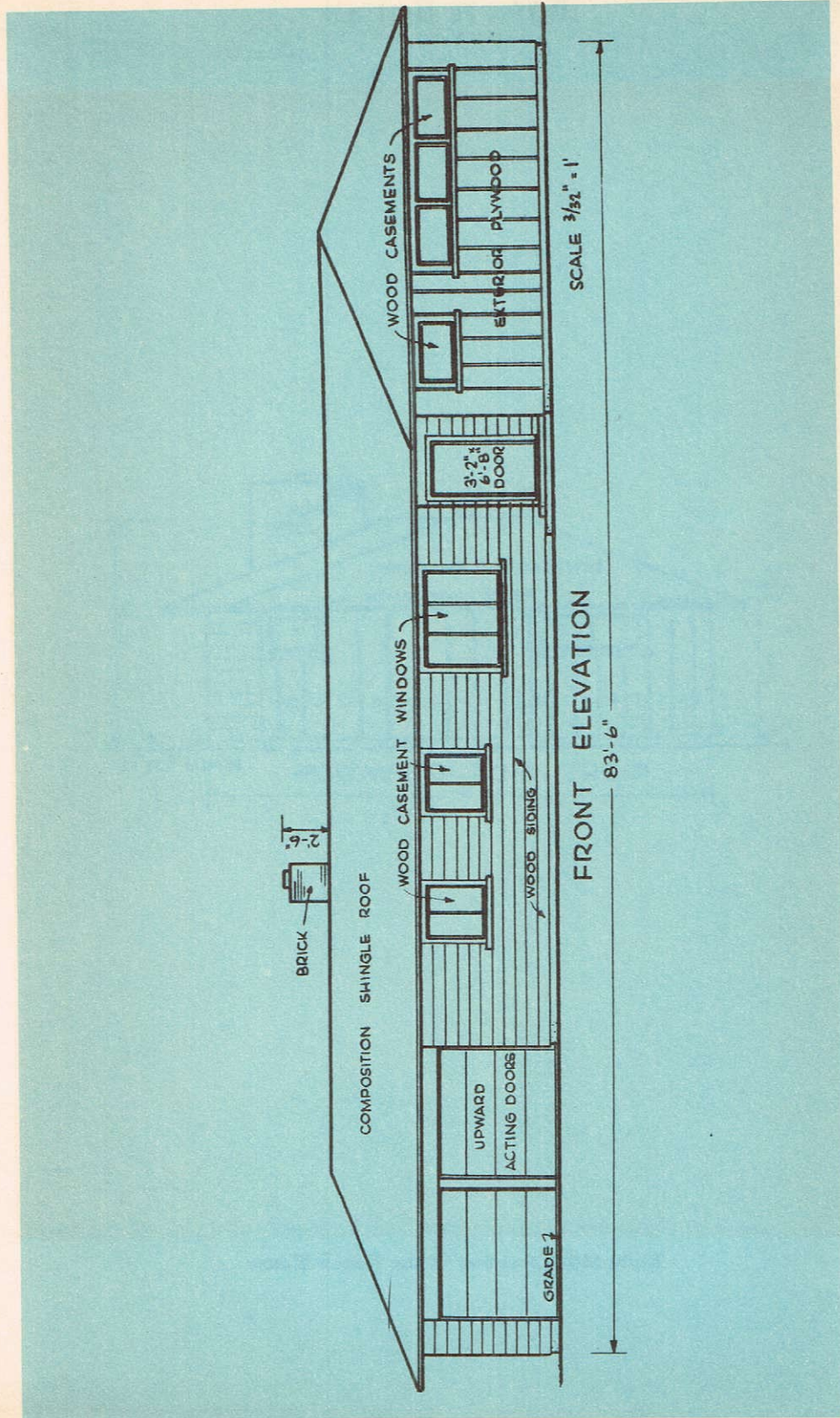
<i>Material</i>	<i>Quantity</i>	<i>Dimensions</i>
Mixed cement	55 cu. yds.	
2" x 10"	20	18'
	33	16'
	28	14'
	35	12'
2" x 8"	21	18'
	135	16'

<i>Material</i>	<i>Quantity</i>	<i>Dimensions</i>
2" x 8"	2	14'
	64	12'
	44	10'
2" x 6"	12	16'
2" x 4"	12	20'
	249	16'
1" x 3"	115	16'
Sheathing	10,070 board ft.	1" x 6"
Finish flooring	2,400 board ft.	1" x 3"
Shelving	150'	1" x 6"
Copper flashing	126'	12"
Garage doors	2	8'9" x 7'6"
		<i>Rough Openings</i>
Entrance doors with frame and trim	1	3'6" x 7'
	1	3' x 7'
	1	2'6" x 7'0"
Windows with frame and trim	2	4'0" x 3'9"
	1	5'0" x 6'3"
	7	2'3" x 3'9"
	2	2'3" x 6'9"
	4	7' x 4'
	1	2'3" x 2'9"
	1	2'3" x 6'6"
	1	2'3" x 3'0"
1" x 6", 240'	Flight box stairs, 1	
1" x 2", 196'	Paint: exterior, 12 gal.; water-thinned,	
Roofing material, 4,000 sq. ft.	19 gal.; interior enamel, 2 gal.	
Building paper, 1,640 sq. ft.	Common bricks, 6,000	
Beveled siding, 1,968 board ft.	Mortar, 3 cu. yds.	
Insulation, 3,350 sq. ft.	2-ft. flue-tile 12" x 12", 10; 12" x 8", 4	
Wallboard, 5,900 sq. ft.	Chimney thimble	
Base mold, 500'	Clean-out door	
Nails: 6d, 40 lbs; 8d, 50 lbs; 10d, 285	Firebricks, 90	
lbs; 16d, 60 lbs; 20d, 50 lbs; 4d, 240	Fireclay, 30 lbs	
lbs; 5d, 36 lbs	Hearth assembly	
Interior doors, 15	Mixed cement, 2 cu. ft.	
Hinges: brass, 9; interior, 30	Damper	
Mortice locks, 18	Angleirons: 42", 1; 36", 1	

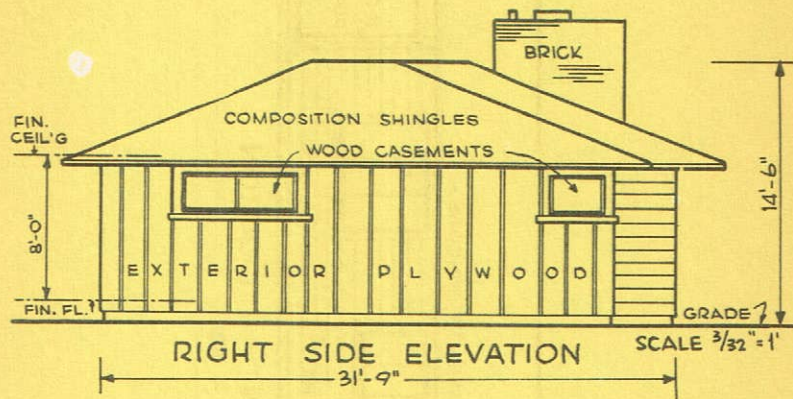
Forced warm-air or hot-water heating system	Soap dishes, 2
Y branches: 4", 4; 2", 1	Hot-water heater
Clean-out plugs, 2	Ceiling fixtures, 11
Sanitary T; 4", 2; 4" with 2" tapp., 6; 2", 2	Ceiling fixtures with pull chain, 2
Tees: 2", 5; 1½", 6; ¾", 12	Wall fixtures, 2
Decreasers, 2	Outside fixture
Elbows: 2", 6; 1½", 7; ¾", 4	Convenience outlets, 21
Traps, 7	Special outlets, 1
Closet bends, 2	Single switches, 12
Bathtub	3-way switches, 2
5' sections cast-iron soil pipe: 4", 20; 2", 18	4" outlet boxes with plates, 13
Galvanized pipe: 2", 75'; 1½", 100'; ¾", 300'	2½" switch boxes with plates, 21
Lavatories, 2	Door bell and button
Water closets, 2	Cable connectors and bushings, 150
Stall shower	Metal hangers, 13
Laundry tub	Service head
Kitchen sink	Switch box
Medicine closets, 2	Sill plate
Towel racks, 4	Grounding bushing
Toothbrush holder	Entrance cable, 16'
	No. 14 2-wire, 400'
	No. 14 3-wire, 75'
	No. 12 wire, 50'
	No. 6 wire, 30'



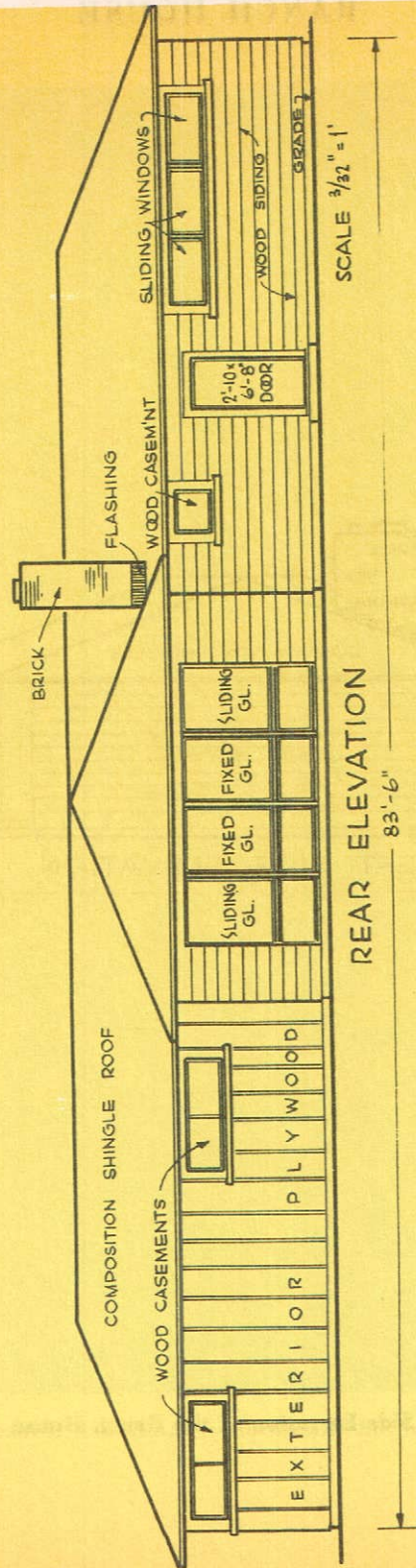
Foundation Plan of the Ranch House



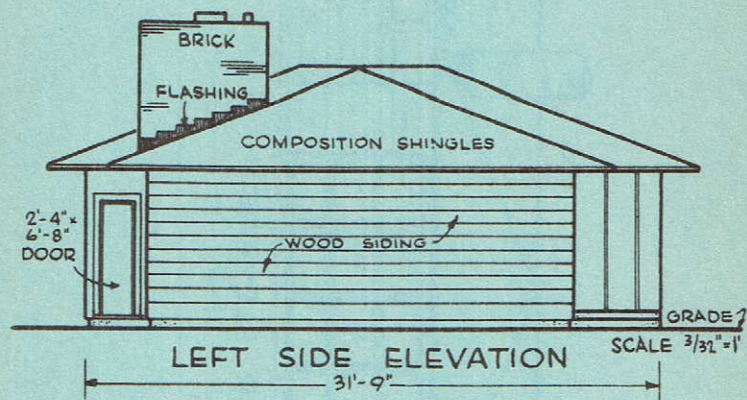
Front Elevation of the Ranch House



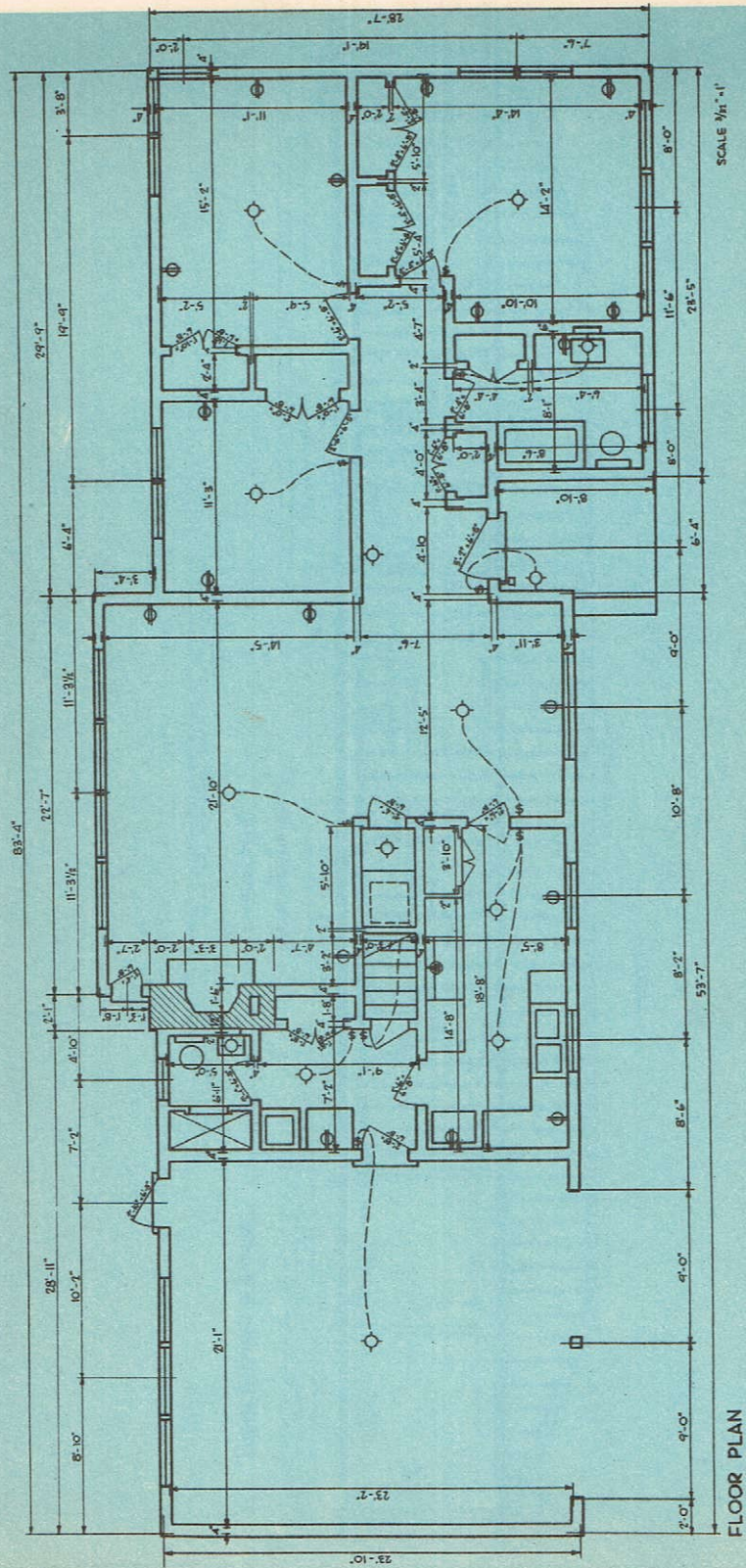
Right Side Elevation of the Ranch House



Rear Elevation of the Ranch House

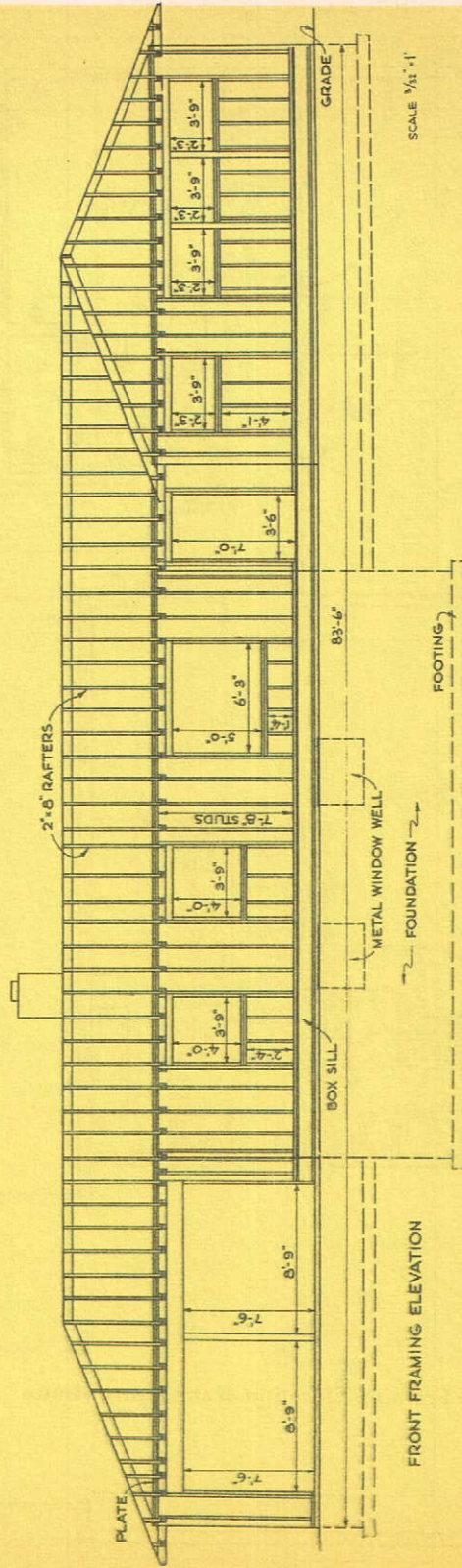


Left Side Elevation of the Ranch House



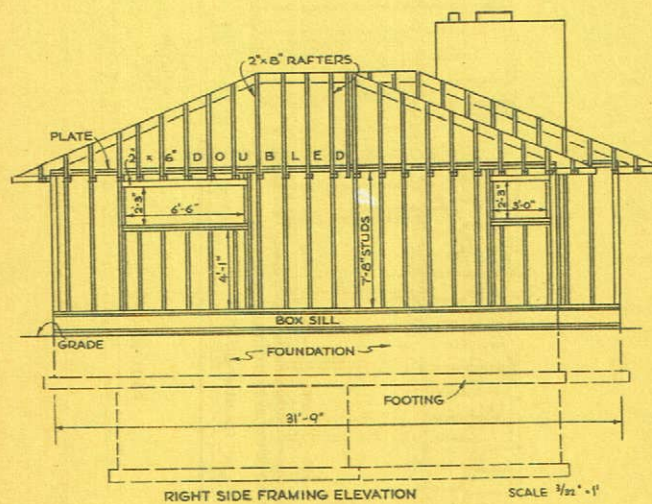
FLOOR PLAN

Floor Plan of the Ranch House

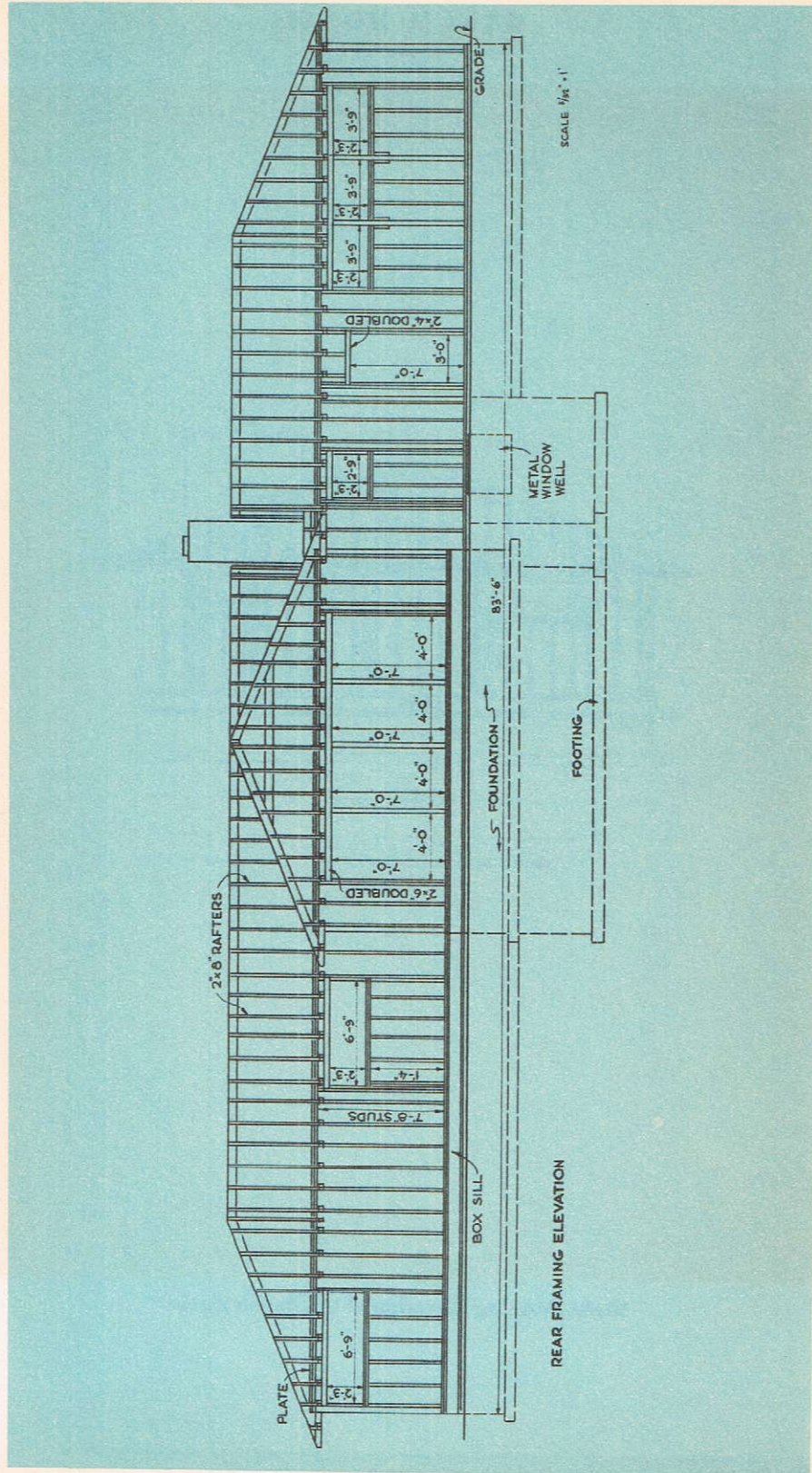


SCALE 1/8" = 1'

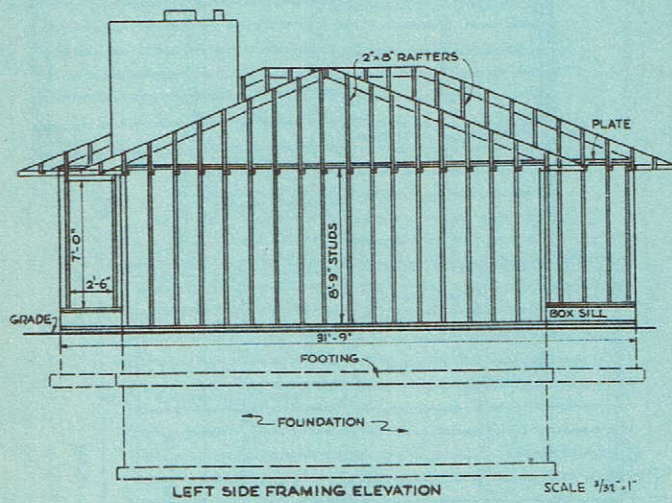
Front Framing Elevation of the Ranch House



Right Framing Elevation of the Ranch House

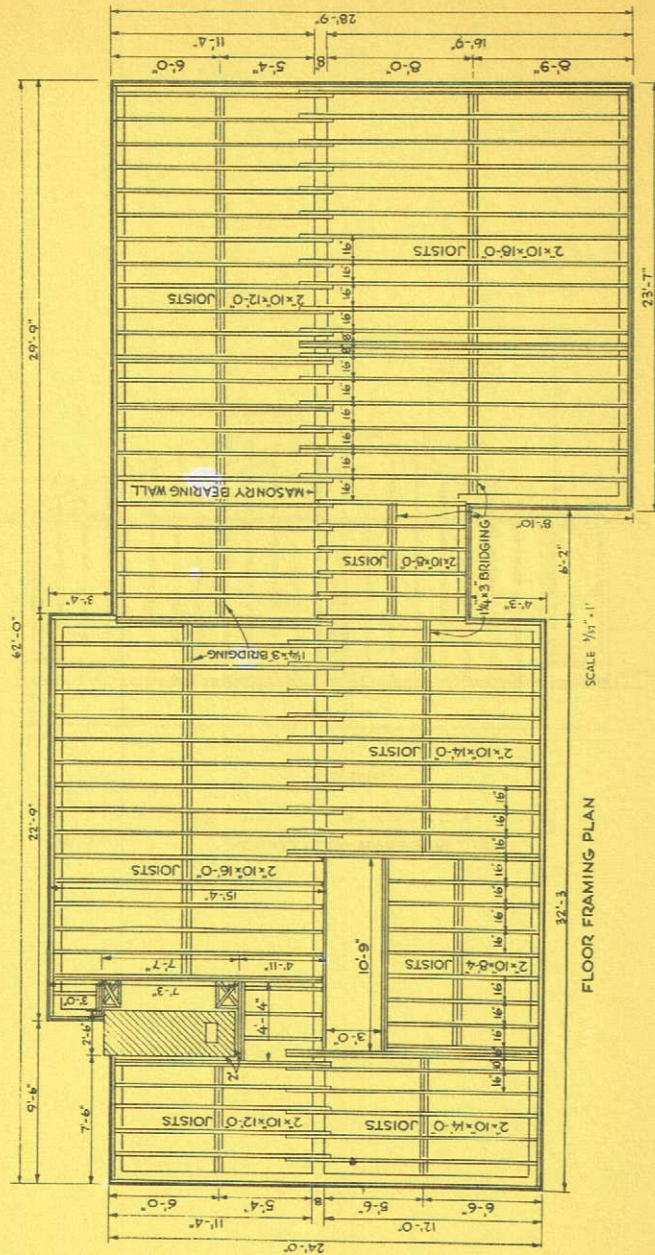


Rear Framing Elevation of the Ranch House

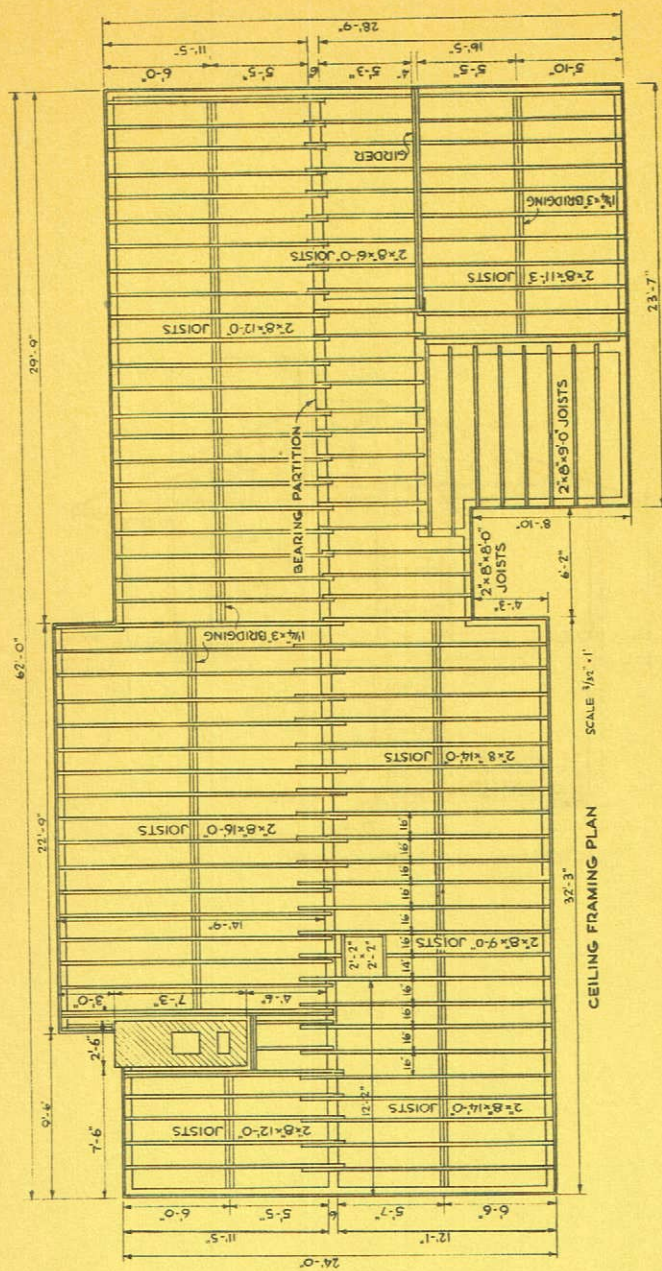


Left Framing Elevation of the Ranch House

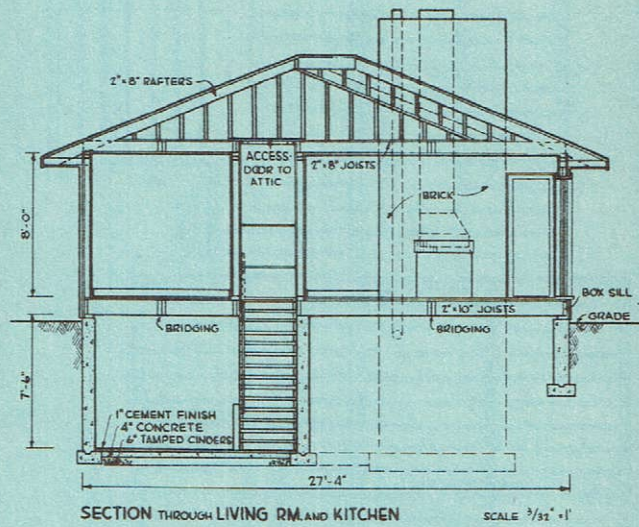
RANCH HOUSE



Floor Framing Plan of the Ranch House



Ceiling Framing Plan of the Ranch House



Section of the Ranch House