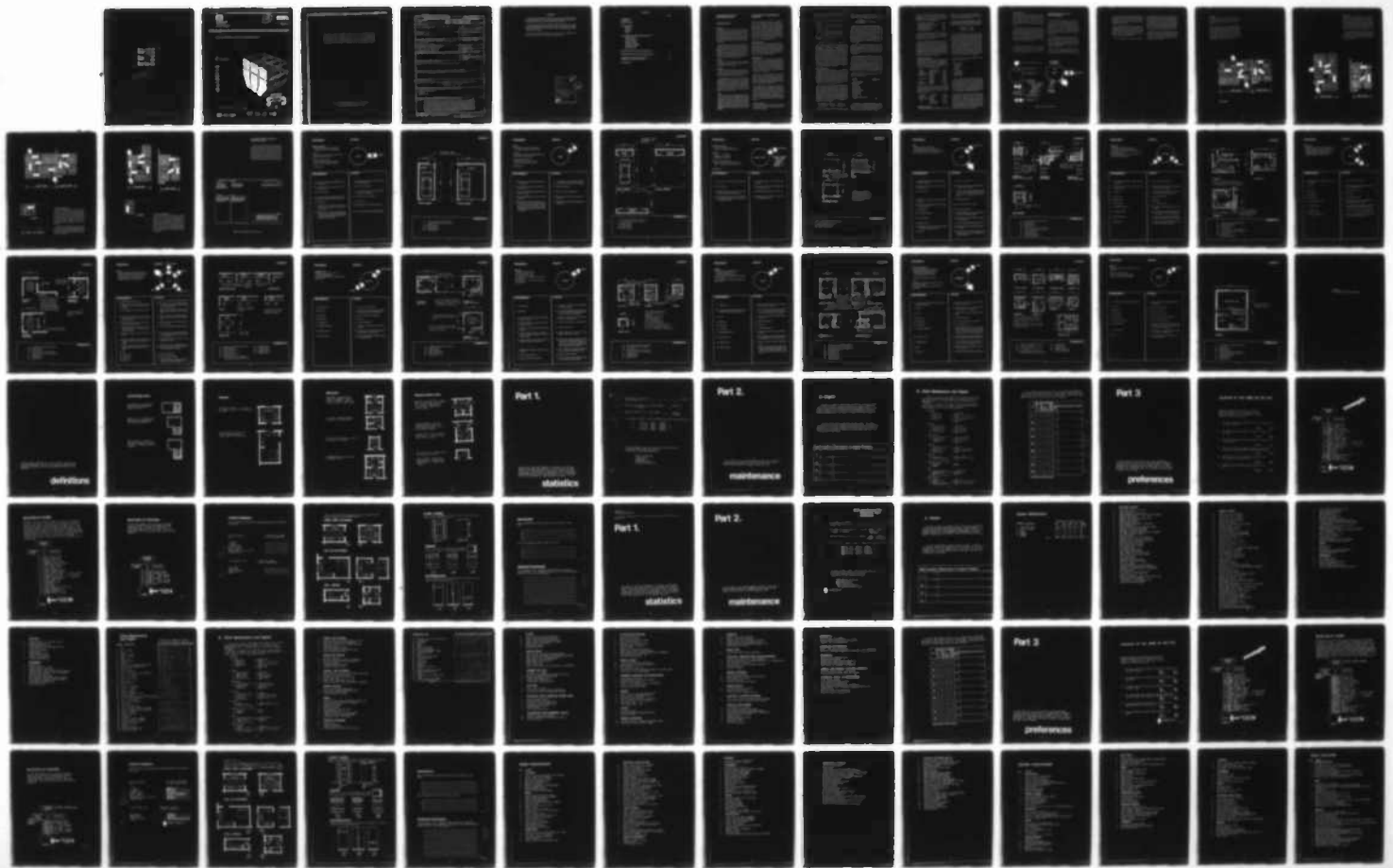


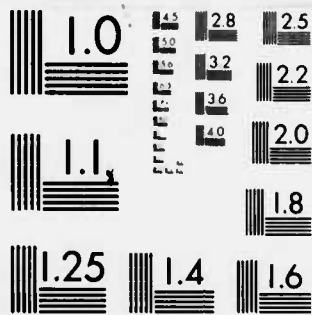
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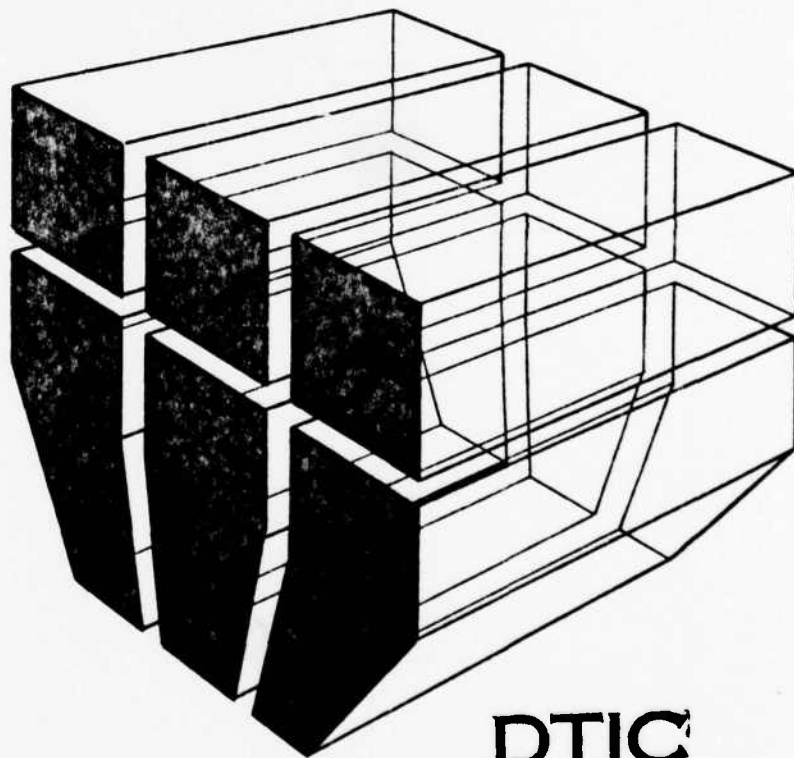
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Technical Report P-15:  
January 1984

DESIGN INFORMATION FOR CIVIL WORKS HOUSING

by  
David L. Dressel

AD A139114



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### FOREWORD

This guidance information was developed for the Directorate of Civil Works, Office of the Chief of Engineers (OCE), under reimbursable work order CWO-M-80-6. The Technical Monitor was Mr. James Gottesman, DAEN-CWO-M.

The work was performed by the Facility Systems Division (FS), U.S. Army Construction Engineering Research Laboratory (CERL). Appreciation is extended to Mr. R.D. Neathammer, Mr. R.B. Blackmon, and Mr. David Hoglund for their contributions to this effort.

Mr. E.A. Lotz is Chief of CERL-FS. COL Paul J. Theuer is Commander and Director of CERL, and Dr. L.R. Shaffer is Technical Director.

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## DESIGN INFORMATION FOR CIVIL WORKS HOUSING

### 1 INTRODUCTION

#### Background

The Army currently has housing units related to civil works projects, a majority of which are occupied by Corps of Engineers civilian families. These housing units are located at project and town sites across the country and range in age up to 70 years. Some of these were built as part of major civil works projects; others are remotely located farmhouses acquired as part of large acreages.

As part of a new initiative, the Corps has determined the need to renovate and/or offer a more systematic approach for house design and annual maintenance of existing homes. It is important that policies be developed concerning the maintenance, renovation, and design of housing provided under the accountability of the civil works program. This design information report is part of that ongoing endeavor.

#### Objective

The objective of this research was to develop design information for the renovation or design of family housing provided by Civil Works.

#### Approach

Much of the information presented in this report is in the form of recommendations resulting from the analysis of responses to a questionnaire administered to all adult occupants of Civil Works housing.

The questionnaire asked Civil Works housing occupants about site considerations, room selection, adjacencies, and housing features. Questionnaires were mailed to Corps districts that had an inventory of Civil Works accountable family housing. The districts distributed the questionnaires to the housing occupants, who returned their completed copies directly to CERL for analysis.

#### Scope

The survey results and housing design information apply to all Civil Works accountable family housing at relatively remote sites. The design information is based on the preference data of families currently occupying such housing. This information could be applicable to housing provided by other Federal agencies for families at relatively remote sites, if the demography of the groups is similar to that of those sampled.

## 2 HOUSING STUDY QUESTIONNAIRE RESULTS

Housing occupants were asked to respond to questions concerning family statistics, location of the home on the site, selection of rooms and features, layouts of specific rooms, closet door style, and major appliance design. To aid the occupants' understanding of some terms, word and/or visual definitions were offered. The questionnaire is shown in Appendix A. Additional preference information is contained in the "Preference" blocks of design information for specific rooms/spaces in Chapter 4. Responses to specific questions are presented in Appendix B.

#### Maintenance Issues

One part of the questionnaire was devoted to the topic of maintenance. Although the information gathered did not contribute directly to the recommendations in this report, it was of use to the sponsor. The responses to maintenance issues formed the basis for creation of a maintenance checklist to be used at project sites during annual inspections.

#### Family Statistics

Occupants were asked how many adults and children lived in the home and how long the family had lived in that home. The average length of residence was 5.9 years. Eighty-five percent of the families had two adults in residence, and 51 percent of the families had two or more children living at home. The average ages of children 1, 2, and 3 were 12.2, 10.3, and 9.1 years, respectively (see Appendix A).

The number and age distribution of children suggest that a two-bedroom home would not fill a family's needs. The number of children alone would justify this conclusion; the distribution of the ages reinforces it. Children of different sex in the 9 to 12 age group should not have to share a room.

An average time of occupancy of 5.9 years is somewhat higher than the national average and is certainly long enough for occupants to establish an identity with their home. When asked how satisfied they were with their homes, 65.3 percent of the occupants indicated that they were "satisfied" or "very satisfied" while only 8.9 percent indicated "dissatisfied" or "very dissatisfied" (25.8 percent selected "neutral").

#### Location on the Site

With at least a 60 percent consensus, the occupants indicated that the following sites would be best. The home *should be* located:

1. as close as possible to the work location (66.6 percent);
2. as near as possible to a wooded area (64.7 percent);
3. as near as possible to a major access road (64.1 percent).

Moreover, the home *should not be* located:

4. as near as possible to water (60.1 percent);
5. in a cluster with other homes on a project site (62.0 percent);
6. near public areas of the site (76.3 percent).

It was suspected that there may have been regional differences in responses to this description. The housing sites were arbitrarily divided into groups of northern-most vs southern-most. Significant differences were found between the groups on the issue of how close the home should be to a wooded area. Of those respondents in the northern group, a majority (78 percent) felt that the home *should be* as near as possible to a wooded area. Of the southern group, the majority (51.4 percent) felt that the home *should not be* near a wooded area. This difference may be explained by the greater perceived danger of snakes in wooded areas of the southern states.

#### Selection of Rooms

Common room types formed a list from which respondents could select the types of rooms important in a home. Each room name was assigned a "space units" number. Each respondent was asked to select a combination of rooms, provided the combination selected did not require more than 36 space units. All room types were defined by text or plan in the "definitions" section of the questionnaire.

To develop a hierarchy of the most desired room types, some upper bound had to be placed on how many could be selected. Since proposed regulations state a maximum figure of 1300 sq ft per three-bedroom dwelling, the boundary was based on that value. Some room types were sized according to accepted practice; others were designed to determine an adequate size. These square footage figures were reduced to ratios among rooms to simplify the mathematics. For example:

$$\begin{array}{l} \text{master bedroom} = 144 \text{ sq ft} = 4 \text{ space units} \\ \text{one-half bath} = 36 \text{ sq ft} = 1 \text{ space unit} \end{array}$$

No room was assigned a space unit lower than one, and

an increment of .5 space unit was set. The total allowable number of space units to be assigned was 36:

$$\frac{1300 \text{ sq ft}}{36 \text{ sq ft/space unit}} \approx 36 \text{ space units}$$

It is important to remember that the space units do not translate directly into square feet by multiplying the number of space units by 36. For example, 36 sq ft is unnecessarily large for a utility closet (1 space unit)—24 sq ft should be adequate in most cases. The space units reflect only approximate relative sizes among spaces and served as an expedient way of guiding respondents to a realistic combination of room type preferences. In other words, the space units forced trade-offs.

A total of 362 occupants responded to the room selection part. Among these occupants, there was substantial disagreement about which combination of rooms constitutes a home. In fact, the most frequent combination of rooms was selected on only six questionnaires.

The result would probably have been different (i.e., greater consensus) if a core of living, full bath, and three bedrooms had been "given," and other rooms could have been added to this core home. The scattered result does suggest that occupants may view their home differently, depending on how it is furnished and how they live in it. Thus, the difference between "formal" and "informal" living room choices was based on how the room was furnished and used.

Based on frequency of selection alone, the most desired rooms would be:

Room	Space Units
Master bedroom	4
Bedroom no. 2	3
Full bath	2
Living room	7
Bedroom no. 3	3
Food-prep kitchen	2.5
Dining room	4
Family room	6
½ Bath	1
Laundry/utility/storage	4
	36.5

Given the inexact method of determining the space units, a total of 36.5 should be possible if the home is designed carefully. The laundry/utility/storage room is listed as one unit for reasons described later.

There was substantial disagreement among the respondents concerning the type of kitchen and dining layouts. The percentage of occupants giving valid responses to each combination is:

Food-prep kitchen/dining L.	18%
Food-prep kitchen/dining room	25%
Eat-in kitchen/dining L.	18%
Eat-in kitchen/dining room	18%
Eat-in kitchen alone	21%

Looking at these data another way, 56 percent of the valid responses indicate that an eat-in kitchen, either alone or in combination with some more formal dining space, is desired.

One type of space not presented in the questionnaire was created for inclusion in Chapters 3 and 4. The combination laundry/utility/storage room resulted from the obvious need to accommodate the laundry, water heater, and furnace while meeting the strong demand for a general storage area. By combining these functions into one room, for example, in a one-story home with no basement, space can be economized and used for other rooms.

#### Location and Adjacency

Respondents were asked about certain adjacencies between rooms. The question was structured as: "If you selected the *room name* given it should be closest to the *room name supplied by respondent*." The results were (only the strongest given):

¼ Bath	Master bedroom	66.1%
½ Bath	Master bedroom	43.9%
Laundry room	Kitchen	54.3%
Utility closet	Kitchen	39.0%
	Laundry	22.0%
Family room	Kitchen	41.1%
	Living	28.4%
Kitchen	Dining	55.1%
Storage room	Kitchen	34.6%

From these results, the kitchen is firmly established as the hub of the home. Locations for the front door, back door, carport/garage, and patio were requested in the same manner.

Front door	Living room	82.6%
Back door	Kitchen	71.8%
Carport/garage	Kitchen	67.1%
Patio	Kitchen	41.3%
	Dining room	20.5%
	Family room	15.7%

#### Selection of Features

The proposed 1300-sq ft restriction excludes certain

features such as general storage and basements. A preference for these features was structured using "value units" in place of space units.

Value units were developed similarly to the space units, but were limited by invested dollars rather than square feet. These units represent relative cost ratios:

$$\frac{\text{screened porch}}{\text{deck}} = \frac{2 \text{ units}}{1 \text{ unit}}$$

The 2:1 ratio implies that a screened porch would cost twice as much to provide as a deck. This is only approximately correct; the value units were actually intended to force trade-offs. The value of four units for the two-car garage and the boundary of 4 units was set intentionally because it was suspected there would be a strong preference for the two-car garage. Choosing the two-car garage, however, would "use up" all allowable value units, so no other feature could be selected. Thus, a preference for the two-car garage would indicate quite a sacrifice on the part of respondents. Even so, 36 percent of those responding to this question selected the two-stall garage.

In order of most to least frequently selected features, the preferences are:

- 2-Stall garage
- Storage shed
- Basement
- Deck
- 1-Stall garage
- Screened porch
- 1-Stall carport
- 2-Stall carport

There were some significant regional differences concerning the selection of features. A significantly greater percentage of occupants in the South selected the screened porch (37.0 vs 8.1 percent). There was also a greater desire for a storage shed in the South (42.5 vs 19.4 percent). This desire has been accommodated in Chapter 3 by suggesting oversized garages, with the excess space to be used as storage.

The North group expressed a significantly stronger preference for a basement (33.9 vs 2.7 percent), presumably as a children's recreation space during long winters. The South group also indicated a greater preference for a one-stall carport (24.7 vs 4.8 percent). As with the issue of basements, this difference can probably be attributed to the climate and the South group's tendency to use value units for protected outdoor spaces (screened porches).

### Other Preferences

Preferences for kitchen and bath layout and for range and refrigerator style are given in Chapter 4. One preference, however, applies throughout the home—the type of closet door. Sixty-three percent of the respondents indicated a preference for side-sliding, hypass doors; 37 percent preferred bifold doors.

A similar result occurred in a 1973 study of military family housing.<sup>1</sup> At that time, occupants had had a had experience with bifold doors that were poorly designed, constructed, and adjusted. The doors were flimsy and were designed with a two-track system consisting of lower and upper tracks. The combination of door flexion and two tracks caused the doors to bind as they were opened or closed.

<sup>1</sup>D.L. Dressel, R.E. Brauer, R.D. Neathammer, C.B. Hahn, R.S. Gorham, and J.E. Francis, *Army Family Housing: Preferences and Attitudes About Housing Interiors*, Technical Report D-48 ADA (3 vol.) (U.S. Army Construction Engineering Research Laboratory [CERL], February 1975).

## 3 HOUSING DESIGN: SPATIAL RELATIONSHIPS

The information in Chapters 3 and 4 presents requirements, criteria, and design guidance for use by designers of Civil Works accountable housing. It also has application in major renovation and as an evaluation tool for those reviewing or approving house designs. The use of this information should improve the overall quality of design and result in housing responsive to the desires of the civilian family tenants.

This chapter addresses the issue of spatial relationships among rooms or functional areas within the home. The illustrations in this chapter and the "context" diagrams in Chapter 4 incorporate several symbols to speed understanding. Figure 1 provides a legend for these symbols.

The adjaencies shown in the following examples are basic to a well planned home. To preserve individual privacy and to prevent disturbance caused

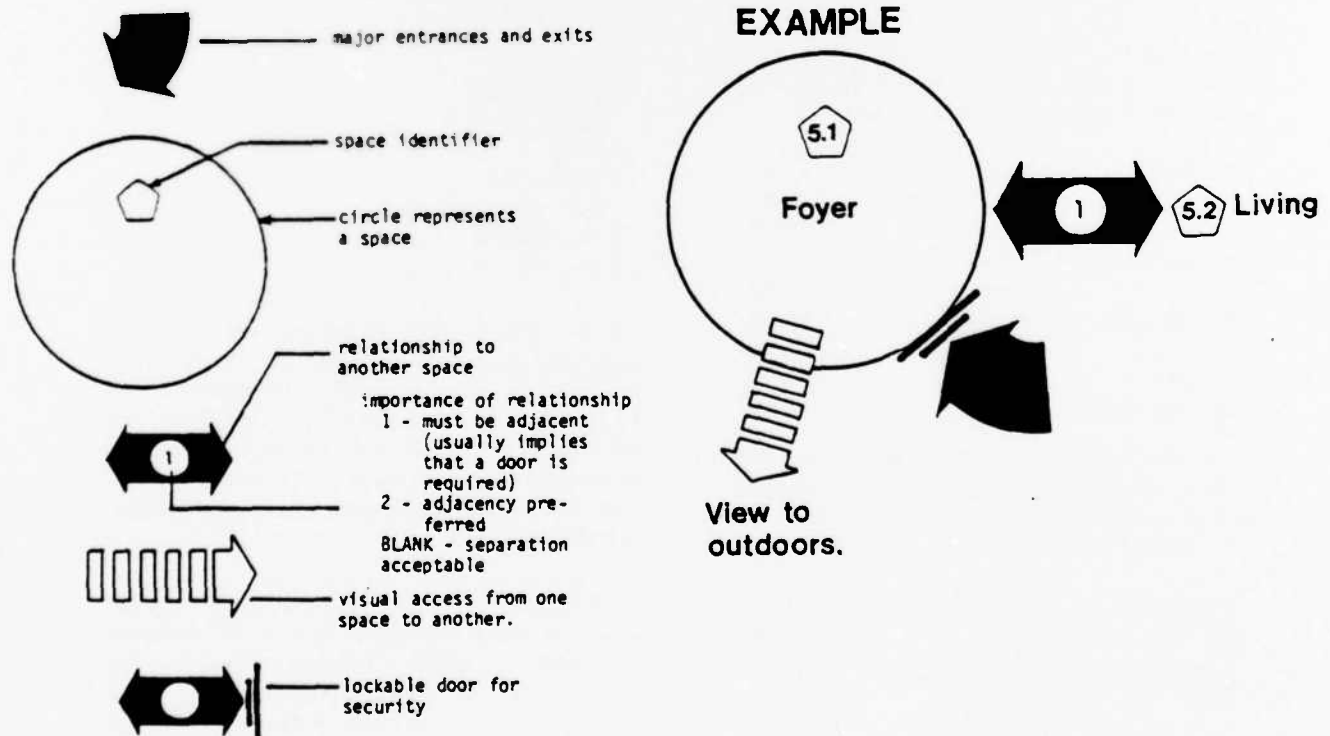


Figure 1. Context diagram legend.

by sound transmission, homes should be planned with a clear distinction between the "living zone" and the "quiet zone." The quiet zone consists of the bedrooms and bath areas; all other spaces may be considered the living zone.

Most respondents indicated a clear preference for the location of major entries; most wanted the front and back doors to be near the living room and kitchen, respectively. (There should be a view from the foyer to the area immediately outside the front door for increased occupant security.)

The four schemes in this chapter should not be

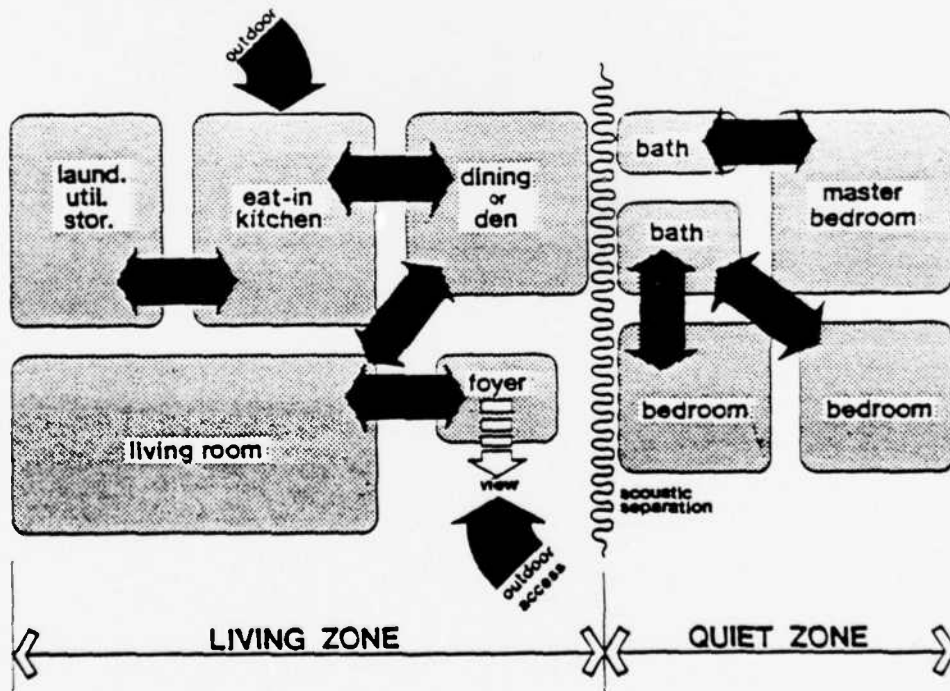
considered floor plans, as close inspection will show several undesirable elements from cost and construction viewpoints. For example, the plumbing is not "stacked" in the two-story schemes. These schemes were developed for one- and two-story arrangements primarily to show it is more economical to organize a house vertically; the design requires less foundation, less roof, and it naturally zones the activity areas.

Basements are shown in two schemes. In northern climates where excavation to below the frostline can be extensive, a full or partial basement can be economical since it can be used for mechanical space, laundry, and general storage.

### One-Story

A minimally adequate home can result from a simple one-story arrangement, provided the home is carefully zoned and has enough general storage space.

The example below saves space by combining laundry, utility, and storage areas. Another space-saving room that also provides flexibility to occupant needs is the dining room or den. By locating this space adjacent to the kitchen, it can be furnished to serve as either a formal dining space or a television and family entertainment room to relieve the more formal living room from these activities.

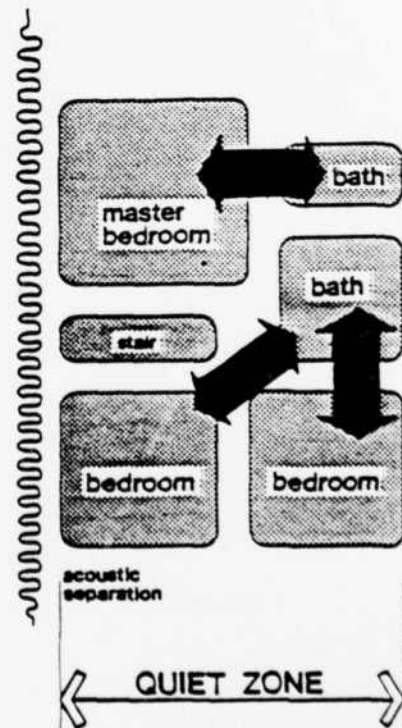
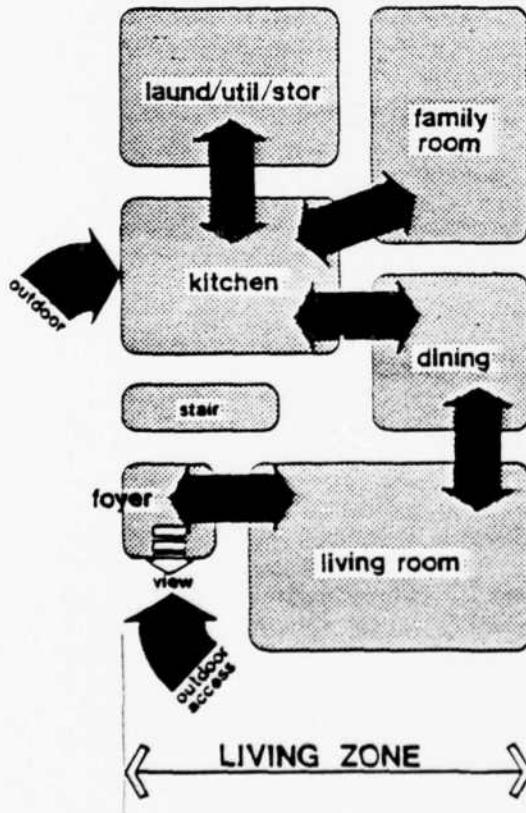


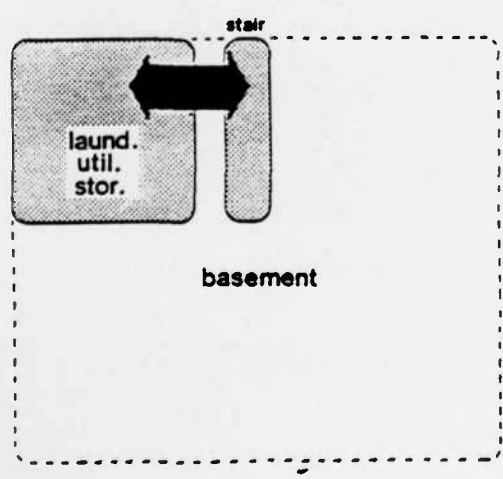
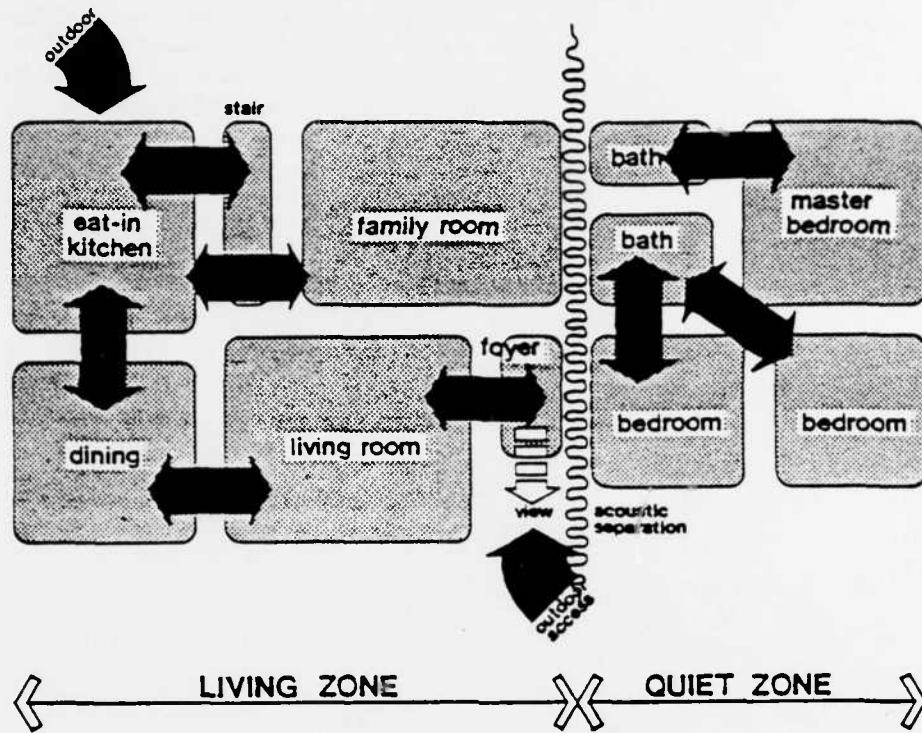
ONE STORY

### Two-Story

In most cases, a well designed two-story or similar multistory home offers more square feet for the dollar than a typical one-story or ranch-style home. This savings is primarily due to the decreased roof and foundation space. Additional long-term savings may result from decreased energy consumption due to the insulating value the second floor provides for the first floor as well as the decreased roof area.

The example below shows a family room, although a den could be substituted. Good zoning is almost an inherent feature of a multistory design, with bedrooms well away from the family or entertainment areas of the home.



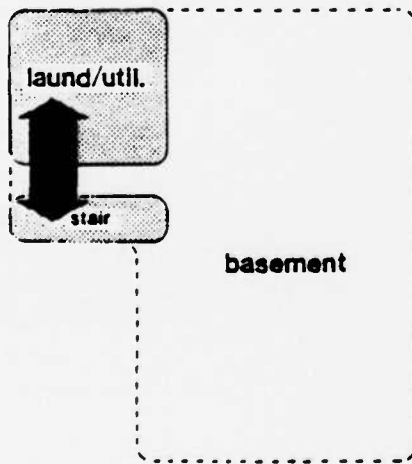
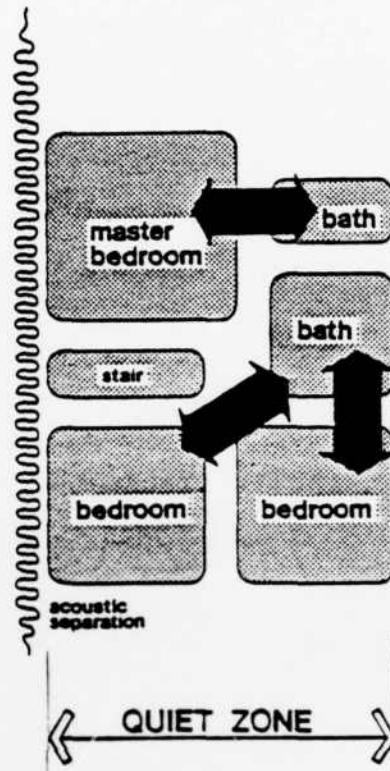
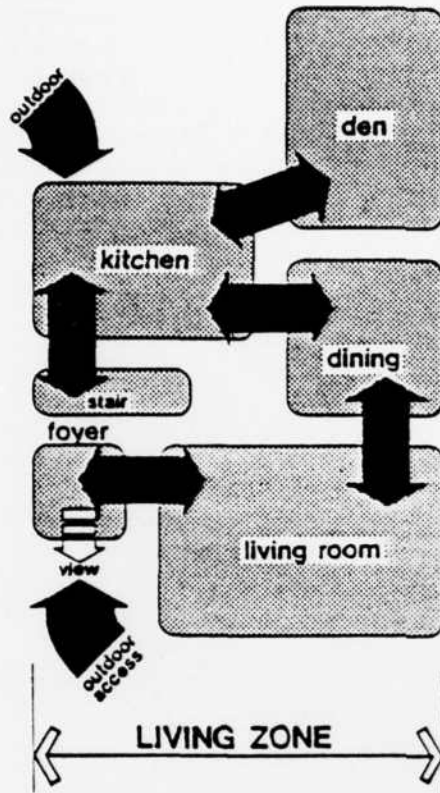


**ONE STORY WITH BASEMENT**

**One-Story with Basement**

Even a partial basement can solve square footage problems if a deep footing is required and the basement does not require expensive waterproofing due to a high water table. If a basement is provided, the laundry/utility/storage area can be located in this less expensive space. Although a family room is shown on the adjacency diagram above, the smaller den should suffice since children can play in the basement.

It is important to locate the basement stairs near the kitchen. The average homemaker spends a large part of the day in the kitchen and laundry room, so an effort should be made to place these areas as close to each other as possible.



#### Two-Story with Basement

This example shows the advantage of having a basement in a multistory design. Compared to the scheme for a two-story house (no basement), the laundry/utility/storage space has been moved to the basement and a smaller den is shown instead of a family room. One end of the basement, near the laundry/utility area, can be used as a general storage space, while the otherwise unoccupied area could be used for children's play or for more active family entertainment.

## 4 HOUSING DESIGN: INDIVIDUAL ROOMS/SPACES

Chapter 3 described how careful space arrangement can create an adequate and desirable residence. The information here addresses the design of individual spaces in a home in terms of requirements, criteria, and guidance. Figure 2 defines these informational units and explains the format used in this chapter. The design solutions shown here are not all of those possible; they are merely examples of designs that satisfy the criteria and thus meet the requirements.

DESIGN INFORMATION - CIVIL WORKS HOUSING		DESIGN INFORMATION - CIVIL WORKS HOUSING
<b>PREFERENCE</b>	<b>CONTEXT</b>	<b>GUIDANCE</b>
THE USER'S PREFERENCE RATINGS FOR SELECTION OF VARIOUS FEATURES WITHIN THE HOUSE, RESULTS ARE BASED UPON THE SURVEY RESULTS OF CURRENT RESIDENTS OF CIVIL WORKS HOUSING (SEE SECTION 2).	A VISUAL KEY ILLUSTRATING ANY IMPORTANT RELATIONSHIPS WHICH MAY EXIST BETWEEN THE PARTICULAR SPACE AND OTHER AREAS WITHIN THE HOME	ADVICE REGARDING THE APPLICATION OF CRITERIA IN FACILITY PLANNING, DESIGN OR OPERATION; USUALLY PRESENTED WITH DIAGRAMS OR SKETCH GRAPHICS.
<b>REQUIREMENTS</b>	<b>CRITERIA</b>	<b>COMMENTARY</b>
QUANTITATIVE STATEMENTS OF OBJECTIVES FOR FACILITIES. IN PERFORMANCE LANGUAGE, THEY ARE DEFINED AS STATEMENTS OF DISCRETE TECHNICAL NEED OR EXPECTED RESULTS FOR A FACILITY, BASED UPON THE ACTIVITIES TO BE ACCOMPLISHED.	STATEMENTS WHICH ARE INTERFERENCES FROM REQUIREMENTS AND WHICH FORM THE BASIS FOR DETERMINING WHETHER A PURPORTED SOLUTION SATISFIED THOSE REQUIREMENTS; CRITERIA ARE USUALLY IN A FORM WHICH CAN BE MEASURED--QUANTIFIED.	
		A STATEMENT WHICH DESCRIBES THE RATIONALE USED IN ESTABLISHING A CRITERION OR A REFERENCE TO THE JUSTIFYING DOCUMENT, SUCH THINGS AS WHY A CRITERION HAS BEEN SELECTED, WHY A PARTICULAR LIMITING VALUE OF MEASURE WAS CHOSEN, AND WHY SATISFYING THE CRITERION WILL ALSO EXPLAIN WHY A PARTICULAR REQUIREMENT DOES NOT HAVE A SPECIFIC CRITERION MEASURE; I.E., IF THE REQUIREMENT IS RELATED TO "QUALITIES" OF THE ENVIRONMENT.

Figure 2. Format for design information sheet.

## PREFERENCE

### Garage and Storage

- \*13.0 percent selected the one-stall garage.
- 35.9 percent selected the two-stall garage.

### Adjacency

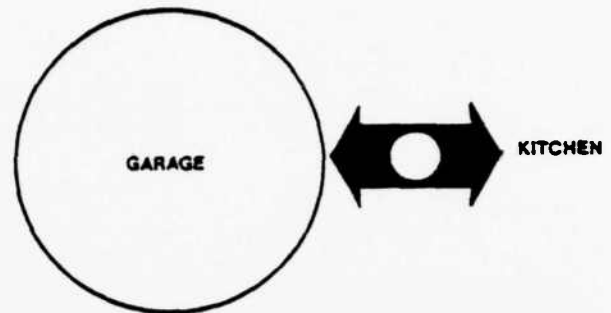
67.1 percent—Carport/garage should be nearer the kitchen than any other room.

### Significant regional differences

- North—19.4 percent selected storage shed.
- South—42.5 percent selected storage shed.

\*See Chapter 2.

## CONTEXT

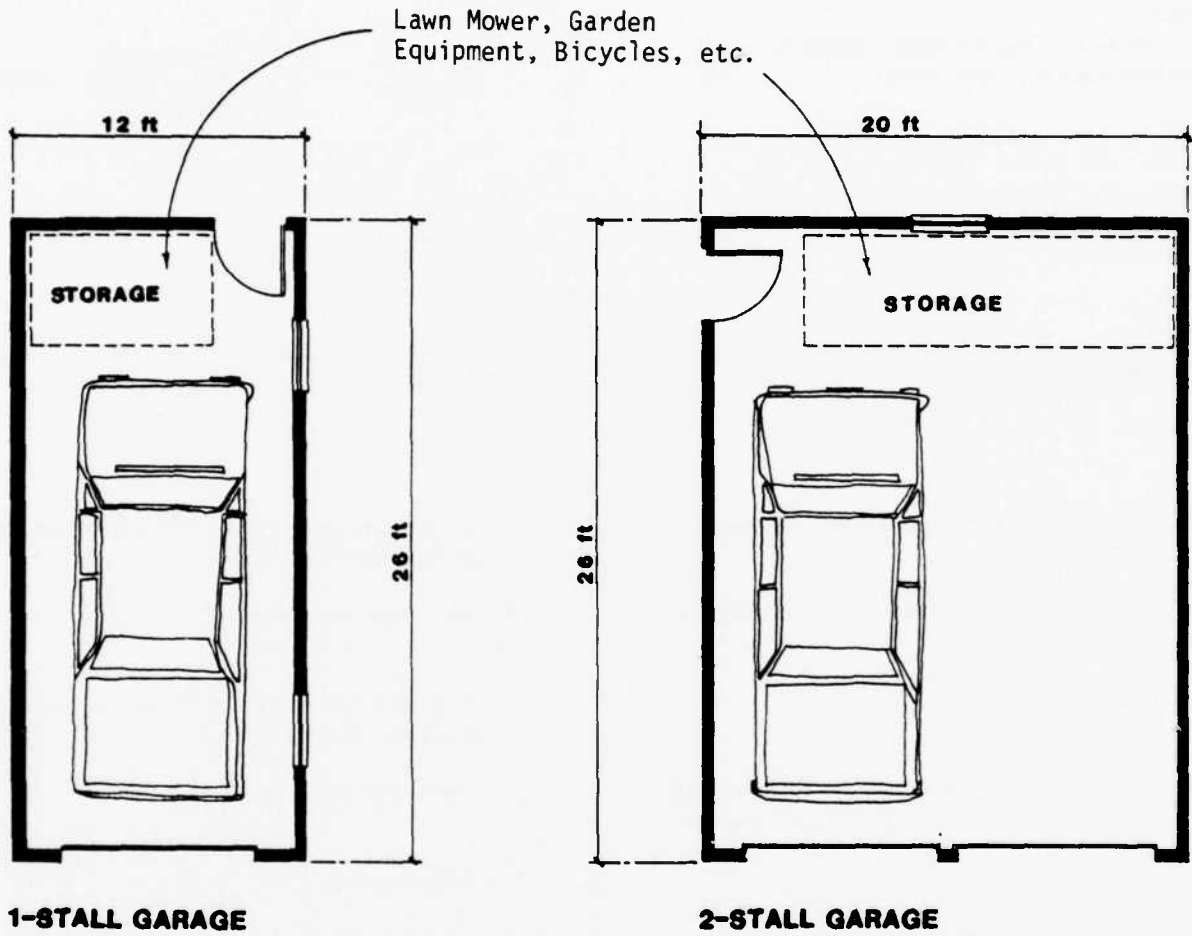


## REQUIREMENTS

- 1A. Adequate area for car storage and adequate area for bulk storage.
- 1B. Access/location. Groceries are commonly carried from the car.
- 2A. Interior wall finish.
- 2B. Floor finish. Must be durable and easily cleaned. Resistance to gasoline/oil spills important.
- 2C. Ceiling finish.
- 3A. Adequate illumination. Many people will use this space for minor automotive maintenance or as a shop area.
- 3B. Electrical power. Consideration should be given to possible nonauto storage activities. Receptacles should be provided for additional portable lighting and small handtools.

## CRITERIA

- 1A. One-stall garage: 250 to 275 GSF; two-stall garage: 440 to 485 GSF.
- 1B. Adjacent to kitchen door.
- 2A. None required. Peg board, if provided, greatly increases storage capability.
- 2B. Exposed concrete, troweled finish.
- 2C. None required.
- 3A. One lamp fixture over each stall of garage.
- 3B. 110-V outlets (as required per applicable code).



**COMMENTARY**

- 1A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 1B. Standard practice.
- 2A-C. Standard practice.
- 3A. Standard practice.
- 3B. Standard practice.

## PREFERENCE

### Carport

- \*8.3 percent selected the one-stall carport.
- 4.4 percent selected the two-stall carport.

### Adjacency

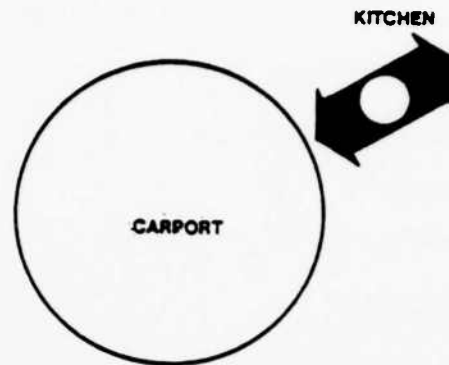
67.1 percent—The carport / garage should be nearer the kitchen than any other room.

### Significant regional differences

- North—48 percent selected one-stall.
- South—24.7 percent selected one-stall.

\*See Chapter 2.

## CONTEXT



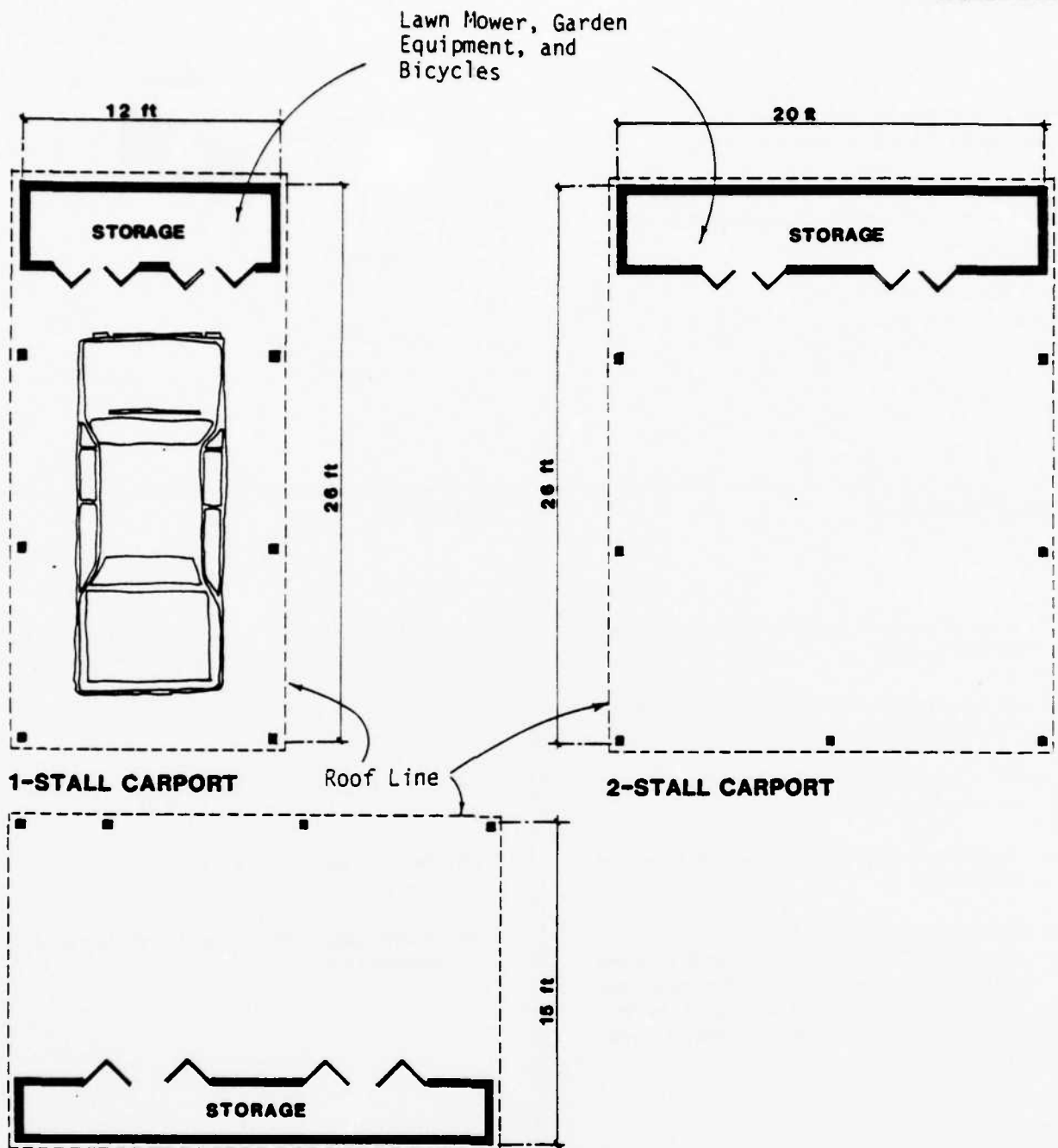
## REQUIREMENTS

- 1A. Adequate area for car storage and adequate area for bulk storage.
- 1B. Access/location. Groceries are commonly carried from the car.
- 2A. Floor finish. Durable and easily cleaned. Resistant to oil/gas spills.
- 3A. Adequate illumination. For safety of movement and security.
- 3B. Electrical power. Although it offers less protection from the weather than a garage does, a carport can still serve as an automotive maintenance area and a shop space in good weather. There should be adequate provision for electrical handtools.

## CRITERIA

- 1A. One-stall carport: 250 to 275 GSF; two-stall carport: 440 to 485 GSF; storage: 40 to 60 GSF.
- 1B. Adjacent to kitchen door.
- 2A. Exposed concrete, troweled finish.
- 3A. One weatherproof lamp fixture over each carport stall.
- 3B. Weatherproof 110-V outlets (as required per applicable code).

**GUIDANCE**



**COMMENTARY**

- 1A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 1B. Standard practice.
- 2A. Standard practice.
- 3A. Standard practice.
- 3B. Standard practice.

## PREFERENCE

### Deck, Patio, and Porch

- \*14.4 percent selected the deck.
- 10.8 percent selected the screened porch.

### Adjacency

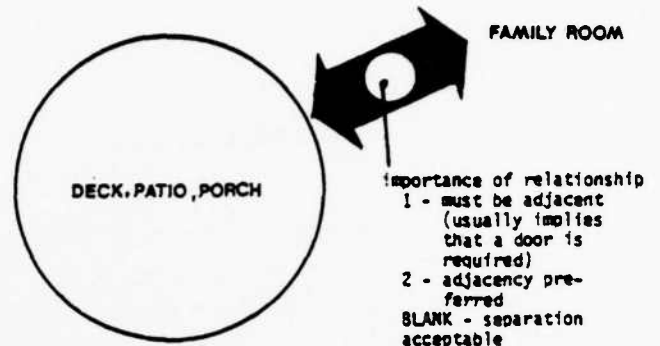
- Kitchen: 41.3 percent
- Dining Room: 20.5 percent
- Family Room: 15.7 percent

### Significant regional differences

- North—8.1 percent selected screened porch.
- South—37.0 percent selected screened porch.

\*See Chapter 2.

## CONTEXT

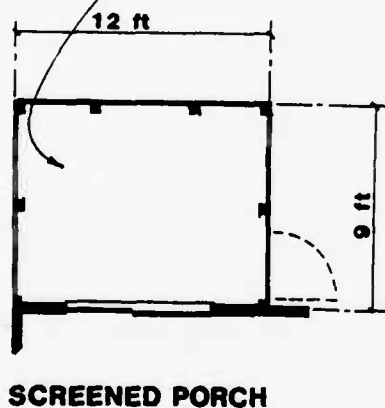
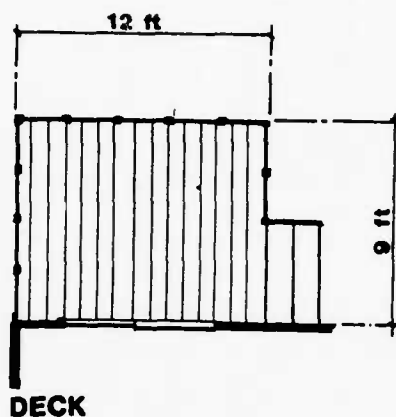
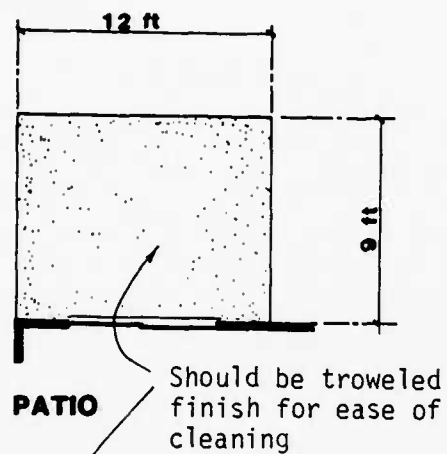


## REQUIREMENTS

- 1A. Adequate area for "recreational" use and eating.
- 1B. Access/location.
- 2A. Adequate illumination. Many social activities will be conducted after daylight hours.
- 2B. Electrical power. A provision should be made for additional lighting or for such appliances as electrical insect traps.

## CRITERIA

- 1A. Minimum deck, patio, or screened porch area: 80 GSF.
- 1B. Direct access from kitchen and/or family room and/or dining room.
- 2A. Weatherproof lamp fixture near deck area.
- 2B. Weatherproof 110-V outlets (as required near deck per applicable code).



A deck is the most reasonable alternative for a sloping site. A concrete patio may be more economical for a flat site.

**COMMENTARY**

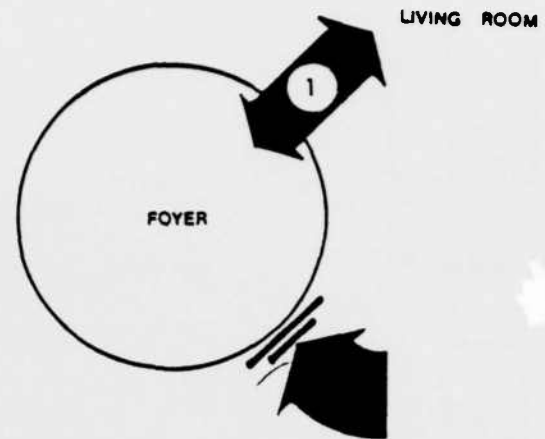
- 1A. Area based on functional requirements.
- 1B. User preference, survey result.
- 2A. CERL recommendation.
- 2B. CERL recommendation.

## PREFERENCE

### Foyer

- 50.8 percent desired an entry foyer.
- 49.2 percent did not select an entry foyer.
- 82.6 percent felt that the front door should be nearer the living room than any other room.

## CONTEXT



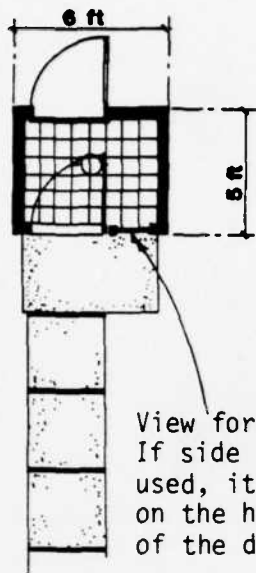
## REQUIREMENTS

- 1A. Adequate entry space for greeting visitors, storing coats, umbrellas.
- 1B. Privacy: visual control of views into private areas of home.
- 1C. Access/location.
  
- 2A. Wall finish. Should be durable and easily cleaned.
- 2B. Floor finish. Should be durable, easily cleaned, and water-resistant.
- 2C. Ceiling finish.
  
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.
  
- 4A. Adequate coat storage. Provide enough space for resident as well as guest coats.
- 5A. Security.

## CRITERIA

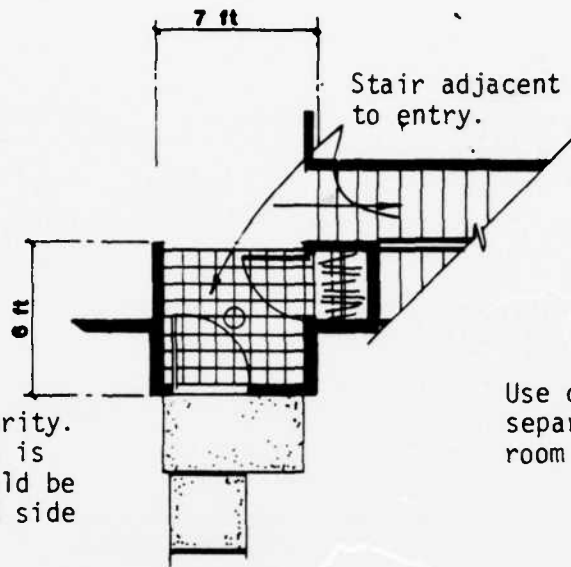
- 1A. Entry foyer: 30 to 45 GSF.
- 1B. Walls and door openings should be planned to screen views from the entry.
- 1C. The entry should be well lighted and identifiable from the street. It should lead directly to horizontal/vertical circulation and major living spaces.
  
- 2A. Smooth, painted finish.
- 2B. Vinyl, tile, sheet vinyl, or similar.
- 2C. Smooth, painted finish.
  
- 3A. General lighting level of 20 to 40 FC. Built-in overhead or wall fixture desirable.
- 3B. Entry area may be cooler (unheated), if planned as energy "air lock."
- 3C. A 110-V outlet (as required per applicable code).
  
- 4A. Enclosed coat storage with pole, shelf, and door: 8 to 10 GSF.
- 5A. Secure view of visitors at front entrance. Use small window or peep hole. Deadbolt lock should be provided.

## GUIDANCE



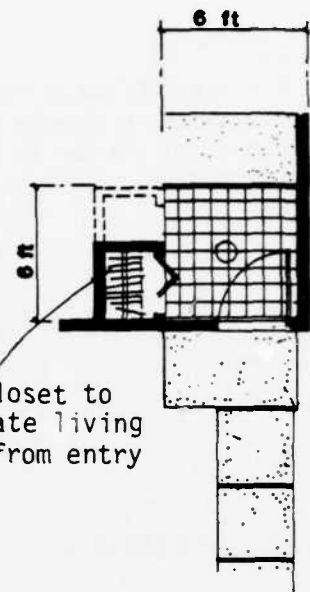
View for security. If side light is used, it should be on the hinged side of the door.

**EXAMPLE A**  
ENERGY "AIR-LOCK" ENTRY



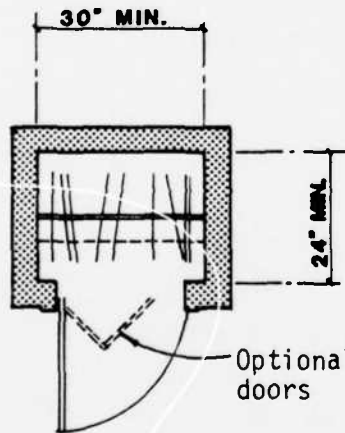
Stair adjacent to entry.

**EXAMPLE B**  
ENTRY/FOYER



Use closet to separate living room from entry

**EXAMPLE C**  
ENTRY IN LIVING ROOM



Optional bi-fold doors

## COAT CLOSET

## COMMENTARY

- 1A. Area based on task-related requirements.
- 1B. Standard practice.
- 1C. Standard practice.
- 2A-C. User preference.
- 3A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 3B. CERI recommendation.
- 3C. Standard practice.
- 4A. Task-related requirement.
- 5A. CERI recommendation.

## PREFERENCE

### Living Room

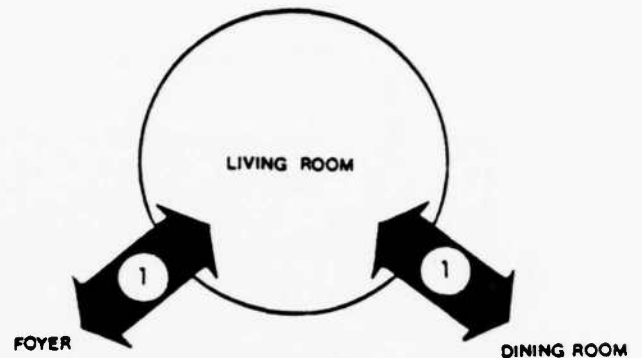
84.8 percent selected a living room.

15.2 percent did not select a living room.

82.6 percent responded the front door should be near the living room.

28.4 percent responded that the family room should be near the living room.

## CONTEXT



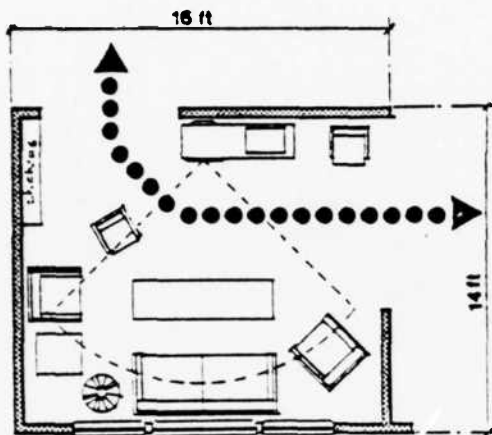
## REQUIREMENTS

- 1A. Adequate space for family living and to entertain guests.
- 1B. Privacy: visual control of views into other rooms of home.
- 1C. Access.
- 2A. Wall finish.
- 2B. Floor finish.
- 2C. Ceiling finish.
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.
- 4A. Entry foyer.

## CRITERIA

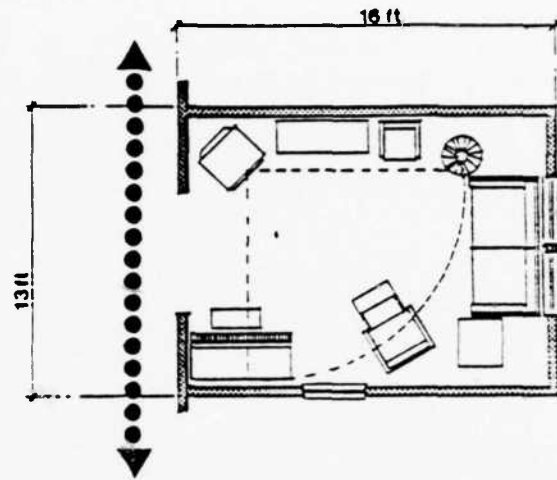
- 1A. Living room: 200 to 250 GSF.
- 1B. Walls and door openings should be planned to screen views from the entry.
- 1C. Control circulation patterns so they do not interrupt activities in the living room.
- 2A. Smooth, painted finish.
- 2B. Carpeting.
- 2C. Smooth, painted finish.
- 3A. No built-in fixtures required; provide switch-receptacle.
- 3B. 68° F (heating), 78° F (cooling) with 60 percent relative humidity and 15 cu ft/min/person.
- 3C. A 110-V outlet (as required per applicable code), and switch-receptacle, as noted in 3A above.
- 4A. An entry or foyer may be included as part of the living room (see scheme for foyer).

## GUIDANCE

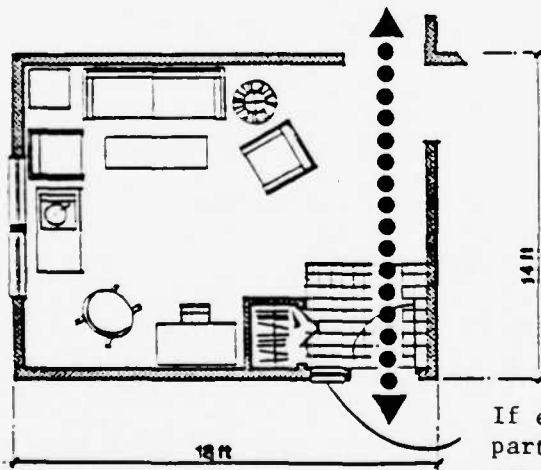


EXAMPLE A

Consider circulation patterns and furniture arrangements when planning room proportions and locating windows.



EXAMPLE B



EXAMPLE C

If entry is planned as part of living room, separate them with a wall or closet.

## COMMENTARY

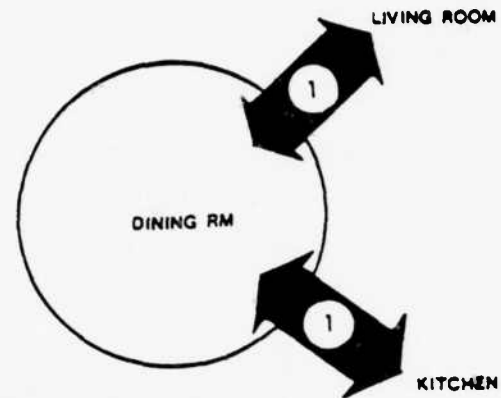
- 1A. Area based on task-related requirements.
- 1B. CERL recommendation.
- 1C. Standard practice.
- 2A-C. User preference.
- 3A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 3B. Standard practice.
- 3C. Standard practice.
- 4A. CERL recommendation.

## PREFERENCE

### Dining Room

- 18 percent selected food-prep kitchen/dining L.
- 25 percent selected food-prep kitchen/dining room.
- 18 percent selected eat-in kitchen/dining L.
- 18 percent selected eat-in kitchen/dining room.
- 21 percent selected eat-in kitchen alone.

## CONTEXT



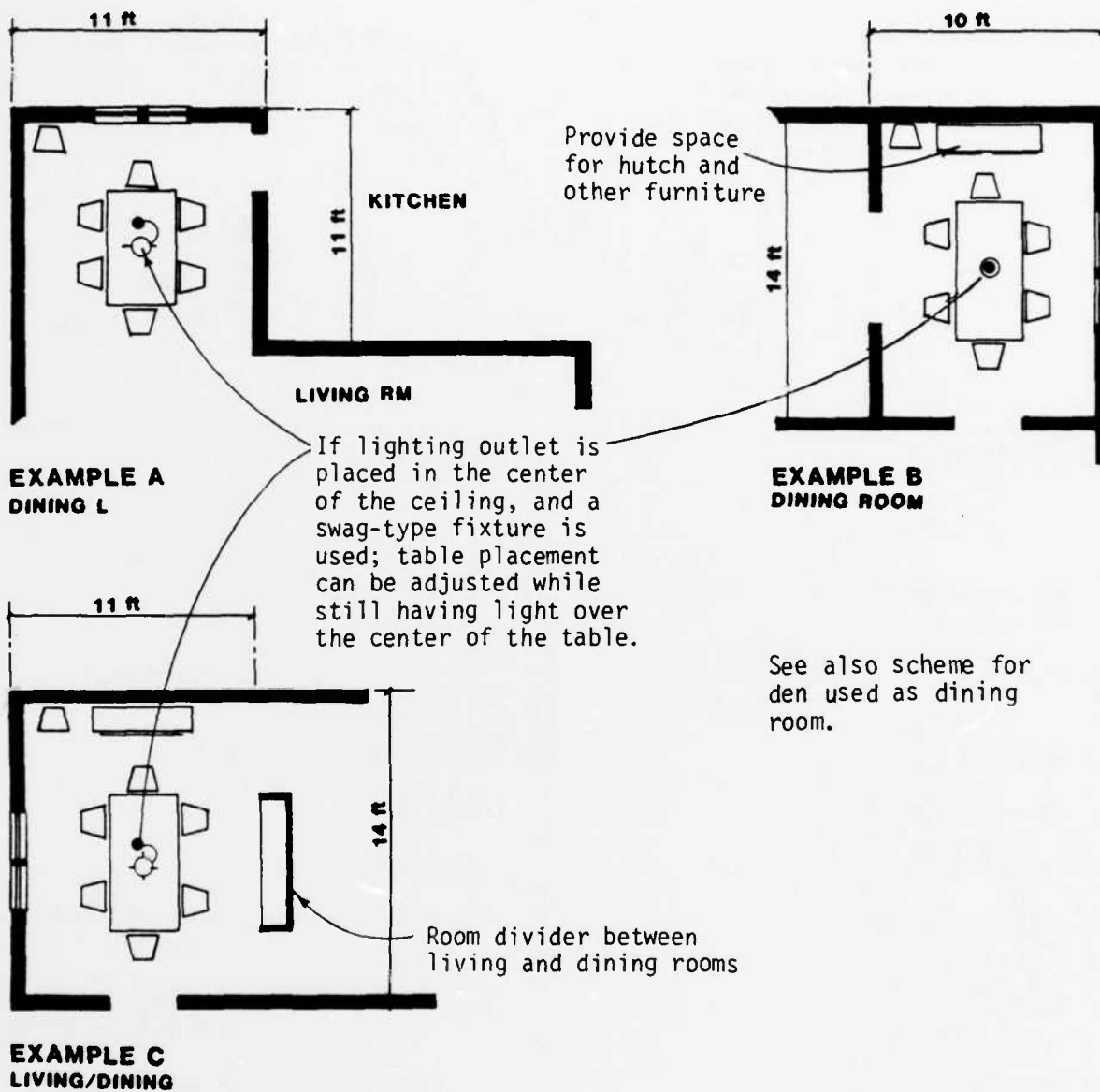
## REQUIREMENTS

- 1A. Adequate space for seating and circulation behind seats.
- 1B. Access.
- 2A. Wall finish.
- 2B. Floor finish.
- 2C. Ceiling finish.
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.
- 4A. Access to patio/deck.

## CRITERIA

- 1A. Dining room: 140 to 155 GSF.
- 1B. The only access to the dining room should not be through the kitchen.
- 2A. Smooth, painted finish.
- 2B. Carpeting.
- 2C. Smooth, painted finish.
- 3A. General lighting level of 20 to 40 FC from overhead fixture at center of space.
- 3B. 68° F (heating), 78° F (cooling) with 60 percent relative humidity, and 15 cu ft/min/person.
- 3C. A 110-V outlet (as required per applicable code).
- 4A. Total of 21.4 percent of responses indicated patio should be near dining room.

## GUIDANCE



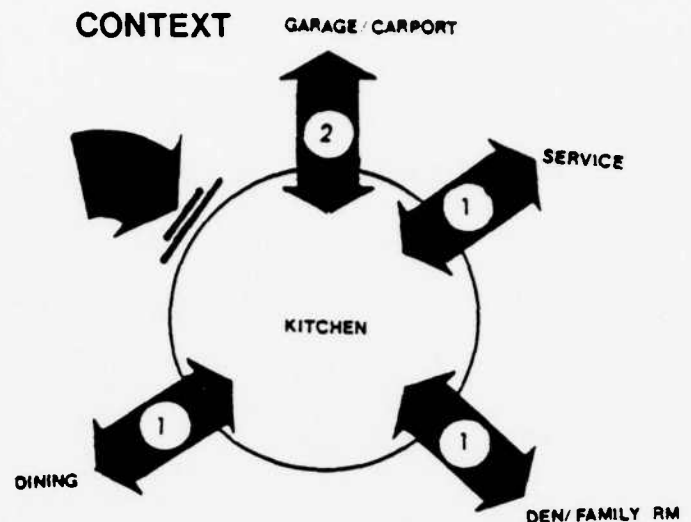
## COMMENTARY

- 1A. Area based on task-related requirements.
- 1B. Standard practice.
- 2A-C. User preference.
- 3A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 3B. Standard practice.
- 3C. Standard practice.
- 4A. Survey results.

## PREFERENCE

### Kitchen

- 18 percent selected food-prep kitchen/dining L
- 25 percent selected food-prep kitchen/dining room
- 18 percent selected eat-in kitchen/dining L
- 18 percent selected eat-in kitchen/dining room
- 21 percent selected eat-in kitchen alone



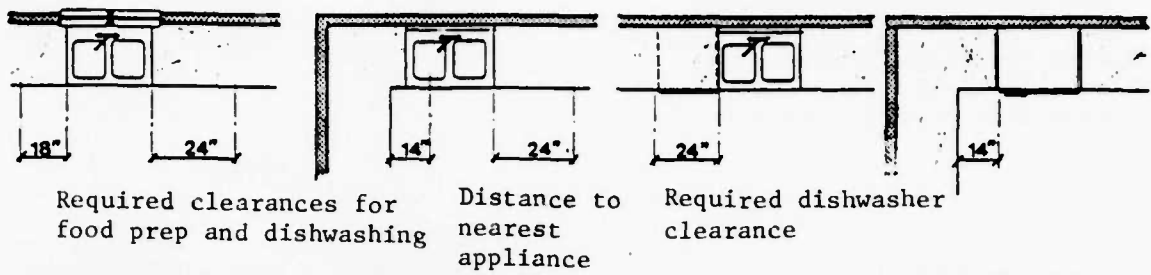
## REQUIREMENTS

- 1A. Adequate space to prepare meals.
- 1B. Circulation. Eat-in kitchen spaces should be conducive to an easy flow between meal prep and eating.
- 1C. Visual separation from entry and living room.
- 2A. Wall finish. Wall finish must be durable and easily cleaned. Spills may be frequent, as well as grease splattering.
- 2B. Floor finish. Must be durable and easily cleaned, as well as resistant to staining.
- 2C. Ceiling finish. While not a problem in most areas of the home, kitchen ceilings are susceptible to discoloration.
- 3A. Ventilation. Exhaust excess heat and cooking odors.
- 3B. Adequate illumination. General lighting is required. At counter work areas, provide task lighting.
- 3C. Electrical and gas service. Outlets for small kitchen appliances, range and refrigerator required.
- 3D. Gas.
- 4A. Counter space.
- 4B. Cupboard space.
- 4C. Equipment.

## CRITERIA

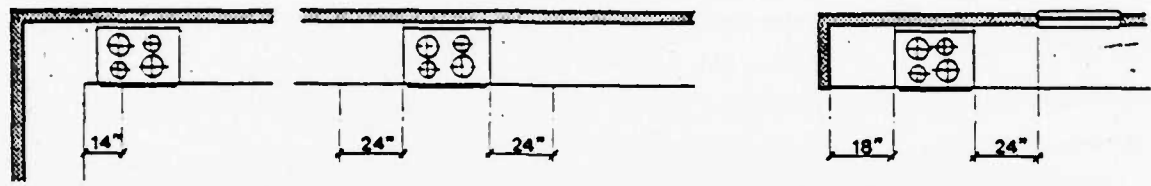
- 1A. Eat-in: 155 to 175 GSF; food prep: 85 to 95 GSF.
- 1B. Circulation should not pass through food prep area. This area should be a "dead end" space with circulation passing by it.
- 1C. Stagger door openings and use walls to visually separate the kitchen from the entry and living room.
- 2A. Smooth, painted finish (preferably semigloss). Glazed ceramic tile may be used near range and sink.
- 2B. Sheet vinyl preferred, although vinyl-asbestos tile is acceptable.
- 2C. Smooth, painted finish (preferably satin finish).
- 3A. Consider exhaust and ventilation of excess heat, 2 cu ft / min with hood exhaust (preferred) or fan vent in exterior wall.
- 3B. General lighting level of 20 to 30 FC and task lighting of 60 to 80 FC.
- 3C. Provide 110-V outlets as required by code. If &D. electric ranges are not provided, hookup for gas range should also be provided.
- 4A. Maximize counter space.
- 4B. Maximize cupboard storage.
- 4C. Automatic defrosting refrigerator; range; double-bowl kitchen sink (see guidance).

# GUIDANCE



**DOUBLE-BOWL SINK**

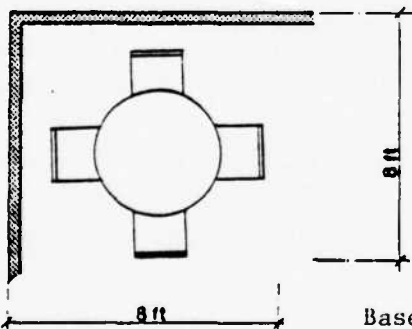
**REFRIGERATOR**



**RANGE**

Distance to nearest appliance or end of counter

Minimum clearances are indicated for proper kitchen planning



**EATING AREA**

Based on 48" round table.

## COMMENTARY

- |  |                        |
|--|------------------------|
| 1A. Area based on task-related requirements.   | 3D. Standard practice. |
| 1B. Standard practice.   | 3E. Standard practice. |
| 1C. CERL recommendation.   | 4A. Standard practice. |
| 2A-C. User preference.   | 4B. Standard practice. |
| 3A. CERL recommendation.   | 4C. Standard practice. |
| 3B. Standard practice.   |                        |
| 3C. AIA, <i>Architectural Graphic Standards</i> (John Wiley and Sons, Inc., 1970), p. 639. |                        |

## PREFERENCE

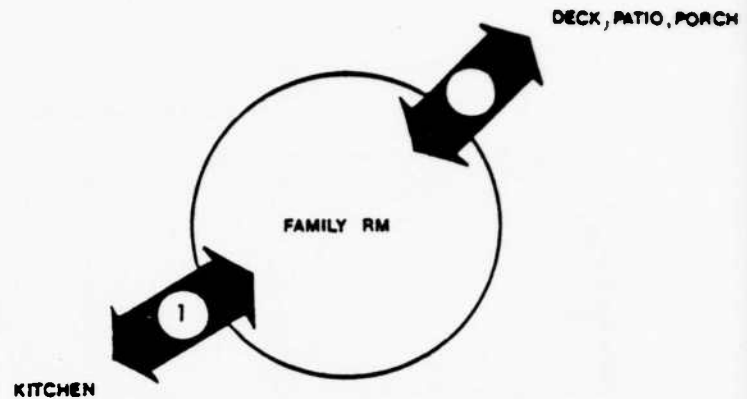
### Family Room/Den

45.0 percent selected family room.

22.4 percent selected den.

15.7 percent indicated that the patio should be near the family room.

## CONTEXT

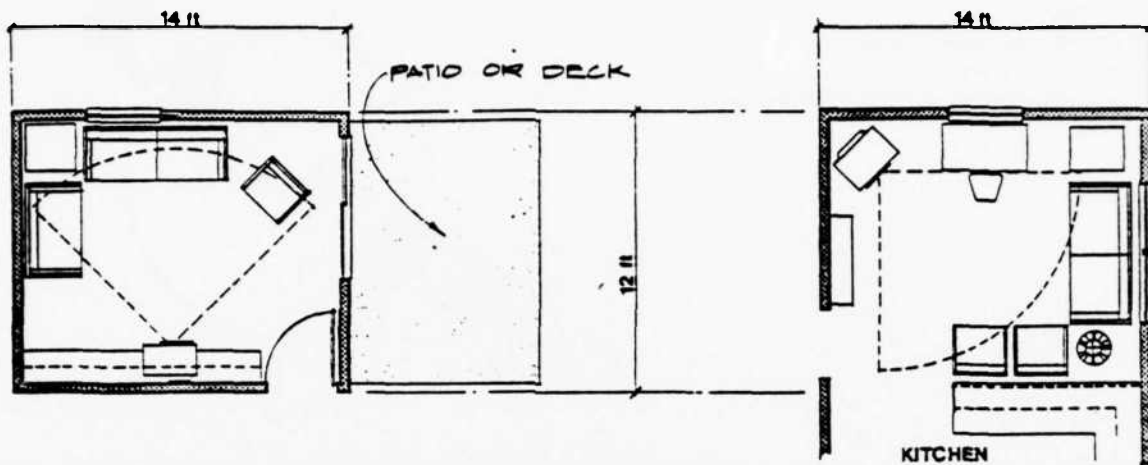


## REQUIREMENTS

- 1A. Adequate space.
- 1B. Location.
- 2A. Wall finish.
- 2B. Floor finish.
- 2C. Ceiling finish.
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.

## CRITERIA

- 1A. Family room: 160 to 225 GSF.
- 1B. Should be near main family living areas (kitchen, eating area); should *not* be in basement.
- 2A. Smooth, painted finish or paneling.
- 2B. Carpeting.
- 2C. Smooth, painted finish.
- 3A. No built-in fixtures required; provide switch-receptacle.
- 3B. 68° F (heating), 78° F (cooling) with 60 percent humidity, and 15 cu ft/min/person.
- 3C. A 110-V outlet (as required and switch receptacle per applicable code).



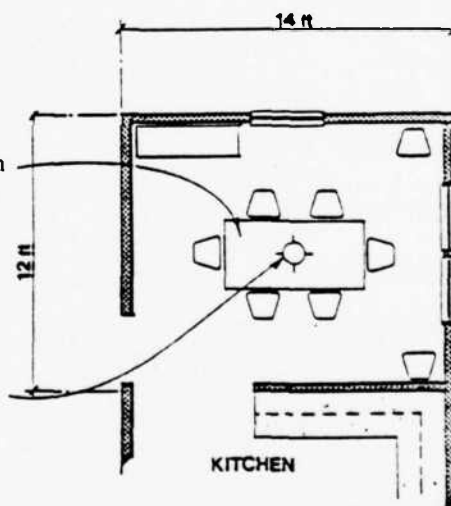
**EXAMPLE A**  
FAMILY ROOM

Plan for the many functions which the "family room" must accommodate--play room, study, TV, hobbies, eating, etc.

**EXAMPLE B**  
INFORMAL KITCHEN / DEN

Consider planning family room for alternate use as dining room.

If used as dining room, include switched receptacle for use with swag lamp over table.



**EXAMPLE C**  
FAMILY ROOM AS DINING

**COMMENTARY**

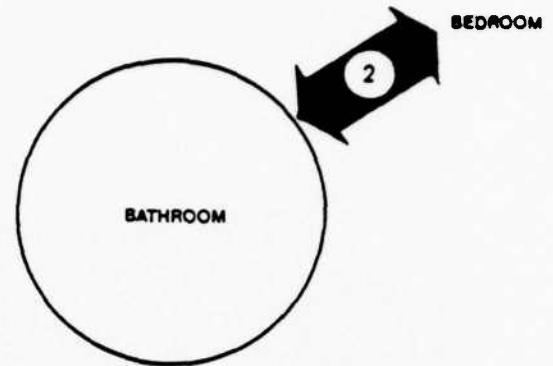
- 1A. Area based on task-related requirements.
- 1B. Standard practice.
- 2A-C. User preference.
- 3A. CERL recommendation.
- 3B. CERL recommendation.
- 3C. Standard practice.

## PREFERENCE

### Bathrooms

- 85.4 percent selected full bath.
- 34.3 percent selected  $\frac{3}{4}$  bath.
- 33.7 percent selected  $\frac{1}{2}$  bath.
- 66.1 percent felt  $\frac{3}{4}$  bath should be adjacent to master bedroom.
- 43.9 percent felt  $\frac{1}{2}$  bath should be adjacent to master bedroom.

## CONTEXT



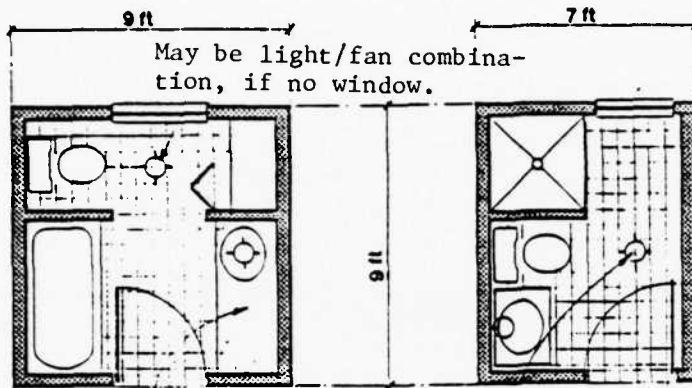
## REQUIREMENTS

- 1A. Adequate space.
- 1B. Adjacency.
- 2A. Wall finish. Finishes should be easily cleaned and water-resistant.
- 2B. Floor finish. Finishes should be easily cleaned and water-resistant.
- 2C. Ceiling finish. Finish should be resistant to high humidity.
- 3A. Adequate illumination. General lighting required as well as task lighting at mirror for make-up, shaving.
- 3B. Thermal comfort. Some provision should be made for auxiliary heat in both areas.
- 3C. Electrical power required for small electric appliances.
- 4A. Toiletries storage required.
- 4B. Full bath should have linen storage.

## CRITERIA

- 1A. Full bath: 65 to 75 GSF;  $\frac{3}{4}$  bath: 50 to 60 GSF;  $\frac{1}{2}$  bath: 30 to 40 GSF.
- 1B. One bath should be adjacent to master bedroom. The additional bath should be accessible from major living areas and/or bedrooms.
- 2A. Ceramic tile wainscot with full tub/shower. Other areas smooth painted.
- 2B. Ceramic tile, sheet vinyl, or vinyl asbestos tile.
- 2C. Smooth painted finish.
- 3A. General lighting level of 20 to 40 FC. Task lighting of 60 to 80 FC at mirror.
- 3B. Standard environmental condition of 68° F heating, 78° F cooling, 60 percent RH and 15 cu ft/min/person ventilation capability. Exhaust fan if no window is provided. Provide 110-V receptacle for small space heater.
- 3C. 110-V receptacles as required per applicable code and at mirror shavers, blow-dryers.
- 4A. Medicine cabinet and shelves.
- 4B. Provide storage for towels, wash cloths, soap. Prefer location inside the bathroom.

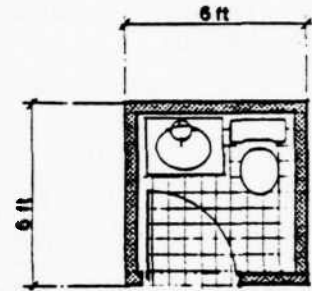
# GUIDANCE



FULL BATH

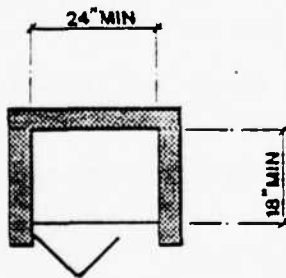
IF SINK IS OFF CENTER, MAKE UP AREA RESULTS

3/4 BATH



Because of small size, general room lighting not required.

1/2 BATH



LINEN CLOSET

When possible locate the linen closet within the bathroom.

Lighting over sink may be wall-mounted or recessed ceiling fixtures. Mirror over sink should be provided. Incandescent fixtures should be used, or fluorescent fixtures which are flattering to skin tones.

## COMMENTARY

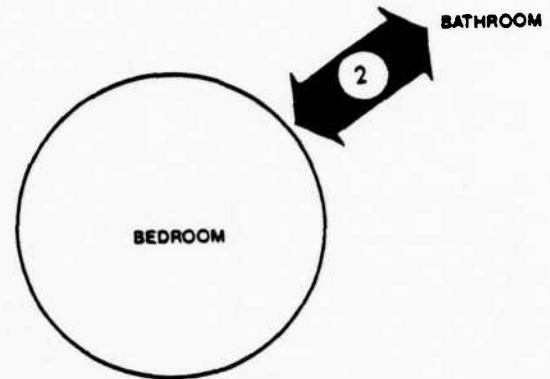
- 1A. Area based on task-related requirements.
- 1B. User preference from survey results.
- 2A-C. User preference.
- 3A. A1A. *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 3B. Standard practice.
- 3C. Standard practice.
- 4A. Standard practice.

## PREFERENCE

### Bedrooms

- 93.4 percent chose master bedroom.
- 93.4 percent chose bedroom no. 2.
- 77.6 percent chose bedroom no. 3.
- 66.1 percent felt master bedroom should be adjacent to  $\frac{3}{4}$  bath.
- 43.9 percent felt master bedroom should be adjacent to  $\frac{1}{2}$  bath.

## CONTEXT

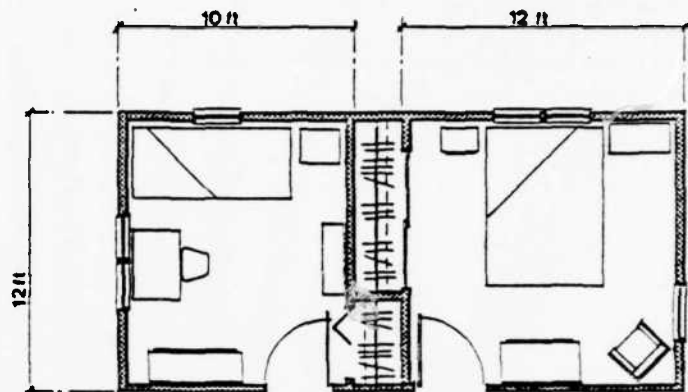
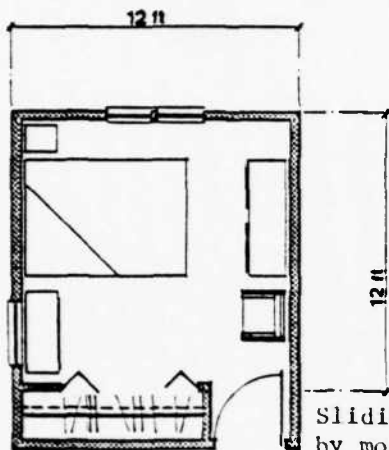


## REQUIREMENTS

- 1A. Adequate area.
- 1B. Privacy (acoustical). Sleeping should not be disturbed by sounds from adjacent spaces.
- 1C. Access.
- 2A. Wall finish.
- 2B. Floor finish.
- 2C. Ceiling finish.
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.
- 4A. Adequate storage.

## CRITERIA

- 1A. Master bedroom: 130 to 150 GSF; bedrooms nos. 2 and 3: 95 to 150 GSF.
- 1B. STC: 35 to 40 for enclosing walls. Zone home so that kitchen, living room, and family room are away from bedroom area. See Chapter 3.
- 1C. Access to private areas (bedrooms) should be controlled.
- 2A. Smooth, painted finish.
- 2B. Carpeting.
- 2C. Smooth, painted finish.
- 3A. No built-in fixtures required, provide switch-receptacle.
- 3B. 68° F (heating), 78° F (cooling) with 60 percent relative humidity, and 15 cu ft/min/person.
- 3C. A 110-V outlet (as required per applicable codes).
- 4A. In addition to GSF of bedroom, provide: 18 to 24 GSF of closet storage in master bedroom; 8 to 10 GSF of closet storage in bedrooms no. 1 and 2. Each closet should have a clothes rod and shelf.



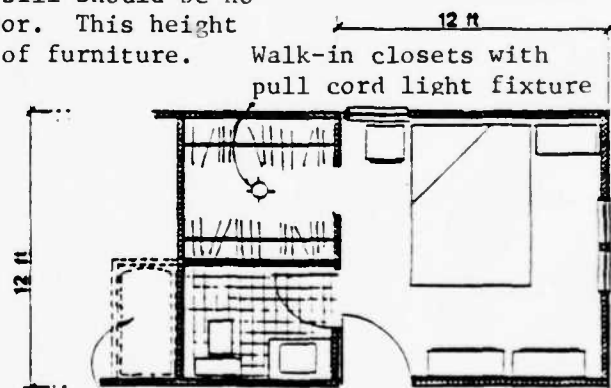
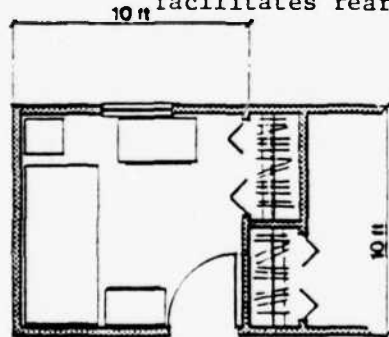
Sliding by-pass closet doors are preferred by most users. Bi-fold doors are also acceptable, provided they are wood or composition with the top track, not light gauge metal.

MASTER BEDROOM

BEDROOM 2 or 3

MASTER BEDROOM

In most cases, the window sill should be no less than 36" from the floor. This height facilitates rearrangement of furniture.



Walk-in closets with pull cord light fixture

Optional 3/4 bath or full bath with master bedroom.

BEDROOM 2 or 3

MASTER BEDROOM

COMMENTARY

- 1A. Area based on task-related requirements.
- 1B. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 1C. Standard practice.
- 2A-C. User preference.
- 3A. Standard practice.
- 3B. Standard practice.
- 3C. Standard practice.
- 4A. Standard practice.

## PREFERENCE

### Laundry/Utility/Storage

- 34.5 percent preferred laundry/utility.
- 36.5 percent preferred laundry/mudroom.
- 13.8 percent preferred laundry room.
- 9.9 percent preferred laundry/bath.

Storage was selected by 47.5 percent.

### Adjacency

- 54.3 percent responded that the laundry room should be near kitchen.
- 34.6 percent responded that the storage should be near kitchen.

## CONTEXT

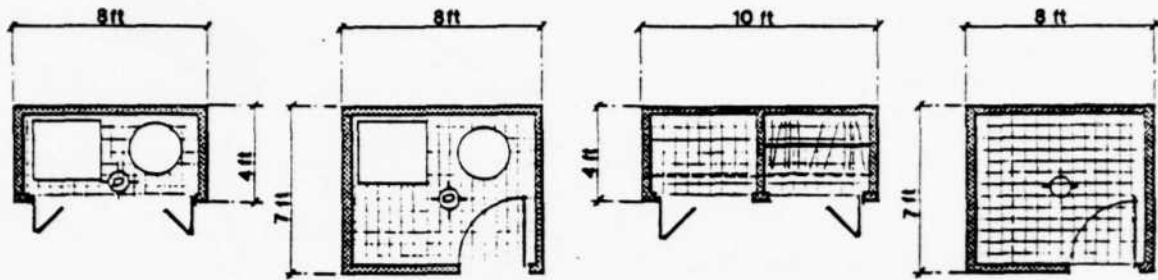


## REQUIREMENTS

- 1A. Adequate space for laundry, utility (mechanical) closet, and storage.
- 1B. Privacy.
- 1C. Access.
- 2A. Wall finish.
- 2B. Floor finish.
- 2C. Ceiling finish.
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.
- 3D. Gas.
- 4A. Storage.

## CRITERIA

- 1A. Laundry: 60 to 75 GSF; utility: 35 to 60 GSF; storage: 40 to 80 GSF.
- 1B. This area should be visually and acoustically separated from other living spaces.
- 1C. Access should be off major circulation or from kitchen.
- 2A. Smooth, painted finish.
- 2B. Vinyl flooring or similar easy-care finish.
- 2C. Smooth, painted finish.
- 3A. General lighting: 20 to 40 FC. Task lighting: 60 to 80 FC. Pull-cord light in utility closet and storage. Task lighting should be provided at washer and dryer, and over sink (if provided).
- 3B. 68° F (heating), 78° F (cooling) with 60 percent relative humidity, and 15 cu ft/min/person.
- 3C. A 110- and 220-V outlet and a 220-V (as required by equipment per applicable code).
- 3D. Gas hookup (where available) for dryer, water heater, and furnace.
- 4A. In addition to storage area, shelves over laundry.

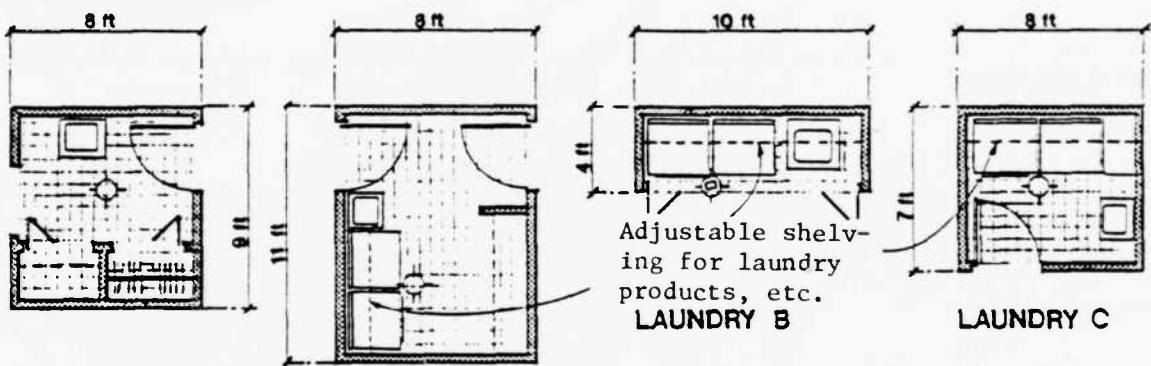


UTILITY CLOSET

UTILITY ROOM

STORAGE CLOSET

STORAGE RM



MUDROOM

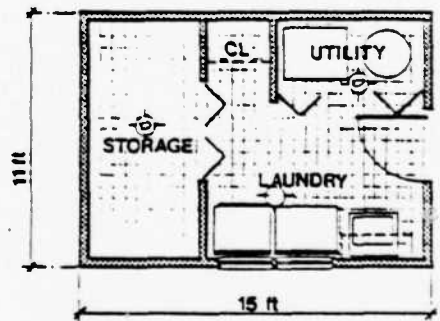
LAUNDRY A

LAUNDRY B

LAUNDRY C

Consider combination of services (Laundry, storage, and utility) into one space for improved and efficient layout.

Consider providing drop cord light fixture in closets, storage areas, and laundry areas.



SERVICE ROOM

COMMENTARY

- 1A. Area based on task-related requirements.
- 1B. CERL recommendation.
- 1C. User preference from survey results.
- 2A-C. User preference.
- 3A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.

- 3B. Standard practice.
- 3C. Standard practice.
- 3D. Standard practice.
- 4A. CERL recommendation.
- 4B. CERL recommendation.

## PREFERENCE

### Basement

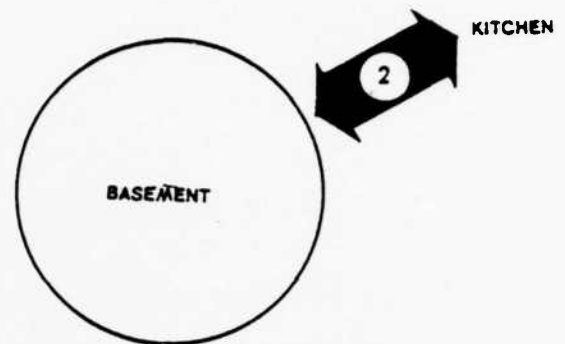
This feature was selected by 24.6 percent of the respondents.

### Significant regional differences

North—33.9 percent selected basement.

South—2.7 percent selected basement.

## CONTEXT

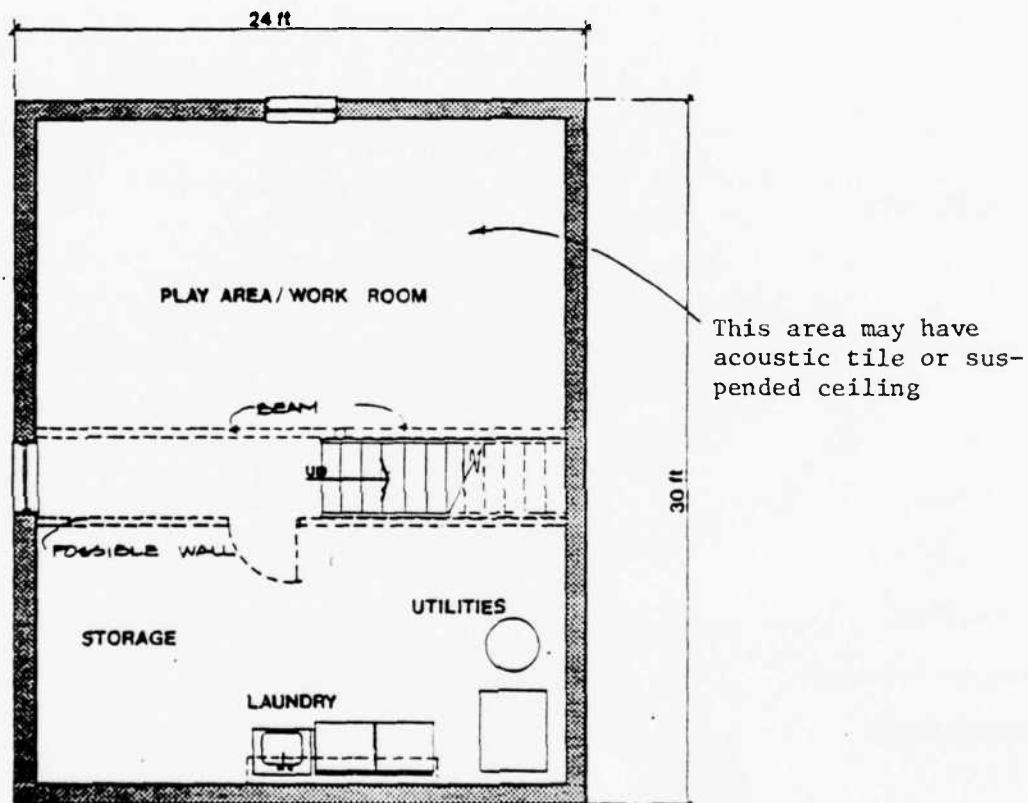


## REQUIREMENTS

- 1A. Adequate area for storage, laundry, utilities.
- 1B. Access.
- 2A. Wall finish.
- 2B. Floor finish.
- 2C. Ceiling finish.
- 3A. Adequate illumination.
- 3B. Thermal comfort.
- 3C. Electrical power.
- 3D. Gas.

## CRITERIA

- 1A. Maximum: full basement under house; minimum: 400 GSF.
- 1B. Stair access from interior.
- 2A. No special requirement.
- 2B. "Exposed concrete slab."
- 2C. No special requirement (see guidance).
- 3A. 20 to 30 FC general lighting.
- 3B. If to be used as a play area, thermal control should be similar to that in a family room (see family room criteria, p 30).
- 3C. 110-V outlets as required and 220-V as required by equipment per applicable code.
- 3D. Gas hookup where available for dryer, water heater, and furnace.



**BASEMENT**

**COMMENTARY**

- 1A. Area based on functional and construction requirements.
- 1B. Standard practice.
- 2A-C. Standard practice.
- 3A. AIA, *Architectural Graphic Standards* (John Wiley and Sons, Inc., 1970), p. 639.
- 3B. CERL recommendation.
- 3C. Standard practice.
- 3D. Standard practice.

APPENDIX A:  
CIVIL WORKS HOUSING QUESTIONNAIRE

SEVERAL TERMS, REFERRING TO TYPES OF ROOMS, ARE USED IN THIS QUESTIONNAIRE. TO HELP YOU VISUALIZE WHAT WE MEAN WHEN WE USE THESE TERMS, THE FOLLOWING DEFINITIONS ARE PROVIDED.

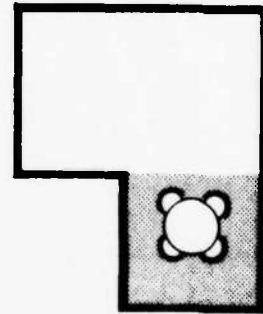
# definitions

## Living/Dining rooms

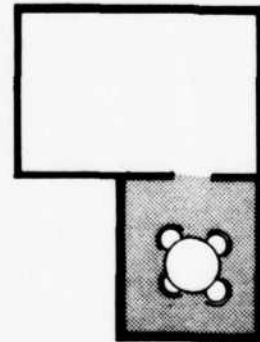
LIVING/DINING - ONE LARGE ROOM WHICH ACCOMMODATES BOTH ACTIVITIES



DINING "L" - A DINING AREA OPEN TO THE LIVING ROOM, BUT DEFINED SEPARATELY

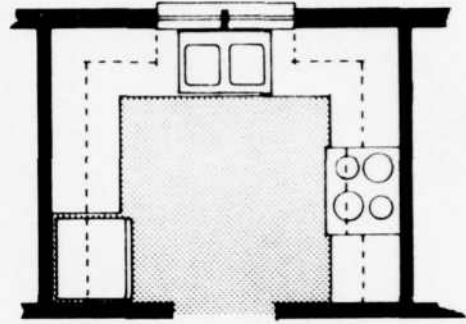


DINING ROOM - A ROOM FOR THE SOLE PURPOSE OF DINING, DISTINCTLY SEPARATE FROM ALL OTHERS

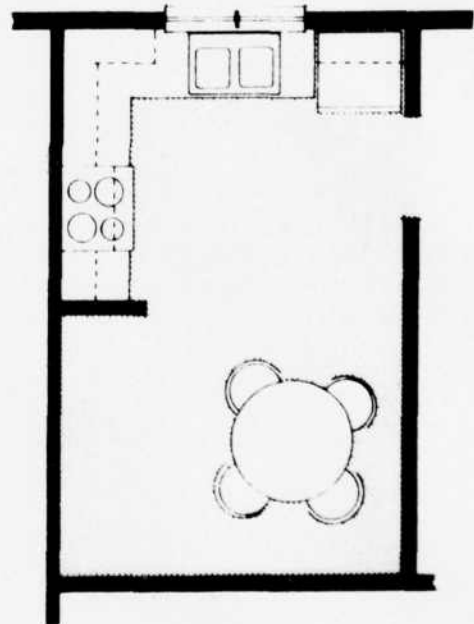


## Kitchens

FOOD-PREP KITCHEN - A KITCHEN  
DESIGNED FOR ONLY THE PREPARATION  
OF FOOD

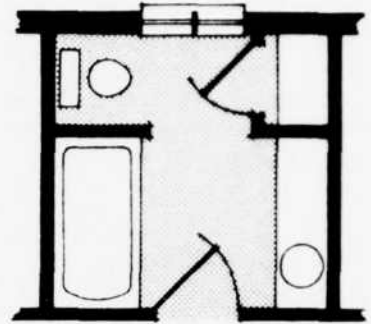


EAT-IN KITCHEN - A KITCHEN  
SERVING BOTH INFORMAL  
DINING AND FOOD PREPARATION

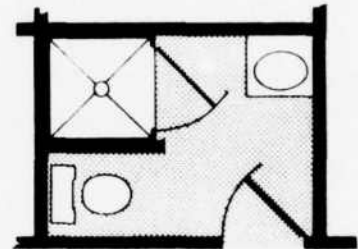


## Bathrooms

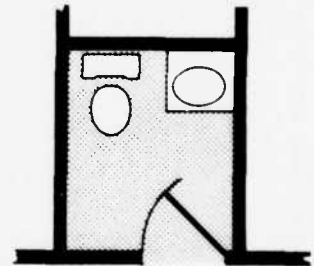
FULL BATH - CONTAINS TUB (W/OR W/O SHOWER), WATER CLOSET, LAVATORY. MAY ALSO CONTAIN A SMALL LINEN CLOSET



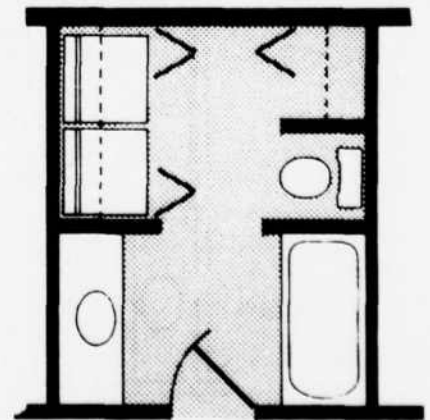
3/4 BATH - CONTAINS SHOWER, WATERCLOSET AND LAVATORY



HALF-BATH CONTAINS ONLY A WATER CLOSET AND A LAVATORY

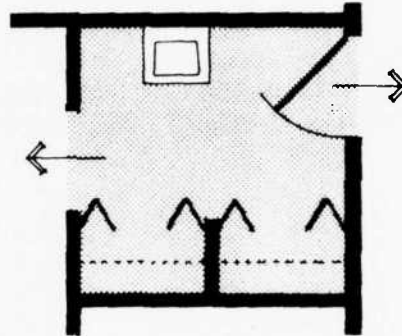


LAUNDRY/BATH-FULL BATH WITH A LAUNDRY CLOSET

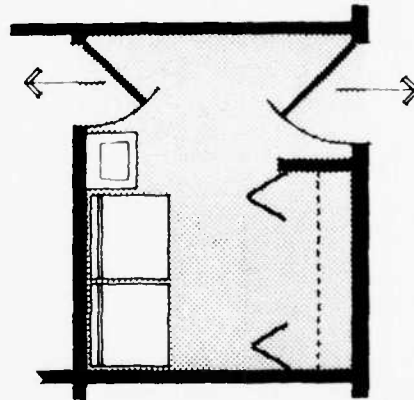


## Utility & Laundry areas

MUDROOM - A SMALL ROOM, USUALLY NEAR THE BACK DOOR, WITH SOME COAT STORAGE, SOME CABINET STORAGE AND A LAUNDRY-TYPE UTILITY SINK

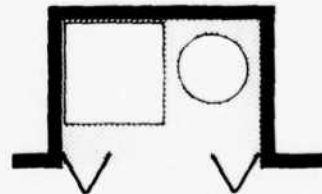


LAUNDRY/MUDROOM - ONE ROOM COMBINING BOTH FUNCTIONS. HAS A WASHER, DRYER, UTILITY SINK & SOME STORAGE



LAUNDRY ROOM - SAME AS ABOVE, BUT SMALLER. MAY OR MAY NOT HAVE A UTILITY SINK.

UTILITY CLOSET - WATER HEATER AND FURNACE SPACE ONLY



UTILITY ROOM - SMALL ROOM CONTAINING ONLY FURNACE AND WATER HEATER PERHAPS SOME STORAGE

# Part 1.

THIS PART OF THE QUESTIONNAIRE IS INTENDED TO DETERMINE INFORMATION ABOUT THE LOCATION OF THE HOME AND ITS OCCUPANTS. THE INFORMATION WILL BE USED TO DETECT REGIONAL DIFFERENCES IN THE QUALITY, MAINTENANCE, ETC. OF THE HOME, AND WHETHER STATISTICAL CHARACTERISTICS OF THE OCCUPANTS AFFECT THE RESPONSES IN THE FOLLOWING SECTIONS.

# statistics

Quest. 1-4  
Dist. 5-6  
7-8  
9-10

1. THIS HOME IS LOCATED AT \_\_\_\_\_ PROJECT  
IN THE STATE OF \_\_\_\_\_.

11-12 2. HOW LONG HAVE YOU LIVED IN THIS HOME? \_\_\_\_\_ YEARS AND  
13-14 \_\_\_\_\_ MONTHS.

15 3. HOW MANY PEOPLE LIVE IN THIS HOME? \_\_\_\_\_ ADULTS  
16 \_\_\_\_\_ CHILDREN

Skip 17 4. IF YOU HAVE CHILDREN LIVING AT HOME, WHAT ARE THEIR AGES & SEX?

- 18-20 1. \_\_\_\_\_ YRS OLD (MALE \_\_\_\_\_ FEMALE \_\_\_\_\_)
- 21-24 2. \_\_\_\_\_ YRS OLD (MALE \_\_\_\_\_ FEMALE \_\_\_\_\_)
- 25-29 3. \_\_\_\_\_ YRS OLD (MALE \_\_\_\_\_ FEMALE \_\_\_\_\_)
- 30-34 4. \_\_\_\_\_ YRS OLD (MALE \_\_\_\_\_ FEMALE \_\_\_\_\_)
- 35-42 5. \_\_\_\_\_ YRS OLD (MALE \_\_\_\_\_ FEMALE \_\_\_\_\_)

33 5. IN MOST GENERAL TERMS, HOW SATISFIED ARE YOU WITH THE  
GOVERNMENT-OWNED HOME YOU OCCUPY?  
PLACE AN X IN THE APPROPRIATE BOX.

- VERY SATISFIED
- SATISFIED
- NEUTRAL
- DISSATISFIED
- VERY DISSATISFIED

Skip 34

# Part 2.

IN THIS PART OF THE QUESTIONNAIRE WE WANT TO FIND OUT IF MAINTENANCE AND REPAIR IS NEEDED FOR ANY PART OF YOUR HOUSE, OUT BUILDINGS, DETACHED GARAGE OR YARD.

# **maintenance**

## A. Urgent

WE WANT TO KNOW IF THERE ARE ANY REPAIR OR MAINTENANCE ITEMS THAT REQUIRE IMMEDIATE ATTENTION. URGENT ITEMS INCLUDE THOSE WHICH HAVE SERIOUS CONSEQUENCES (COULD CAUSE FURTHER DAMAGE TO THE HOUSE OR YOUR BELONGINGS), CAUSE MAJOR INCONVENIENCE, OR CREATE A HEALTH AND SAFETY HAZARD.

IN THE SPACE BELOW, DESCRIBE URGENT ITEMS. BE SURE TO IDENTIFY WHERE THE PROBLEM EXISTS (OUTSIDE, IN THE HOUSE, GARAGE, ETC.), WHILE COMPLETING THE NEXT SECTION YOU MAY THINK OF AN ITEM WHICH SHOULD BE LISTED HERE, AND MAY WISH TO RETURN TO THIS PAGE.

Item	Location	Description of Urgent Problem
1.	35-36	37-38
2.	39-40	41-42
3.	43-44	45-46
4.	47-48	49-50

Skip 51

## B. Other Maintenance and Repair

OTHER THAN URGENT MAINTENANCE AND REPAIR ITEMS, THERE MAY BE SOME ITEMS WHICH ARE CHRONIC, NUISANCE, CAUSE INCONVENIENCE OR, IF TAKEN CARE OF, COULD PREVENT WORSE PROBLEMS.

BELOW IS A CHECKLIST OF MANY PARTS OF A BUILDING OR YARD. USE IT TO HELP YOU THINK OF ITEMS NEEDING REPAIR OR MAINTENANCE AND TO CODE YOUR COMMENTS.

### 1. STRUCTURE

- |                   |  |
|-------------------|--|
| A. ROOF           | H. PORCH, ENTRY                          |
| B. WALLS-INSIDE   | I. CHIMNEY OR FLUE                       |
| C. WALLS-OUTSIDE  | J. GUTTERS                               |
| D. WINDOWS        | K. EXTERIOR TRIM, OVERHANG, EAVES, EACIA |
| E. DOORS-INTERIOR | L. FOUNDATION AND BASEMENT WALLS         |
| E. DOORS-EXTERIOR | M. PATIO OR DECK                         |
| G. FLOOR          | N. STAIRS & STEPS                        |
|                   | O. OTHER                                 |

### 2. PLUMBING

- |   |                        |
|---|------------------------|
| A. WELL (INCL. PUMP AND OTHER COMPONENTS) | F. WATER HEATER        |
| B. PIPES-COLD WATER                       | G. WATER CONDITIONER   |
| C. PIPES-HOT WATER                        | H. TOILETS             |
| D. SEWER LINE-INTERIOR                    | I. SINKS OR LAVATORIES |
| E. SEPTIC TANK & TILE                     | J. FAUCETS-INTERIOR    |
|   | K. FAUCETS-EXTERIOR    |
|   | L. OTHER               |

### 3. HEATING/COOLING

- |   |                            |
|---|----------------------------|
| A. FUEL TANK OR SERVICE LINES                   | D. DUCTS-SUPPLY OR RETURN  |
| B. BURNER & BLOWER                              | E. PIPES AND RADIATORS     |
| C. AIR CONDITIONER (OTHER THAN OWNER FURNISHED) | F. THERMOSTAT AND CONTROLS |
|   | G. INSULATION              |
|   | H. VENTILATION FAN         |
|   | I. OTHER                   |

### 4. ELECTRICAL

- |   |                               |
|---|-------------------------------|
| A. SERVICE (LINES TO HOUSE OR BUILDING) | F. RECEPTACLES                |
| B. FUSE BOX, BREAKER BOX, MAIN SHUTOFFS | F. SWITCHES                   |
| C. WIRING-INTERIOR                      | G. LIGHTING FIXTURES-INTERIOR |
| D. WIRING-EXTERIOR                      | H. LIGHTING FIXTURES-EXTERIOR |
|   | I. EXHAUST FANS (BUILT-IN)    |
|   | J. OTHER                      |

### 5. FINISHES

- |                             |                                       |
|-----------------------------|---------------------------------------|
| A. WOODWORK                 | D. FLOORING OR CARPET                 |
| B. PAINT OR WALLPAPER       | E. CABINETS, VANITIES OR COUNTER-TOPS |
| C. PLASTER OR PLASTER BOARD |                                       |

### 6. APPLIANCES (ONLY GOV'T FURNISHED)

- |                 |          |
|-----------------|----------|
| A. REFRIGERATOR | D. DRYER |
| B. RANGE/OVEN   | E. OTHER |
| C. WASHER       |          |

### 7. MISC

- |                                 |                      |
|---------------------------------|----------------------|
| A. SUMP LINES AND PUMP          | F. FIRE EXTINGUISHER |
| B. LIGHTNING ARRESTORS & GROUND | G. TELEPHONE         |
| C. ANTENNA AND LINES            | H. SOLID WASTE       |
| D. LOCKS                        | I. OTHER             |
| E. SMOKE DETECTOR OR ALARM      |                      |

### 8. EXTERIOR AND YARD

- |                                |                                    |
|--------------------------------|------------------------------------|
| A. SIDEWALK                    | F. DRAINAGE                        |
| B. DRIVEWAY OR PARKING         | G. ANIMAL AND RODENT CONTROL, BUGS |
| C. MAILBOX                     | H. FENCE                           |
| D. TREES, SHRUBS AND PLANTINGS | I. EXTERIOR PAINT OR BRICKWORK     |
| E. GRASS AND GROUND COVER      | J. OTHER                           |

IN THE CHART BELOW, MAKE A LIST OF REMAINING MAINTENANCE AND REPAIR ITEMS WHICH WE SHOULD KNOW ABOUT. CHECK ONLY ONE LOCATION BOX FOR EACH ITEM, FILL IN THE CODE (SEE FACING PAGE), AND GIVE A BRIEF DESCRIPTION OF EACH PROBLEM.

ITEM	LOCATION OF PROBLEM				CODE (FROM LIST)	BRIEF DESCRIPTION OF PROBLEM
	HOUSE*	DETACHED GARAGE	OTHER BLDG.	YARD OR GROUNDS		
52 <b>1</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	53-54	55-56
57 <b>2</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	58-59	60-61
63 <b>3</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	64-65	66-67
68 <b>4</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	69-70	71-72
74 <b>5</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	75-76	77-78
5 <b>6</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6-7	8-9
10 <b>7</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11-12	13-14
16 <b>8</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17-18	19-20
21 <b>9</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22-23	24-25

Skip 62

Skip 73

Skip 79

80

Dup 1-4

Skip 15

Skip 26

\* INCLUDING ATTACHED GARAGE

# Part 3

IN THIS SECTION, WE ARE ASKING FOR YOUR PREFERENCES.  
IN SOME CASES, WE ARE ASKING YOUR PREFERENCES CONCERNING  
ISSUES WHICH MAY DIRECTLY BE OF BENEFIT TO YOU. YOUR  
RESPONSES TO OTHER QUESTIONS MAY NOT BENEFIT YOU DIRECTLY,  
BUT THEY WILL CERTAINLY HELP US TO PROVIDE THE BEST HOME  
POSSIBLE IN THE FUTURE.

# preferences

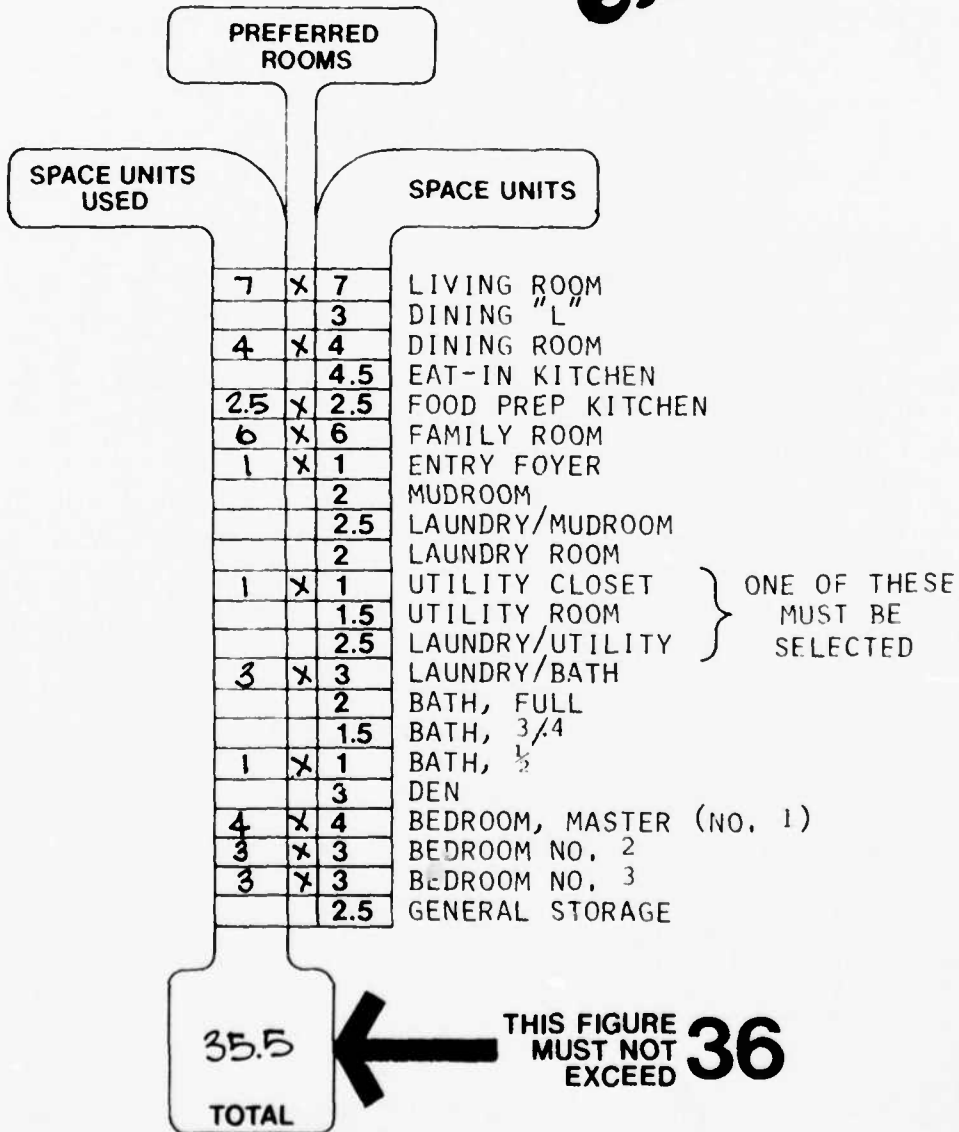
## LOCATION OF THE HOME ON THE SITE

ANSWER THE FOLLOWING QUESTIONS CONCERNING YOUR PREFERENCES FOR THE LOCATION OF THE HOME ON A PROJECT SITE. RESPOND BY PLACING AN **X** IN THE APPROPRIATE BOX.

1. THE HOME SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE WORK LOCATION  
 YES  NO 27
2. THE HOME SHOULD BE LOCATED AS NEAR AS POSSIBLE TO THE WATER  
 YES  NO 28
3. THE HOME SHOULD BE LOCATED AS NEAR AS POSSIBLE TO A WOODED AREA  
 YES  NO 29
4. THE HOME SHOULD BE LOCATED AS NEAR AS POSSIBLE TO A MAJOR ACCESS ROAD (ROAD NOT ON PROJECT SITE).  
 YES  NO 30
5. THE HOME SHOULD BE LOCATED IN A CLUSTER WITH OTHER HOMES ON A PROJECT SITE.  
 YES  NO 31
6. THE HOME SHOULD BE NEAR PUBLIC AREAS OF THE SITE  
 YES  NO 32

Skis 33

**example**





## SELECTION OF FEATURES

IN THE SAME MANNER AS YOU SELECTED PREFERRED ROOMS, NOW INDICATE YOUR PREFERENCE FOR THE FEATURES BELOW. INSTEAD OF "SPACE UNITS", EQUIVALENT "VALUE UNITS" ARE USED. THE TOTAL VALUE UNITS FOR THE FEATURES YOU SELECT MUST NOT EXCEED 4.

PREFERRED FEATURES		
VALUE UNITS USED		VALUE UNITS
6.0		2 SCREENED PORCH
6.1		1 STORAGE SHED
6.2		3 1 - STALL GARAGE
6.3		4 2 - STALL GARAGE
6.4		3 BASEMENT
6.5		2 1 - STALL CARPORT
6.6		3 2 - STALL CARPORT
6.7		1 DECK
6.8		<b>TOTAL</b>

← THIS FIGURE MUST NOT EXCEED **4**

Skip 69

## location & adjacency

FOR THE ROOMS YOU SELECTED ON PAGE 17 ANSWER THE FOLLOWING QUESTIONS.

IF YOU SELECTED  
THE...

IT SHOULD BE CLOSEST  
TO THE... (NAME ROOM)

70	3/4 BATH .....	_____
71	1/2 BATH .....	_____
72	LAUNDRY ROOM .....	_____
73	UTILITY CLOSET .....	_____
74	FAMILY ROOM .....	_____
75	FOOD PREP OR EAT-IN KITCH. ....	_____
76	STORAGE ROOM .....	_____
Skip 77-79		
80 2		
Dup 1-4		

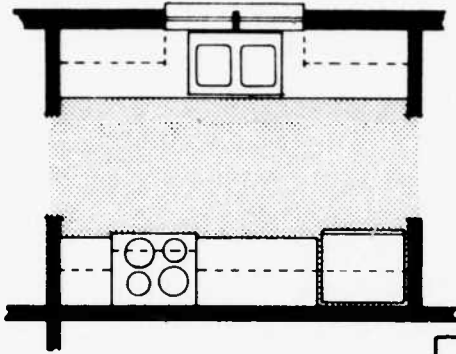
IN ANY HOME, THE...

SHOULD BE CLOSEST  
TO THE... (NAME ROOM)

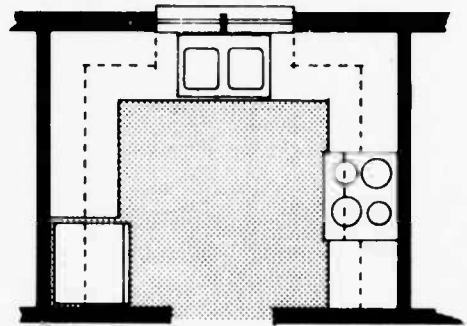
5	FRONT DOOR .....	_____
6	BACK DOOR .....	_____
7	CARPORT/GARAGE .....	_____
8	PATIO .....	_____
Skip 9		

SELECT YOUR PREFERRED ARRANGEMENT FOR EACH ROOM TYPE BY PLACING AN **X** IN THE APPROPRIATE BOX.

### FOOD-PREP KITCHENS



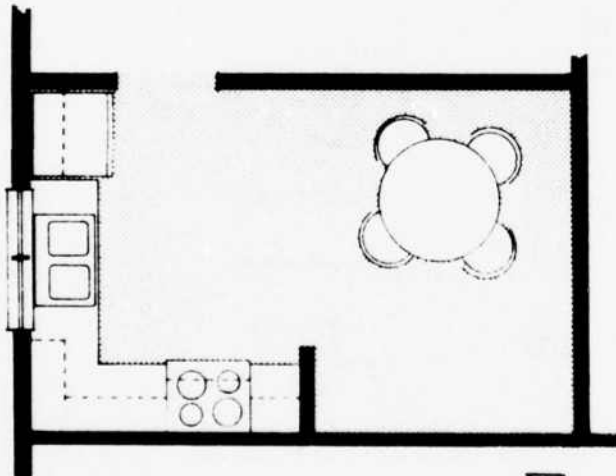
A



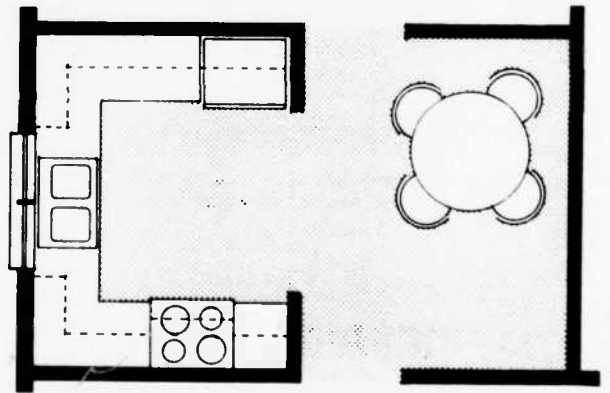
B

10

### EAT-IN KITCHENS



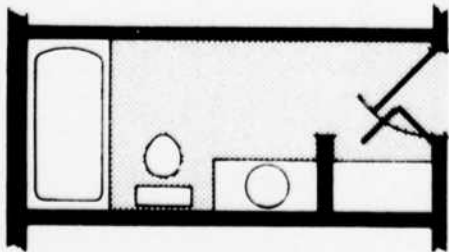
A



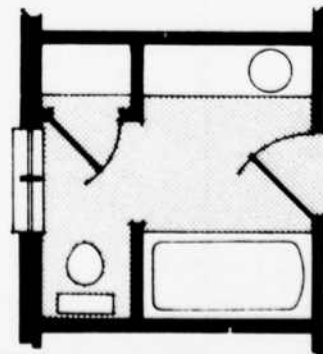
B

11

### FULL BATHS



A

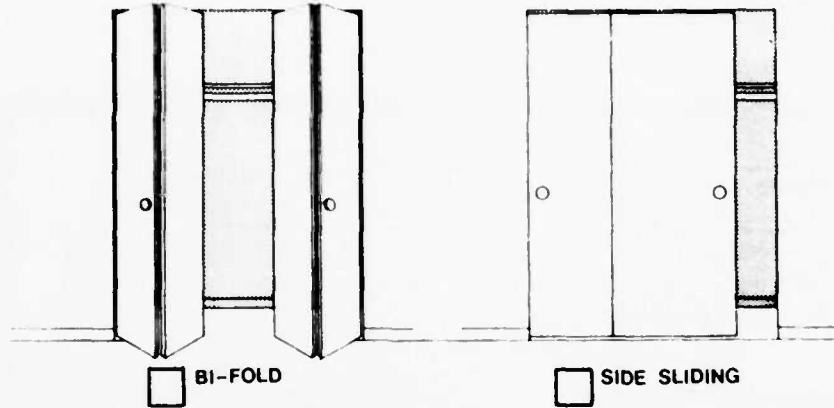


B

12

## CLOSET DOORS

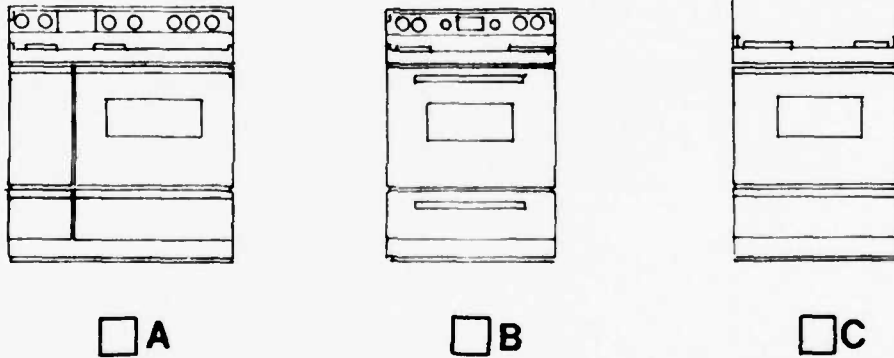
SELECT YOUR PREFERENCE FOR CLOSET DOOR STYLE BY PLACING AN X IN THE APPROPRIATE BOX.



13

## RANGES

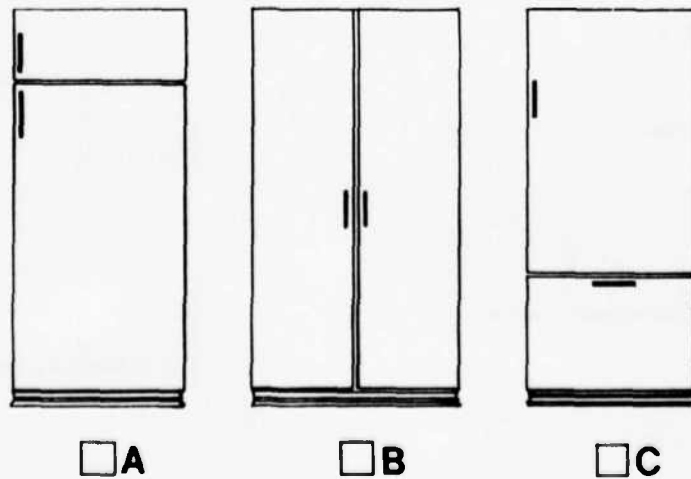
SELECT THE STYLE OF RANGE/OVEN YOU PREFER BY PLACING AN X IN THE APPROPRIATE BOX.



14

## REFRIGERATORS

SELECT THE STYLE OF REFRIGERATOR YOU PREFER BY PLACING AN X IN THE APPROPRIATE BOX.



15

## improvements

WHAT IMPROVEMENTS SHOULD BE MADE TO THE INSIDE OF YOUR HOME?

- |         |    |
|---------|----|
| 1 _____ | 17 |
| 2 _____ | 18 |
| 3 _____ | 19 |
| 4 _____ | 20 |
| 5 _____ | 21 |

WHAT IMPROVEMENTS SHOULD BE MADE OUTSIDE?

- |         |    |
|---------|----|
| 1 _____ | 22 |
| 2 _____ | 23 |
| 3 _____ | 24 |
| 4 _____ | 25 |
| 5 _____ | 26 |

Skip 27

## General Comments

IF YOU WOULD LIKE TO COMMENT ABOUT CURRENT OR DESIRED HOUSE FEATURES, NOT OTHERWISE COVERED IN THIS QUESTIONNAIRE, PLEASE DO SO IN THE SPACE BELOW.

- |       |       |
|-------|-------|
| _____ | 28-30 |
| _____ | 31-33 |
| _____ | 34-36 |
| _____ | 37-39 |
| _____ | 40-42 |
| _____ |       |
| _____ |       |
| _____ |       |
| _____ |       |
| _____ |       |
| _____ |       |
| _____ |       |

Skip 43-79  
80 3

APPENDIX B:  
DETAILED SURVEY RESULTS

For a graphic representation of room types considered in the questionnaire, see Appendix A.

# Part 1.

THIS PART OF THE QUESTIONNAIRE IS INTENDED TO DETERMINE INFORMATION ABOUT THE LOCATION OF THE HOME AND ITS OCCUPANTS. THE INFORMATION WILL BE USED TO DETECT REGIONAL DIFFERENCES IN THE QUALITY, MAINTENANCE, ETC. OF THE HOME, AND WHETHER STATISTICAL CHARACTERISTICS OF THE OCCUPANTS AFFECT THE RESPONSES IN THE FOLLOWING SECTIONS.

# statistics

# Part 2.

IN THIS PART OF THE QUESTIONNAIRE WE WANT TO FIND OUT IF MAINTENANCE AND REPAIR IS NEEDED FOR ANY PART OF YOUR HOUSE, OUT BUILDINGS, DETACHED GARAGE OR YARD.

# **maintenance**

# 362 questionnaires returned and analyzed.

- Quest. 1-4  
Dist. 5-6 1. THIS HOME IS LOCATED AT \_\_\_\_\_ PROJECT  
7-8 IN THE STATE OF \_\_\_\_\_  
9-10
- 11-12 2. HOW LONG HAVE YOU LIVED IN THIS HOME? 5.5 YEARS AND  
13-14 4.4 MONTHS. **5.9 years**
- 15 3. HOW MANY PEOPLE LIVE IN THIS HOME? 1.9 ADULTS  
16 1.6 CHILDREN
- Skip 17 4. IF YOU HAVE CHILDREN LIVING AT HOME, WHAT ARE THEIR AGES & SEX?
- |       |                        |                             |
|-------|------------------------|-----------------------------|
| 18-20 | 1. <u>12.2</u> YRS OLD | ( MALE _____ FEMALE _____ ) |
| 21-23 | 2. <u>10.3</u> YRS OLD | ( MALE _____ FEMALE _____ ) |
| 24-26 | 3. <u>9.1</u> YRS OLD  | ( MALE _____ FEMALE _____ ) |
| 27-29 | 4. <u>10.9</u> YRS OLD | ( MALE _____ FEMALE _____ ) |
| 30-32 | 5. <u>8.0</u> YRS OLD  | ( MALE _____ FEMALE _____ ) |

33 5. IN MOST GENERAL TERMS, HOW SATISFIED ARE YOU WITH THE GOVERNMENT-OWNED HOME YOU OCCUPY?  
PLACE AN X IN THE APPROPRIATE BOX.

- |      |                                     |                   |
|------|-------------------------------------|-------------------|
| 16.4 | <input type="checkbox"/>            | VERY SATISFIED    |
| 48.9 | <input checked="" type="checkbox"/> | SATISFIED         |
| 25.8 | <input type="checkbox"/>            | NEUTRAL           |
| 8.3  | <input type="checkbox"/>            | DISSATISFIED      |
| .6   | <input type="checkbox"/>            | VERY DISSATISFIED |

**numbers are %**

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## A. Urgent

WE WANT TO KNOW IF THERE ARE ANY REPAIR OR MAINTENANCE ITEMS THAT REQUIRE IMMEDIATE ATTENTION. URGENT ITEMS INCLUDE THOSE WHICH HAVE SERIOUS CONSEQUENCES (COULD CAUSE FURTHER DAMAGE TO THE HOUSE OR YOUR BELONGINGS), CAUSE MAJOR INCONVENIENCE, OR CREATE A HEALTH AND SAFETY HAZARD.

IN THE SPACE BELOW, DESCRIBE URGENT ITEMS. BE SURE TO IDENTIFY WHERE THE PROBLEM EXISTS (OUTSIDE, IN THE HOUSE, GARAGE, ETC.). WHILE COMPLETING THE NEXT SECTION YOU MAY THINK OF AN ITEM WHICH SHOULD BE LISTED HERE, AND MAY WISH TO RETURN TO THIS PAGE.

Item	Location	Description of Urgent Problem
1.	35-36	37-40
2.	39-40	41-42
3.	43-44	45-46
4.	47-48	49-50

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# Urgent Maintenance

## COMMENT CONCERNING

1. OUTSIDE THE HOUSE
2. INSIDE THE HOUSE
3. ROOF
4. WINDOWS
5. GARAGE
6. BASEMENT

## FREQUENCY BY ORDER OF MENTION

	1st	2nd	3rd	4th	total
1. OUTSIDE THE HOUSE	28	19	18	5	70
2. INSIDE THE HOUSE	54	46	29	14	143
3. ROOF	14	3	1	0	18
4. WINDOWS	9	8	5	2	24
5. GARAGE	7	5	2	1	15
6. BASEMENT	24	4	3	1	32
totals	136	85	58	23	302

## OUTSIDE HOUSE

- 8 HOUSE NEEDS PAINTING OR SIDING
- 4 THERE IS NO GARAGE
- 4 GUTTERS/DOWNSPOUTS NEED REPLACED
- 4 REWORK DRAINAGE SYSTEM TO AVOID FLOODING BASEMENT
- 4 NEED NEW STORM DOORS
- 3 URGENTLY NEED NEW SEWER & WATER MAINS
- 2 PORCHES & STEPS ROTTING
- 2 REPLACE ROTTEN BOARDS
- 2 SEWER PROBLEMS FROM HOUSE TO SEWER MAIN
- 2 NEED A POTABLE WELL
- 2 CEMENT DRIVEWAY SETTLING BADLY/BADLY BROKEN
- 1 SIDEWALK IS LOWER THAN THE YARD
- 1 MAIN WATER LINE BREAKS FREQUENTLY
- 1 COTTONWOOD TREE ROOTS CAUSE FLOODING IN BASEMENT
- 1 TREE ROOTS BREAKING SIDEWALKS
- 1 REPLACE SIDEWALKS
- 1 WATER PURIFICATION SYSTEM IS OUTDATED
- 1 CONCRETE STEPS PULLING AWAY FROM HOUSE
- 1 DRIVEWAY NOT BIG ENOUGH FOR ALL OUR CARS
- 1 NEED INSULATION IN THE WALLS
- 1 REPLACE OLD WIRING WITH NEW
- 1 VERY UNEVEN CEMENT SIDEWALKS
- 1 NO LANDSCAPING YET
- 1 NO SIDEWALKS AROUND HOUSE
- 1 ANTS & MOSQUITOES VERY BAD
- 1 PORCH FLOOR DECKING IS GETTING SOFT
- 1 REPLACE SOFFIT & TRIM WITH ALUMINUM
- 1 NEED STORM WINDOWS
- 1 WALLS NEED PAINTING
- 1 DANGEROUS TRENCH IN BACKYARD
- 1 STEPS ICY & DANGEROUS IN WINTER
- 1 TOO CLOSE TO DAM
- 1 OBSOLETE UNDERGROUND ELECTRIC SERVICE
- 1 FOUNDATION SILLS BELOW GRADE & ROTTED OUT
- 1 WATER WELL HAS BEEN POLLUTED BY FLOOD WATERS
- 1 NEED NEW SIDING
- 1 LINE VOLTAGE TO HOUSE IS VERY LOW
- 1 TREE ROOTS IN ALL THE SEWER LINES
- 1 SEWER IS FALLING IN
- 1 NEED NEW FLOOD WALLS AROUND INSTALLATION TO KEEP  
HIGH WATER OUT OF BASEMENT
- 1 REPLACE SPLIT WILLOW WITH MAPLE TREE
- 1 REPLACE BOTTOM SIDING BOARDS

## INSIDE HOUSE

- 17 NEED INSULATION IN THE WALLS
- 15 HOUSE NEEDS TO BE RE-WIRED
- 7 NEED INSULATION IN THE ATTIC
- 6 FURNACE NEEDS TO BE REPLACED
- 4 REPLACE OLD WIRING WITH NEW
- 4 WALLS NEED PAINTING
- 4 REPLACE ALL THE PLUMBING IN THE HOUSE
- 3 REMODEL KITCHEN
- 3 REPLACE BATHROOM PLUMBING
- 3 PUT CARPETING ON FLOORS
- 3 NEED STORM WINDOWS
- 3 NO EXHAUST FAN IN KITCHEN/BATHROOM
- 3 NO FIRE OR SMOKE DETECTORS/NEED MORE
- 2 PLASTER WALL CRACKED
- 2 NEED BETTER HEATING SYSTEM
- 2 BASEMENT LEAKS
- 2 NEED CENTRAL HEATING & COOLING
- 3 HEATING IS A PROBLEM
- 2 BATHROOM NEEDS NEW FLOOR & TILE
- 2 REFINISH FLOORS
- 1 FURNACE FAN SO LOUD IT DROWNS OUT NORMAL SOUNDS
- 1 BATHTUB LEAKS INTO BASEMENT
- 1 FAN IN BATHROOM IS FAULTY
- 1 SLOW DRAINAGE IN TUB & SINK
- 1 STOOL OVERFLOWS OCCASIONALLY
- 1 STOVE IS POTENTIAL FIRE HAZARD
- 1 BACK DOOR HARD TO OPEN
- 1 WINDOWS ROTTED
- 1 DOORS FALLING APART
- 1 FIREPLACE IS A PROBLEM
- 1 REPLACE WALLS AROUND TUB IN BATHROOM
- 1 NOT ENOUGH LIGHT OR VENTILATION IN UPSTARIS BEDROOM
- 1 REPLACE BATHTUB
- 1 FAUCETS NEED REPLACING
- 1 REPLACE KITCHEN PLUMBING
- 1 EXTEND A/C DUCTS TO LIVING ROOM & KITCHEN
- 1 CHIMNEY URGENTLY NEEDS CLEANING
- 1 REPLACE WALL HEATERS
- 1 URGENTLY NEED WATER SOFTENER
- 1 ONE BATHROOM IS NOT ENOUGH FOR BIG FAMILY
- 1 ALL WINDOWS LEAK AIR
- 1 WATER LEAKS FROM BATHROOM, THRU CEILING, INTO KITCHEN
- 1 PLASTER CEILING CRACKED
- 1 QUESTIONNABLE SAFETY OF OLD GAS WATER HEATER
- 1 CHIMNEY NEEDS TO BE RELINED
- 1 TILE MISSING FROM WALL ABOVE BATHTUB
- 1 COMMODE BASE CRACKED
- 1 SWITCH BOX NEEDS TO BE GROUNDED
- 1 MILDEW IN CLOSETS/CLOSE PLACES
- 1 KITCHEN SINK & CABINETS NEED REPLACED
- 1 TERMITES IN FOUNDATION
- 1 REPLACE KITCHEN CABINET TOPS
- 1 ELECTRICAL SERVICE BOX TOO SMALL
- 1 NEED LARGER FURNACE
- 1 ALL APPLIANCES OUTDATED & INEFFICIENT
- 1 FAUCET IMPROPERLY MOUNTED ON KITCHEN SINK

- 1 ATTIC & CRAWL SPACE VENTS TOO SMALL
- 1 KITCHEN VENT IN WRONG PLACE
- 1 REPLACE BASEMENT PLUMBING
- 1 NEED EXTRA BATHROOM
- 1 SEWER COMES UP EVERY WEEK
- 1 NEED NEW STORM DOORS
- 1 FIREPLACE SMOKES UP THE HOUSE
- 1 SINK WON'T DRAIN BECAUSE PIPES RUN UPHILL
- 1 NOT ONE DRAWER IN THE ENTIRE KITCHEN TO STORE  
EATING UTENSILS
- 1 INSULATION IN ATTIC HAS COVERED THE VENTS
- 1 REPLACE WATER CONDITIONER
- 1 BEDROOM FLOOR ROTTED & BUCKLING BECAUSE WATER SEEPS  
IN FROM GARAGE
- 1 NEED A 2-ZONE FURNACE SYSTEM
- 1 REPLACE SEPTIC TANK
- 1 PIPE LEAKING IN BATHROOM
- 1 WATER HEATER LEAKS
- 1 NEED NEW COUNTERTOP ON SINK IN BATHROOM
- 1 REPLACE SHEETROCK TAPING IN CEILING

### **ROOF**

- 9 NEED NEW ROOF
- 6 ROOF LEAKS
- 1 SLATE BREAKING & SLIDING INTO GUTTERS
- 1 GUTTERS/DOWNSPOUTS NEED REPLACED
- 1 REPLACE ROTTING TRIM

### **WINDOWS**

- 8 ALL WINDOWS LEAK AIR
- 8 NEED STORM WINDOWS
- 4 REPAIR/REPAINT/REPLACE WINDOWS
- 2 REPAIR BEDROOM WINDOWS
- 1 INSTALL DIFFERENT TYPE WINDOWS
- 1 REPLACE ALUMINUM WINDOWS WITH WOOD WINDOWS

## **GARAGE**

- 3 GARAGE TOO SMALL FOR STANDARD SIZE CAR
- 2 REPLACE GARAGE FLOOR
- 2 BROKEN/ROTTEN GARAGE DOOR
- 1 FLOOR DANGEROUS SLICK WHEN SNOW GETS ON IT
- 1 CEILING IS FALLING
- 1 NEED LIGHTS IN GARAGE
- 1 NEED NEW ROOF
- 1 GARAGE TOO SMALL FOR VW
- 1 WATER SOFTENER FREEZES UP
- 1 HOT WATER TANK TOO BIG
- 1 NO DRAIN IN GARAGE FLOOR

## **BASEMENT**

- 16 BASEMENT LEAKS
- 3 NEED BETTER HEATING SYSTEM
- 2 FURNACE NEEDS TO BE REPLACED
- 2 REWORK DRAINAGE SYSTEM TO AVOID FLOODING BASEMENT
- 1 GASOLINE FUMES IN BASEMENT FROM CAR IN GARAGE
- 1 FOUNDATION WALLS CRACKED
- 1 SEWER DOES NOT DRAIN PROPERLY
- 1 NEED NEW WATER PUMP FOR BETTER WATER PRESSURE
- 1 TOP 2 COURSES OF CONCRETE BLOCK ARE LEANING
- 1 NEED HUMIDIFIER & HEATING DUCTS
- 1 SEWER COMES UP EVERY WEEK
- 1 WATER HEATER LEAKS

# Other Maintenance and Repair

## FREQUENCY BY ORDER OF MENTION

### COMMENT CONCERNING

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup> 9<sup>th</sup> total

COMMENT CONCERNING	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	total
1 ROOF	29	2								31
2 WALLS - INSIDE	18	3	2	1						24
3 WALLS - OUTSIDE	8	6	4		1					19
4 WINDOWS	19	7	2							28
5 DOORS - INTERIOR		3	1				2			6
6 DOORS - EXTERIOR	12	6	2	3	1	1	1		1	27
7 FLOOR	9	5	1	2	1			1		20
8 PORCH, ENTRY	8	1			1		1			11
9 CHIMNEY OR FLUE	4	1	5							10
10 GUTTERS	8	9	1	1					1	20
11 EXTERIOR TRIM, OVERHANG, EAVES, FACIA	6	3	7	3						19
12 FOUNDATION AND BASEMENT WALLS	15	11	3	2	1					31
13 PATIO OR DECK		2		1			1			4
14 STAIRS & STEPS	3	1								4
15 OTHER (STRUCTURE)	2	2	1	1		1				7
16 WELL (INCL. PUMP AND OTHER COMPONENTS)	1	1								2
17 PIPES - COLD WATER	2	7		2	1		1		1	14
18 PIPES - HOT WATER		3	3	3		1		1		11
19 SEWER LINE - INTERIOR	2	4	6	3	1					16
20 SEPTIC TANK & TILE		2	1							3
21 WATER HEATER	1	4	4	2						11
22 WATER CONDITIONER		2	5							7
23 TOILETS	3		2	1	3					9
24 SINKS OR LABORATORIES	1	8	3	7		1				20
25 FAUCETS - INTERIOR	2	7	6	2	3	2				22
26 FAUCETS - EXTERIOR				1	2	1				4
27 OTHER (PLUMBING)		2	1	1	2	1				7
28 FUEL TANK OR SERVICE LINES			1							1
29 FURNACE & BLOWER	2	6	4	7	2	2	1	1		25
30 AIR CONDITIONER (OTHER THAN OWNER FURNISHED)					2					2
31 DUCTS - SUPPLY OR RETURN	1					1				2
32 PIPES AND RADIATORS		1			1				1	3
33 THERMOSTAT AND CONTROLS			1							1
34 INSULATION	13	14	9	12	7	4	2	1		62
35 VENTILATION FAN										0
36 OTHER (HEATING/COOLING)		1	1							2
37 SERVICE (LINES TO HOUSE OR BUILDING)			1	1	1	2				5
38 FUSE BOX, BREAKER BOX, MAIN SHUTOFFS	2	1	3	1	2		1			10
39 WIRING - INTERIOR	1	4	5	3	4	7	3	1		28
40 WIRING - EXTERIOR				1						1
41 RECEPTACLES	1	1		3	3	3	3	1		15
42 SWITCHES					2					2
43 LIGHTING FIXTURES - INTERIOR	1	2	3	3		3	2			14
44 LIGHTING FIXTURES - EXTERIOR			1			1				2
45 EXHAUST FANS (BUILT-IN)			1					1		2
46 OTHER (ELECTRICAL)		2			1		1			4
47 WOODWORK				2	1	1	2	1		7
48 PAINT OR WALLPAPER	4	1	2	7	2	1	1	2		20
49 PLASTER OR PLASTER BOARD	3	5	3	4	2	1	1			19
50 FLOORING OR CARPET	2	5	6	6	5	4	4	4	2	38

## B. Other Maintenance and Repair

OTHER THAN URGENT MAINTENANCE AND REPAIR ITEMS, THERE MAY BE SOME ITEMS WHICH ARE CHRONIC, NUISANCE, CAUSE INCONVENIENCE OR, IF TAKEN CARE OF, COULD PREVENT WORSE PROBLEMS.

BELOW IS A CHECKLIST OF MANY PARTS OF A BUILDING OR YARD. USE IT TO HELP YOU THINK OF ITEMS NEEDING REPAIR OR MAINTENANCE AND TO CODE YOUR COMMENTS.

### 1. STRUCTURE

- |                   |  |
|-------------------|--|
| A. ROOF           | H. PORCH, ENTRY                          |
| B. WALLS-INSIDE   | I. CHIMNEY OR FLUE                       |
| C. WALLS-OUTSIDE  | J. GUTTERS                               |
| D. WINDOWS        | K. EXTERIOR TRIM, OVERHANG, EAVES, FACIA |
| E. DOORS-INTERIOR | L. FOUNDATION AND BASEMENT WALLS         |
| F. DOORS-EXTERIOR | M. PATIO OR DECK                         |
| G. FLOOR          | N. STAIRS & STEPS                        |
|                   | O. OTHER                                 |

### 2. PLUMBING

- |   |                        |
|---|------------------------|
| A. WELL (INCL. PUMP AND OTHER COMPONENTS) | F. WATER HEATER        |
| B. PIPES-COLD WATER                       | G. WATER CONDITIONER   |
| C. PIPES-HOT WATER                        | H. TOILETS             |
| D. SEWER LINE-INTERIOR                    | I. SINKS OR LAVATORIES |
| E. SEPTIC TANK & TILE                     | J. FAUCETS-INTERIOR    |
|   | K. FAUCETS-EXTERIOR    |
|   | L. OTHER               |

### 3. HEATING/COOLING

- |   |                            |
|---|----------------------------|
| A. FUEL TANK OR SERVICE LINES                   | D. DUCTS-SUPPLY OR RETURN  |
| B. FURNACE & BLOWER                             | E. PIPES AND RADIATORS     |
| C. AIR CONDITIONER (OTHER THAN OWNER FURNISHED) | F. THERMOSTAT AND CONTROLS |
|   | G. INSULATION              |
|   | H. VENTILATION FAN         |
|   | I. OTHER                   |

### 4. ELECTRICAL

- |   |                               |
|---|-------------------------------|
| A. SERVICE (LINES TO HOUSE OR BUILDING) | E. RECEPTACLES                |
| B. FUSE BOX, BREAKER BOX, MAIN SHUTOFFS | F. SWITCHES                   |
| C. WIRING-INTERIOR                      | G. LIGHTING FIXTURES-INTERIOR |
| D. WIRING-EXTERIOR                      | H. LIGHTING FIXTURES-EXTERIOR |
|   | I. EXHAUST FANS (BUILT-IN)    |
|   | J. OTHER                      |

### 5. FINISHES

- |                             |                                       |
|-----------------------------|---------------------------------------|
| A. WOODWORK                 | D. FLOORING OR CARPET                 |
| B. PAINT OR WALLPAPER       | E. CABINETS, VANITIES OR COUNTER-TOPS |
| C. PLASTER OR PLASTER BOARD |                                       |

### 6. APPLIANCES (ONLY GOV'T FURNISHED)

- |                 |          |
|-----------------|----------|
| A. REFRIGERATOR | D. DRYER |
| B. RANGE/OVEN   | E. OTHER |
| C. WASHER       |          |

### 7. MISC

- |                                 |                      |
|---------------------------------|----------------------|
| A. SUMP LINES AND PUMP          | F. FIRE EXTINGUISHER |
| B. LIGHTNING ARRESTORS & GROUND | G. TELEPHONE         |
| C. ANTENNA AND LINES            | H. SOLID WASTE       |
| D. LOCKS                        | I. OTHER             |
| E. SMOKE DETECTOR OR ALARM      |                      |

### 8. EXTERIOR AND YARD

- |                                |                                    |
|--------------------------------|------------------------------------|
| A. SIDEWALK                    | F. DRAINAGE                        |
| B. DRIVEWAY OR PARKING         | G. ANIMAL AND RODENT CONTROL, BUGS |
| C. MAILBOX                     | H. FENCE                           |
| D. TREES, SHRUBS AND PLANTINGS | I. EXTERIOR PAINT OR BRICKWORK     |
| E. GRASS AND GROUND COVER      | J. OTHER                           |

## PIPES - COLD WATER

- 3 WATERLINES ARE OLD & GETTING BUILD-UP IN THEM
- 1 NEED INSULATION/NEED BETTER INSULATION
- 1 PIPES RUN UP OUTSIDE WALL & FREEZE IN WINTER
- 1 PIPES ARE EXPOSED
- 1 DISCOLORED WATER/RUSTY WATER
- 1 RUST IN COLD WATER PIPES/HOT WATER PIPES
- 6 REPLACE PIPES/REPAIR PIPES

## PIPES - HOT WATER

- 1 LOW WATER PRESSURE
- 1 HOT WATER LINES BARELY RUN DUE TO CORROSION
- 2 NEED INSULATION/NEED BETTER INSULATION
- 1 PIPES ARE EXPOSED
- 3 DISCOLORED WATER/RUSTY WATER
- 3 REPLACE PIPES/REPAIR PIPES

## SEWER LINE - INTERIOR

- 5 HAVE TROUBLE WITH ROOTS IN LINES/LINES STOP UP OFTEN
- 1 SEWER VENT PIPE NEEDS REPLACING
- 1 KITCHEN SINK CLOGS UP/WILL NOT DRAIN
- 5 REPLACE SEWER LINES
- 3 SEWER LINES PLUGGED MOST OF THE TIME
- 1 WATER SUCKED OUT OF STOOL WHEN BATHTUB IS DRAINING

## WATER HEATER

- 1 NEED INSULATION/BETTER INSULATION
- 8 WATER HEATER OUTDATED/NEED NEW ONE/LEAKS
- 1 DISCOLORED WATER/RUSTY WATER
- 1 LIMESTONE DEPOSITS IN COILS

## SINKS

- 6 SINKS/LAVORATORIES ARE OLD/SCRATCHED, CRACKED, ETC.
- 1 NEED NEW SHOWER IN DOWNSTAIRS LAVORATORY
- 1 FAUCETS NEED REPLACED
- 1 BATHROOM SINK LEAKS
- 2 KITCHEN SINK LEAKS
- 1 POOR PLUMBING IN KITCHEN & BATH
- 2 SINK NEEDS REPLACING
- 1 GARBAGE DISPOSAL IS A CONTINUAL PROBLEM
- 4 KITCHEN SINK CLOGS UP/WILL NOT DRAIN
- 1 BATHROOM SINK WON'T RETAIN WATER

## FAUCETS - INTERIOR

- 13 FAUCETS LEAK
- 1 LOW WATER PRESSURE
- 7 FAUCETS NEED REPLACED
- 1 BATHROOM FAUCETS CORRODED & HARD TO TURN

Comment on:

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup> 9<sup>th</sup> total

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	total
51 CABINETS, VANITIES OR COUNTER TOPS	3		5	5	2	2	4		1	22
52 REFRIGERATOR						1				1
53 RANGE/OVEN	1	2	4	2	5	3			1	18
54 WASHER										0
55 DRYER										0
56 OTHER (APPLIANCES)										0
57 SUMP LINES AND PUMP										0
58 LIGHTNING ARRESTORS & GROUND										0
59 ANTENNA AND LINES				1		1				2
60 LOCKS		1	1	3	3		3	2		13
61 SMOKE DETECTOR OR ALARM	1	4	3	2	6	4	3	4	3	30
62 FIRE EXTINGUISHER			1							1
63 TELEPHONE				1						1
64 SOLID WASTE										0
65 OTHER (MISC.)							1			1
66 SIDEWALK		1	1		2	4	5	4		17
67 DRIVEWAY OR PARKING	1	4	1	1	2	2	2	2	3	18
68 MAILBOX										0
69 TREES, SHRUBS AND PLANTINGS				1	1	1		3	3	9
70 GRASS AND GROUND COVER							1	1		2
71 DRAINAGE	1		1	3	2		1	4	2	14
72 ANIMAL AND RODENT CONTROL, BUGS	1	4	5	3	3	1		2	3	22
73 FENCE										0
74 EXTERIOR PAINT OR BRICKWORK	2	3	5	3	2	1	3	1	10	30
75 OTHER (EXTERIOR AND YARD)				2						2
TOTALS	193	164	128	113	81	58	58	37	32	

## FLOOR

- 2 NEED INSULATION/NEED BETTER INSULATION
- 4 INSTALL CARPETING/REPLACE CARPETING
- 8 FLOORS NEED REFINISHING/REPLACING/REPAIR
- 1 PARTICLE BOARD FLOOR BUCKLING IN KITCHEN
- 3 REPLACE/INSTALL FLOOR TILES
- 1 REPAIR PORCH FLOORS
- 1 GARAGE FLOOR CRACKED

## PORCH, ENTRY

- 2 PORCH SHOULD BE SCREENED IN/NEED NEW SCREENS
- 1 PORCH ROOF DOES NOT PERMIT FULL OPENING OF SCREEN DOOR
- 1 FRONT & REAR STEPS ARE BAD/NEED NEW STEPS
- 4 PORCHES NEED TO BE LEVELED/REPAIRED
- 1 WATER DAMAGE TO ENTRY CEILING
- 1 REPAIR PORCH FLOORS
- 1 PORCH IS ROTTING OUT
- 1 WATER RUNNING ON BACK PORCH SLAB CAUSING ICY CONDITIONS

## CHIMNEY OR FLUE

- 1 AIR COMES IN ALL AROUND
- 1 CHIMNEY BRICKS DETERIORATING & MORTAR FALLING OUT
- 3 SOME BRICKS LOOSE/MISSING IN CHIMNEY
- 2 CHIMNEY SMOKES/SMOKES UP HOUSE
- 1 CHIMNEY NEEDS REPOINTING
- 2 CHIMNEY NEEDS CLEANING/CHECKING

## GUTTERS

- 18 REPLACE/REPAIR GUTTERS
- 1 NEEDS ANNUAL ATTENTION/PERIODIC MAINTENANCE
- 2 GUTTERS NEED CAULKING & REATTACHMENT TO HOUSE

## EXTERIOR TRIM, OVERHANG, EAVES, FACIA

- 4 REPLACE OVERHAND, EAVES, ETC.
- 3 PAINT/SAND EXTERIOR TRIM
- 1 ROTTING NOTED IN FACIA ABOVE ENTRY
- 1 SHOULD HAVE VINYL OR ALUMINUM TRIM
- 2 OVERHANGS NEED REPAINTING
- 5 NEEDS PAINTING
- 3 TRIM & FACIA NEED REPAIR

## FOUNDATION AND BASEMENT WALLS

- 21 BASEMENT LEAKS/FOUNDATION LEAKS
- 10 CRACKS IN BASEMENT WALLS/FOUNDATION CAVING IN
- 1 SILLS ROTTED OUT

## PLASTER OR DRYWALL

- 3 PLASTER COMING OFF WALL
- 2 SMALL CRACKS IN PLASTER
- 2 CEILINGS SAGGING BADLY & CRACKING
- 4 WALL & CEILING CRACKING
- 1 BATHROOM CEILING PEELING & MOLDY
- 1 SOME ROOMS/WALLS TO REPAINT
- 2 BAD WALL CRACKS
- 1 SHOWER WALL TILES NEED REPLACING
- 1 SPOTS ON WALLS NEED FILLING & PAINTING
- 1 SEVERAL MARKS & NICKS THAT HAVE BEEN FILLED & REPAINTED
- 2 NEED PANELING OVER PLASTER WALL
- 1 PLASTER UPSTAIRS HALLWAY

## FINISH FLOOR

- 12 INSTALL CARPETING/REPLACE CARPETING
- 13 FLOORS NEED REFINISHING/REPLACING/REPAIR
- 1 NEEDS PAINTING
- 12 REPLACE/INSTALL FLOOR TILES
- 1 TILE FLOORS A CONSTANT MAINTENANCE PROBLEM & SLIPPING HAZARD
- 1 GARAGE FLOOR IS A SLIPPING HAZARD

## CABINETS, VANITIES, OR COUNTERTOPS

- 1 SOME WOODWORK TO REPAINT
- 8 NEED NEW CABINETS IN KITCHEN/NO CABINETS
- 2 CABINETS NEED REFINISHED
- 1 KITCHEN IS IN A SERIOUS STATE OF DETERIORATION
- 1 REPLACE KITCHEN CABINET DOORS
- 8 REPLACE COUNTER & VANITY TOPS

## RANGE

- 1 RANGE SO OLD CAN'T GET NEW BURNERS FOR IT
- 9 REPLACE ELECTRIC STOVE/REPLACE STOVE
- 3 OVEN DOESN'T HEAT PROPERLY
- 1 OVEN HEATS ABOUT 25° TOO HOT FOR SETTING
- 1 OUTLET ON RANGE ONLY WORKS SOMETIMES
- 1 OVEN DOESN'T SEAL
- 2 STOVE BURNER DOESN'T WORK

## LOCKS

- 1 NO KEYS FOR LOCKS
- 1! LOCKS/LATCHES NEED CHANGING/POOR QUALITY
- 1 LOCKS DON'T WORK

## SMOKE DETECTOR

- 29 NO SMOKE DETECTOR OR ALARM/NOT ENOUGH/DON'T WORK
- 1 SMOKE DETECTORS DON'T OPERATE PROPERLY

## **FURNACE**

- 2 FURNACE HAS FREQUENT BREAKDOWNS
- 17 REPLACE FURNACE/REPAIR FURNACE
- 1 FURNACE DOESN'T HEAT WHOLE HOUSE EFFECTIVELY
- 1 SOMETHING SCRAPING WHEN FURNACE KICKS IN
- 3 FURNACE BLOWER NEEDS LUBRICATION/EXTREMELY LOUD
- 1 HEATER LEAKS OIL OR WATER

## **INSULATION**

- 62 NEED INSULATION/NEED BETTER INSULATION

## **FUSE BOX, BREAKER BOX, MAIN SHUTOFFS**

- 1 INTERIOR RECEPTACLES ARE ON TOO FEW BREAKERS
- 2 NEED NEW BREAKER PANEL, FOR PRESENT SERVICE IS IN 5 SEPARATE BOXES
- 1 HOUSE NEEDS TO BE RE-WIRED
- 1 FUSE BOX DOESN'T HAVE THE BREAKERS IDENTIFIED
- 4 REPLACE BREAKER BOX
- 1 FUSE BOX TOO SMALL

## **WIRING - INTERIOR**

- 1 NEED 3-PRONG RECEPTACLES
- 1 INTERIOR RECEPTACLES ARE ON TOO FEW BREAKERS
- 22 HOUSE NEEDS TO BE RE-WIRED
- 2 REPLACE BREAKER BOX
- 2 INTERIOR WIRING SHOULD BE REWIRED

## **RECEPTACLES**

- 10 REPLACE ELECTRICAL RECEPTACLES
- 4 NEED 3-PRONG RECEPTACLES
- 1 FREQUENT OUTAGES ON VARIOUS OUTLETS

## **LIGHTING FIXTURES-INTERIOR**

- 13 INSTALL NEW LIGHTING FIXTURES/FLUORESCENT LIGHTING
- 1 CEILING FIXTURES ARE LOOSE & CAN'T BE REPAIRED

## **PAINT OR WALLPAPER**

- 2 SOME ROOMS/WALLS TO REPAINT
- 2 PAINT PEELING OFF WALLS & CEILINGS
- 1 NEEDS ANNUAL ATTENTION/PERIODIC MAINTENANCE
- 1 GAS FUMES FROM OUTFLOW CAUSE PAINT TO DETERIORATE
- 2 INTERIOR WALLS NEED PAINTING
- 4 NEEDS PAINTING
- 1 LAUNDRY ROOM NEEDS PAINTING
- 1 WALLS NEED PAPERING
- 3 POOR QUALITY PAINT
- 1 PAINT UPSTAIRS HALLWAY

## **SIDEWALK**

- 15 NEED SIDEWALKS/NEW SIDEWALKS
- 1 SIDEWALK HEAVES A GREAT DEAL IN THE SPRING
- 1 SIDEWALKS SETTling TOWARD HOUSE

## **DRIVEWAY OR PARKING**

- 16 REPAIR & SEAL DRIVEWAY/RESURFACE
- 1 WATER GETS IN BASEMENT BECAUSE PATIO/DRIVEWAY SLOPES TOWARD HOUSE

## **DRAINAGE**

- 1 BASEMENT LEAKS/FOUNDATION LEAKS
- 1 WATER RUNS INTO GARAGE
- 1 DRAINAGE WORK REQUIRED AROUND CEMENT SLAB
- 10 DRAINAGE AWAY FROM BUILDING IS POOR
- 1 WATER DRAINS INTO BASEMENT FROM DOWNSPOUT

## **ANIMAL AND RODENT CONTROL, INSECTS**

- 21 NEED BETTER RODENT/ANIMAL/INSECT CONTROL
- 1 PORCH SHOULD BE SCREENED IN/NEED NEW SCREENS

## **EXTERIOR PAINT OR BRICKWORK**

- 1 PAINT EXTERIOR WINDOWS
- 3 PAINT FLAKING OFF EXTERIOR BRICK
- 1 BRICK HOME NEEDS SANDBLASTING
- 1 NEEDS ANNUAL ATTENTION/PERIODIC MAINTENANCE
- 1 EXTERIOR METAL TRIM IS CHALKING & DISCOLORING BRICK BELOW IT
- 19 NEEDS PAINTING
- 2 NEED VINYL SIDING/ALUMINUM SIDING
- 1 MORTAR IN STONE IS DETERIORATING

IN THE CHART BELOW, MAKE A LIST OF REMAINING MAINTENANCE AND REPAIR ITEMS WHICH WE SHOULD KNOW ABOUT. CHECK ONLY ONE LOCATION BOX FOR EACH ITEM, FILL IN THE CODE (SEE FACING PAGE), AND GIVE A BRIEF DESCRIPTION OF EACH PROBLEM.

ITEM	LOCATION OF PROBLEM				CODE (FROM LIST)	BRIEF DESCRIPTION OF PROBLEM
	HOUSE*	DETACHED GARAGE	OTHER BLDG.	YARD OR GROUNDS		
52 <b>1</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	53-54	55-56
57 <b>2</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	58-59	60-61
63 <b>3</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	64-65	66-67
68 <b>4</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	69-70	71-72
74 <b>5</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	75-76	77-78
5 <b>6</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6-7	8-9
10 <b>7</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11-12	13-14
16 <b>8</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17-18	19-20
21 <b>9</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22-23	24-25

Skip

Skip

Skip 7  
9  
Dup :-

Skip

Skip

\* INCLUDING ATTACHED GARAGE

# Part 3

IN THIS SECTION, WE ARE ASKING FOR YOUR PREFERENCES.  
IN SOME CASES, WE ARE ASKING YOUR PREFERENCES CONCERNING  
ISSUES WHICH MAY DIRECTLY BE OF BENEFIT TO YOU. YOUR  
RESPONSES TO OTHER QUESTIONS MAY NOT BENEFIT YOU DIRECTLY,  
BUT THEY WILL CERTAINLY HELP US TO PROVIDE THE BEST HOME  
POSSIBLE IN THE FUTURE.

# preferences

## LOCATION OF THE HOME ON THE SITE

ANSWER THE FOLLOWING QUESTIONS CONCERNING YOUR PREFERENCES FOR THE LOCATION OF THE HOME ON A PROJECT SITE. RESPOND BY PLACING AN **X** IN THE APPROPRIATE BOX.

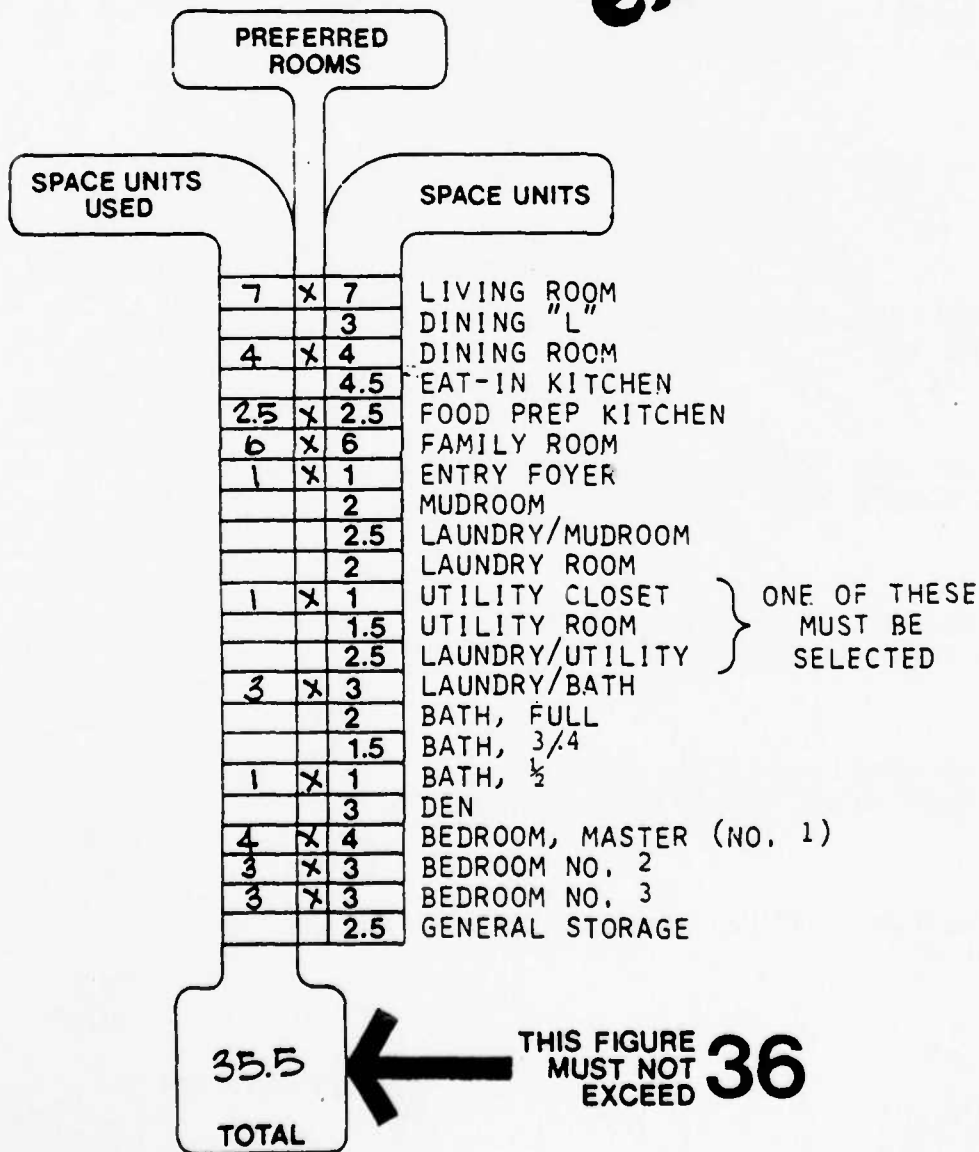
- |    |   |  |   |    |
|----|---|--|---|----|
| 1. | THE HOME SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE WORK LOCATION                              | <b>66.6</b><br><input checked="" type="checkbox"/> YES | <b>33.4</b><br><input type="checkbox"/> NO            | 27 |
| 2. | THE HOME SHOULD BE LOCATED AS NEAR AS POSSIBLE TO THE WATER                                       | <b>39.9</b><br><input type="checkbox"/> YES            | <b>60.1</b><br><input checked="" type="checkbox"/> NO | 28 |
| 3. | THE HOME SHOULD BE LOCATED AS NEAR AS POSSIBLE TO A WOODED AREA                                   | <b>64.7</b><br><input checked="" type="checkbox"/> YES | <b>35.3</b><br><input type="checkbox"/> NO            | 29 |
| 4. | THE HOME SHOULD BE LOCATED AS NEAR AS POSSIBLE TO A MAJOR ACCESS ROAD (ROAD NOT ON PROJECT SITE). | <b>64.1</b><br><input checked="" type="checkbox"/> YES | <b>35.9</b><br><input type="checkbox"/> NO            | 30 |
| 5. | THE HOME SHOULD BE LOCATED IN A CLUSTER WITH OTHER HOMES ON A PROJECT SITE.                       | <b>38.0</b><br><input type="checkbox"/> YES            | <b>62.0</b><br><input checked="" type="checkbox"/> NO | 31 |
| 6. | THE HOME SHOULD BE NEAR PUBLIC AREAS OF THE SITE  | <b>23.7</b><br><input type="checkbox"/> YES            | <b>76.3</b><br><input checked="" type="checkbox"/> NO | 32 |



numbers are %

Skip 33

**example**



# SELECTION OF ROOMS

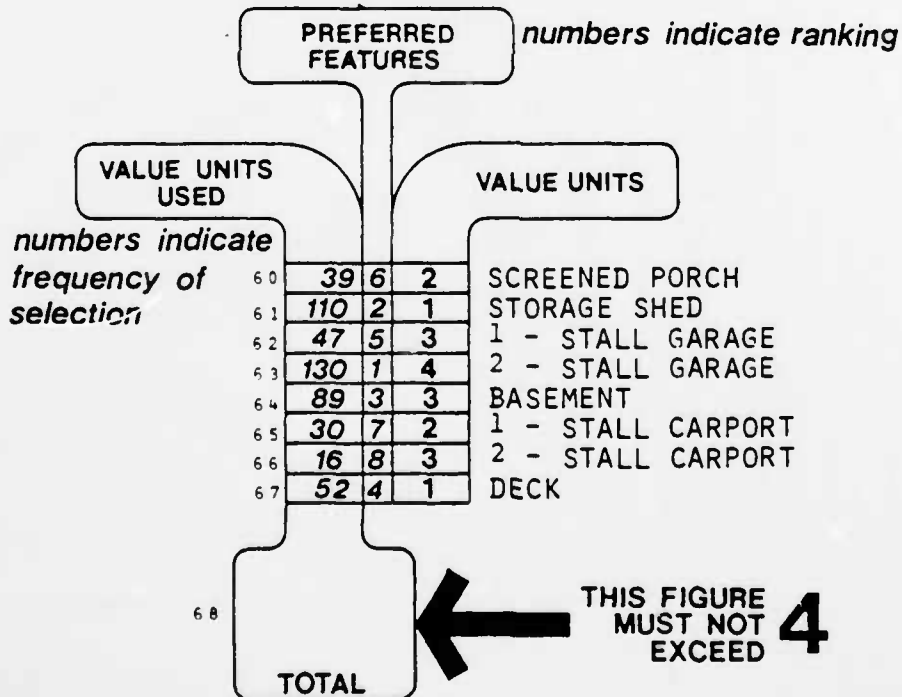
WE WOULD LIKE TO KNOW WHICH ROOMS YOU FEEL ARE IMPORTANT TO HAVE IN A HOME. SINCE THERE ARE CURRENTLY SIZE AND DOLLAR LIMITS ON NEW CONSTRUCTION, EACH ROOM LISTED BELOW HAS BEEN ASSIGNED A SPECIFIC NUMBER OF SPACE UNITS. INDICATE WHICH ROOMS YOU WOULD PREFER BY PLACING AN X IN THE APPROPRIATE BOXES UNDER THE COLUMN MARKED "PREFERRED ROOMS." THE SPACE UNITS REQUIRED FOR EACH ROOM ARE FOUND UNDER THE COLUMN MARKED "SPACE UNITS". THE TOTAL SPACE UNITS FOR THE COMBINATION OF ROOMS YOU SELECT MUST NOT EXCEED 36. REFER TO THE EXAMPLE ON THE OPPOSITE PAGE, AND DEFINITIONS ON PAGES 2-6

		PREFERRED ROOMS			
					<i>numbers indicate ranking</i>
		SPACE UNITS USED		SPACE UNITS	
<i>numbers indicate frequency of selection</i>					
34	307	4	7	LIVING ROOM	
35	123	15	3	DINING "L"	
36	150	11	4	DINING ROOM	
37	189	6	4.5	EAT-IN KITCHEN	
38	151	10	2.5	FOOD PREP KITCHEN	
39	163	9	6	FAMILY ROOM	
40	184	7	1	ENTRY FOYER	
41	50	20	2	MUDROOM	
42	132	12	2.5	LAUNDRY/MUDROOM	
43	50	20	2	LAUNDRY ROOM	
44	99	18	1	UTILITY CLOSET	} ONE OF THESE MUST BE SELECTED
45	116	7	1.5	UTILITY ROOM	
46	125	13	2.5	LAUNDRY/UTILITY	
47	36	22	3	LAUNDRY/BATH	
48	309	3	2	BATH, FULL	
49	124	14	1.5	BATH, 3/4	
50	122	16	1	BATH, 1/2	
51	81	19	3	DEN	
52	338	1	4	BEDROOM, MASTER (NO. 1)	
53	338	1	3	BEDROOM NO. 2	
54	287	5	3	BEDROOM NO. 3	
55	172	8	2.5	GENERAL STORAGE	
56-58	TOTAL				

THIS FIGURE MUST NOT EXCEED **36**

## SELECTION OF FEATURES

IN THE SAME MANNER AS YOU SELECTED PREFERRED ROOMS, NOW INDICATE YOUR PREFERENCE FOR THE FEATURES BELOW. INSTEAD OF "SPACE UNITS", EQUIVALENT "VALUE UNITS" ARE USED. THE TOTAL VALUE UNITS FOR THE FEATURES YOU SELECT MUST NOT EXCEED 4.



Skip 69

## location & adjacency

FOR THE ROOMS YOU SELECTED ON PAGE 17 ANSWER THE FOLLOWING QUESTIONS.

	IF YOU SELECTED THE...	IT SHOULD BE CLOSEST TO THE... (NAME ROOM)
	70 3/4 BATH .....	<u>MBR (66.1)</u>
	71 1/2 BATH .....	<u>MBR (43.9)</u>
	72 LAUNDRY ROOM .....	<u>KIT (54.3)</u>
	73 UTILITY CLOSET .....	<u>KIT (39.0) LDRY (22.0)</u>
	74 FAMILY ROOM .....	<u>KIT (41.1) LR (28.4)</u>
	75 FOOD PREP OR EAT-IN KITCH. ....	<u>DR (56.1)</u>
	76 STORAGE ROOM .....	<u>KIT (34.6)</u>
Skip	77-79	
	80-82	
Dup	1-4	

	IN ANY HOME, THE...	SHOULD BE CLOSEST TO THE... (NAME ROOM)
	5 FRONT DOOR .....	<u>LR (82.6)</u>
	6 BACK DOOR .....	<u>KIT (71.8)</u>
	7 CARPORT/GARAGE .....	<u>KIT (67.1)</u>
	8 PATIO .....	<u>KIT (41.3) DR (20.5) FR (15.7)</u>
Skip	9	

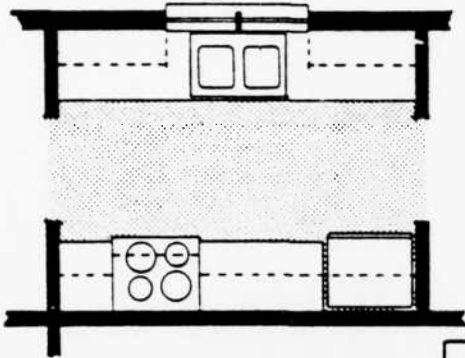


numbers indicate %

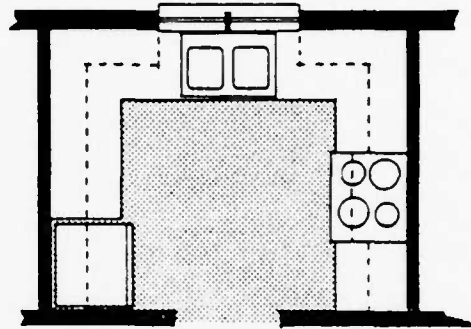
SELECT YOUR PREFERRED ARRANGEMENT FOR EACH ROOM TYPE BY PLACING AN X IN THE APPROPRIATE BOX.

### FOOD-PREP KITCHENS

*numbers indicate %*



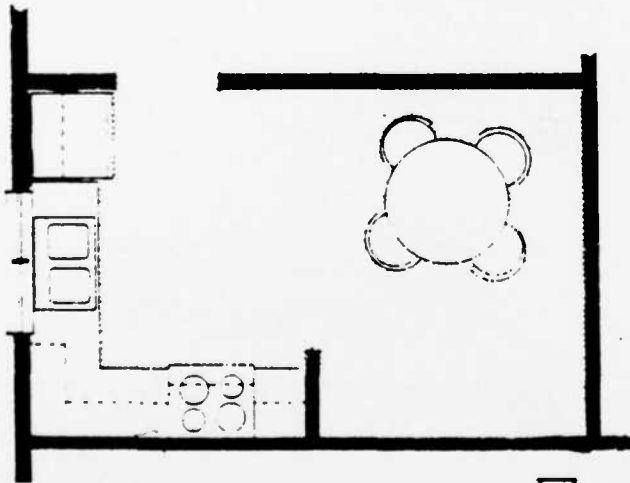
A  
34.5



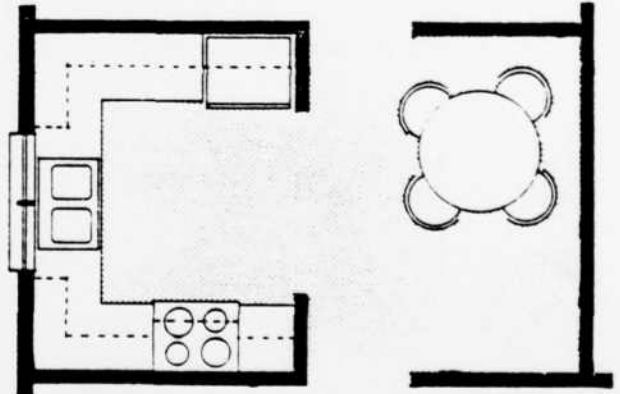
B  
65.5

10

### EAT-IN KITCHENS



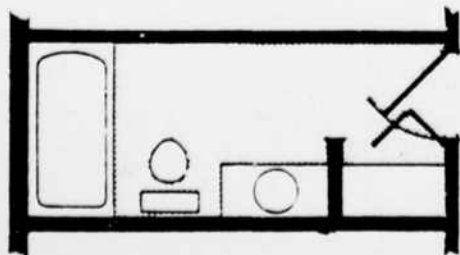
A  
29.0



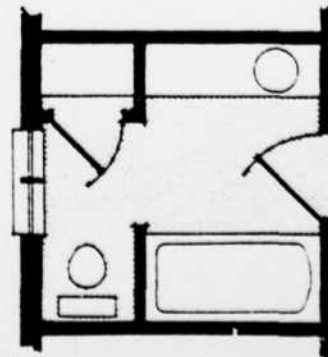
B  
71.0

11

### FULL BATHS



A  
24.4

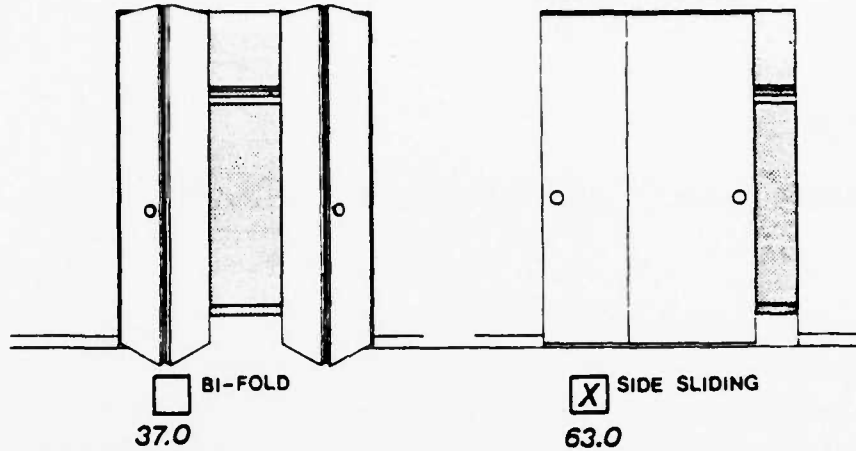


B  
75.6

12

## CLOSET DOORS

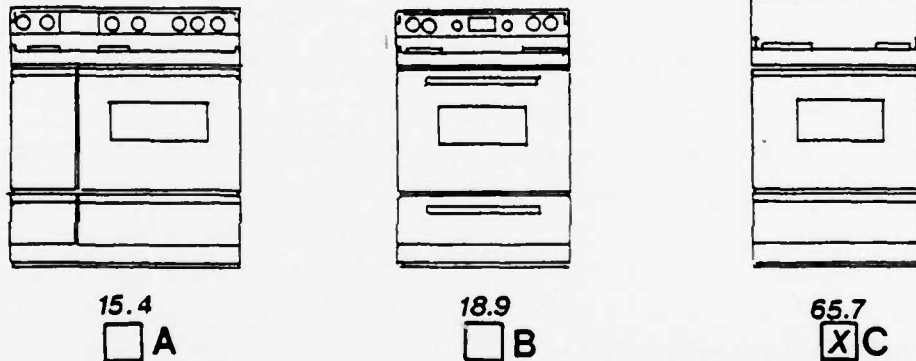
SELECT YOUR PREFERENCE FOR CLOSET DOOR STYLE BY PLACING AN X IN THE APPROPRIATE BOX. *numbers indicate %*



13

## RANGES

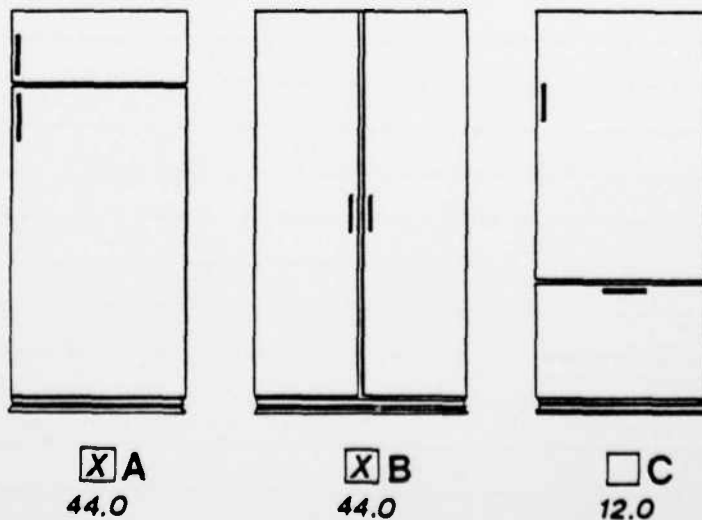
SELECT THE STYLE OF RANGE/OVEN YOU PREFER BY PLACING AN X IN THE APPROPRIATE BOX.



14

## REFRIGERATORS

SELECT THE STYLE OF REFRIGERATOR YOU PREFER BY PLACING AN X IN THE APPROPRIATE BOX.



15

Skip 16



# Inside Improvements

FREQ. COMMENT

## KITCHEN

- 8 INSTALL KITCHEN CABINETS/MORE KITCHEN CABINETS
- 1 KITCHEN CABINETS ARE OUTDATED
- 1 INSTALL BETTER QUALITY CUPBOARDS
- 11 REPLACE KITCHEN CABINETS
- 1 MORE COUNTER SPACE IN KITCHEN
- 2 REFINISH ALL CABINETS
- 6 REPLACE COUNTERTOPS IN KITCHEN/BATHROOM
- 1 REPLACE CUPBOARD DOORS
- 2 REPAIR CABINETS & CLOSETS
- 1 PUT VANITY CABINETS IN BATHROOM

## MISC.

- 1 INSULATING CURTAINS FOR ALL WINDOWS
- 2 INSTALL MODERN APPLIANCES IN KITCHEN
- 1 NEED ONE MORE REFRIGERATOR
- 2 INSTALL WOOD BURNING STOVE
- 1 SHOULD HAVE WOOD BURNING STOVE IN BASEMENT
- 31 REMODEL BATHROOM
- 3 MAKE HOUSE MORE ENERGY EFFICIENT
- 24 REMODEL KITCHEN
- 1 INSTALL SHELVES IN BATHROOM
- 1 BATHUB SHOULD NOT BE ON AN EXTERIOR WALL
- 2 BASEMENT LEAKS
- 3 INSTALL GARBAGE DISPOSAL
- 47 PUT IN INSULATION/IMPROVE INSULATION
- 1 COMPLETE RENOVATION OF INTERIOR
- 1 FLOOR PLANS POOR
- 1 TREAT HOUSE FOR TERMITES
- 1 INSTALL SUMP PUMP IN BASEMENT
- 1 REPAIR ANTENNA PLATE
- 1 PORCH SHOULD BE COVERED
- 1 REPLACE RANGE & WATER HEATER

## FIREPLACE

- 2 IMPROVE FIREPLACE SO NO SMOKE SMELL IN THE HOUSE
- 1 NEED MORE HEAT-EFFICIENT FIREPLACE
- 2 FIREPLACES SHOULD HAVE DAMPERS
- 1 NEW SCREEN & GRATE FOR FIREPLACE
- 11 INSTALL FIREPLACE
- 2 INSTALL CHIMNEY FOR WOOD-BURNING STOVE

## HEATING, VENTILATION

- 1 INSTALL VENTILATION FAN IN BATHROOM
- 2 INSTALL VENTILATION FAN IN ATTIC
- 1 NEED HEAT IN BASEMENT
- 1 INSTALL EXHAUST FAN ABOVE RANGE
- 1 RELOCATE KITCHEN VENT FAN
- 1 LARGER LOUVERS IN ATTIC
- 1 PUT FURNACE ON 2-ZONE SYSTEM
- 14 REPLACE FURNACE
- 2 CONVERT HEATING SYSTEM FROM OIL TO GAS
- 1 IMPROVE DUCTING FROM FURNACE TO ROOMS
- 2 INSTALL ELECTRIC CENTRAL HEAT/CENTRAL HEAT
- 4 BASEBOARD RADIATION
- 1 REPLACE FURNACE WITH BASEBOARD ELECTRIC UNITS
- 11 INSTALL CENTRAL AIR-CONDITIONING
- 1 REPLACE PARTS OF HEATING SYSTEM
- 1 HEATER NEEDS ADJUSTING
- 4 CONVERT FURNACE TO A WOOD/FUEL OIL SYSTEM
- 1 NEED MORE HEAT TO BATHROOM
- 2 HEAT DUCTS SHOULD BE IN FLOOR, NOT TOP OF WALL
- 1 REPLACE CAST IRON HOT WATER REGISTERS
- 1 REPLACE OIL FURNACE WITH COAL FURNACE
- 1 WE HAVE NO HEAT IN THE HOUSE
- 3 PUT HEAT PUMP ON FURNACE
- 1 SHOULD HAVE SEVERAL SMALL COLD AIR DUCTS
- 1 NEED HUMIDIFIER

## ADD-A-ROOM

- 3 INSTALL COMMODE IN BASEMENT 1½ BATH
- 1 NEED LAUNDRY ROOM ON GROUND FLOOR
- 1 FAMILY ROOM IN BASEMENT
- 2 HOUSES SHOULD HAVE A FULL BASEMENT
- 1 FULL BATH IN MASTER BEDROOM
- 4 ADD A BEDROOM
- 1 ADD LAUNDRY ROOM UPSTAIRS
- 1 LAUNDRY SHOULD BE SEPARATE FROM THE KITCHEN
- 1 MAKE HALF OF BASEMENT INTO FAMILY ROOM
- 1 ADD A FAMILY ROOM
- 7 MORE CLOSETS
- 15 BUILD A SECOND BATHROOM OR ½ BATH OR ¾ BATH
- 1 UTILITY ROOM SHOULD BE BROUGHT UP TO FLOOR LEVEL
- 1 BATHROOM IN BASEMENT
- 1 ADD A UTILITY/LAUNDRY ROOM

## SAFETY/SECURITY

- 1 SMOKE DETECTORS/FIRE ALARMS
- 1 DEADBOLT LOCKS
- 1 ALL FIREPROOF INTERIOR

## PHONES

- 1 HAVE PHONE UPSTAIRS & DOWNSTAIRS
- 1 SHOULD HAVE PRIVATE TELEPHONE

## PLUMBING

- 1 REPAIR FAUCET IN KITCHEN
- 1 HOT WATER HEATER SHOULD BE CLOSER TO BATHROOM
- 2 INSTALL ELECTRIC WATER HEATER
- 1 CLEAN AND/OR FIX SEWER LINES
- 1 REPLACE PLUMBING IN BATHROOM
- 1 REPLACE SEWAGE VENT PIPE
- 2 MORE EFFICIENT WATER HEATER
- 9 REPLACE WATER LINES
- 1 STAINLESS STEEL SINK
- 1 REPLACE FAUCETS ON SINKS
- 1 NEW BATHTUB
- 1 MOVE PLUMBING AWAY FROM OUTSIDE WALLS
- 5 REPLACE KITCHEN/SINK BATHROOM SINK
- 2 NEED SHOWER
- 1 BASEMENT WATER PUMP NEEDS NEW TANK
- 1 LESS "INSTITUTIONAL" LOOKING FIXTURES

## SIZES

- 11 NEED MORE STORAGE SPACE INSIDE HOUSE
- 1 ENLARGE THROUGHOUT
- 5 KITCHEN IS TOO SMALL
- 3 NEED LARGER BASEMENT
- 2 NEED LARGER BEDROOMS
- 1 NEED MORE SQUARE FOOTAGE
- 1 BIGGER FOYER
- 1 BIGGER 2ND AND 3RD BEDROOMS
- 1 ALL BEDROOMS SHOULD BE ABOUT THE SAME SIZE

## ELECTRICAL

- 1 HOUSE SHOULD BE PROPERLY GROUNDED
- 1 INSTALL CEILING LIGHTS IN BEDROOMS
- 3 INSTALL NEW CIRCUIT BREAKER PANEL
- 12 BETTER LIGHTING FIXTURES
- 1 INSTALL LIGHT DIMMERS
- 1 DO AWAY WITH CEILING LIGHT IN LIVING ROOM
- 1 3-WAY SWITCHES
- 1 BETTER ELECTRICAL ARRANGEMENT
- 9 MORE WALL PLUGS
- 19 REWIRE THE HOUSE
- 1 AT LEAST ONE SWITCHED LIGHTING FIXTURE IN EACH ROOM

## WINDOWS & DOORS

- 1 REPLACE WINDOW SHADES
- 1 NEW DRAPES
- 1 CHANGE ANDERSON VENT TYPE WINDOW WALLS
- 1 CHANGE FROM BIFOLD CLOSETS TO SLIDING DOORS
- 1 CHANGE FROM SLIDING DOOR IN ½ BATH TO REGULAR DOOR
- 5 WEATHERSTRIPPING OF DOORS & WINDOWS
- 51 REPLACE WINDOWS WITH STORM WINDOWS/THERMOPANE
- 1 NEW WINDOWS WITHIN NEXT 5 YEARS
- 1 PUT DOOR ON BASEMENT
- 1 NEW DOORS THROUGHOUT THE HOUSE
- 1 REPLACE BASEMENT WINDOWS
- 1 BETTER TYPE DOORS
- 1 COMBINATION DOORS
- 1 FIX WINDOWS SO THEY WILL SHUT
- 10 INSTALL STORM DOORS
- 2 BACK DOOR FROM MAIN PORTION OF HOUSE
- 2 NEW SILLS ON DOORS/WINDOWS
- 1 PUT SCREEN ON WINDOWS
- 2 INSTALL SLIDING GLASS DOORS AND/OR LARGER WINDOWS
- 1 BATHROOM DOORS TOO SMALL
- 1 PUT DOOR BETWEEN KITCHEN & ENCLOSED BACK PORCH
- 1 REPLACE HANDLE ON STORM DOOR
- 1 REPLACE OLD VENETIAN RODS WITH TRAVERSE RODS

## FLOORS, CEILINGS, WALLS

- 1 ELIMINATE BEDROOM TO BATHROOM DOOR
- 1 REMOVE WALL BETWEEN KITCHEN & DINING ROOM
- 1 PUT DRYWALL IN BASEMENT UNDER STAIRS
- 3 FLOOR NEEDS BRACING
- 2 USE BETTER QUALITY PAINT INSIDE
- 3 PANEL THE WALLS
- 2 REPLACE CEILINGS
- 3 REPAIR WOODWORK/REPLACE WOODWORK
- 3 REPAIR AND SEAL BASEMENT WALLS
- 3 PANEL BEDROOM WALLS/LIVING ROOM
- 38 INSTALL CARPETING/NEW CARPETING
- 3 WALLS SHOULD BE PANELLED OR PLASTERED
- 13 REPLACE KITCHEN TILE FLOOR/BATHROOM TILE FLOOR
- 2 REPAIR WALL, CEILING, AND FLOORS
- 1 USE SEMI-GLOSS PAINT THROUGHOUT THE HOUSE
- 1 PAINT THE BASEMENT WALLS
- 6 REPLACE LATH & PLASTER/REPAIR
- 1 PAINT THE KITCHEN
- 1 TEXTURE THE CEILING
- 1 USE PAINT THAT WILL ADHERE TO THE PLASTER WALLS
- 1 NO-WAX TILE FLOORS IN BATH & KITCHEN
- 13 REFINISH THE FLOORS/REPLACE
- 1 PUT FLEA ON BASEMENT FLOOR
- 1 LOWER THE CEILINGS
- 1 PAINT AND FINISH THE BASEMENT
- 16 PAINT THE WALLS/CEILINGS
- 2 REFINISH ALL WOODWORK
- 2 NEW CEILING IN LIVING ROOM
- 1 CEILING CRACKED

# Outside Improvements

FREQ. COMMENT

## ELECTRICAL

- 1 NEED OUTSIDE OUTLET NEAR GARAGE
- 1 INSTALL LIGHT IN CARPORT
- 1 INSTALL WIRING IN THE GARAGE
- 1 INSTALL EXTERIOR ELECTRICAL OUTLETS
- 1 INSTALL LIGHTNING RODS ON DWELLINGS & BUILDINGS
- 2 RELOCATE POWER LINES/REPLACE
- 2 BACKYARD LIGHT
- 2 MORE OUTSIDE LIGHTING
- 1 INSTALL LIGHTNING RODS
- 1 NEED BETTER DOORBELL

## TREES, SHRUBS

- 2 USE MORE GROUNDCOVER ON THE LANDSCAPE
- 4 REMOVE SOME NUISANCE TREES
- 4 REPLACE SHRUBS & HEDGE
- 24 NEED LANDSCAPING IMPROVEMENT
- 2 REPLACE TREES/SHRUBS
- 1 PLANT SOME TREES
- 1 REPLACE TREES CLOSE TO HOUSE WITH LOW-GRADING ORNAMENTALS

## DRAINAGE

- 1 BETTER DRAINAGE FOR PATIO
- 1 RESLOPE BACKYARD FOR RAIN & WATER RUNOFF
- 2 DRAINAGE SYSTEM AROUND BASEMENT WALLS
- 7 DRAIN TILE AROUND FOOTING/IMPROVE DRAINAGE AROUND HOUSE
- 1 PUT DRAIN IN GARAGE FLOOR

## PAINT

- 1 BETTER CHOICE OF COLORS FOR PAINT
- 1 USE NATURAL SHADE OF SHINGLES FOR SIDING
- 1 PAINT THE EAVES
- 3 CLEAN & REPAIR EAVES
- 2 REPLACE EAVES, OVERHANG & FACIA
- 25 PAINT THE HOUSE
- 1 PAINT WINDOWS
- 1 USE BETTER QUALITY PAINT OUTSIDE

## WALKS, DRIVES

- 1 REPAIR BACK STEPS
- 12 SIDEWALKS/NEW SIDEWALKS
- 11 REPAIR & SEAL DRIVEWAY/RESURFACE
- 8 ENLARGE DRIVEWAY PARKING AREA
- 1 NEW STEPS
- 2 REDESIGN THE DRIVEWAY
- 2 PROVIDE PARKING APRON FOR 2 CARS

## **GUTTERS**

- 7 REPLACE GUTTERS
- 2 IMPROVE GUTTER RUNOFF SO WATER DOESN'T GO UNDER HOUSE
- 1 PUT EAVES & GUTTERS ON HOUSE
- 1 WATERPROOF THE GUTTERS
- 1 INSTALL SCREEN COVERS IN GUTTERS TO KEEP LEAVES OUT

## **MISC.**

- 1 CHIMNEY FOR WOOD BURNING STOVE
- 1 NEED A MUDROOM
- 3 RE-CAULK AROUND WINDOWS/DOORS
- 1 SMALLER YARD
- 1 3000' AIR STRIP
- 1 HANGAR WITH CONCRETE FLOOR
- 1 TENNIS COURTS
- 1 HOUSE IN PATH OF GASES COMING FROM OUTFLOW
- 1 SWIMMING POOL
- 5 REPAIR FRONT PORCH DECKING/FRONT PORCH
- 1 REPAIR/REPLACE FOUNDATION
- 12 BUILD A STORAGE SHED
- 1 REPAIR CHIMNEY

## **WINDOWS, DOORS**

- 2 WINDOWS NEED SCREENS
- 3 PUT SHUTTERS ON THE WINDOWS
- 7 NEW STORM DOORS
- 1 REPLACE WINDOW FRAMES
- 1 REPLACE PATIO DOOR

## **FENCES, HEDGES**

- 8 LARGER FENCED YARD/FENCED YARD
- 1 HOUSES SHOULD BE MORE WIDELY SEPARATED FOR PRIVACY
- 1 NEED WINDBREAK & PRIVACY
- 1 LOCATE HOUSES FURTHER FROM MAIN ACCESS ROAD
- 1 HOUSE TOO CLOSE TO WORK AREA & PUBLIC AREA
- 5 HIGH SHRUBBERY OR FENCE FOR PRIVACY
- 1 REPAIR THE FENCE
- 1 IMPROVE ACCESS ROAD TO HOUSE

## **AWNINGS**

- 1 PUT AWNING OVER WEST WINDOW
- 1 SUN SHADES OVER LARGE PICTURE WINDOWS
- 1 BETTER TYPE AWNINGS

## **GARAGE**

- 19 BUILD A GARAGE/2-CAR GARAGE/CARPORT/2ND GARAGE
- 1 MAKE GARAGE FLOOR LEVEL
- 14 ADD A SECOND BAY TO THE GARAGE
- 1 MOVE GARAGE FROM BASEMENT TO REAR OF HOME
- 1 SEAL GARAGE

## **PLUMBING**

- 2 REPLACE SEPTIC TANK
- 1 REPLACE SEWER LINES
- 2 NEW WATER LINES TO DWELLING FROM SUPPLY
- 1 REPLACE FAUCETS
- 1 NEED COMPLETE NEW WATER SYSTEM

## **ROOF**

- 3 ROOF NEEDS REPAIR
- 11 NEED NEW ROOF
- 1 NEW ROOF WITHIN NEXT 5 YEARS
- 1 GARAGE NEEDS NEW ROOF

## **PORCHES, DECK, PATIO**

- 1 ADD PORCHES IN PLACE OF STOOPS
- 1 ENCLOSE FRONT STOOP
- 1 SCREENING AROUND PATIO
- 15 BUILD A PATIO/SIDE PORCH
- 1 TAKE OUT BACK PORCH
- 3 OUTSIDE ENTRANCE TO BASEMENT
- 6 PORCH SHOULD BE SCREENED IN/ENCLOSED
- 1 PUT EAVE OVER FRONT DOOR
- 1 ROOF OVER EXISTING ENTRANCE TO KITCHEN
- 3 COVERED PATIO IN BACKYARD/COVER EXISTING PATIO
- 2 COVERED DECK IN FRONT YARD/COVER THE DECK
- 3 NEED SOME KIND OF PORCH
- 1 ALTER FRONT ENTRANCE TO ALLOW PASSAGE OF LARGE FURNITURE
- 1 CONNECT BACK DOOR TO GARAGE

## **SIDING**

- 2 REPAIR EXTERIOR BRICKWORK
- 5 NEED NEW SIDING
- 1 COMPLETE RENOVATION OF EXTERIOR
- 2 PUT VINYL SIDING ON ALL WOOD TRIM
- 1 USE VARIOUS TYPES OF SIDING SO HOUSES WON'T LOOK ALIKE
- 18 USE ALUMINUM SIDING/VINYL
- 1 BRICK SIDING

# Other Comments

FREQ. COMMENT

## DOORS, ENTRIES

- 1 ALL DOORS SHOULD BE A MINIMUM OF 32" WIDE
- 1 OUTSIDE DOORS ARE PLACED IN RIDICULOUS AREAS
- 3 KITCHEN POORLY DESIGNED
- 1 ENTRYWAYS ARE POORLY DESIGNED
- 1 ALL TRAFFIC SHOULD NOT HAVE TO GO THROUGH LIVING ROOM
- 2 OUTSIDE ENTRANCE TO BASEMENT
- 1 WATER HEATER LOCATED MORE CENTRALLY TO KITCHEN & BATHROOM
- 1 ACCESS TO UTILITY STORAGE VERY INCONVENIENT

## MISC.

- 2 MAINTENANCE MEN DO POOR WORK
- 1 HAVE ASKED FOR THESE REPAIRS FOR YEARS WITHOUT SUCCESS
- 1 GOVERNMENT SHOULD EITHER KEEP THE HOUSES IN GOOD SHAPE, OR GET OUT OF THE BUSINESS
- 2 TREE ROOTS IN SEWER LINES
- 1 REPLACE SOME OF THE EAVES
- 1 VERY FEW IMPROVEMENTS IN THE PAST 50 YEARS
- 1 MANY WINDOW PANES ARE BROKEN
- 1 HOUSE ONLY 3 YEARS OLD & ALREADY HAS DEFECTS
- 6 HOUSE IS WELL MAINTAINED
- 1 HOUSE NEEDS COMPLETE REHABILITATION TO COME UP TO MINIMUM STANDARDS
- 1 CEMENT FLOOR BROKEN IN REAR DOORWAY
- 1 BASEMENT SO BAD THAT IT'S UNREPAIRABLE
- 1 NEED REGULARLY SCHEDULED MAINTENANCE PROGRAM

## ENERGY

- 1 LOCATE HOUSES TO HELP CONSERVE ENERGY
- 1 HOT AIR DUCTS THROUGH CONCRETE FLOOR SLAB LOSES HEAT
- 1 ATTIC FAN REDUCES USE OF A/C
- 2 NEW STORM & SCREEN DOORS
- 1 HOUSE SHOULD FACE SOUTHEAST
- 1 DON'T USE FUEL OIL HEATING SYSTEMS FOR PROJECT HOUSING IF ALTERNATIVE ENERGY SOURCES ARE AVAILABLE.
- 1 INSERT HEAVY CLEAR PLASTIC AROUND COVERED PATIO, FOR USE IN WINTER WEATHER
- 3 HOUSE SHOULD HAVE BETTER HEATING
- 1 UTILITY BILLS TOO HIGH
- 5 HOUSES SHOULD BE WELL-INSULATED
- 2 HOUSE DESIGN SHOULD CONSIDER ALTERNATIVE ENERGY SOURCES
- 1 PUT SOLAR WATER HEATERS IN THE LOCK HOUSES
- 2 DAMPERS HAVE BEEN REMOVED FROM FIREPLACES, & HEAT ESCAPES
- 1 HOUSE IS OLD & HARD TO HEAT
- 5 HOMES SHOULD HAVE SOLAR ENERGY
- 3 DESIGN HOUSES WITH THE RISING COST OF UTILITIES IN MIND
- 1 SMALLER HOLDING TANKS ON TOILETS TO CONSERVE WATER
- 1 INCORPORATE PASSIVE SOLAR IN FUTURE HOUSES
- 2 HAVE 2 CHIMNEYS ON NEW HOUSES
- 1 NEED MORE THAN 1 OR 2 DRAWERS IN KITCHEN

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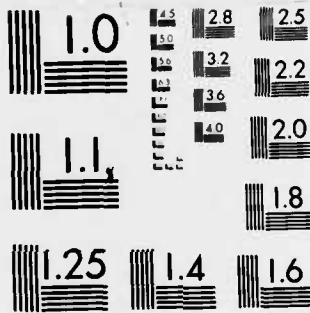
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## SIZE

- 1 HOUSE SHOULD BE OPEN & SPACIOUS
- 5 HOUSE IS JUST TOO SMALL
- 1 MAKE PORCHES SMALLER, SO KITCHENS CAN BE BIGGER
- 2 NO CABINET SPACE IN KITCHEN/NEED MORE SPACE
- 7 KITCHEN IS A BIT SMALL/NOT LARGE ENOUGH
- 3 GARAGE IS TOO SMALL
- 9 ALLOW FOR MORE STORAGE
- 1 BIGGER SINKS IN BATHROOMS
- 1 BASEMENT IS VERY SMALL
- 1 UTILITY ROOM SHOULD BE BIG ENOUGH TO ACCOMMODATE A 3-WAY FURNACE

## ADD-A-FEATURE

- 10 HOMES SHOULD HAVE FIREPLACES
- 3 SHOULD HAVE CENTRAL A/C
- 1 INSTALL A SHOWER IN THIS HOUSE
- 1 ½ BATH ON MAIN FLOOR WOULD BE DESIRABLE
- 1 INSTALL MORE LIGHTING FIXTURES IN LIVING ROOM
- 1 FLOORS SHOULD BE CARPETED
- 1 SHOULD HAVE A PATIO
- 1 SHOULD HAVE OVERHANGING EAVES
- 1 BUILT-IN DUCT WORK FOR SMOKE FROM WOOD BURNER
- 1 CARPET THE FLOORS
- 1 SHOULD HAVE SOME HOUSES 2&3 BEDROOMS
- 1 PUT ½ BATH IN BASEMENT
- 15 HOUSE SHOULD HAVE BASEMENT
- 1 SHOULD HAVE KITCHEN/DINING ROOM
- 1 WALK OUT PATIO WITH SLIDING GLASS DOORS
- 2 NEED WASHER DRYER & DISHWASHER
- 9 SHOULD HAVE 2-CAR GARAGE
- 5 INSTALL A WOOD BURNING STOVE/FURNACE
- 1 PORCHES SHOULD BE ROOFED
- 1 INSTALL SUMP PUMPS IN HOUSES WITH BASEMENTS
- 1 GREATER USE OF OVERHEAD LIGHT FIXTURES
- 1 PROVIDE SOLAR GREENHOUSE ATTACHED TO THE HOUSE
- 1 FLOORS SHOULD BE HARDWOOD, NOT TILE-COVERED CONCRETE
- 2 HOMES SHOULD BE BRICK, WITH ALUM OR VINYL TRIM AND WINDOW FRAMES
- 1 HOUSES SHOULD HAVE LOWER CEILINGS
- 1 NEED HUMIDIFIER FOR WINTER USE
- 1 SHOULD HAVE 2 FURNACES
- 1 SHOULD HAVE PRIVATE TELEPHONES
- 1 SHOULD HAVE MAIL BOXES
- 1 SHOULD HAVE AUXILIARY POWER WHEN COMMERCIAL POWER FAILS
- 1 SCREENED PATIO PORCH VERY USEFUL
- 2 INSTALL HOT WATER HEATER
- 1 BETTER PLACEMENT OF HOT WATER HEATER
- 1 BETTER PLACEMENT OF WASHER & DRYER

## STYLE

- 4 HOUSES SHOULD BE 1-STORY
- 1 SHOULD BE SINGLE UNITS, NOT DUPLEXES
- 1 HOUSE SHOULD BE RANCH TYPE

## FINISHES

- 1 PAINT THE HOUSE
- 1 RAISE THE DOLLAR CEILING ON CONSTRUCTION
- 1 ALLOW WIVES OF ON-SITE PERSONNEL TO BE INVOLVED IN PLANNING FOR MODIFICATION, NEW CONSTRUCTION, ETC.
- 1 REPLACE ELECTRIC WATER HEATER WITH GAS
- 1 NEW WIRING IN HOUSE
- 1 DISCONTINUE USE OF RADIANT HEAT
- 1 FOUNDATIONS SHOULD NEVER BE MADE OF CEMENT TILE
- 1 UTILITY LINES TO THE HOUSE SHOULD BE UNDERGROUND
- 1 EXTERIOR SCREENS ON WINDOWS ARE VERY USEFUL
- 2 BUILD A NEW HOUSE
- 1 DON'T INSTALL COMMERCIAL CARPETING ANY MORE
- 1 ALUMINUM WINDOWS WEEP BADLY IN WINTER
- 1 SUPPLEMENTAL HVAC
- 1 DON'T BUILD HOUSES ON A SLAB
- 1 DON'T BUILD IT ACCORDING TO THE PLANS IN THIS BOOK
- 1 REPLACE KITCHEN COUNTERTOPS
- 1 GET RID OF THE GOVERNMENT PHONE
- 1 IMPROVE THE TV RECEPTION IN THIS REMOTE LOCATION
- 1 LOUVERED WINDOWS JUST NOT PRACTICAL IN THESE HOUSES

## SITING

- 1 HOUSE SHOULD BE LOCATED FOR EASY SURVEILLANCE OF ACTIVITY
- 1 SITE LOCATION IS VERY POOR
- 1 UNSAFE BECAUSE TOO CLOSE TO STATE ROAD
- 1 HOUSE TOO CLOSE TO ACCESS ROAD
- 2 DWELLING IS TOO CLOSE TO THE WORK SITE
- 1 SHOULD BE LOCATED AWAY FROM PUBLIC USE AREAS. BUT STILL ABLE TO OBSERVE GENERAL AREA
- 1 LOT IS NOT BIG ENOUGH

## SAFETY, SECURITY

- 1 AIR NOT GOOD FOR YOUR HEALTH BECAUSE OF GASES COMING FROM OUTFLOW
- 1 FOAM INSULATION COULD BE A HEALTH HAZARD
- 1 GARAGE UNDER HOUSE IS A FIRE HAZARD
- 1 GARAGE FLOORS SHOULD NOT HAVE GLOSS FINISH
- 1 DANGEROUS HAVING A GAS HEATER IN THE ATTIC

## RENT

- 1 OCCUPANT SHOULD HAVE AN OPTION ON UPKEEP & MAINTENANCE, SO AS TO KEEP THE RENT AT A MINIMUM
- 2 SHOULD BE NO RENT REQUIRED WHEN LIVING ON THE JOB SITE
- 7 RENT IS JUST TOO HIGH
- 1 RENT KEEPS GOING UP, BUT NOTHING GETS FIXED

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