BEDROOM PLANNING STANDARDS

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PLANNING CONSIDERATIONS

The most efficient bedroom for a given set of needs is the smallest bedroom which will accommodate the required furniture, and allow access to the furniture and adequate floor space for dressing, sleeping, cleaning, etc.

The term bedroom in this circular refers to a room with space for the bed and other furniture, as well as clearances for dress/sleep activities and closets. The largest bedroom in the house is called the master (or primary) bedroom, and the others are secondary bedrooms.

The bedrooms are usually located together in one area of the house. If one bedroom is separated from the others, it is desirable to provide another bathroom nearby.

When children are young, it is important that their bedrooms be near that of their parents. For older persons and those with physical disabilities, it is convenient to have the bedroom and bathroom on the same level as the living area.

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Bedroom Furniture and Clearances

The most desirable room size will depend upon room proportions, size and location of windows and doors, the amount and size of furniture, and the necessary clearances. A small, well-planned room can accommodate more furniture with needed clearances than larger, poorly-planned rooms. Typical furniture sizes were selected from current standard sizes of manufactured furniture. Older pieces of furniture are sometimes larger.

**Beds.** The following are the principal standard mattress sizes:

<table>
<thead>
<tr>
<th>Bed</th>
<th>Mattress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crib</td>
<td>27&quot; x 48&quot;</td>
</tr>
<tr>
<td>Twin</td>
<td>39&quot; x 75&quot;</td>
</tr>
<tr>
<td>Full</td>
<td>54&quot; x 75&quot;</td>
</tr>
<tr>
<td>Longster twin</td>
<td>39&quot; x 80&quot;</td>
</tr>
<tr>
<td>Longster full</td>
<td>54&quot; x 80&quot;</td>
</tr>
<tr>
<td>Queen</td>
<td>60&quot; x 80&quot;</td>
</tr>
<tr>
<td>King</td>
<td>75&quot; x 80&quot;</td>
</tr>
</tbody>
</table>

**Dressers.** The frontage of a dresser or chest of drawers ranges from 25" to 72", and the depth (front to back) varies from 18" to 22".

**Night stand.** The frontage ranges from 14" to 26", and the depth varies from 15" to 20".

**Chair.** Straight chairs used in bedrooms may range from 15" to 22" wide, and be equally deep. Overstuffed arm chairs will range from 24" to 34" wide and are about 22" deep.

**Assumed furniture sizes.** The plans shown in this circular are based upon the following furniture sizes: twin bed, 40" x 80"; full bed, 56" x 80"; double dresser, 60" x 20"; single dresser, 36" x 20"; night stand, 20" x 20"; and straight chair, 20" x 20".

**Clearances.** Activity clearances should be provided around the bed and in front of other furniture for making the bed, dressing, vacuuming, dust mopping, opening dressers, opening doors, and access to furniture, windows, and doors. In some cases, clearances greater than indicated may be required to satisfy the needs of wheelchair users and invalids who need help.
Doors, Windows, and Closets

All doors are assumed to be 80” high. Entrance doors are assumed to be 32” wide, and closet doors 24” wide for a one-person room and 60” wide for a two-person room. (The closet extends 6” beyond both edges of the door.)

A door located near a corner will offer less interference with furniture than one located in the middle of a wall. If an inswinging door is located 24” from the corner, furniture may be located along the adjoining wall up to that corner. To avoid damage to that furniture, a hinge-stop should be attached to the door. It should be recognized that a person standing in front of such furniture (or a closet door) may be struck by an adjacent inswinging door.

Hinge stop to limit door swing

If an inswinging door presents a hazard, there are two alternatives: a sliding (pocket) door, which is more expensive and not as easy to operate, and an outswinging door. If the latter is used, the hallway must be wide enough for others to walk past the open door.

Windows. Window placement for thermal comfort is not critical in an air conditioned house. However, if cooling is to be achieved by natural ventilation, cross-ventilation may be obtained by providing windows in opposite corners of the same room or by opening doors and windows to allow air circulation through two or more rooms.

Wall space without windows is needed to accommodate a mirror over a dresser. In colder climates, the head of the bed should not be placed under a window because of the cold drafts which cascade down from the glass surface.

To permit exit in case of an emergency, at least one openable window of appropriate size or an exterior door is required. Where there is no door, the 1973 edition of the HUD Minimum Property Standards requires at least one outside window with sill height not more than 48” above the floor, providing not less than 5 square feet of openable area, and having no dimension less than 22”.

The windows shown in the bedroom plans on pages 4 to 9 are sized to meet the common building code requirement that the glass area in each room shall be at least 10% of the floor area.

Ceiling height. An 8-foot ceiling height is common in most parts of the country. The minimum acceptable height is 7'-6". In evaluating a bedroom with a sloping ceiling, do not consider floor area where the ceiling height is less than 5'-0".

Closets. Assumed minimum closet rod lengths are 36” for a one-person secondary bedroom and 72” for a two-person master bedroom. The other dimensions for accessibility to closets are illustrated. (The 1973 HUD Minimum Property Standards requires a minimum accessible rod length of 36” for single-occupancy bedrooms and 60” for double occupancy bedrooms.)
EFFICIENT BEDROOMS FOR A FULL BED

The examples of bedrooms on pages 4 through 9 are efficient plans for the selected furniture, assuming that the head of the bed should not be under a window. Each pair shows that rooms of different proportions can provide an efficient bedroom. Obviously, if any furniture is larger than the assumed sizes or if extra pieces are added, the clearances will be reduced.

The bedrooms on these two pages are the smallest which will accommodate a full-size bed, a night stand, a double dresser, a straight chair, and closet frontage with appropriate clearances. This allows a 40”-wide space for access to the closet and dresser, and along one side and the foot of the bed.

The extra walls show the most practical way that the location of the openings may be modified. Openings in other locations may require relocation of some furniture and the elimination of some of the openings shown on the main drawing.
The window sash openings shown on these two pages are 28" wide and 46" high.

A 28" x 48" crib may be placed in these bedrooms temporarily with some adjustment of furniture and reduced clearances.

Plans F-1 and F-2 satisfy all 1973 HUD Minimum Property Standards (Table 4-1.1 Minimum Room Sizes) as a Primary bedroom for two people, if they have "at least one uninterrupted wall space of at least 10 feet." This is feasible if just one enlarged window is used to provide the required glass area.

The extra walls show the most practical way that the location of the openings may be modified. Openings in other locations may require relocation of some furniture and the elimination of some of the openings shown on the main drawing.
EFFICIENT BEDROOMS FOR TWO TWIN BEDS

The bedrooms on these two pages are the smallest which will accommodate two twin beds, a night stand, two single dressers, a straight chair, and closet frontage with appropriate clearances. This allows a 40"-wide access space in front of the closet and dressers, and along the foot of both beds and one side of one of the beds.

The window sash openings shown on these plans are 32" wide and 46" high. A 28" x 48" crib may be placed in these bedrooms temporarily with some movement of furniture and reduced clearances.

The extra walls show the most practical way that the location of the openings may be modified. Openings in other locations may require relocation of some furniture and the elimination of some of the openings shown on the main drawing.
Plans T - 1 and T - 2 satisfy all 1973 HUD Minimum Property Standards (Table 4 - 1.1 Minimum Room Sizes) for a Primary bedroom for two people if they have "at least one uninterrupted wall space of at least 10 feet." This is feasible if just one enlarged window is used to provide the required glass area.

The extra walls show the most practical way that the location of the openings may be modified. Openings in other locations may require relocation of some furniture and the elimination of some of the openings shown on the main drawing.
EFFICIENT BEDROOM FOR ONE TWIN BED

The bedrooms on these two pages are the smallest which will accommodate one twin bed, a night stand, a single dresser, a straight chair, and closet frontage with appropriate clearances. This allows a 40"-wide access space in front of the closet and dresser, and along one side and the foot of the bed.

Either room will accommodate one person. Two persons can be accommodated in plan S-1 if stacked bunk beds are used instead of the twin bed and the single dresser is replaced with a larger unit.

The window sash openings shown on these two pages are 24" wide and 46" high.

The extra walls show the most practical way that the location of the openings may be modified. Openings in other locations may require relocation of some furniture and the elimination of some of the openings shown on the main drawing.
Plan S-1 satisfies all 1973 HUD Minimum Property Standards (Table 4 - 1.1 Minimum Room Size) for Secondary bedrooms. Plan S-2, which has a width of 7'-0" does not meet the requirement that the "least dimension" be a minimum of 8'-0".

The extra walls show the most practical way that the location of the openings may be modified. Openings in other locations may require relocation of some furniture and the elimination of some of the openings shown on the main drawing.
PLANNING ARRANGEMENT OF BEDROOMS

For dwellings in the design stage, the architect, builder, or prospective home owner can use the following procedure:

**Step No. 1.** Decide on the number and type of bedrooms. For example, the selection for a four-person family might be one bedroom for a full-size bed, one bedroom for two twin beds, and one bedroom for one twin bed. Pages 4 - 9 show minimum dimensions for efficient bedrooms of each of these types. The room dimensions shown can always be increased to fit a house plan but should never be diminished.

If a non-rectangular bedroom is used, it will necessarily be larger than the "efficient bedroom" and should be evaluated using the method in Step No. 2 on page 11.

**Step No. 2.** Arrange and combine the bedrooms with closets and adjoining space for the hallway and bathroom(s). Keep in mind that the plans can be rotated or reflected from right to left and/or top to bottom. A tracing of the efficient bedroom plans (which are at a scale of $\frac{1}{4}" = 1'$) will be useful for this purpose. Be sure to trace only the floor area, as indicated by the colored line. Show the location of the windows and doors, and add the floor area for the closets.

It may be necessary to relocate some openings, such as where two rooms are placed together. The changes shown on the extra walls in the diagrams can be made without reducing the furniture capacity or clearances of the room. If it is necessary to move openings to other locations, the result can be evaluated by the method in Step No. 2 on page 11.

**Example.** A tracing is made of three selected bedroom plans, S - 1, T - 2, and F - 2. The tracings are cut out and laid side by side to establish an arrangement that fits together, with room for an adjoining 36'-wide hallway and a bathroom. These plans fit within the selected building width of 26 feet.

A 10'-0" wall of plan S - 1 adjoins a 10'-0" wall of plan T - 2. For entrance to the hallway, the access door of plan S - 1 is moved from wall a to wall b. The window in wall c is moved to wall d, and is replaced by the closet door, which was moved from wall b. These changes in arrangement of openings are permissible as shown on the alternate wall drawings.

To allow the hallway to reach F - 2, the closet of bedroom T - 2 is moved to the end of wall a. To match the 36' width of the hallway, the closet may be increased in depth to 36' or built-in shelves or cabinets may be added facing bedroom F - 2. In order to locate the entrance door properly, the traced plan F - 2 is turned upside down and rotated to place wall a along the extended closet of plan T - 2.

**Bathroom space.** A suitable location for a bathroom is indicated by a broken line.

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Diagram showing the arrangement of bedrooms, hallway, and bathroom, with labels for steps and examples of changes made. The diagram includes the following elements:
- S - 1, T - 2, F - 2 plans
- Hallway
- Bathroom
- Move lines indicating relocated openings
- Colored line for floor area
- Example of changes made to plans S - 1, T - 2, and F - 2 to fit together with a 36'-wide hallway and bathroom.

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EVALUATING AN EXISTING BEDROOM PLAN

To evaluate the bedrooms in a house already built, the appraiser or prospective buyer can use the following procedure:

Step No. 1. Check the adequacy of room dimensions by comparing them with the bedroom plans shown on pages 4 - 9.

Example: Plan X on page 12 is drawn to a scale of $\frac{1}{4}'' = 1'$. The first step in evaluating this typical room is to compare the room dimensions of 10'-8" by 13'-6" with the plans shown.

A comparison of plan X with plan T - 1 shows that the 10'-8" width is too small for the narrow dimension. Also, the 13'-6" length is less than the long dimension of plan T - 2. Therefore, plan X is not suitable for two twin beds without reducing space for furniture and access.

A similar comparison of plan X with plan F - 1 shows that both dimensions are larger than the corresponding dimensions of F - 1. Therefore, as far as room dimensions are concerned, plan X is satisfactory for a full bed. Plan X also meets the minimum dimensions of plan F - 1.

Step No. 2. Determine the adequacy of the space for furniture without blocking access to doors and windows.

The patterns for furniture and the selected bed clearance should be cut from page 12. A modified bed clearance pattern, with the bed shifted to the right, will appear on the back of each bed pattern.
Example. The full-bed pattern fits against walls b, c, or d of plan X. If located on wall d, adequate space for the dresser remains along the facing b wall. Since the bed in the left bed clearance pattern would not allow the 40” space for access to the closet front, the right clearance pattern is selected.