Bedroom Definition for Determining Subsurface Sewage Treatment System Size

The following information is provided to assist Local Government Unit (LGU) regulators and Subsurface Sewage Treatment System (SSTS) Designers in determining if a room should be considered a bedroom when sizing a SSTS.

Determining flow
For SSTS design, the number of bedrooms in the dwelling is used to determine daily flow volumes. It is assumed the number of bedrooms in the dwelling reflects the number of occupants, which reflects the volume of sewage generated. The volume of sewage generated helps determine the size of system that is needed for a dwelling.

In some cases, determining whether a room is a bedroom has proven difficult. Many older dwellings were not built to a code requirement, while newer dwellings can be constructed under very detailed codes. Therefore, rooms used as bedrooms can be markedly different from older to newer dwellings.

Defining a “Bedroom”
To aid in deciding whether a room is a bedroom, the MPCA, in collaboration with LGU program administrators across Minnesota, crafted a definition of a bedroom. This new definition, found in Minn. R. 7080.1100, subp. 9, became effective February, 2008.

For the sole purpose of estimating design flows from dwellings, a bedroom is an area that is:

- a room designed or used for sleeping; or
- a room or area of a dwelling that has a minimum floor area of 70 square feet with access gained from the living area or living area hallway. Architectural features that affect the use as a bedroom may be considered in making the bedroom determination.

This definition is only applicable when trying to estimate sewage flow from a dwelling. It cannot be used to determine the adequacy or safety of a room for sleeping purposes. For adequacy and safety requirements, refer to the International Residential Code, the Minnesota State Building Code, or local building codes.

Current room use
A room that is currently being used as a sleeping room, even if not constructed to current code requirements, is counted as a bedroom. The LGU has the flexibility to make exceptions to this requirement if the occupant: using the room for sleeping is temporary (e.g., college student home on holidays or weekend house guests)

Other useful sources for determining if a room is a bedroom include:

- the current or most recent real estate listing of the number of bedrooms
- the number of bedrooms listed with the local Assessor’s office
- rooms labeled as bedrooms on the house plans
- rooms with smoke detector
- all rooms on a second level that are not bathrooms
Architectural features
These are features common to designated bedrooms or rooms used as sleeping areas:
- rooms or areas with legal egress
- rooms with a closet
- rooms which are adjacent to a three-quarter bathroom

Rooms such as dens, sewing rooms, exercise rooms and home theaters should also be given serious consideration as a bedroom as they have the potential to be easily converted.

Architectural features that are obstacles to the use of a room as a bedroom include:
- rooms that are obviously a kitchen, bathroom, living room, dining room, laundry room, storage room (without windows) or family room
- rooms and areas with low ceilings
- rooms with arched doorways that lack a door
- rooms and areas with half walls
- rooms and areas with no privacy
- rooms and areas without egress to the outside
- rooms and areas with no source of light and ventilation to the outside
- rooms and areas that are used as a passage to other rooms, stairs, or bathrooms unless this is the only sleeping area in the dwelling
- “open” lofts

A minimum ceiling height is seven feet for basements and seven feet, six inches for upper floors; for attic areas having downward-tapering ceilings a minimum height of five feet is allowed. Areas less than five feet in height are not included in the 70 sq. ft. minimum floor area calculation.

LGU ordinance considerations
The following are examples of ordinance amendments being used by some LGUs to address whether or not a questionable room is counted as a bedroom. These may not be applicable to all LGUs.
- requiring documentation from builder/owner of a permanent feature that precludes the use of the room as a bedroom
- limiting the number of bedrooms for a typical single family dwelling
- requiring a minimum number of bedrooms for a typical single family dwelling
- requiring techniques to insulate the system if freezing is a concern for a dwelling with a large number of bedrooms but a water use well below the design volume

Financial considerations
Typically, the increase in cost of adding an additional bedroom to a system design is not exorbitant. A larger system size adds longevity and often recaptures the additional cost over the life of the system.
Sample bedroom determinations

The table below offers some common situations, suggestions on the bedroom determination, and reasons supporting the suggested determination. Always remember to check with the LGU to see whether they have stricter provisions in their ordinance.

<table>
<thead>
<tr>
<th>Room description</th>
<th>Bedroom?</th>
<th>Supporting reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Den, exercise room or sewing room on house plan that is ≥ 70 ft²</td>
<td>Yes</td>
<td>Meets minimum size requirements and has no precluding architectural features</td>
</tr>
<tr>
<td>Room used as bedroom in an existing dwelling that is &lt; 70 ft² and has no egress</td>
<td>Yes</td>
<td>Currently being used as a bedroom</td>
</tr>
<tr>
<td>Laundry room in existing dwelling is &gt; 70 ft²</td>
<td>No</td>
<td>Plumbing, sinks, and washer/dryer are obstacles to use a bedroom</td>
</tr>
<tr>
<td>Open loft in existing dwelling used as a bedroom</td>
<td>Yes</td>
<td>Currently being used as a bedroom</td>
</tr>
<tr>
<td>Open loft on house plan</td>
<td>No</td>
<td>“Open” is an obstacle to use as a bedroom</td>
</tr>
<tr>
<td>Open loft in existing dwelling currently used as a playroom</td>
<td>No</td>
<td>Not being used as a bedroom, and “Open” is an obstacle to use as a bedroom</td>
</tr>
<tr>
<td>Basement room &gt;70 ft² with egress</td>
<td>Yes</td>
<td>Meets Rule requirements of size and architectural features</td>
</tr>
<tr>
<td>Basement &gt;70 ft² without egress</td>
<td>No</td>
<td>Lack of egress is an obstacle to use as a bedroom</td>
</tr>
</tbody>
</table>

For more information

For more information on the Minnesota Pollution Control Agency’s (MPCA) SSTS program, visit the MPCA Web site at www.pca.state.mn.us/programs/ists/ or call us at 651-296-6300, toll free at 800-657-3864.