

**TOILET ROOMS—GENERAL**

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**1. GENERAL**

**1.01** This section outlines suggestions for the general treatment and finishes of toilet rooms and the factors to be considered in their planning in telephone buildings.

**1.02** This section is being reissued due to changes in materials used in building construction. Revision arrows are used to emphasize the more significant changes.

**1.03** Variations from the recommendations may be required by local codes, ordinances, or may be necessary in large headquarters buildings or small

offices in outlying areas where special conditions are not unusual.

**1.04** Typical toilet room layouts including mounting heights of the fixtures and various toilet room accessories are outlined in Section 760-240-152, Toilet Room Fixture Spacings. The requirements for the various fixtures and accessories based upon the number of persons assigned to their use are covered in Section 760-240-153, Number of Fixtures in Toilet Rooms. Suggestions as to types of plumbing fixtures and fittings are described in Section 760-520-151, Plumbing Fixtures in Toilet Rooms and House Service Closets.

**2. LOCATION**

**2.01** Toilet rooms are generally located, as far as practicable, in or adjoining the core or the stair area of the building. In addition to the desirability of this location from the standpoint of accessibility for building personnel, it is generally considered a location which will offer a minimum of interference with future growth.

**2.02** Locations opening directly into equipment areas, or where equipment aisles are used as passageways to toilets, are avoided where practicable, to reduce the exposure of the equipment to lint, dirt, and water.

**2.03** It is considered advisable not to locate toilet rooms above equipment space or where a leak in the piping or fixture overflow may result in damage to the equipment. The arrangement of toilet rooms one above another, where feasible, provides the most economical and practical method of plumbing, and with toilets on successive floors the probability of damage from leaking water is reduced. Where it is necessary to locate toilet rooms above equipment space, the floor area is treated as outlined in Part 3.

**2.04** In multistoried buildings as well as in many average-size equipment buildings, there is often a variation in the proportion of female and male employees as a result of regroupings and expansion. Figure 1 illustrates a method where changes in toilet room requirements can be handled without ex-



tensive plumbing and partitioning rearrangements when changes in population occur. The layout illustrates a toilet room complete with water closets, lavatories, toilet stalls, etc, which are provided on a modular basis and could be assigned to either male or female employees. The room is then subdivided by a movable sound insulated partition having low noise transmission qualities. The partition shall extend up to the underside of the structural slab above. Since the divider partition is readily movable, varying requirements of washroom facilities to meet changing proportion of male and female employees are quickly and inexpensively provided. By interchanging the divider partition with one of the regular stall partitions, one room can be enlarged and the other reduced without changing any plumbing. With the use of wall-hung water closets, it is also a simple matter to replace one with a urinal when needed.

### 3. WATERPROOFING

**3.01** The floors of toilet rooms above equipment areas, and in other locations where it is considered advisable, are made watertight to minimize the hazard of overflow or leaks. In general, applied waterproofing compounds are not recommended for this purpose because of the possibility of cracks developing in the floor slab. Experience indicates that the application of a continuous pan or membrane directly to the structural floor slab and up into the wall area, forming a dam, provides a more satisfactory waterproofing treatment. The pan or membrane is extended over the entire area of the toilet room floor including adjacent piping space.

**3.02** Floor drains installed in toilet rooms with waterproofed floors are preferably discharged into a service sink or similar open receptacle to avoid the problem of dry traps and the possible backflow from the sewerage system. To minimize the possible accident hazard and for appearance, it is considered advisable to locate floor drains out of the general path of travel.

**3.03** In toilet rooms with waterproofed floors where the provision of floor drains is not practicable, consideration must be given to alternate means for removal of contained leaks and overflows.

### 4. WATER SUPPLY CONTROL

**4.01** To provide for emergency and maintenance conditions, water supply branches to each toi-

let room should be equipped with shutoff valves located in an accessible place and suitably designated with a pipe plan layout showing access to pipe chase. In larger toilet rooms, it is considered advisable to provide shutoff valves within or adjacent to the immediate area and readily accessible in emergency and for maintenance.

### 5. VENTILATION

**5.01** The requirements for the ventilation of toilet rooms are usually determined by local or state ordinances and the procedures recommended in this section are for the general consideration of meeting local codes.

**5.02** Natural ventilation, through windows opening to outside air, is generally provided for toilet rooms in smaller buildings and in other buildings where adequate window area is available. However, the ventilation of toilet rooms involves the process of exhausting air in addition to air supply. Under conditions of limited ventilating area, undesirable window location, and in cold climates, natural ventilation is not entirely satisfactory.

**5.03** For toilet room windows opening to the outside and where uniform appearance is a factor, it is suggested that consideration be given to the use of fine mesh inside screens rather than obscure glass.

**5.04** Mechanical exhaust systems are generally provided for toilet rooms where ventilation by natural means is not practicable. For larger toilet rooms and where appearance is the controlling factor, duct systems are installed with the vent stack extended through the roof. Toilet ventilating systems are **entirely independent of other building ventilation systems**. Low-speed window exhaust fans are also considered for toilet rooms where acceptable. Louver openings in walls or doors for positive draft in connection with mechanical exhaust systems are not generally desirable and are often prohibited under local codes. Louvers should not be considered for fire rated walls and doors between toilet rooms and adjacent areas.

**5.05** Mechanical toilet room exhaust systems should be equipped with controls to ensure the shutdown of the system when the building is unoccupied.

## 6. LIGHTING

**6.01** Sufficient illumination is provided for easy visibility of all parts of the toilet room including the compartment area. With the provision of adequate ceiling lighting and planned light distribution, supplemental lighting, for example, at mirrors and wash basin areas, is not generally required.

**6.02** For toilet rooms having outside windows, the lighting requirements are determined with consideration of the amount of daylight provided, particularly in buildings where the toilet room is used only during daylight hours. ♦A lighting level of about 10 footcandles is considered adequate for a toilet room. ♦Lighting fixtures should have local switch control.

**6.03** In smaller toilet rooms having high ceilings, it is considered desirable to have the lighting fixtures at a level which permits ready maintenance. The lowered light source also tends to reduce the high ceiling effect in these locations. To avoid the use of the long pendants of ceiling hung fixtures, consideration should be given to recessed or surface mounted fixtures on a suspended ceiling or to wall-mounted fixtures.

## 7. VESTIBULES AND STALLS

♦**7.01** Toilet rooms having more than one toilet are provided with entrance vestibules to screen the interior from view, except where the room layout or location does not require a screened entrance.

**7.02** Where not required to be ceiling high, the vestibule partition is generally of the same material as the toilet stalls. The partition shall be not less than 6 feet high and 2 feet wider than the entrance door where space permits.

**7.03** Stall partitions with baked enamel finishes have proven satisfactory. Consideration may also be given to plastic laminate. Partitions shall be not less than 6 feet high. The economics of ceiling hung partitions versus wall-hung partitions should be considered. Ceiling hung partitions usually have a higher initial cost but reduced maintenance costs. ♦

### A. Doors

♦**7.04** Toilet stall doors and doors in stall height vestibule partitions are usually flush type and of the same material as the partition. ♦

**7.05** Where it is considered desirable, vision openings are provided in vestibule doors.

### B. Hardware

**7.06** Hardware for toilet rooms is generally of chromium-plated cast bronze or stainless steel. For toilet rooms in small offices or leased quarters, less expensive hardware of chromium-plated wrought bronze is considered satisfactory.

**7.07** Toilet stall doors are equipped with coil spring or gravity hinges arranged to hold the door open when the stall is unoccupied. More reliable operation is obtained where two spring hinges are used with each door rather than a single spring hinge and a pivot hinge. A combination coat hook and rubber tipped bumper and a latch are normally provided on the stall side of each door.

**7.08** Vestibule doors are equipped with coil springs or gravity hinges arranged to return the door to the closed position. Push plates and pull handles are provided as required.

♦**7.09** Service sinks should not be located in toilet rooms (refer to Section 760-240-150, Service Sink Rooms, General); ♦however, if they are so located, service sink stall doors are equipped with coil spring or gravity hinges arranged to return the door to the closed position. Pull handles are provided and where locking is required, cylinder locks are generally used.

## 8. TOILET ROOM FINISHES

### A. Walls and Wainscot

**8.01** Walls may be finished with enamel based paint or vinyl wall covering. A vitreous tile, such as a ceramic glazed tile wainscot, may also be used where economic conditions warrant the use. A wainscot height of 4 feet to 4 feet 6 inches permits the installation of mirrors and towel dispensers directly on the cap without scribing the wainscot. Projecting caps are not recommended and all free edges of the wainscot should be rounded.

**8.02** Where the toilet room is designed for future extension, consideration is given to omission of wainscot treatment of the wall to be removed. In toilet rooms, which, due to the building layout, are considerably larger than necessary for the number of

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fixtures required, the wainscot treatment is limited to the general area of the fixtures.

### B. Ceilings

**8.03** In general, toilet room ceiling finishes are similar to the finish of equipment room ceilings in central office buildings. Exposed concrete ceilings should be formed to provide reasonably smooth surfaces which are painted. The height of a toilet room ceiling is usually determined by the height of the ceilings in adjacent rooms. However, if the ceiling height of an adjoining room is abnormally high, a suspended ceiling in the toilet room might be considered for maintenance and appearance reasons.

**8.04** In the arrangement of toilet rooms one above another, the exposed piping at the ceiling is covered with insulation as required and both covered and uncovered piping are painted to match the ceiling.

### C. Floors and Base

**8.05** Toilet room floors are generally level with adjacent floors to eliminate tripping hazards and to permit the passage of mop trucks where used. This condition may be obtained normally by using

wall-type fixtures or by exposing waste piping on the ceiling below where one toilet room is above another or over the basement.

**8.06** Unglazed tile of a highly vitreous composition is generally used for floor finishes. Terrazzo surfaces have a tendency toward staining and pitting and are not as readily repaired as the tile surfaces. Traffic marks are more apparent on extremely light finishes and the extremely dark shades of terrazzo tend to change color in traffic lanes.

**8.07** In general, baseboards are of the same material as the floor finish. Where glazed structural tile walls are used, base units of the same material in a darker shade may be considered.

**8.08** A nonslip rustproof metal door threshold is provided at each toilet room door.

**8.09** Floors of rooms having one toilet should be as nonabsorptive as practicable consistent with the justifiable cost. Asphalt or vinyl composition tile using a variegated pattern avoiding black or white solid colors, with rubber base, are generally satisfactory. Wood is not considered sufficiently impervious from a sanitation standpoint.

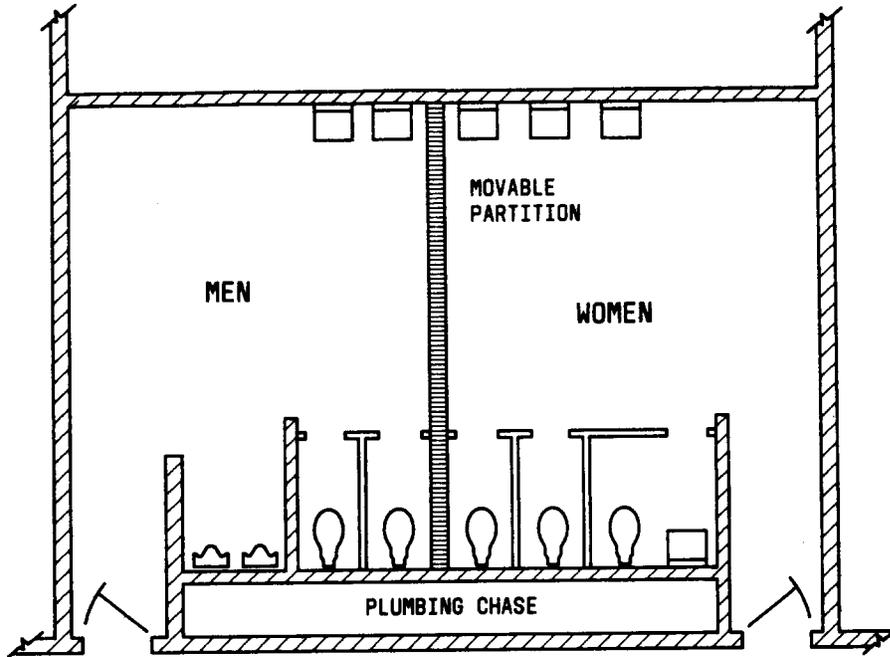


Fig. 1 — Flexible Toilet Room Plan