

rooms are useless for killing organisms and a nuisance to keep clean

As an item of general sanitation, shower rooms and stalls should be well ventilated and adequately lighted to prevent the formation of mold. The floor of the shower should be mopped daily with detergent, hot water and disinfectant to combat athlete's foot (fungus and ringworm infection). A foot-actuated spray can aid in controlling athlete's foot.

Toilets

Wall-hung, elongated-bowl flush toilets with open-front seats should be provided according to the number of employees (Table 20-D). If persons other than employees are allowed to use toilet facilities, their number should be increased accordingly. Paper holders must be provided for every water closet. For each three toilet facilities, there must be at least one lavatory in the toilet room or adjacent to it.

Wall-hung units are easier to keep sanitary and to clean under. Codes prohibit any type that is not thoroughly washed at each discharge or that might permit siphonage of bowl contents back into the tank. Water supplied to tanks must have vacuum breakers or have a positive air gap between top of water in the tank and the water supply inlet.

Toilets should be placed not more than 200 ft from any work place. In multistory buildings, toilets should be not more than one floor above or below the work area. With toilets and lavatories at various points throughout the plant, the main locker room and shower room can be closed for cleaning during the work period, an advantage for the janitorial crew.

Toilet rooms and washrooms for women sometimes have an attendant on duty during use. Washroom attendants should not attempt to give first aid to women who become ill at work. Such aid is best given by the plant nurse or physician. Some states also require that women work no more than a certain distance from a woman's rest room. This should be checked during design stages. Some states also require cots to be installed.

Ventilation is required for toilet rooms. If natural ventilation is relied upon, there should be windows or skylights having a ventilation area of 6 sq ft for a room with one toilet,

TABLE 20-D
MINIMUM TOILET FACILITIES

<i>Number of Employees</i>	<i>Minimum Number of Water Closets*</i>
1 to 15	1
16 to 35	2
36 to 55	3
56 to 80	4
81 to 110	5
111 to 150	6
More than 150	One additional fixture for each additional 40 employees

* Where toilet facilities will not be used by women, urinals may be provided instead of water closets, except that the number of water closets in such case shall not be reduced to less than $\frac{2}{3}$ of the minimum specified.

From OSHA Regulations, § 1910.141(c)(1)

with an additional square foot of window ventilation space for each additional toilet. If this amount of window space cannot be provided, forced ventilation should be supplied at a rate of three to four air changes per hour in the room.

Since windows and skylights generally do not afford sufficient light, light fixtures should be installed in all toilet rooms and washrooms. Switches, for the lights or for electric driers or other equipment, should be located so that they cannot be operated by persons who are at the same time in contact with piping or other grounded conductors.

Individual wall-hung urinals should be provided in the men's room. These may be substituted to the extent of one-third or less of the number of stools specified. Trough urinals are poor substitutes for individual fixtures and are prohibited in many states. Approved urinals must have all surfaces which are subject to soiling accessible for cleaning. Integral screens over the discharge openings are the major cause of chronic toilet room odors because the decomposing soil under the screen cannot be removed by any practicable method. Blow-down washout urinals are the only acceptable type. Floor-type urinals, in which the drain pipe becomes chronically offensive,