



GUIDE TO CLEAN PORTABLE RESTROOMS

PORTABLE SANITATION ASSOCIATION INTERNATIONAL
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When the modern-day flush toilet system was invented it represented one of mankind's most marvelous advancements. Until recently, many workers did not have this convenience available to them. Today, portable field sanitation can provide a dignified, healthful and dependable sanitation system to any location.

The portable sanitation industry set out over 40 years ago to develop portable sanitation facilities that would provide both privacy and cleanliness for human sanitation.

The Portable Sanitation Association International was formed in 1971 by progressive leaders in the portable sanitation industry who realized the necessity to standardize and strengthen government and industry guidelines. The Association promotes the business interests of the industry, stimulates continued improvement in the skills and materials employed in the industry, serves as an industry spokesman and fosters high standards within the industry.

Listed below are a few situations where portable sanitation is in common usage:



PSAI MISSION STATEMENT

It is the mission of the Portable Sanitation Association International (PSAI) to expand and improve portable sanitation services and facilities worldwide and to be recognized as the authority within our industry.

PSAI VISION STATEMENT

The PSAI is an organization which:

- Is recognized internationally as the credible, authoritative voice of the portable sanitation industry.
- Continues to educate the industry, general public and government entities and provides tools to promote safety and health.
- Represents international members through a regional network and assists and promotes the setting of standards and services as a repository of information and resources for all.

Through our efforts the environment is a cleaner, safer place.

PSAI CODE OF ETHICS

The PSAI Member...

- **Conducts** their business in the public interest and adheres to policies and procedures relating thereto.
- **Operates** constantly in accordance with the best and most fully accepted business practices.
- **Provides** safe and sanitary portable equipment and maintenance services at fair, equitable and nondiscriminatory charges.
- **Complies** with all legally applicable governmental regulations.
- **Furnishes** adequate equipment, supplies and qualified personnel to achieve and maintain the highest standard of technical performance.
- **Recognizes** the rights and respect due customers and clients and strives for similar recognition by all service staff members.
- **Recognizes** and respects the rights and privileges of competitors in the true fashion of individual initiative and free competitive enterprise, while offering similar services of constantly increasing quality with a reasonable profit return.
- **Contributes** regularly to the improvement of the industry's public affairs.
- **Strives** for continued improvement of the image and reputation of the industry by practicing good and enlightened public relations in the community and by keeping the community adequately informed of the functions and services of the firm and the industry.
- **Participates** loyally in the industry's growth and progress through the activities and the public interest efforts of the Association.
- **Adheres** to the constitution and bylaws of the Association in their business affairs.
- **Recognizes** the PSAI Code of Ethics are not binding by rule of law but are a moral guideline individually accepted and honored.

CONSTRUCTION, JOB SITES AND ROUTE UNITS



Portable restrooms are the primary sanitation facility for the construction industry. Contractors realize that when employees have to leave the job site or walk too far to use restroom facilities it costs money. *The average time needed, including travel, to make one off-site restroom usage is 7 minutes. If you divide a worker's pay plus benefits/hour by 60 minutes you'll discover the cost for each minute of restroom usage.* A University of Missouri-St. Louis Study, "Provision of Sanitation Facilities at Construction Sites," calculated that at four types of construction sites studied in the St. Louis area, contractors earned an 850% return on their investment in portable facilities. Availability of units was important in the study. Every group of seven (7) workers had access to a facility within 100 feet of the group's central location. Portable units are not only less expensive than permanent facilities but their use improves productivity.

The following table indicates how many portable restroom facilities are needed based on the number of employees:

MINIMUM NUMBER OF RESTROOM FACILITIES

Number of Employees	Minimum Number of Restroom Facilities If Serviced Once/Week
1 - 10	1
11 - 20	2
21 - 30	3
31 - 40	4
Over 40	1 additional facility for each 10 additional employees

Number of Employees	Minimum Number of Restroom Facilities If Serviced More Than Once/Week
1 - 15	1
16 - 35	2
36 - 55	3
56 - 75	4
76 - 95	5
Over 95	1 additional facility for each 20 additional employees

The Occupational Safety and Health Agency (OSHA) requires sanitation facilities at all work sites in the United States. PSAI maintains a close liaison with OSHA and other regulatory agencies such as the American National Standards Institute (ANSI) to assist in the writing, updating and observance of uniform codes and regulations, locally and nationwide.

SPECIAL EVENTS



Proper planning is the key to successful special events and mass gatherings. Studies indicate that adequate restroom facilities have a significant impact on attendance and profitability. Since visual effects make the greatest impression on attendees, special consideration should be given to quantity, placement and service. Because users of the portable restroom facilities determine the quality of service based on both real and perceived conditions, the special events coordinator will want nice, clean, high quality units that are in good repair with vent screens and door locks. Proper service will maintain the condition of the units with regards to the level of waste, the availability of tissue and clean interior. Even if the event is not large enough to warrant pumping service, general housecleaning can make a significant impact on the event.

A bad experience with a portable restroom can affect the users attitude toward the event itself.

Providing too few units can have a major economic impact on promoters and vendors. Providing too many units can cause an excessive expense for the promoters. The following chart provides a guideline in determining the number of portable restroom facilities necessary to provide adequate service for your customers.

NUMBER OF UNITS REQUIRED WHEN NO PUMPING SERVICE IS PROVIDED:

50/50 MIX OF MEN & WOMEN

1 UNIT PROVIDES APPROXIMATELY 200 USES WITH 4 HOURS BETWEEN USES

Average Crowd Size	Average hours at the event									
	1	2	3	4	5	6	7	8	9	10
500	2	4	4	5	6	7	9	9	10	12
1000	4	6	8	8	9	9	11	12	13	13
2000	5	6	9	12	14	15	17	29	23	25
3000	6	9	12	16	20	24	26	30	34	38
4000	8	13	16	22	25	30	35	40	45	50
5000	12	15	20	25	31	38	44	50	56	63
6000	12	15	23	30	38	45	53	60	68	75
7000	12	18	26	35	44	53	61	70	79	88
8000	12	20	30	40	50	60	70	80	90	100
10000	15	25	38	50	63	75	88	100	113	125
12500	18	31	47	63	78	94	109	125	141	156
15000	20	38	56	75	94	113	131	150	169	188
17500	22	44	66	88	109	131	153	175	197	219
20000	25	50	75	100	125	150	175	200	225	250

For anticipated crowds over 20,000 people, please call your local portable restroom contractor or contact the Portable Sanitation Association International at 952-854-8300 / 800-822-3020.

Under normal conditions most persons will use sanitation facilities once every four hours. Each portable sanitation unit should accommodate a maximum of 200 uses. Weather conditions and the consumption of food, liquids, beer and other alcoholic beverages will increase usage by 30-40%. Your local portable sanitation service contractor's experience will help you in planning properly for any event. During large events requiring more than 10 portable restrooms for more than one day requires additional service. This enables the portable restroom contractor to adequately handle any sanitation problems that may arise.

This hypothetical example illustrates how good sanitation planning can impact a special event.

Assumptions:

1. There are 10,000 attendees at an event.
2. The sponsor budgets \$6,000 for portable restroom facilities.
3. Each attendee spends \$3.00/hour at the event.

The average cost for the portable restroom facilities is \$.60/attendee. If the average attendee is satisfied with the cleanliness, availability and absence of long lines to use the portable restroom facilities, he/she will be willing to use the facilities and thus stay at the event longer. If each attendee lengthens his/her visit by only 12 minutes, the additional gross revenues to the event sponsors will pay for the cost of furnishing portable restrooms.

Good planning for sanitation at special events pays! A satisfied customer will stay longer, spend more money and return next year. Your portable restroom contractor can advise you on availability of handwashing units, accessible facilities and many other special event items.

General Statistics:

- Mean toilet use time: Men 54 seconds, Women 75 seconds.
- Average water usage per person per day is 65 gallons.
- Flush toilets use 40% of the water consumed in a home.
- 16.2 gallons of water is used per person per day in flush toilets.
- A portable restroom facility uses 90% less water than a conventional flush toilet.

FOR REFERENCE TO OTHER SANITATION STANDARDS:

OSHA

Occupational Safety & Health Administration
www.osha.gov

EPA

Environmental Protection Agency
www.epa.gov

EU

European Union
Links - www.osha.gov/us-eu/index.html

CSA

Canadian Standards Association
www.csa.ca

ICC

International Code Council
Publisher of the International Plumbing Code referencing ANSI Z4.3
www.intlcode.org

NEHA

National Environmental Health Association
www.neha.org

ANSI

American National Standards Institute
Portable Sanitation Association International (PSAI) is the Secretariat for:
ANSI Z4.1 Sanitation - In Places of Employment - Minimum Requirements
ANSI Z4.3 Sanitation – Nonsewered Waste Disposal Systems - Minimum Requirements
ANSI Z4.4 Sanitation - In Fields and Temporary Labor Camps - Minimum Requirements
www.ansi.org

Contact the PSAI at info@psai.org for other agencies or organizations in your area.



The PSAI logo symbolizes the deep concern the Association has for the preservation and protection of the environment. The arrows symbolize concern for the green earth below and the blue sky above. The field of pure white represents the portable sanitation industry's contribution toward a clean, unpolluted environment by providing portable sanitation facilities for the use of workers and the general public.

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For more information, contact your local portable sanitation contractor:

