

Draft Design Guidelines
for
Public Toilets

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1. The UK Paruresis Trust

The Trust concerns itself with men and women who suffer from a specific social anxiety known as Paruresis, or Shy Bladder Syndrome. These individuals find it very difficult, or impossible, to relieve themselves in the presence, actual or perceived, of other people. This has a devastating effect on their lives, severely restricting mobility, job opportunities, social life, and relationships. The individual generally feels very ashamed and humiliated by his/her handicap, and will go to great lengths to conceal their problem; they certainly do not divulge it to anyone.

In its work, the Trust encourages sufferers to disclose to family and friends that they trust, on a "need to know" basis. As a result of feedback from this process, it had been surprised by the extent to which the non-affected population admits to feelings of discomfort or unease in public toilets; e.g. as many as 1 in 3 men. The triggers for these feelings are due to things that could easily be improved, often at no cost.

Hence this document, which addresses how improving the layout of public toilets would help the general population, improve throughput and incidentally make life easier for those with the condition, as they seek to recover from it.

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1 Purpose of this Document

To establish a set of guidelines on the layout of public toilets

The term "Public toilet" to mean any toilet open to the public, or paying public, in public spaces or commercial properties, for use by more than one person.

To encompass the best advice and experience of users, equipment providers and the British Toilet Association (BTA).

The eventual aim being for these guidelines:

- to be promoted by the BTA, and by equipment providers
- to be addressed to architects etc
- to be incorporated in a British Standard.

Note it is not the intention to introduce proposals that are uneconomic or impractical; the aim is to show that careful consideration of layout can be done within reasonable budgets. The one exception is the provision of an adequate number of female toilets.

The groundwork has already been laid by the DfES Standard specifications, layouts and dimensions – Toilets in schools. The aim should be to take what is considered to be necessary for children in schools and to apply similar standards in public facilities.

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2 Where Does the Need for Privacy Come From

2.1 The Affected Population

Discomfort in a public toilet caused by the public nature of the premises is a phenomenon acknowledged only anecdotally and even then with reservation. This discomfort exists as a range from no discomfort at all at one end, to total inhibition at the other.

At one end of the scale are men and women who see voiding as a purely conscious action: it is an action that they can do without hesitation however crowded or public the situation. They cannot understand how anybody can have any difficulty voiding.

At the other end of the spectrum are individuals of both sexes who are severely inhibited in public situations to the extent of being unable to relieve themselves; there are two conditions: one is known as paruresis, or shy bladder syndrome; the other is parcopresis, or shy bowel syndrome. These are recognised as social anxiety conditions which result in a subconscious switching off of the voiding mechanism: however much the individual wishes to void, the body does not respond. Currently psychotherapy is advised: cognitive behaviour therapy being the current recommendation.

This document does **not** seek to address either of these two populations, though the proposals would significantly help those affected mildly by shy bladder and or shy bowel syndrome.

However in between these two extremes lies a population which is variously affected. This is something that is rarely talked about. This is backed up by psychological research; also the Trust has been in receipt of a wide range of anecdotal evidence. From now on this document refers only to men and women in this mid-range. The current cramped or inappropriate layouts of public toilets result in public discomfort, resulting in a reduction in throughput, which becomes negatively reinforcing i.e. if individuals take longer to relieve themselves, this increases the crowding, so causing individuals to take even longer.

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2.2 Men and Women in Cubicles

For women the main issue is the insufficient number of cubicles, leading to queuing and thence to time pressure.

For both men and women, other issues revolve around:

- a) lack of sound privacy
- b) lack of some visual privacy caused by over large gaps at floor level, inadequate height of partitions and doors, and the gaps between panels when the overlap method of construction is used
- c) inadequate or broken locks.

2.3 Men at Urinals

Men have a varying level of discomfort when

- a) having to stand next to another man, or between two men.
- b) the relatively narrow spacing of urinals results in elbow to elbow contact
- c) there are no modesty screens between urinals, or the screens are inadequate
- d) using troughs
- e) there are queues
- f) there is circulation going on behind them
- g) in stark lighting conditions
- h) in silent conditions.

Evidence is both documentary and anecdotal. It is estimated, based on feedback, that about one third of men exhibit such discomfort, but are reluctant to admit to it for fear of ridicule. See:

1. Psychological research.
2. the Urinal Quiz illustrating the concept of Urinal Etiquette.
3. the Big Issue cartoon of 7 June 2003 No 469

These are elaborated on below.

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2.4 Psychological Research

Middlemist, R. D., E.S. Knowles, and C.F. Matter. 1976. Personal space invasions in the lavatory: Suggestive evidence of arousal. *Journal of Personality and Social Psychology* 33: 541-546.

(Note that arousal in this context refers to anxiety and not to sexual arousal. – Ed)

The hypothesis that personal space invasions produce arousal was investigated in a field experiment. A men's lavatory provided a setting where norms for privacy were salient, where personal space invasions could occur in the case of men urinating, where the opportunity for compensatory responses to invasion were minimal, and where proximity-induced arousal could be measured.

Research on micturation indicates that social stressors inhibit relaxation of the external urethral sphincter, which would delay the onset of micturation, and that they increase intravesical pressure, which would shorten the duration of micturation once begun. Sixty lavatory users were randomly assigned to one of three levels of interpersonal distance and their micturation times were recorded. In a three-urinal lavatory, a confederate stood immediately adjacent to a subject, one urinal removed, or was absent. Paralleling the results of a correlational pilot study, close interpersonal distances increased the delay of onset and decreased the persistence of micturation. These findings provide objective evidence that personal space invasions produce physiological changes associated with arousal.

The result is that the delayed initiation extends the time taken; the reduced voiding time results in incomplete voiding and hence in increased frequency of use of a toilet.

2.5 The Urinal Quiz

See http://gamescene.com/The_Urinal_Game.html

Gamesscene.com is a website of computer "arcade" games of all sorts: it has no association with shy bladder. This quiz demonstrates the unspoken behaviour pattern exhibited by many men, known as Urinal Etiquette.

This behaviour consists of:

- a) maintaining maximum separation between two men
- b) avoiding standing between two men
- c) if forced to stand next to someone, and there is a choice between standing next to one person or next to a group of two or more, joining the group.
- d) If these conditions cannot be met, either using a cubicle, or leaving and returning a bit later.

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The result is that the usage of urinals is lower than that installed, so reducing throughput.

Performing a search on the internet using the term "Urinal etiquette" throws up 13,500 hits, which indicates that this is not an isolated phenomenon.

2.6 Big Issue Cartoon

The Big Issue magazine is sold on the High Street by unemployed vendors; its content is general news and matters related to unemployment. This cartoon (see Appendix B) shows four men elbow to elbow at a trough. A thought bubble above one of the men says "Sh*t.-sh*t! I can't get started..!" The author contacted the cartoonist, who explained that he had been in that situation himself, he knew his mates had as well, but nobody spoke about it. Hence why he decided to bring it into the open via the medium of a cartoon.

2.7 Conclusion

The behaviours outlined in 2.4 – 2.6 above have been witnessed in operation many times. The irony is that spacing urinals close together reduces throughput because:

- a) a proportion of men hold back and wait for a suitable space to become available and/or
- b) voiding takes longer to initiate and to complete and/or
- c) voiding frequency increases.

Appendix A shows how providing fewer urinals at a greater spacing provides more usable urinals than more urinals packed closer together.

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3 Principles and Rationale for the Design and Layout of Public Toilets

3.1 Principles and Rationale - All Toilets

Use ambient lighting that is soft in tone.

To eliminate total silence, provide where feasible a sound track, which can be relevant to the premises. The default could be the sound of waves.

3.2 Principles and Rationale – Cubicles for Both Men and Women

- a) cubicle walls and doors to ideally be floor to ceiling, but in default of that: floor gaps to be the minimum needed to facilitate cleaning (e.g. 5 cm?); ceiling gap to be high enough to remove fear of peeing toms. Reference can be made to the DfES Standard specifications, layouts and dimensions – Toilets in Schools.

3.3 Principles and Rationale - Urinals

- a) Use bowl urinal, not troughs. No-one likes their difficulty in starting to void to be evidenced by the lack of fluid in the trough. Nor do they wish to see other people's urine.
- b) spacing to be such as to avoid the feeling of touching elbow to elbow: the recommendation is 800mm. An alternative is to consider same spacing as cubicles as per the Bog Standard School proposal.
- c) encourage a feeling of personal space and visual privacy by providing privacy screens between urinals. The bottom of the screen should be no more than 500mm off the floor, and to top to be a minimum height of 1700mm above the floor.
- d) provide visual privacy by using privacy screening between the urinal area and other areas e.g. wash basins, hand dryers, entrance door; the sizing to be as above.
- e) Hand dryers and towels to be separated from urinals by 800mm, along with a privacy screen.

3.4 Principles and Rationale – Layout of Male Toilets

The area behind men standing at urinals should not be a gangway, nor an area for circulation e.g. a hand washing or drying area. Instead the preference is for the entrance to be into an area with cubicles on one side, and hand washing and drying

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on the other. Walking through this area is to lead to the far part of the room where the urinals are located, on both sides. Screening between the two areas to be a minimum of 1700mm.

Where hand washing and drying cannot be separated in this way, but has to be level with the urinals, then a 1700mm plus high screen should separate them: see JDWetherspoon pub in Macclesfield, and the Waterhouse in Manchester

In large facilities urinals should be grouped in odds numbers e.g. fives or threes, with further high level screening between the groups.

3.5 Small Two-Urinal Installations

In these locations, the two urinals are presently often put side by side, often at the end of a narrow room. If there is space to achieve the correct separation of 800mm and a privacy screen, there is no problem; if not, they should instead be located at 45 degrees, one into each corner.

Other recommendations are to place them in different areas of the room, instead of side by side, so long as the other guidelines above are met.

A common mistake in small toilets e.g. two urinals and one cubicle, is for the hand dryer to require the user to stand in almost the same space as the urinal user, often at right angles. Again it is preferential to put the urinal side by side with the dryer or wash basin, with a 1 meter separation, and with a full height modesty screen between them.

Alternatively instead of the standard two urinals and one cubicle, provide one urinal and two cubicles.

3.6 Cubicle Seats in Male Toilets

The seat should be counterbalanced so that when not sat upon, the counterweight lifts the seat; if a seat cover is fitted, its weight should be adequate to overcome the counterweight of the seat. The aim is to ensure that the seat is always upright, to avoid getting wet when the pan is used standing.

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3.7 Female Toilets

The number of cubicles provided in female toilets should be based on quantitative data that takes into account:

- a) the longer time needed to void due to clothing
- b) the longer time needed to deal with menstruations issues, pro-rata
- c) the increased frequency of urination vis-à-vis men, due to e.g. childbirth weakening bladder control
- d) mothers with young children
- e) any possibility that the premises could host an all-female population as opposed to a mixed population.

The experience of providers of portaloos to big events is that women take on average three times as long as men. This points to the need for three times as many units for urination. Hence if a male toilet contains say ten urinals and six cubicles, the women's toilet should contain three times the ten urinals, plus the six cubicles i.e. 36 cubicles. The aim should be to eliminate queuing for women. If this provision seems high, the opinion of a range of women should be obtained!

Female toilets are sometimes located well away from well frequented areas; they should be located in the premises in a place where the users feel that they are within calling range for help.

Some female toilets are located down a corridor beyond the male toilet, so the women have to walk past men exiting the male toilet while zipping themselves up. The female toilets should be located so that this scenario is avoided.

3.8 Variable Gender Ratios

In premises that can host populations ranging from all-male, to all-female, via a mixed of male and female, it can be uneconomic to provide the necessary numbers of separate male and female toilets to handle the two extremes. In such cases, the economic case may point towards the provision of unisex cubicles only; or a large proportion of unisex cubicles. In such cases, the use of the counter-balanced seat would improve hygiene. However the example of Italian and Spanish facilities could be followed, which is to provide both a pan and a urinal in each unisex cubicle.

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4 Example Layouts

We thought it might be of interest to show an example of an existing well designed toilet (courtesy of [J D Wetherspoon](#)).

Weblink:

www.ukpt.org.uk/public_toilets/public_toilets_Layouts_Great_Design.htm



On entering the room, the urinals are not visible.



Walk past the 5 cubicles on the left, which have walls down to the floor, and minimal gaps below doors.

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Then the urinals are seen on the left, each separated by a stylish divider from shoulder-height to floor. The urinals are spaced out so men are not elbow to elbow.



A lengthwise seven foot high screen separates the urinal area on the left from the basin area on the right. Hence when standing at a urinal there is no-one behind you.

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When using the basins the urinals are out of view.
Maximum privacy, in a stylish setting.

5 Costings

To be provided.

The DfES Standard specifications, layouts and dimensions – Toilets in schools contains relevant costings.

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6 Appendix A - Improved Spacing of Urinals

A	B	C	D
	600		800
1	600	1	1
2	1200	1	1
3	1800	2	2
4	2400	2	3
5	3000	3	3
6	3600	3	4
7	4200	4	5
8	4800	4	6
9	5400	5	6
10	6000	5	7
11	6600	6	8
12	7200	6	9
13	7800	7	9
14	8400	7	10
15	9000	8	11
16	9600	8	12

Column A is the number of installed urinals.

Column B shows the space in millimeters required at a 600mm spacing.

Column C shows the number of urinals that are used if men avoid standing next to each other because the urinals are too closely spaced

Column D shows the number of urinals that can be fitted into the total space at an 800mm spacing. At this spacing, with shoulder to knee privacy screens, the assumption is that every urinal is likely to be used.

In every case the wider spacing with privacy screens results in more usage. e.g. 12 urinals at 600mm spacing take up 7200mm (column B), but only 6 are used. Column D shows that 9 urinals can be fitted into 7200mm at 800mm spacing, with a greater likelihood that they would all be used.

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7 Appendix B – Big Issue Cartoon



Courtesy of Big Issue Magazine and of Paul Fitzgerald

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8 Appendix C - Contributing Organisations

The UK Paruresis Trust

9 Bibliography

DfES Standard specifications, layouts and dimensions – Toilets in schools

Middlemist, R. D., E.S. Knowles, and C.F. Matter. 1976. Personal space invasions in the lavatory: Suggestive evidence of arousal. *Journal of Personality and Social Psychology* 33:541-546.

http://gamescene.com/The_Urinal_Game.html

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10 Document History

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