





Use

It is essential that the design and layout of changing accommodation allow for flexibility of use by both school and community users. School use of the changing accommodation will be for both physical education classes and extra-curricular use by such as school teams or clubs. Community use may be by individuals, groups, teams or organised classes.

For schools with a swimming pool, separate dedicated swimming pool changing is required.

Both school and community use require separate changing accommodation for indoor and outdoor activities. PE classes may be mixed or single sex, although changing accommodation will always be single sex. However, the facilities must at all times be able to accommodate concurrent use by male and female users and, in some facilities, concurrent use by school and community users.

Scale of Provision

The level of changing accommodation required to meet school needs is partly derived from the number and type of teaching spaces, but more directly from the numbers of classes likely to be taking PE at any given time. [Appendix I sets out in detail the appropriate calculations.] It is also important to ensure that there is sufficient provision to accommodate expected levels of extra-curricular use by school teams, after-school clubs and for sports days.

The amount of changing accommodation required for school use should normally prove sufficient for community use. This is subject, however, to the exact programming and use of the facility. An assessment of the community requirements for changing facilities, based on how the activity spaces will be used and allowing for overlapping use by successive users, should therefore be undertaken in order to ensure that sufficient accommodation is provided.

Layout

In addition to separate male and female accommodation, school use also needs to be split for different class groups. This results in a series of changing rooms and is different from the more open-plan approach of most modern community sports centres (which often have female and male changing areas plus a buffer area). This arrangement can nevertheless be suitable for both school and community use providing the detailed design and specification is carefully considered.

Design of changing accommodation should be based on a minimum allowance of one square metre of changing space per person, including 500mm of bench space but excluding shower, toilet and circulation space. There are several issues which will influence the design approach taken, and a number of possible solutions.

Drawings 6 and 7 show some suggested approaches designers may wish to consider, and demonstrate some of the issues involved. These drawings should be considered as indicative only, and designers may find other solutions which work equally well.

One unit, consisting of two rooms, is required for each class. The units are designed to accommodate class sizes of around

30. Allowing for imbalance in the male/female split in such a class, the rooms are however each capable of accommodating 20 people. These together form a standard changing unit for one 30-person class. If class sizes will always be smaller than 30 then the size of rooms may be reduced accordingly, providing flexibility of use can be maintained.

To aid supervision and flexibility of use, changing rooms may be linked by lockable doors. To further aid flexibility, the toilet facilities should be suitable for male or female use. However, it will be easier to manage school and community use by programming the same changing rooms for the same sex from day to day and week to week (especially if toilets are fitted with feminine hygiene products). If rooms are permanently for male use, one WC can be replaced by two urinals.

It will generally make sense to group male and female changing rooms together. This makes for a more understandable layout for users and allows easier supervision of single-sex groups by teachers. If changing rooms are indeed expected to be used by different sexes at different times, clear signage is needed for each room. This should be easily changeable, but accessible only to staff.

Changing accommodation for outdoor activities has a somewhat different design than for indoor activities. These units should be situated at the entrance to the facility from the playing fields to avoid trailing mud, sand etc. through the building.

Indoor Changing Units

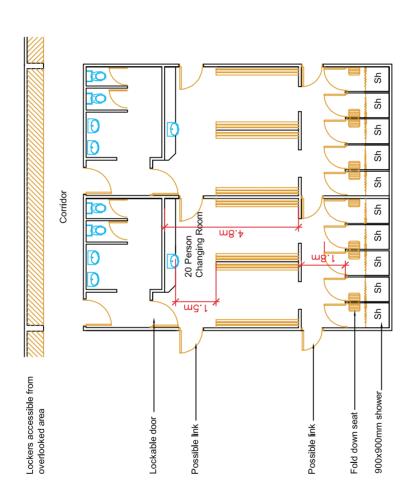
Drawing 6 shows one possible approach to providing changing facilities for indoor activity. Each unit has two changing rooms with bench space for 20 people. Rooms and units may be linked by lockable doors. The door between the changing rooms and the toilets is lockable to allow access to the toilets from the teaching spaces during class time while pupils' clothes and bags can be locked in the changing room. For community use, the rooms will generally be unlocked, with lockers provided in the area outside the changing rooms.

Outdoor Changing Units

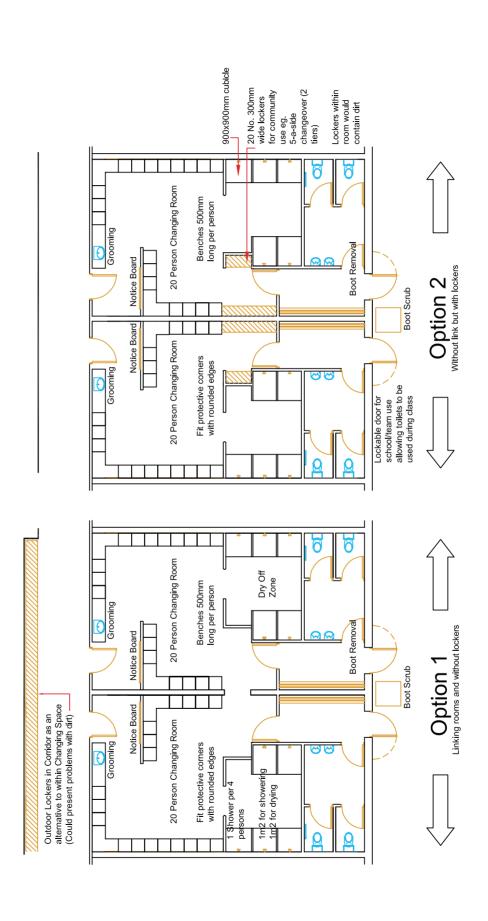
Drawing 7 shows two possible layouts, with the option of placing lockers inside or outside the changing rooms. It will prove easier to contain mud and dirt from the playing fields if lockers are inside the rooms, but the lockers will be afforded less supervision. The units each consist of two team-changing rooms. They are suitable for all outdoor activity whether by teams or individual. A benched area should be provided at the playing field entrance to the rooms to allow boots and other muddy equipment to be removed. Sufficient space should be allowed for equipment such as hockey sticks and cricket bats and pads.

Changing Accommodation for Wheelchair Users

Children with a disability are included in mainstream education where appropriate, and this principle should extend to taking part in and changing for PE. Depending on the anticipated need, at least two of the changing rooms (one male and one female) should therefore be adapted to accommodate one wheelchair user and a helper. Designers should therefore ensure there is sufficient circulation space and appropriate bench, toilet, showering and grooming facilities. In addition, separate disabled changing accommodation should also be provided where changing within the group would not be appropriate. Such spaces could also be used as changing space for staff or officials.



Drawing 06: Indoor Changing



Drawing 07: Outdoor Changing Accommodation



Lockers should be in a well-supervised area, such as a corridor or within sight of the reception desk.

Showers

Privacy is a crucial consideration in the design and layout of the showering, drying and changing areas. For community use, the privacy afforded by individual shower cubicles is becoming more and more the expected norm. This is also the case in schools, with pupils (especially girls) becoming increasingly unwilling to shower and change without such privacy. Several options are available to designers, from providing individual shower and changing cubicles to providing communal showers without partitions.

Drawing 6 is based on individual shower cubicles, each with their own private drying/changing compartment. This provides maximum privacy but means that the cubicles are occupied for a significant length of time by each user and the showers are unavailable for use until the changing compartment is vacated. This is perhaps a particular problem for school use when pupils are required to change during the PE period and so any time wasted eats into activity time or extends into the subsequent period or break. This may be overcome somewhat by encouraging pupils to use the drying/changing cubicle quickly, but this may not have much influence in practice.

The only sure way of ensuring a quicker turnaround in the changing rooms for this option is to provide more showers. Time may not be so critical for community use as some users prefer to shower at home and community users are not under the same pressure to shower and change quickly.

Drawing 7 shows shower cubicles, but no drying cubicles. Outdoor and team changing areas have tended to be provided with communal showering facilities, but that is becoming less popular for community users and gives very little privacy. For team sports, privacy can however be less of an obstacle to showering, and the fact that users may be muddy means that everyone may need a shower and so turnaround times are particularly important. It should be remembered, however, that not all outdoor activity is team-based and that users who require privacy are likely to feel the same way about communal changing after any activity whether it be outdoor or indoor.

Neither of the above options should be assumed to represent an ideal solution. They have been chosen in order to demonstrate the privacy and management issues which must be considered when designing showering and changing accommodation. Designers should carefully consider these issues, as well as the needs of all the facility users and the requirements and policies of the Local Education Authority, before deciding on the nature of the changing facilities to be provided. Communal shower facilities, however, are unlikely to be acceptable.

The above options are based on five showers per room, providing around one shower for every two to four pupils depending on class size and the balance between male and female. For community use, they provide a minimum of one shower for every four changing spaces.

To avoid cross circulation and prevent water migration, showers should be located as far as possible from doors leading to the activity spaces.

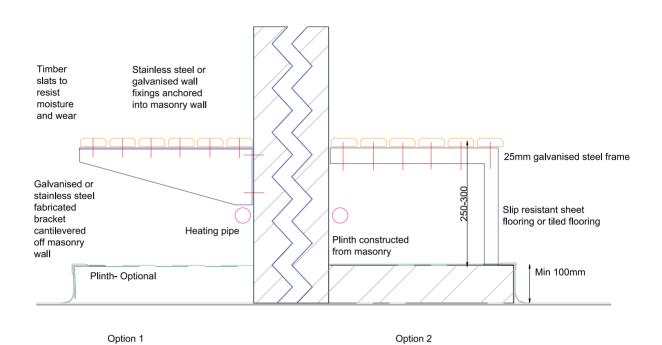
Lockers

A mix of full size and half size lockers are required for community use. These should be located in a well-supervised area outside but close to the changing areas and on a main route to the activity/teaching spaces.

Sufficient lockers should be provided for the maximum number of users of the facility expected at any one time, with an additional allowance for overlap between successive users and for a proportion being out of order at any one time. A four-court hall will require around 40 lockers to allow for overlapping of users, and a dance studio around 60. The gymnasium's requirements will depend on its use, but an allowance of around 25 may be sensible. Finally, allowing perhaps 1 1/2 lockers for every piece of fitness room equipment will mean an overall requirement of around 150-160 lockers for a facility with each of the above four activity spaces.

Additional lockers are likely to be required for outdoor changing rooms, although it may be acceptable instead to lock each room while the team is outside.

The lockers in the PE facility should not generally be for school use as this is likely to mean they are often occupied for days at



Drawing 08: Examples of Bench Details

a time and therefore unavailable for community use. Pupils' clothes and bags can be left in the changing room which will be locked during teaching time, and the main pupil lockers situated elsewhere in the school can be used for the storage of PE and other equipment during the school day.

Performance Requirements

Changing rooms should provide good levels of user comfort, adequate space standards, a clear circulation pattern and have fixtures and finishes which are durable and which ensure easy maintenance and high levels of cleanliness. Materials specified should have maximum possible resistance to corrosion, especially for concealed or inaccessible components of the services systems. This should not, however, require user comfort and aesthetic standards to be reduced as community use is likely to require a higher specification of finishes than would normally be chosen for a school.

The floor should be non-slip, impervious to water and quick drying. Floor drainage should be provided to allow for hosing down of floors in all areas of the changing rooms. Wall surfaces in the changing areas should be non-abrasive, smooth finished and require low maintenance. The ceiling should preferably be sound absorbing. Suspended ceilings with push in panels should be avoided as they are particularly prone to vandalism.

Each changing space should have a minimum of 500mm of fixed benching, 450mm deep. Benches must be of robust construction and resistant to moisture with the detailing of floor and wall supports requiring particular attention.

Drawing 8 shows two alternative options for such detailing. Both of these lift the bench supports clear of the floor, thus reducing the likelihood of corrosion from regular cleaning of the floor. The plinths shown also allow bags and shoes to be stored under benches, free from a muddy or wet floor.

Outdoor activities generally result in tougher use and finishes must be specified accordingly, for example to withstand studs and general wear and tear from bats and balls.

Environment

A general illuminance of 200 lux is recommended. Light fittings should be robust, tamper and vandal proof, water and corrosion resistant and recessed into the ceiling if possible.

A temperature of around 20°C should be maintained. Underfloor or low-level heating should be considered in order to help maintain warm, dry floor areas. Location and protection of heat emitters should take account of safety and the risk of vandalism. A well distributed mechanical ventilation system providing 10 to 12 fresh air changes per hour should ensure that comfortable conditions are maintained.

Power outlets should be recessed, have a protective cover and be suitable for use in wet environments. Drinking water should be provided in each changing room.

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