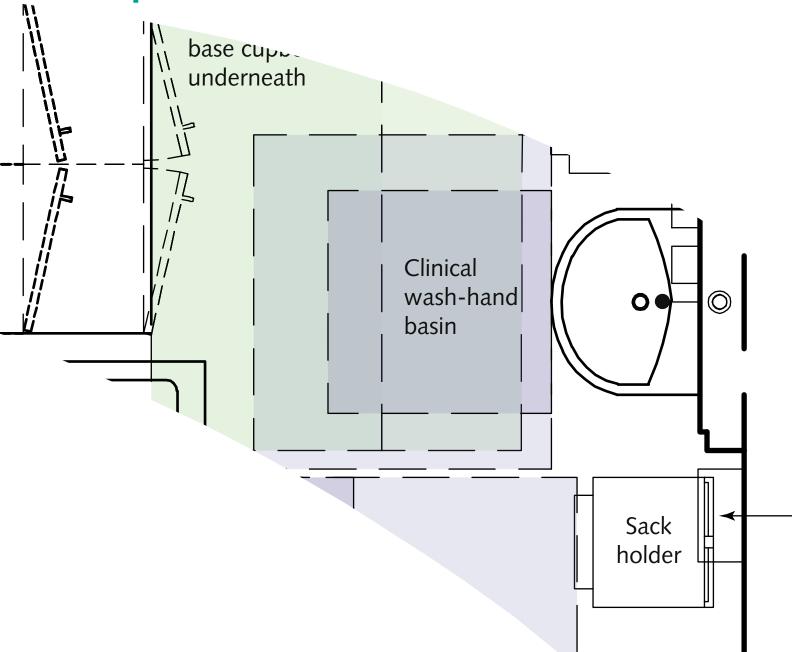


# **Core elements**

# Health Building Note 00-03: Clinical and clinical support spaces



# Health Building Note 00-03 Clinical and clinical support spaces

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## **Preface**

### **About Health Building Notes**

Health Building Notes give "best practice" guidance on the design and planning of new healthcare buildings and on the adaptation/extension of existing facilities.

They provide information to support the briefing and design processes for individual projects in the NHS building programme.

### The Health Building Note suite

Healthcare delivery is constantly changing, and so too are the boundaries between primary, secondary and tertiary care. The focus now is on delivering healthcare closer to people's homes.

The Health Building Note framework (shown below) is based on the patient's experience across the spectrum of care from home to healthcare setting and back, using the national service frameworks (NSFs) as a model.

### Health Building Note structure

The Health Building Notes have been organised into a suite of 17 core subjects.

**Care-group-based** Health Building Notes provide information about a specific care group or pathway but cross-refer to Health Building Notes on **generic (clinical) activities** or **support systems** as appropriate.

Core subjects are subdivided into specific topics and classified by a two-digit suffix (-01, -02 etc), and may be further subdivided into Supplements A, B etc.

All Health Building Notes are supported by the overarching Health Building Note 00 in which the key areas of design and building are dealt with.

### **Example**

The Health Building Note on accommodation for adult in-patients is represented as follows:

"Health Building Note 04-01: Adult in-patient facilities"

The supplement to Health Building Note 04-01 on isolation facilities is represented as follows:

"Health Building Note 04-01: Supplement 1 – Isolation facilities for infectious patients in acute settings"

Health Building Note number and series title	Type of Health Building Note
Health Building Note 00 – Core elements	Support-system-based
Health Building Note 01 – Cardiac care	Care-group-based
Health Building Note 02 – Cancer care	Care-group-based
Health Building Note 03 – Mental health	Care-group-based
Health Building Note 04 – In-patient care	Generic-activity-based
Health Building Note 05 – Older people	Care-group-based
Health Building Note 06 – Diagnostics	Generic-activity-based
Health Building Note 07 – Renal care	Care-group-based
Health Building Note 08 – Long-term conditions/long-stay care	Care-group-based
Health Building Note 09 - Children, young people and maternity services	Care-group-based
Health Building Note 10 – Surgery	Generic-activity-based
Health Building Note 11 – Community care	Generic-activity-based
Health Building Note 12 – Out-patient care	Generic-activity-based
Health Building Note 13 – Decontamination	Support-system-based
Health Building Note 14 – Medicines management	Support-system-based
Health Building Note 15 – Emergency care	Care-group-based
Health Building Note 16 – Pathology	Support-system-based

# Other resources in the DH Estates and Facilities knowledge series

### Health Technical Memoranda

Health Technical Memoranda give comprehensive advice and guidance on the design, installation and operation of specialised building and engineering technology used in the delivery of healthcare (for example medical gas pipeline systems, and ventilation systems).

They are applicable to new and existing sites, and are for use at various stages during the inception, design, construction, refurbishment and maintenance of a building.

All Health Building Notes should be read in conjunction with the relevant parts of the Health Technical Memorandum series.

### Activity DataBase (ADB)

The Activity DataBase (ADB) data and software assists project teams with the briefing and design of the healthcare environment. Data is based on guidance given in the Health Building Notes, Health Technical Memoranda and Health Technical Memorandum Building Component series.

- Room data sheets provide an activity-based approach to building design and include data on personnel, planning relationships, environmental considerations, design character, space requirements and graphical layouts.
- 2. Schedules of equipment/components are included for each room, which may be grouped into ergonomically arranged assemblies.
- 3. Schedules of equipment can also be obtained at department and project level.
- 4. Fully loaded drawings may be produced from the database.
- Reference data is supplied with ADB that may be adapted and modified to suit the users' project-specific needs.

### **Note**

The sequence of numbering within each subject area does not necessarily indicate the order in which the Health Building Notes were or will be published/printed. However, the overall structure/number format will be maintained as described.

# **Executive summary**

Health Building Note 00-03 – 'Clinical and clinical support spaces' provides evidence-based best practice guidance on the design and layout of generic clinical and clinical support spaces for use in healthcare settings.

Room sizes have been standardised wherever possible. For clinical support areas where a standard room size is not appropriate, this document provides a sizing methodology suitable for briefing purposes. Most of the indicative room layouts are informed by one or more ergonomic drawings.

In places, the guidance differs from that provided in Approved Document M (2010) and BS 8300:2001 (2009 edition). Where this is the case, the reasons for the variations are discussed.

Health Building Note 00-03 - Clinical and clinical support spaces

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### 1 Introduction

1.1 Health Building Note 00-03 provides design guidance and indicative room layouts of generic clinical and clinical support spaces in healthcare buildings.

### Purpose and scope of this document

- 1.2 Most of the layouts are informed by one or more ergonomic drawings (the colour-coding on the room layouts relates to ergonomic information). Both the ergonomic drawings and indicative room layouts aim to enable spaces to be designed that are fit for purpose, accessible, safe and secure.
- 1.3 The indicative room layouts represent example design solutions, not specific recommendations. Actual requirements should be determined on an individual project basis.
- 1.4 Although primarily applicable to new buildings, the recommendations contained within this guidance should also be applied, where practical, when existing facilities are being upgraded.

# Principle of using generic rooms wherever possible

1.5 Generic rooms are designed to accommodate a range of activities rather than being tailored for a single function/specialty or narrow range of functions. 1.6 Clinical and clinical support rooms should be generic wherever possible to maximise flexibility in use. Generic rooms make up a high proportion of the clinical and clinical support spaces within healthcare buildings.

### Standardised room sizes

- 1.7 The size (and dimensions) of the indicative room layouts have been standardised wherever possible. This may mean sizing up to some extent, but results in rooms that can be adapted (for alternative use) much more easily.
- 1.8 For clinical support areas where a standard room size is not appropriate, this document provides a sizing methodology suitable for briefing purposes.
- 1.9 Where special departmental requirements warrant a variation from the spaces described in this document, information is provided in the relevant guidance.

### **Evidence** base

1.10 This document is based on the professional opinion of healthcare planning and design experts and ergonomic research (published and unpublished).

# 2 Generic clinical spaces: Beds

### Single-bed room

### Room description and layout

- 2.1 There are three distinct categories of direct activity that take place at the bedside:
  - clinical treatment and care:
    - (i) admission, with the intimate discussion of personal matters;
    - (ii) specific medical and nursing interventions and observation;
    - (iii) rehabilitation;
    - (iv) informing, discussing, listening and advising both patients and relatives;
  - personal care and maintenance:
    - (i) sleeping and resting;
    - (ii) eating, drinking, washing and toileting;
    - (iii) entertainment/diversion, reading, watching the television;
    - (iv) receiving visitors;
  - support activities:
    - (i) preparation of clinical procedures;
    - (ii) maintaining records;
    - (iii) holding stores;
    - (iv) communicating;
    - (v) developing staff skills.
- 2.2 The example layout for a single-bed room (see Figure 1) shows the zones to enable these activities to take place around a bed space.
- 2.3 The bed space should allow procedures to be carried out from either side of the bed with adequate circulation space so that medical emergency teams and equipment can gain access to the patient. There should be adequate space for moveable furniture and unobstructed access for

- wheelchairs, as well as space to accommodate overnight visitors.
- 2.4 All single rooms should be provided with en-suite sanitary facilities and all bed spaces should be provided with:
  - furniture:
    - (i) a variable-height bed;
    - (ii) a bedside locker, with a lockable compartment for storing medication;
    - (iii) an overbed table;
    - (iv) a bedhead luminaire;
    - (v) space for a relative's overnight stay bed;
    - (vi) space for storing clothes and shoes;
    - (vii) a small refrigerator for a patient's personal use (optional).
  - a co-ordinated bedhead services arrangement incorporating:
    - (i) electrical socket-outlets;
    - (ii) luminaire control switch;
    - (iii) oxygen, medical air and vacuum outlets;
  - a patient services system (which may be incorporated into the bedhead services panel) including:
    - (i) help call button, including two-way speech facilities (consideration might also be given to alternative call systems, such as blow devices, for patients who cannot use their hands);
    - (ii) reassurance light;
    - (iii) luminaire switch:
  - patient entertainment facilities including:
    - (i) TV;
    - (ii) radio;
    - (iii) telephone;

- (iv) headset outlet;
- facilities for staff:
  - (i) a clinical wash-hand basin, plus antibacterial hand-rub dispensers;
  - (ii) a clinical support zone with data outlet;
  - (iii) storage for a day's supply of linen and surgical goods/supplies.
- 2.5 These provisions are necessary as the basis of a desirable environment.
- 2.6 The layout for a single-bed room (see Figure 1) is an example only. Its purpose is to illustrate how the different elements of the room bed space, ensuite, clinical support zone, and family zone can be brought together. Other configurations are possible.
- 2.7 In the design of the example layout, the following issues have been considered:

- clear space around the bed (3600 mm × 3700 mm);
- position of the en-suite shower room;
- bedroom door width into the room;
- location of the clinical wash-hand basin;
- provision of support facilities including space for a fold-down divan;
- sightlines from the corridor (at the doorway).
- 2.8 It is assumed that conventional bedhead services are used, although the use of ceiling- or wall-mounted pendant fittings is possible.
- 2.9 The en-suite comprising WC, washbasin and shower is shown with a chamfered profile. For a rectangular layout, refer to 'Shower rooms' in Health Building Note 00-02 'Sanitary spaces'.

Touchdown base external to room Family zone Bedhead services Clinical support zone En-suite shower room 0098 Bedspace

3700

Bedspace
This is the clear space required for access around the bed for:

- moving and handling of patients
- patient transfers into and out of bed (including ceiling-mounted hoists)
  - clinical activity including resuscitation
     bed making
- manoeuvring the bed in and out of the room

manoeuvring equipment
 Note: it does not include space for built-in or fixed furniture. It does include space for door swings.

En-suite shower room The space required for the en-suite includes not only the enclosed area but also the temporary manoeuvring space for assisting a patient on both sides of the WC which overlaps the bed space.

# Clinical support zones

This includes space for clinical support, hand-washing, built-in storage and space for movable equipment such as supply or disposal trolleys. Note: This space does not overlap the clear bed space.

# Social (family) support zone

Space can be provided for overnight stay either as built-in furniture or space for demountable bed or recliner. This should not impede access to the bedside or into the room. The illustration shows one of the options. Alternatives include window seat and wall-mounted fold-down bed settee.

# Touchdown base (nurses' workstation)

rooms or clusters of rooms. These are best located near to room entrances so that it is possible to observe the patient from outside the room. The location of these workstations should not obstruct the Clinical nursing stations or "touchdown" bases will be provided adjacent to individual rooms, paired primary circulation space and will be dependent on the location of the room entrance.

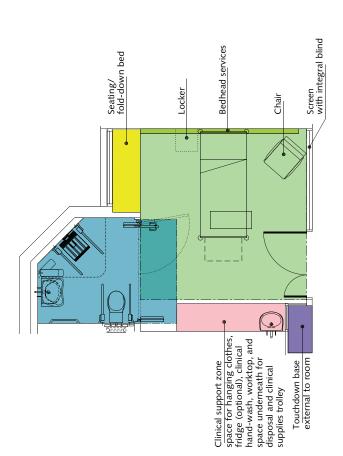


Figure 1 Example layout for a single-bed room

### Multi-bed room

### Room description and layout

- **2.10** There are three distinct categories of direct activity that take place at the bedside:
  - clinical treatment and care:
    - (i) admission, with the intimate discussion of personal matters;
    - (ii) specific medical and nursing interventions and observation;
    - (iii) rehabilitation;
    - (iv) informing, discussing, listening and advising both patients and relatives;
  - personal care and maintenance:
    - (i) sleeping and resting;
    - (ii) eating, drinking, washing and toileting;
    - (iii) entertainment/diversion, reading, watching the television;
    - (iv) receiving visitors;
  - support activities:
    - (i) preparation of clinical procedures;
    - (ii) maintaining records;
    - (iii) holding stores;
    - (iv) communicating;
    - (v) developing staff skills.
- 2.11 The example layout for a single-bed room shows the zones to enable these activities to take place around a bed space. In a multi-bed room (see Figure 2) the different activity zones move to a greater or lesser degree further away from the bedside, and may be shared to support all the beds in the multi-bed room.
- 2.12 The preferred maximum number of beds in a multi-bed room is four. This enables the potential for better gender separation and improved privacy within a 24-bed ward comprising six four-bed rooms. It also gives each patient a corner as a "home base" and a neighbour on one side only.
- 2.13 The bed space should allow procedures to be carried out from either side of the bed with adequate circulation space so that medical emergency teams and equipment can gain access to the patient. There should be adequate space for moveable furniture and unobstructed access for

- wheelchairs, as well as space to accommodate overnight visitors.
- 2.14 All multi-bed rooms should be provided with ensuite sanitary facilities and all bed spaces should be provided with:
  - furniture:
    - (i) a variable-height bed;
    - (ii) a bedside locker, with a lockable compartment for storing medication;
    - (iii) an overbed table;
    - (iv) a bedhead luminaire;
  - a co-ordinated bedhead services arrangement incorporating:
    - (i) electrical socket-outlets;
    - (ii) luminaire control switch;
    - (iii) oxygen, medical air and vacuum outlets;
  - a patient services system (which may be incorporated into the bedhead services panel) including:
    - (i) help call button, including two-way speech facilities (consideration might also be given to alternative call systems, such as blow devices, for patients who cannot use their hands);
    - (ii) reassurance light;
    - (iii) luminaire switch;
  - patient entertainment facilities including:
    - (i) TV;
    - (ii) radio;
    - (iii) telephone;
    - (iv) headset outlet;
  - facilities for staff:
    - (i) a clinical wash-hand basin, plus antibacterial hand-rub dispensers;
    - (ii) a clinical support zone with data outlet;
    - (iii) storage for a day's supply of linen and surgical goods/supplies.
- 2.15 These provisions are necessary as the basis of a desirable environment.
- 2.16 In multi-bed rooms each bed space should be separated to provide a degree of privacy. If curtains are used they should be shadow-proof and flame-

- retardant. When full-height curtains are drawn, the bed space should still be well illuminated and ventilated. Curtains may be disposable. Highly-patterned curtains should be avoided, as they can cause visual disturbances in patients who are confused or heavily sedated.
- 2.17 Each four-bed room should include two clinical wash-hand basins for staff use. These should be located to be highly visible and convenient for staff to use, both on entering and leaving the room and when moving from one patient to another. A clinical support zone with space for a computer and storage for a day's supply of linen and clinical goods is required for each multi-bed bay.
- 2.18 Design teams should decide in consultation with the local fire authority whether multi-bed rooms should or should not be fitted with doors for fire safety reasons, for example to limit the spread of smoke. The infection control team should also be consulted on the use of doors in multi-bed rooms.

- 2.19 Each multi-bed room should have easy access to informal social space, as the majority of patients, although highly dependent, are encouraged out of bed.
- 2.20 The layout for a multi-bed room is an example only. It shows a four-bed room with an assisted shower room and a second semi-ambulant WC, both en-suite.
- 2.21 An en-suite with fully opening wall cannot be used in this layout because of the loss of privacy in a multiple-occupancy room. Each en-suite has an outward-opening single-leaf door. The two ensuites are located inboard, forming a recess at the entrance to the bed areas, providing some privacy to the bed areas. Two clinical wash-hand basins are located centrally, one next to the room entrance and the other on the outside wall. There is room for one clinical support zone.

Figure 2 Multi-bed room layout

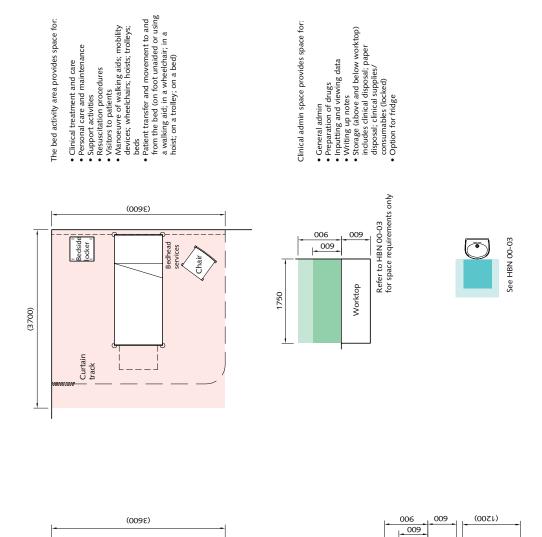
3100

(3700)

| Curtain | track

Curtain track

0



Chair

Chair

Clinical admin space

Curtain track

Curtain track

Curtain

Chair

Worktop

See HBN 00-02

(0977)

See HBN 00-02 (excluding luggage space

(3050)

Service duct

(1500)

# 3 Generic clinical spaces: Consulting, examination and interview spaces

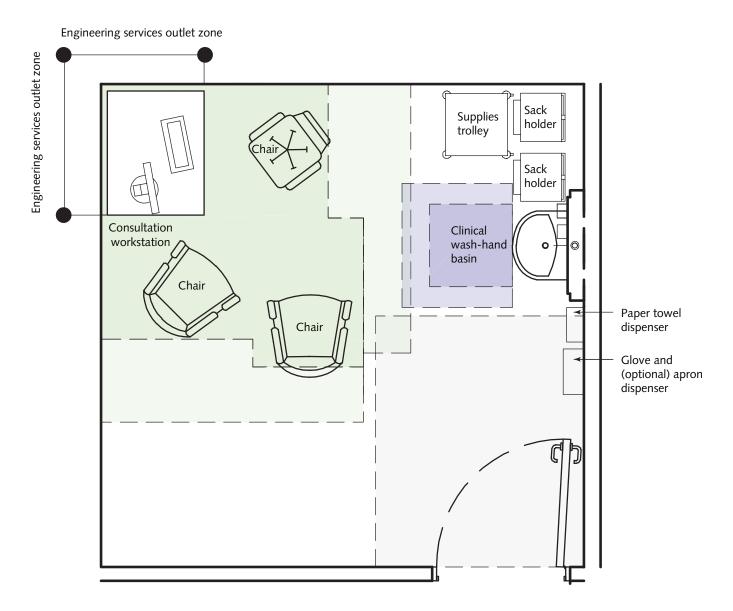
### **Consulting room**

### Room description and layout

- 3.1 For future flexibility (adaptability) the size of a standard consulting room should be around 12 m<sup>2</sup>. However, the absolute minimum recommended area is 8 m<sup>2</sup>.
- 3.2 The room layout provided (see Figure 3) means the patient/client will be positioned between the practitioner and the door during consultation.

  Consideration may be given to altering the layout to position the practitioner between the patient/client and the door for staff safety.

Figure 3 Consulting room



## Separate versus combined consulting and examination rooms

- 3.3 Separate consulting and examination rooms (see Figure 4) do not provide the flexibility of combined consulting/examination rooms although they may be required for certain clinics.
- 3.4 Where separate consulting and examination rooms are provided, there should not be adjoining doors between adjacent examination rooms for reasons of patient privacy.
- 3.5 A comparison of the space requirements and utilisation of four combined consulting/ examination rooms against two consulting rooms and four examination rooms shows the combined rooms require less space and offer greater utilisation.

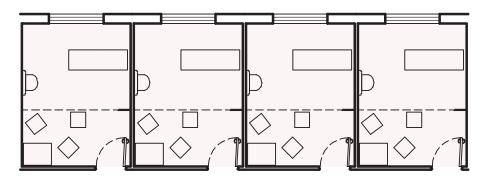
Figure 4 Combined versus separate consulting and examination rooms

Example 1: 4 Consulting/examination rooms (@ 16 m²)

Range of uses:

1–4 doctors

1-4 clinic sessions

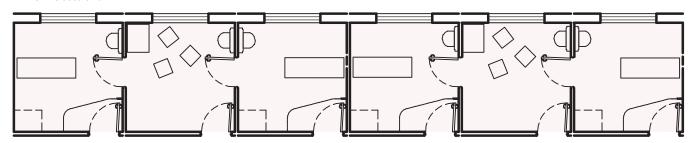


Example 2: 2 Consulting and 4 examination rooms (@ 12 m²)

Range of uses:

1–2 doctors

1-2 clinic sessions



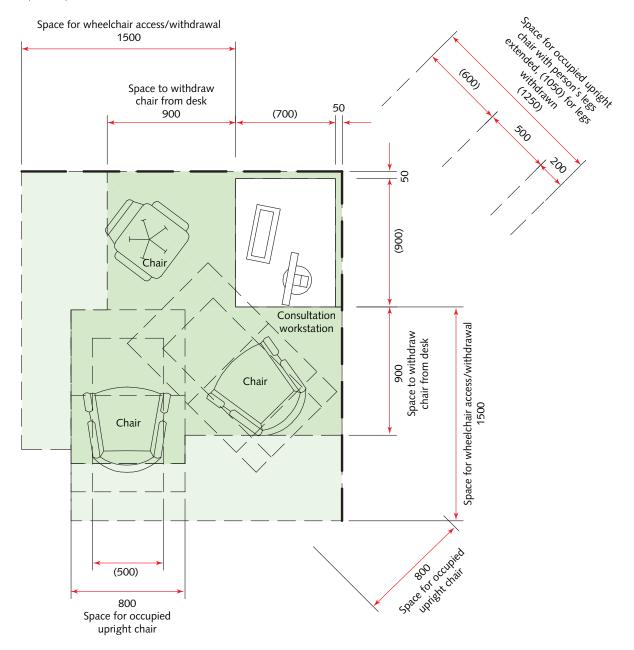
### **Ergonomic drawings**

### Consultation workstation

- 3.6 This ergonomic drawing (see Figure 5) shows a nominal space requirement for a consultation workstation. The actual space requirement will depend upon the design and location of the chairs and the design of the desk. The illustrated desk is the recommended minimum dimension for using a flat screen computer.
- 3.7 The activity space is based on the practitioner sitting at the desk with the patient/client seated diagonally opposite. The desk should not be located between the practitioner and patient/client.

- 3.8 It should be possible to rotate the computer monitor to allow the patient/client to view it.
- 3.9 The consultation desk should be positioned so that:
  - the practitioner can acknowledge a patient/ client on entry to the room;
  - the practitioner is not be silhouetted against a window when in consultation with the patient/ client.
- **3.10** A small lockable drawer should be available to store prescription pads if electronic prescriptions are not being used.
- 3.11 A small local printer may be provided.

Figure 5 Space requirement for a consultation workstation



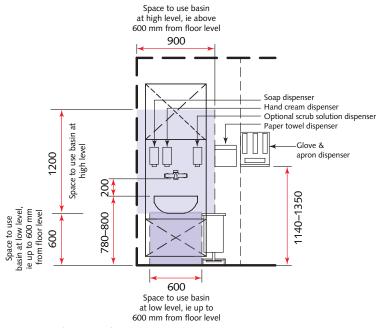
### Clinical wash-hand basin

- 3.12 These ergonomic drawings (see Figure 6) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- 3.13 The basin should be fitted with non-touch taps.
- 3.14 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 3.15 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/ or activities undertaken within any space should be considered when evaluating any room layout.
- 3.16 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- 3.17 The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:

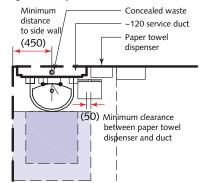
"Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."

- 3.18 Lever taps are not illustrated.
- 3.19 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

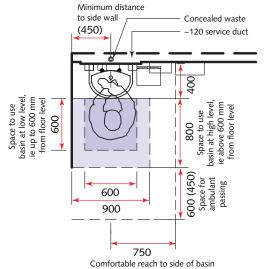
Figure 6 Space requirements for standing use of a clinical wash-hand basin assembly



Elevation (showing sensor tap)



Projecting concealed services duct



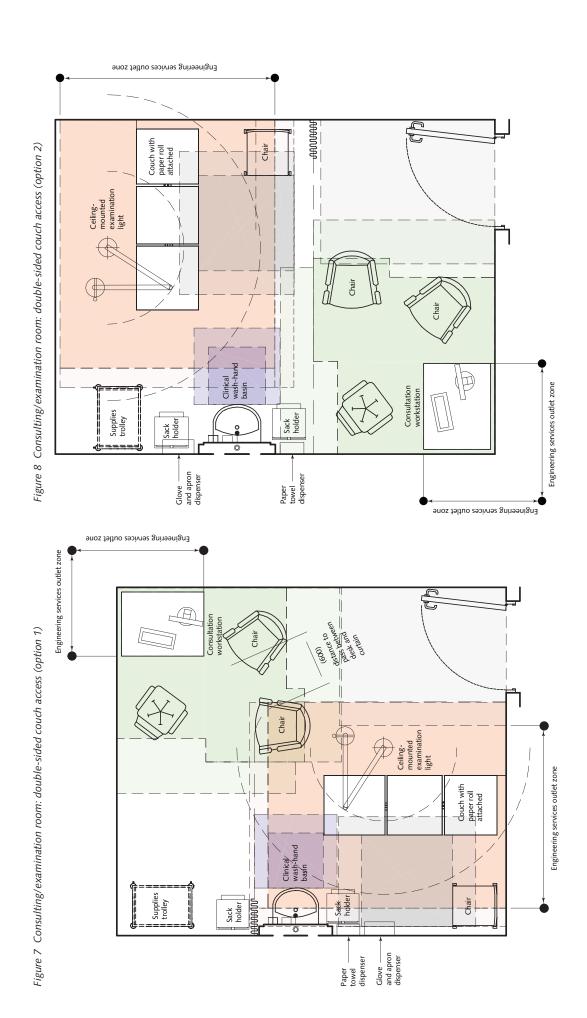
Flush concealed services duct

### Consulting/examination room: doublesided couch access

### Room description and layout

- 3.20 This room is intended as a flexible space for consultations and examinations for use by a wide range of specialties.
- 3.21 The following procedures may take place in this room:
  - non-invasive procedures i.e. procedures that do not break the skin e.g. changing a dressing;
  - minimally invasive procedures i.e. procedures that break or puncture the skin e.g. injections, taking blood etc.
- 3.22 Where it is not necessary to access both sides of the couch, the single-sided room layout may be used but to maximise flexibility and adaptability double-sided couch access is generally recommended.
- 3.23 The layout shows the clinical wash-hand basin within the curtained examination area. However, its location should be subject to local policy and infection control advice. It must be easily accessible from both the consultation and examination areas. The curtain should be located to prevent it becoming contaminated from use of the clinical wash-hand basin.
- 3.24 Piped medical gases are generally not required. In emergency situations it is anticipated that bottled

- oxygen and mobile suction equipment will be readily available.
- 3.25 Two room layouts have been provided (see Figures 7 and 8). Both include a standard three-section couch. In both options, the patient/client is positioned between the member of clinical staff and the door during consultation. Consideration may be given to altering the layout to position the practitioner between the patient/client and the door for staff safety.
- 3.26 In option 1, the consultation space will benefit from natural light if a window is installed in the wall opposite the door, and is ideally positioned for greeting the patient/client. If a window is provided as suggested, solar shading and/or a blind may be necessary to ensure that the practitioner is not silhouetted from the light behind.
- 3.27 Option 2 is identical to option 2 of the treatment room. This could aid future adaptability. It has the disadvantage of the consultation area being located on the inside wall (i.e. generally away from natural light, if a window is installed in the wall opposite the door) and the examination area being located on the outside wall (i.e. requiring privacy control due to the likely proximity of a window).
- 3.28 The primary function of the room could be considered to be consultation. However, in option 2, the examination space is immediately in front of the patient/client as they enter the room.



## Separate versus combined consulting and examination rooms

- 3.29 Separate consulting and examination rooms may be justified for some clinics. However, they do not provide the flexibility of combined consulting/ examination rooms. See Figure 9.
- **3.30** Where separate consulting and examination rooms are provided, there should not be adjoining doors between the rooms for reasons of patient privacy.
- 3.31 A comparison of the space requirements and utilisation of four combined consulting/ examination rooms against two consulting rooms and four examination rooms shows the combined rooms require less space and offer greater utilisation.

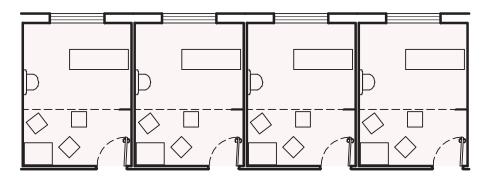
Figure 9 Combined versus separate consulting and examination rooms

Example 1: 4 Consulting/examination rooms (@ 16 m<sup>2</sup>)

Range of uses:

1-4 doctors

1-4 clinic sessions

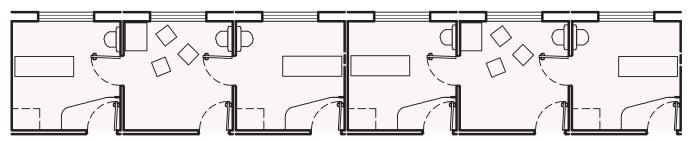


Example 2: 2 Consulting and 4 examination rooms (@ 12 m<sup>2</sup>)

Range of uses:

1-2 doctors

1-2 clinic sessions

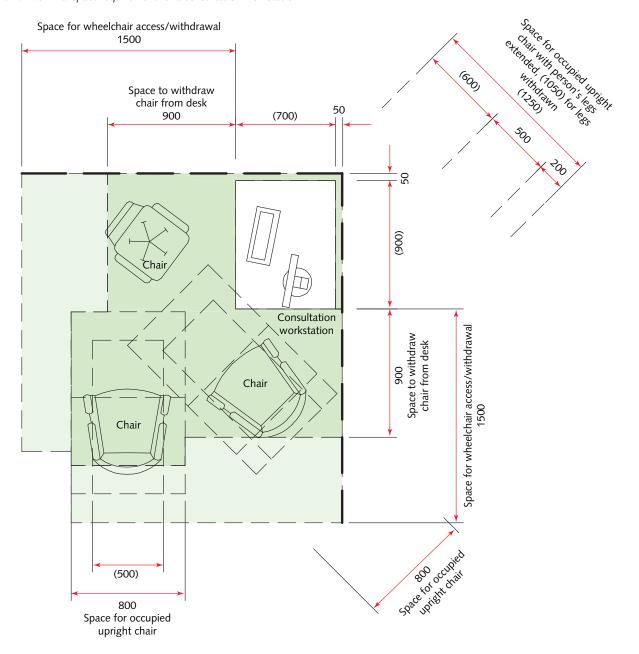


### **Ergonomic drawings**

### Consultation workstation

- 3.32 This ergonomic drawing (see Figure 10) shows a nominal space requirement for a consultation workstation. The actual space requirement will depend upon the design and location of the chairs and the design of the desk. The illustrated desk is the recommended minimum dimension for using a flat screen computer.
- 3.33 The activity space is based on the practitioner sitting at the desk with the patient/client seated diagonally opposite. The desk should not be located between the practitioner and patient/client.
- Figure 10 Nominal space requirement for a consultation workstation

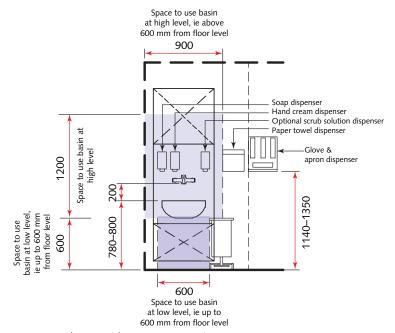
- 3.34 It should be possible to rotate the computer monitor to allow the patient/client to view it.
- 3.35 The consultation desk should be positioned so that:
  - the practitioner can acknowledge a patient/ client on entry to the room;
  - the practitioner is not be silhouetted against a window when in consultation with the patient/ client.
- 3.36 A small lockable drawer should be available to store prescription pads if electronic prescriptions are not being used.
- 3.37 A small local printer may be provided.



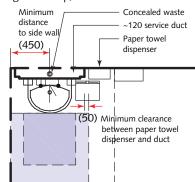
### Clinical wash-hand basin

- 3.38 These ergonomic drawings (see Figure 11) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- 3.39 The basin should be fitted with nontouch taps.
- 3.40 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in
- 3.41 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 3.42 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- 3.43 The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- 3.44 Lever taps are not illustrated.
- 3.45 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

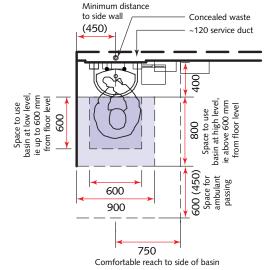
Figure 11 Space requirements for standing use of a clinical wash-hand basin assembly



Elevation (showing sensor tap)



Projecting concealed services duct

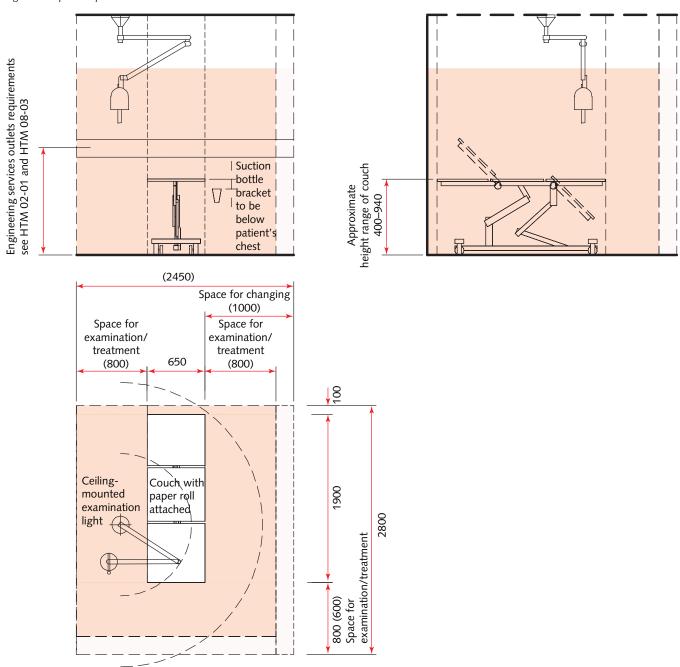


Flush concealed services duct

### Couch: double-sided access

- 3.47 These ergonomic drawings (see Figure 12) show the space requirements for double-sided access to a three-section couch. The overall general space requirements for a three-section couch are the same as for a two-section couch.
- **3.48** Ceiling-mounted examination lights should be provided where double-sided couch access is required.

Figure 12 Space requirements for double-sided access to a three-section couch

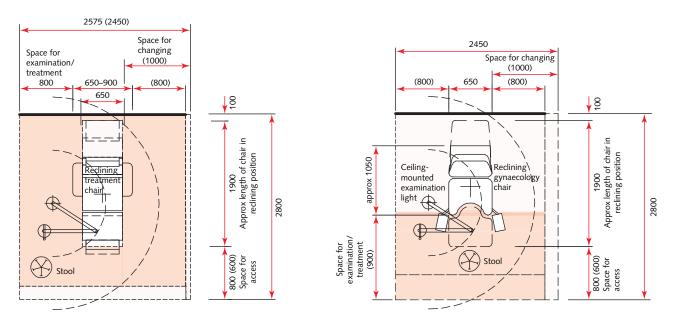


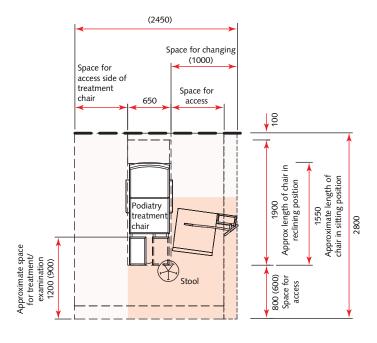
### Treatment chairs (various): double-sided access

- 3.49 These ergonomic drawings (see Figure 13) show the space requirements for double-sided access to a variety of treatment chairs.
- 3.50 The reclining treatment/therapy chair provides the most flexible option for general examinations and treatments.
- 3.51 The reclining gynaecology chair may be used for general examinations and treatments or female internal examinations. A variety of attachments are available to assist internal examinations of females including stirrups, leg supports or footrests. The

- use of the various methods is subject to local clinical and/or patient/ client preferences.
- 3.52 The podiatry treatment chair incorporates separate leg supports, which may be adjusted independently of one another.
- 3.53 The activity space for the podiatry treatment chair assumes the examination light is attached to the podiatry trolley. The illustrated chair is mobile. Floor-mounted chairs are also available although these may reduce flexibility in room use.

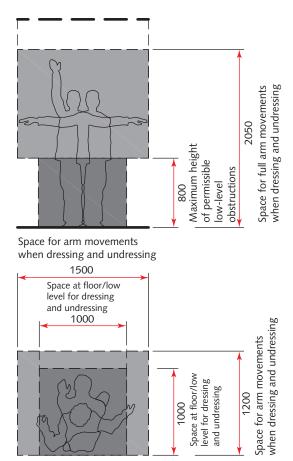
Figure 13 Space requirements for double-sided access to a variety of treatment chairs





### Dressing and undressing: ambulant

- 3.54 These ergonomic drawings (see Figure 14) show the space requirements for ambulant dressing and undressing.
- Figure 14 Space requirements for ambulant dressing and undressing



3.55 An identical space provision is suitable for semiambulant users though it should be located adjacent to a seating area.

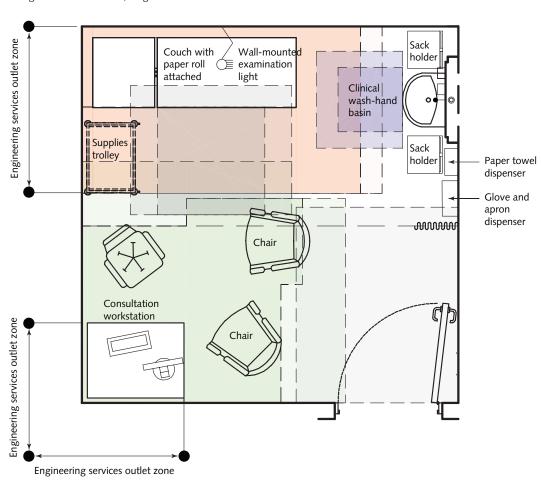
### Consulting/examination room: singlesided couch access

### Room description and layout

- 3.56 This room is intended as a flexible space for consultations and examinations for use by a wide range of specialties.
- 3.57 The following procedures may take place in this room:
  - non-invasive procedures, that is, procedures that do not break the skin, for example changing a dressing;
  - minimally invasive procedures, that is, procedures that break or puncture the skin, for example injections, taking blood etc.
- 3.58 The room layout provided (see Figure 15) includes a two-section couch.
- 3.59 Where it is not necessary to access both sides of the couch, the single-sided room layout may be used but to maximise flexibility and adaptability double-sided couch access is generally recommended.

Figure 15 Consulting/examination room, single-sided couch access

- 3.60 The layout shows the clinical wash-hand basin within the curtained examination area. However, its location should be subject to local policy and infection control advice. It must be easily accessible from both the consultation and examination areas. The curtain should be located to prevent it becoming contaminated from use of the clinical wash-hand basin.
- 3.61 Piped medical gases are generally not required. In emergency situations it is anticipated that bottled oxygen and mobile suction equipment will be readily available.
- 3.62 The room layout provided mean the patient/client will be positioned between the practitioner and the door during consultation. Consideration may be given to altering the layout to position the practitioner between the patient/client and the door for staff safety.
- 3.63 The layout has the disadvantage of the consultation area being located on the inside wall (that is, generally away from natural light) and the examination area being located on the outside wall (that is, requiring privacy control due to the likely proximity of a window).

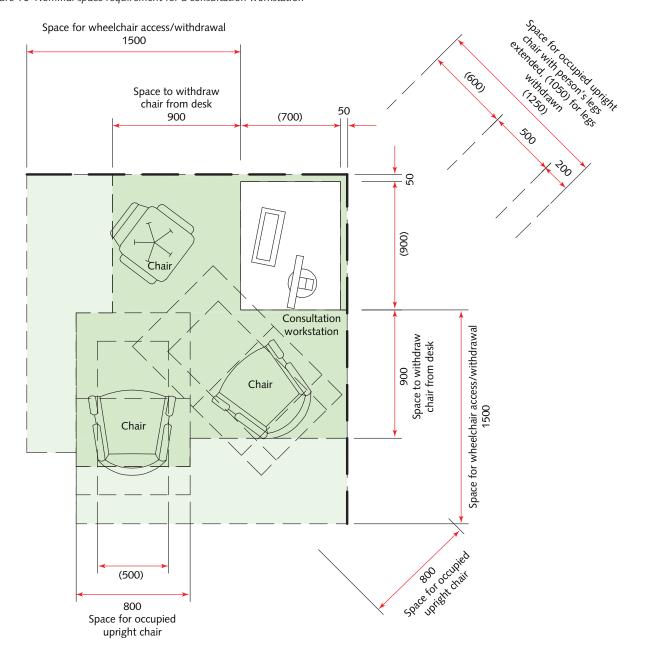


### **Ergonomic drawings**

### Consultation workstation

- 3.64 This ergonomic drawing (see Figure 16) shows a nominal space requirement for a consultation workstation. The actual space requirement will depend upon the design and location of the chairs and the design of the desk. The illustrated desk is the recommended minimum dimension for using a flat screen computer.
- 3.65 The activity space is based on the practitioner sitting at the desk with the patient/client seated diagonally opposite. The desk should not be located between the practitioner and patient/client.
- Figure 16 Nominal space requirement for a consultation workstation

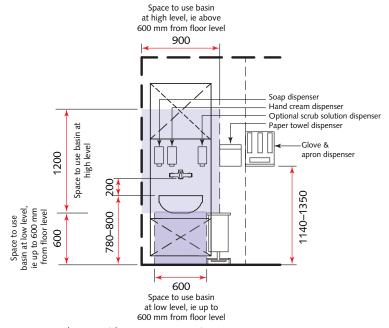
- 3.66 It should be possible to rotate the computer monitor to allow the patient/client to view it.
- 3.67 The consultation desk should be positioned so that:
  - the practitioner can acknowledge a patient/ client on entry to the room;
  - the practitioner is not be silhouetted against a window when in consultation with the patient/ client.
- 3.68 A small lockable drawer should be available to store prescription pads if electronic prescriptions are not being used.
- 3.69 A small local printer may be provided.



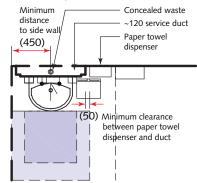
### Clinical wash-hand basin

- 3.70 These ergonomic drawings (see Figure 17) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- 3.71 The basin should be fitted with non-touch taps.
- 3.72 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in
- 3.73 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 3.74 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- 3.75 The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- 3.76 Lever taps are not illustrated.
- 3.77 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

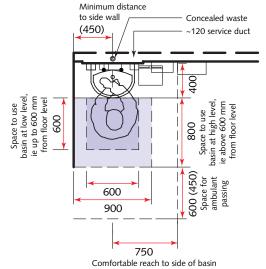
Figure 17 Space requirements for standing use of a clinical wash-hand basin assembly



Elevation (showing sensor tap)



Projecting concealed services duct

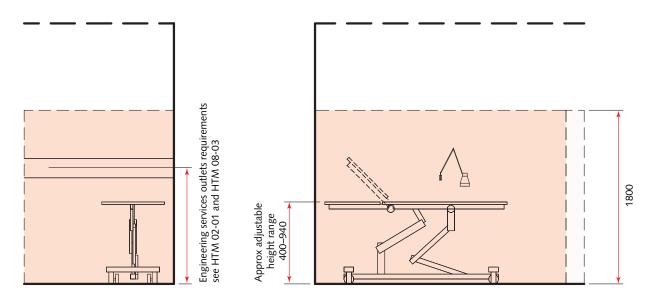


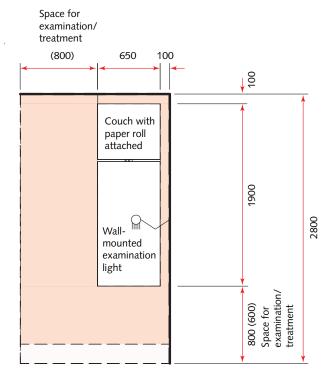
Flush concealed services duct

### Couch: single-sided access

- 3.78 This ergonomic drawing (see Figure 18) shows the space requirements for single-sided access to a couch. It illustrates a two-section couch simply as the most likely scenario. The generic access space is believed to be the same for other types of couch.
- 3.79 Wall-mounted examination lights should be provided where single-sided couch access is required. The light may be mounted on a horizontal rail to enable its position to be altered in the horizontal plane.

Figure 18 Space requirements for single-sided access to a couch

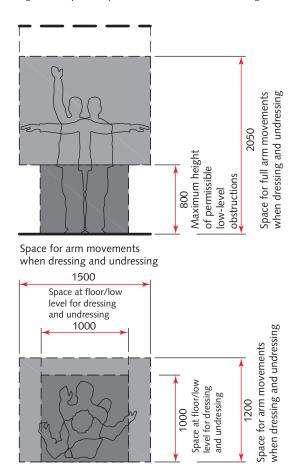




### Dressing and undressing: ambulant

- 3.80 These ergonomic drawings (see Figure 19) show the space requirements for ambulant dressing and undressing.
- 3.81 An identical space provision is suitable for semiambulant users though it should be located adjacent to a seating area.

Figure 19 Space requirements for ambulant dressing and undressing



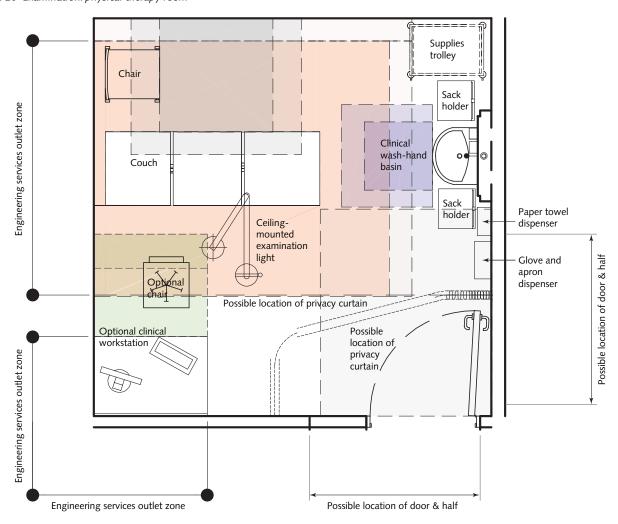
### Examination/physical therapy room

### Room description and layout

- 3.82 An examination/physical therapy space is intended as a generic space where a variety of examinations, tests and therapies (for example physiotherapy, acupuncture and massage) may be undertaken.
- 3.83 The following procedures may take place in this room:
  - non-invasive procedures, i.e. procedures that do not break the skin, for example changing a dressing;
  - minimally invasive procedures, i.e. procedures that break or puncture the skin, for example injections, taking blood etc.
- 3.84 It has been sized to accommodate mobile diagnostic equipment, for example mobile ultrasound equipment.

- 3.85 The room layout provided (see Figure 20) includes a standard three-section couch. However, for maximum flexibility, of general use, a reclining treatment/therapy chair that supports patient/client in sitting or supine position is recommended.
- 3.86 Alternatively, the room can accommodate a reclining gynaecology chair or bobath plinth (for physiotherapy treatments) although the clinical workstation would conflict fractionally with the space required around the plinth.
- 3.87 A touchdown base may be located nearby in place of the clinical workstation in the room.
- 3.88 Where trolley access is required, a door and a half in a 1500 mm aperture will be required.
- 3.89 Locating the privacy curtain across the width of the room will allow an attendant to wait outside the examination area.

Figure 20 Examination/physical therapy room



# Separate versus combined consulting and examination rooms

- 3.90 Separate consulting and examination rooms may be justified for some clinics. However, they do not provide the flexibility of combined consulting/ examination rooms. See Figure 21.
- 3.91 Where separate consulting and examination rooms are provided, there should not be adjoining doors between the rooms for reasons of patient privacy.
- 3.92 A comparison of the space requirements and utilisation of four combined consulting/ examination rooms against two consulting rooms and four examination rooms shows the combined rooms require less space and offer greater utilisation.

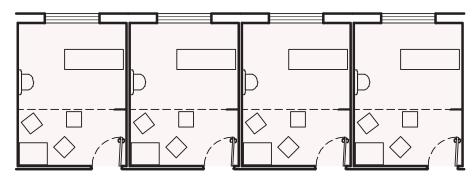
Figure 21 Combined versus separate consulting and examination rooms

Example 1: 4 Consulting/examination rooms (@ 16 m<sup>2</sup>)

Range of uses:

1-4 doctors

1–4 clinic sessions

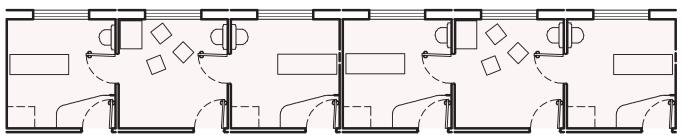


Example 2: 2 Consulting and 4 examination rooms (@ 12 m<sup>2</sup>)

Range of uses:

1-2 doctors

1-2 clinic sessions

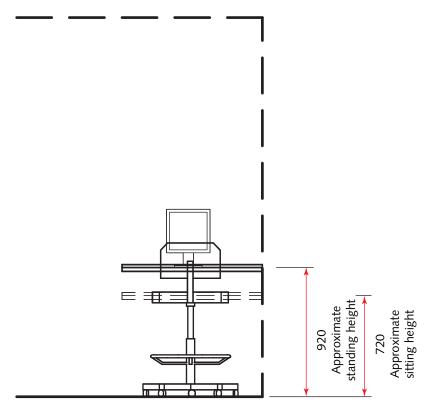


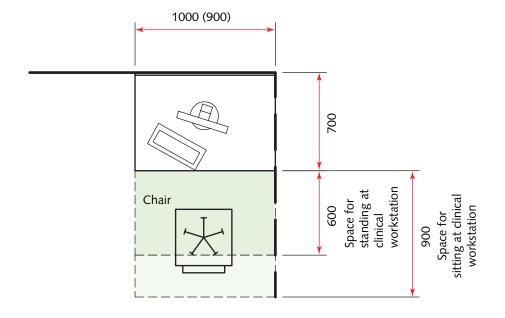
### Clinical workstation

**3.93** This ergonomic drawing (see Figure 22) shows the space requirements for a clinical workstation.

3.94 The clinical workstation is intended for accessing and updating patient records within a clinical environment. It should only be used for short periods of time.

Figure 22 Space requirements for a clinical workstation

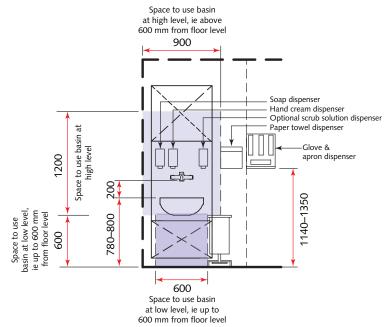




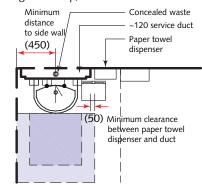
### Clinical wash-hand basin

- 3.95 These ergonomic drawings (see Figure 23) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- 3.96 The basin should be fitted with non-touch taps.
- 3.97 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 3.98 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 3.99 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- 3.100 The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- 3.101 Lever taps are not illustrated.
- 3.102 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

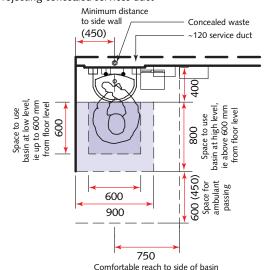
Figure 23 Space requirements for standing use of a clinical wash-hand basin assembly



Elevation (showing sensor tap)



Projecting concealed services duct

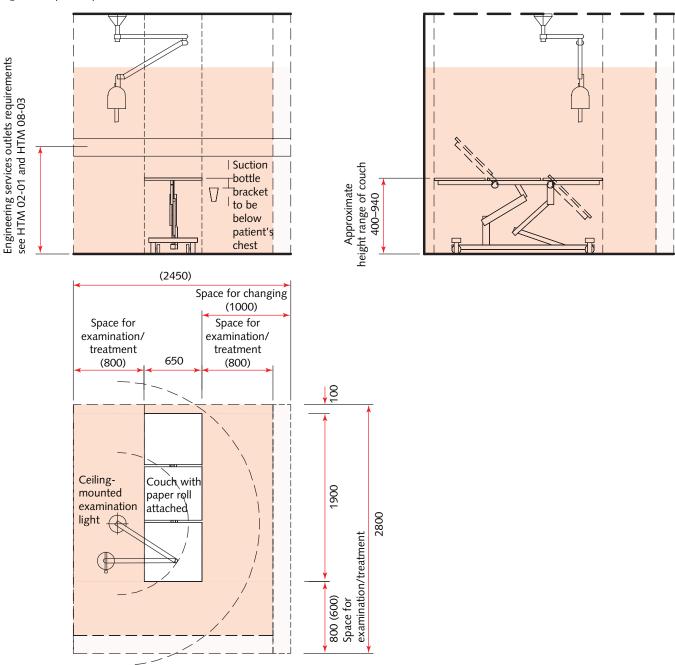


Flush concealed services duct

### Couch: double-sided access

- 3.103 These ergonomic drawings (see Figure 24) show the space requirements for double-sided access to a three-section couch. The overall general space requirements for a three-section couch are the same as for a two-section couch.
- **3.104** Ceiling-mounted examination lights should be provided where double-sided couch access is required.

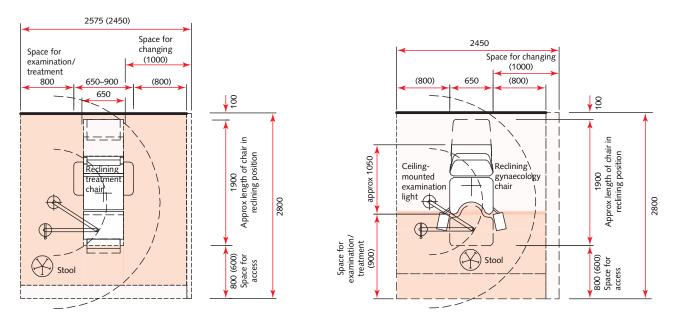
Figure 24 Space requirements for double-sided access to a three-section couch

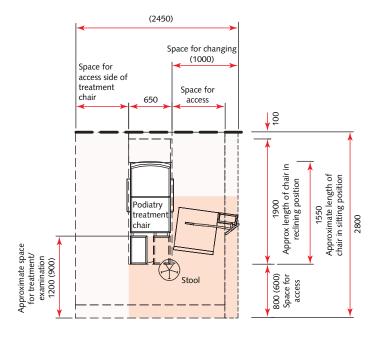


### Treatment chairs (various): double-sided access

- **3.105** These ergonomic drawings (see Figure 25) show the space requirements for double-sided access to a variety of treatment chairs.
- 3.106 The reclining treatment/therapy chair provides the most flexible option for general examinations and treatments.
- 3.107 The reclining gynaecology chair may be used for general examinations and treatments or female internal examinations. A variety of attachments are available to assist internal examinations of females
- including stirrups, leg supports or footrests. The use of the various methods is subject to local clinical and/or patient/client preferences.
- 3.108 The podiatry treatment chair incorporates separate leg supports, which may be adjusted independently of one another.
- 3.109 The activity space for the podiatry treatment chair assumes the examination light is attached to the podiatry trolley. The illustrated chair is mobile. Floor-mounted chairs are also available although these may reduce flexibility in room use.

Figure 25 Space requirements for double-sided access to a variety of treatment chairs

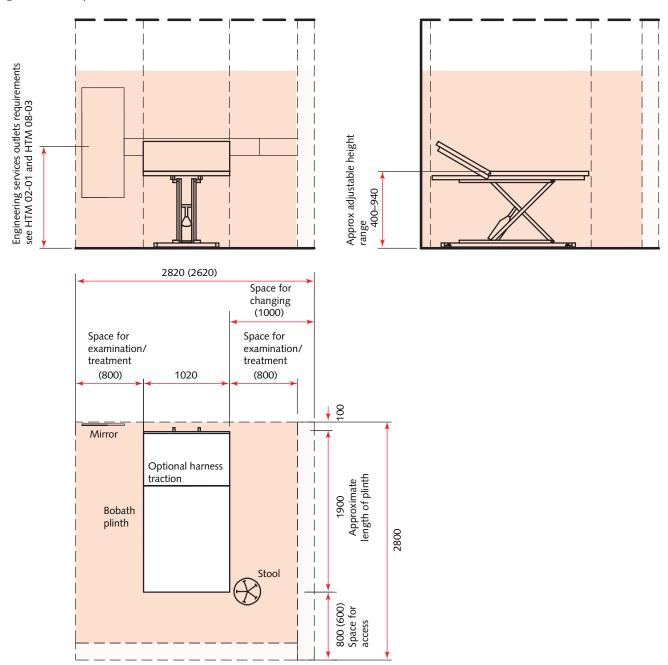




# Bobath plinth

**3.110** The ergonomic drawing (see Figure 26) shows the space requirements for doublesided access to a two-section bobath plinth.

Figure 26 Bobath plinth: double-sided access

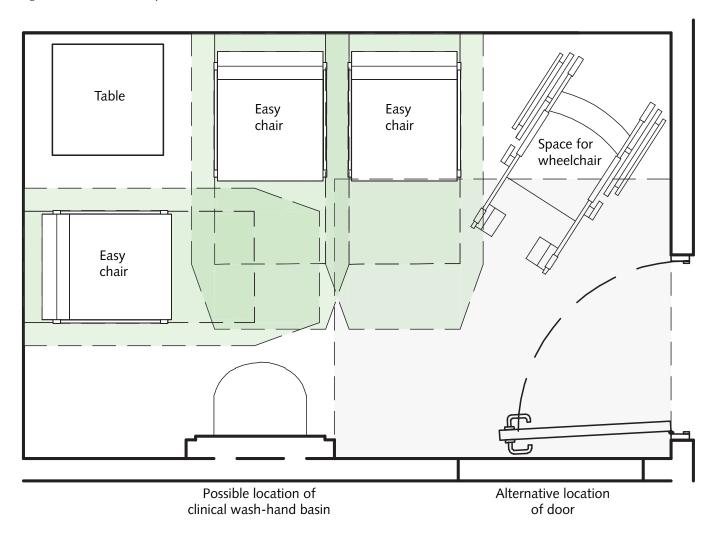


# Interview room: 4 places

- 3.111 A generic interview room may be used for general discussions, interviews and counselling. It may also be used as a sitting room for relatives or patients/ clients. See Figure 27.
- 3.112 A non-threatening ambience should be created through the use of domestic type furniture, for

- example sofas and easy chairs. All upholstered furniture must be easy to clean and impervious.
- 3.113 Telephone and network/internet access should be provided to allow for future change of use.
- 3.114 A clinical wash-hand basin and gel dispenser may be provided to allow for clinical use of the room.
- **3.115** The illustrated space requirements for sitting on a sofa are based on space to access a divan bed.

Figure 27 Interview room: 4 places

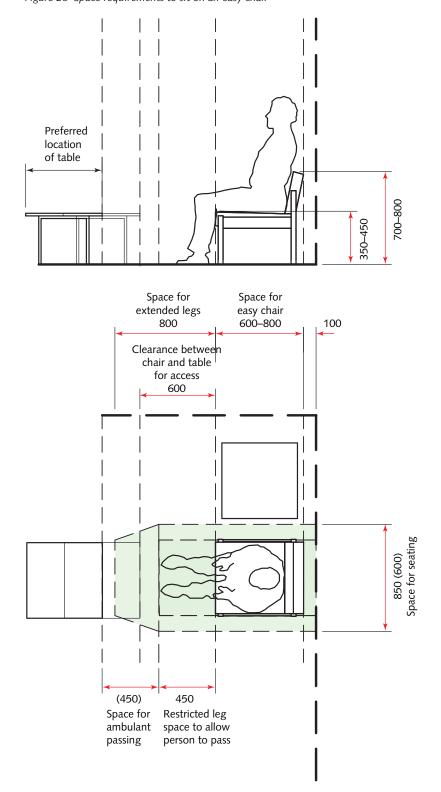


Space to sit on an easy chair

**3.116** These ergonomic drawings (see Figure 28) show the space requirements for a person to sit on an easy chair.

3.117 When seats are pushed together in rows, the average seat width is 600–650 mm for seats without arms and 750 mm for seats with arms.

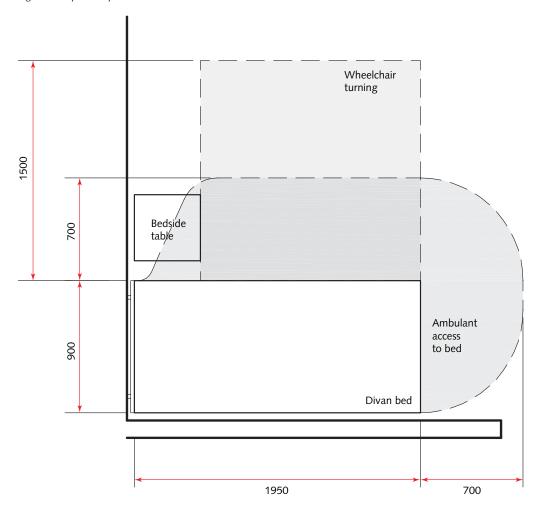
Figure 28 Space requirements to sit on an easy chair



# Space to access a divan bed

**3.118** This ergonomic drawing (see Figure 29) shows the space requirements for wheelchair and ambulant access to a divan bed.

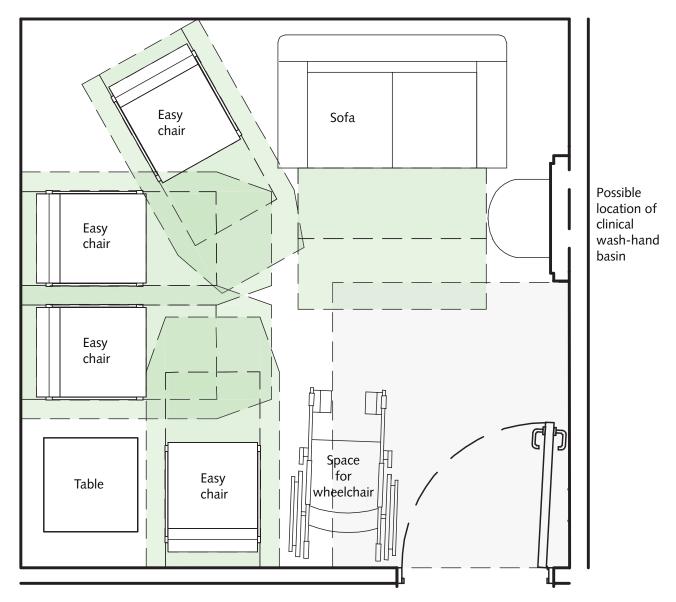
Figure 29 Space requirements for wheelchair and ambulant access to a divan bed



# Interview room: 7 places

- 3.119 A generic interview room may be used for general discussions, interviews and counselling. It may also be used as a sitting room for relatives or patients/ clients. See Figure 30.
- **3.120** A non-threatening ambience should be created through the use of domestic type furniture, for example sofas and easy chairs. All upholstered furniture must be easy to clean and impervious.
- 3.121 Telephone and network/internet access should be provided to allow for future change of use.
- 3.122 A clinical wash-hand basin and gel dispenser may be provided to allow for clinical use of the room.
- 3.123 A 7-place (rather than 4-place) interview room is generally recommended for reasons of flexibility and adaptability.
- **3.124** The illustrated space requirements for sitting on a sofa are based on space to access a divan bed.

Figure 30 Interview room: 7 places including 1 wheelchair place

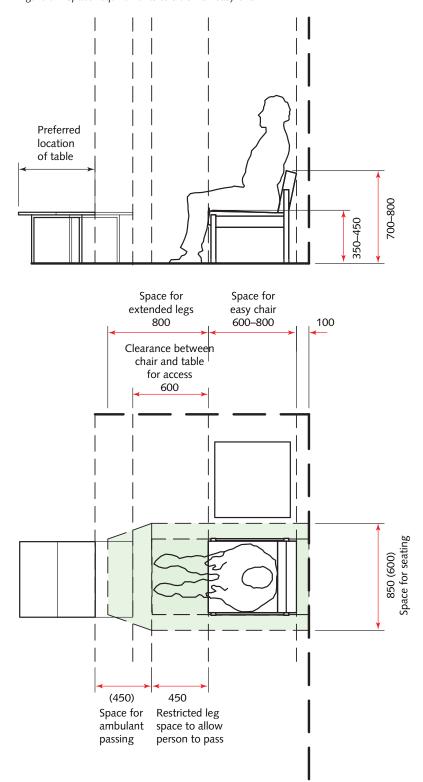


Space to sit on an easy chair

**3.125** These ergonomic drawings (see Figure 31) show the space requirements for a person to sit on an easy chair.

3.126 When seats are pushed together in rows, the average seat width is 600–650 mm for seats without arms and 750 mm for seats with arms.

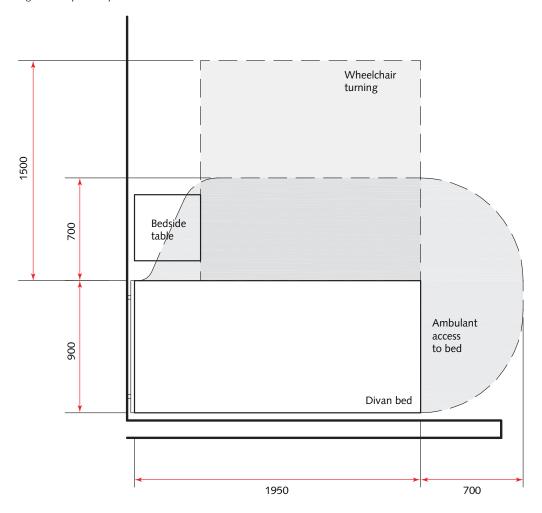
Figure 31 Space requirements to sit on an easy chair



# Space to access a divan bed

**3.127** This ergonomic drawing (see Figure 32) shows the space requirements for wheelchair and ambulant access to a divan bed.

Figure 32 Space requirements for wheelchair and ambulant access to a divan bed

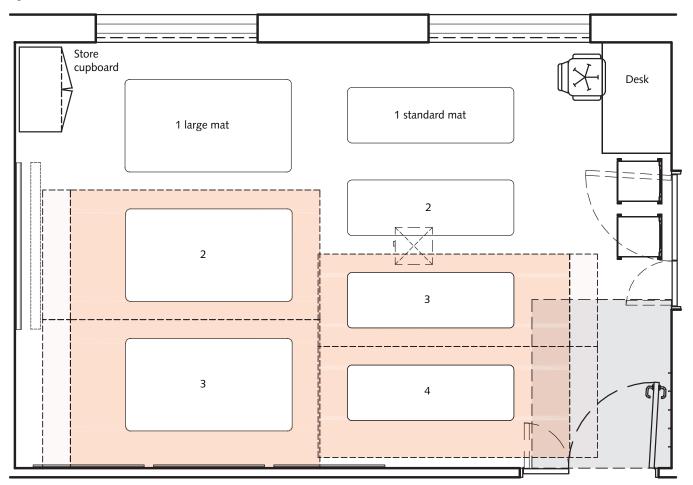


# 4 Generic clinical spaces: Group rooms

# Free movement exercise room

- 4.1 The room layout provided (see Figure 33) shows a  $32 \text{ m}^2$  group room furnished for mat-based exercise activities. The layout includes three large mats, each  $1800 \text{ mm} \times 1000 \text{ mm}$ , and four standard mats, each  $1800 \text{ mm} \times 600 \text{ mm}$ .
- 4.2 For sizing exercise rooms, the following allowances may be used:
  - 2–4 m<sup>2</sup> per practitioner;
  - 4.5 m<sup>2</sup> per large mat or 3.5 m<sup>2</sup> per standard mat.

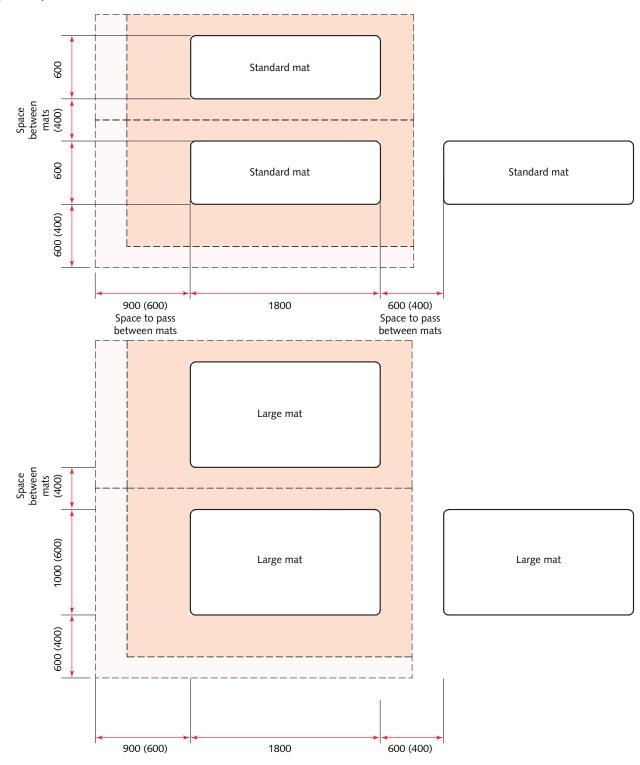
Figure 33 Free movement exercise room



### Exercise mats

- 4.3 This drawing (see Figure 34) illustrates two mat sizes with associated space for passing between two mats.
- 4.4 Typically the standard mats are used for exercise classes (yoga, pilates etc). The larger mat relates to the standard size of a small birthing mat and should be sufficient for antenatal classes.
- 4.5 This space has not been defined by specific ergonomic research.

Figure 34 Space between exercise mats



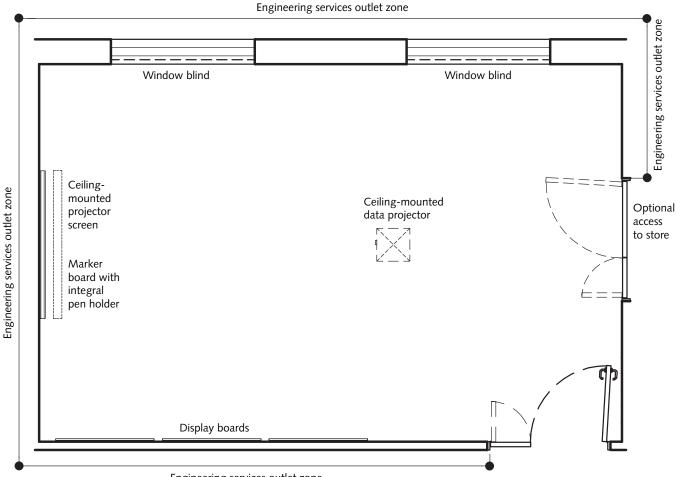
# Group room

# Room description and layout

- 4.6 A group room is basically a room with minimal fittings that can be furnished in different ways for different activities. The room layout provided (see Figure 35) shows a 32 m<sup>2</sup> group room when empty.
- 4.7 Chairs may be arranged in rows for seminars/ conferences or around a central table for meetings. Alternatively, mats may be brought into the room for exercise classes (for example antenatal classes, yoga, pilates etc).
- 4.8 For flexibility, an adjacent space should be provided for the storage of equipment and furniture when it is not in use within the room.
- 4.9 Full blackout facilities are rarely necessary although there should be some means of darkening the

- room. Where blackout facilities are required, special attention should be given to ventilation requirements.
- **4.10** Socket-outlets should be positioned so that laptops, projectors etc can be used with minimum danger from trailing cables.
- 4.11 Videoconferencing and TV facilities and an induction loop hearing aid system may be provided in 32 m<sup>2</sup> group rooms used for meetings and/or seminars.
- **4.12** Access is required to beverage-making facilities.
- 4.13 A clinical wash-hand basin and gel dispenser may be provided to allow for clinical use of the room. However, it must be noted that the inclusion of a basin will significantly influence the perception of the space and will reduce the flexibility of locating mobile furniture for different room uses.



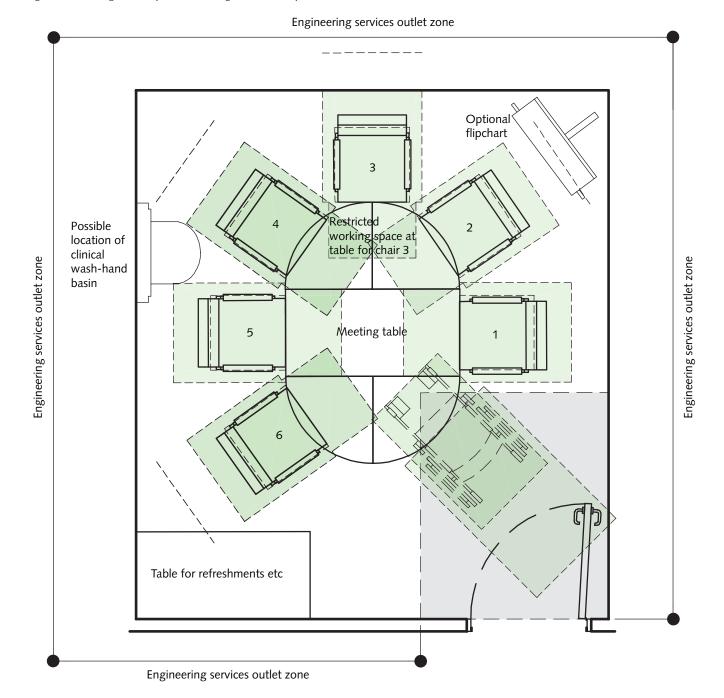


Engineering services outlet zone

# Meeting room: 7 places

- **4.14** Meeting spaces may be distributed throughout a facility or located together in a meeting/conference suite. See Figure 36.
- 4.15 A 7-place meeting space may be an enclosed room or a zone/alcove within an open plan area.
- **4.16** When the room is full to capacity, there will be some compromise on the available space for those sitting at the corners of the table.
- Figure 36 Meeting room: 7 places including 1 wheelchair place

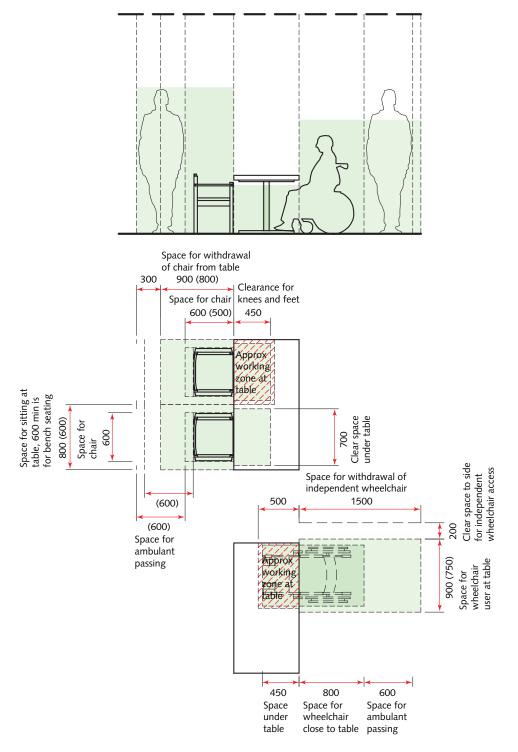
- **4.17** For sizing meeting rooms, the following allowances may be used:
  - 2 m<sup>2</sup> per stacking chair (allows for part use of table);
  - 4 m² per wheelchair place (allows for part of use of table).



### Working at a desk/table

- 4.18 This ergonomic drawing (see Figure 37) illustrates the space requirements for working at a desk/table.
- 4.19 The chair shown is a standard stacking chair. Where larger chairs are used, the space should be
- increased by an additional 100 mm in each direction.
- **4.20** The space requirement for a wheelchair user is based on a standard wheelchair.
- 4.21 The working zone on the desk/table is 700 mm wide by 500 mm deep. This may be compromised if two users sit at 90 degrees to one another at the corner of the desk/table.

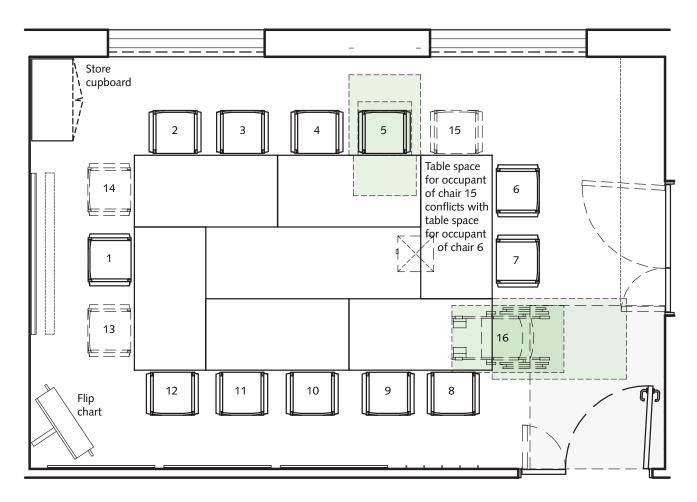
Figure 37 Space requirements for working at a desk/table



# Meeting room: 16 places

- 4.22 Meeting spaces may be distributed throughout a facility or located together in a meeting/conference suite.
- 4.23 The room layout provided (see Figure 38) shows a 32 m<sup>2</sup> group room furnished for use as a meeting room
- 4.24 When the room is full to capacity, there will be some compromise on the available space for those sitting at the corners of the table.
- **4.25** For sizing meeting rooms, the following allowances may be used:
  - 2 m<sup>2</sup> per stacking chair (allows for part use of table);
  - 4 m² per wheelchair place (allows for part of use of table).

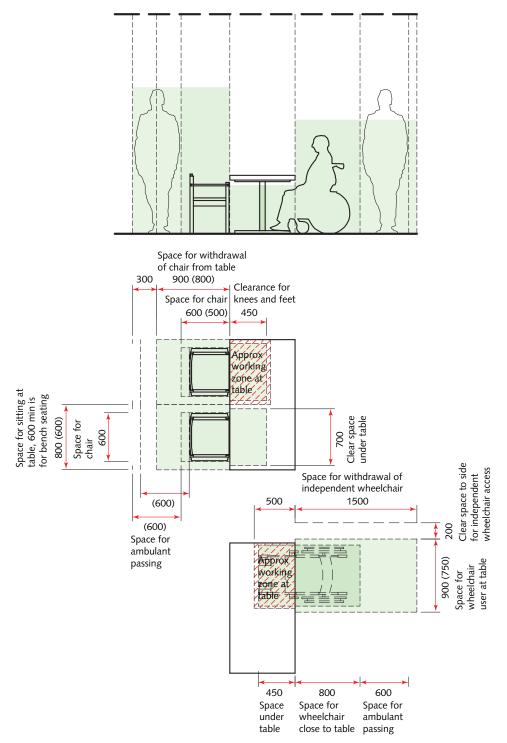
Figure 38 Meeting room: 16 places



### Working at a desk/table

- **4.26** This ergonomic drawing (see Figure 39) illustrates the space requirements for working at a desk/table.
- 4.27 The chair shown is a standard stacking chair. Where larger chairs are used, the space should be
- increased by an additional 100 mm in each direction.
- **4.28** The space requirement for a wheelchair user is based on a standard wheelchair.
- 4.29 The working zone on the desk/table is 700 mm wide by 500 mm deep. This may be compromised if two users sit at 90 degrees to one another at the corner of the desk/table.

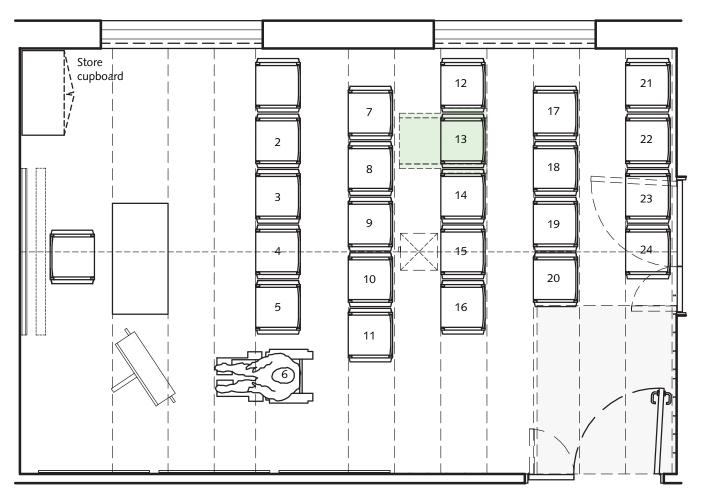
Figure 39 Space requirements for working at a desk/table



# Seminar room

- 4.30 The room layout provided (see Figure 40) shows a 32 m<sup>2</sup> group room furnished for use as a seminar room. It can accommodate 24 people including one wheelchair user, plus the practitioner at the front of the room.
- 4.31 An overhead projector and, in larger seminar rooms, public address system may be provided.
- **4.32** For sizing seminar rooms, the following allowances may be used:
  - 4–5 m² for desk and equipment for practitioner at front of room;
  - 1.2 m<sup>2</sup> per stacking chair;
  - 4 m² per wheelchair space.

Figure 40 Seminar room: 24 places including 1 wheelchair place

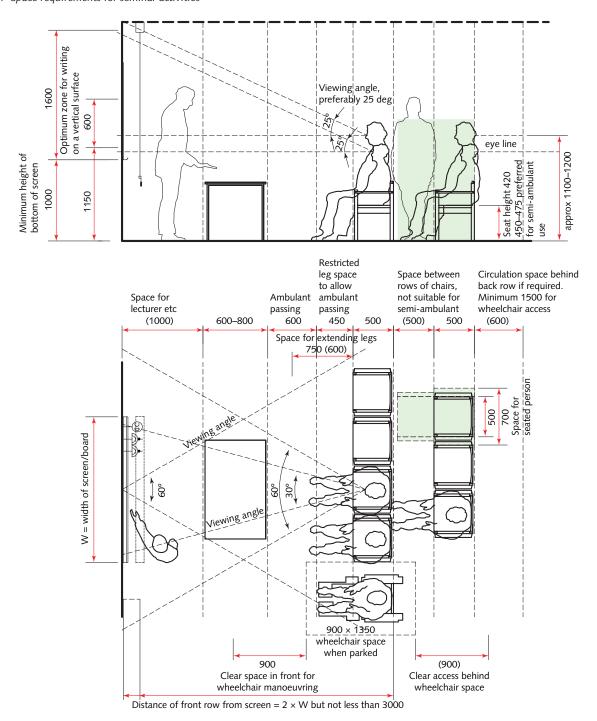


### Seminar activities

- 4.33 This ergonomic drawing (see Figure 41) illustrates space requirements for seminar activities.
- **4.34** For optimum vision of the screen:
  - rows of seats should be staggered;
  - a maximum of five seats in the front row is recommended for an 1800 mm wide screen;

- the distance from the front row to the screen should be twice the width of the screen or a minimum of 3000 mm;
- in large rooms, the bottom of the screen may need to be raised.
- 4.35 Where a large number of semi-ambulant users need to be accommodated, the minimum passing space between rows of chairs should increase to 900–1200 mm. See BS 8300 (paragraph 11.2.2).

Figure 41 Space requirements for seminar activities



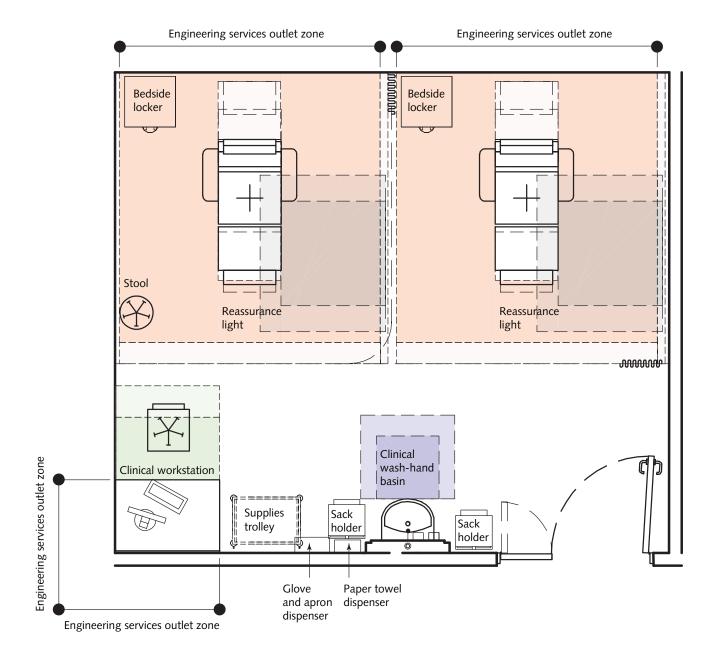
# 5 Generic clinical spaces: Recovery spaces

# Recovery/assessment room (2 places)

- 5.1 A recovery/assessment space is intended as a generic space where patient recovery following a procedure requiring local anaesthetic or sedation (not general anaesthetic) and a variety of assessments (for example maternity) and treatments (for example dialysis) may be undertaken. Patients may also be transferred here from a post-anaesthetic recovery
- 5.2 It may be co-located with a seated recovery area and/or post-anaesthetic recovery area.
- 5.3 Immediate access is required to a resuscitation trolley. If this is not held within the room, it should be located conveniently nearby.
- 5.4 An overall width of 3350 mm is required for mobile hoist transfer. Therefore, 600 mm of the adjacent space will be required for this purpose.

- 5.5 Natural light should be provided.
- 5.6 See Health Technical Memorandum 02-01 'Medical gas pipeline systems' and Health Technical Memorandum 08-03 – 'Bedhead services' for specific requirements on the use of medical gases.
- 5.7 The room layout provided (see Figure 42) includes two couches. It is assumed there will be one practitioner for every two patients/clients. When this space is used, consideration must be given to the 'Delivering Same Sex Accommodation' programme (DSSA), including the attendance of partners/carers.
- 5.8 For sizing recovery/assessment rooms generally, the following allowances may be used:
  - 9 m² per couch/reclining treatment chair;
  - 4–6 m² for clinical support (for example clinical workstation, clinical wash-hand basin etc).

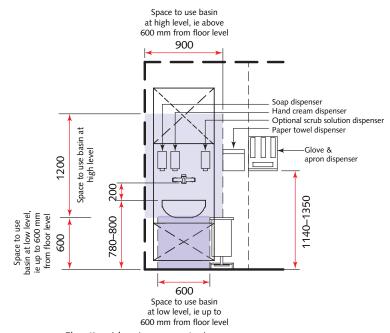
Figure 42 Recovery/assessment room



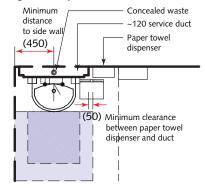
### Clinical wash-hand basin

- 5.9 These ergonomic drawings (see Figure 43) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- 5.10 The basin should be fitted with non-touch taps.
- 5.11 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 5.12 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 5.13 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- 5.14 The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- 5.15 Lever taps are not illustrated.
- 5.16 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

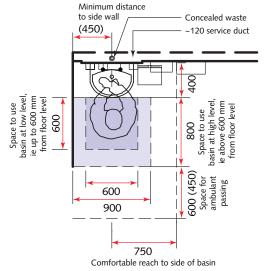
Figure 43 Space requirements for standing use of a clinical wash-hand basin assembly



### Elevation (showing sensor tap)



#### Projecting concealed services duct

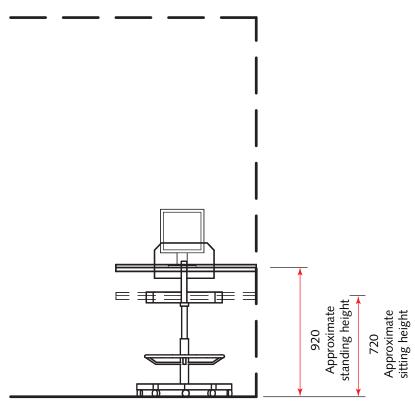


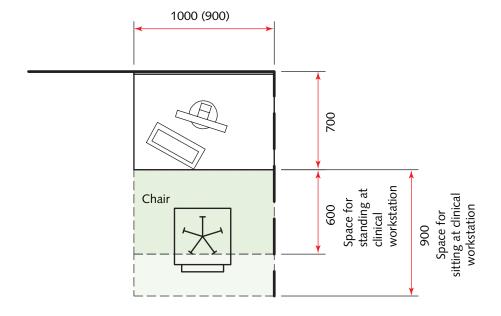
Flush concealed services duct

### Clinical workstation

- 5.17 This ergonomic drawing (see Figure 44) shows the space requirements for a clinical workstation.
- 5.18 The clinical workstation is intended for accessing and updating patient records within a clinical environment. It should only be used for short periods of time.

Figure 44 Space requirements for a clinical workstation

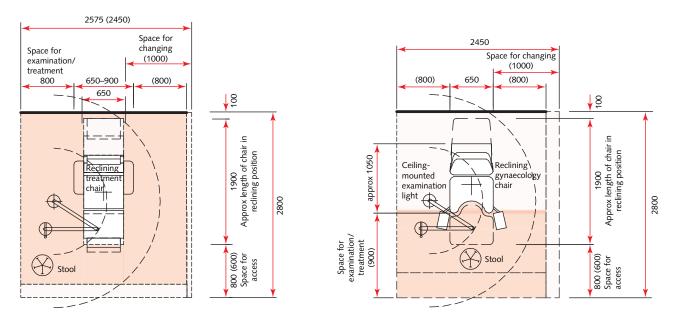


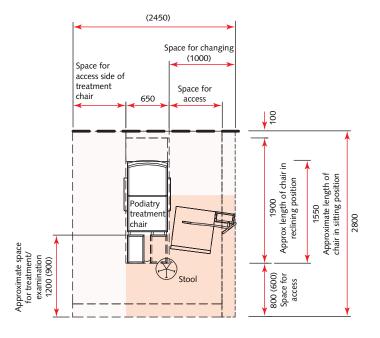


### Treatment chairs (various): double-sided access

- 5.19 These ergonomic drawings (see Figure 45) show the space requirements for double-sided access to a variety of treatment chairs.
- 5.20 The reclining treatment/therapy chair provides the most flexible option for general examinations and treatments.
- 5.21 The reclining gynaecology chair may be used for general examinations and treatments or female internal examinations. A variety of attachments are available to assist internal examinations of females
- including stirrups, leg supports or footrests. The use of the various methods is subject to local clinical and/or patient/client preferences.
- 5.22 The podiatry treatment chair incorporates separate leg supports, which may be adjusted independently of one another.
- 5.23 The activity space for the podiatry treatment chair assumes the examination light is attached to the podiatry trolley. The illustrated chair is mobile. Floor-mounted chairs are also available although these may reduce flexibility in room use.

Figure 45 Space requirements for double-sided access to a variety of treatment chairs

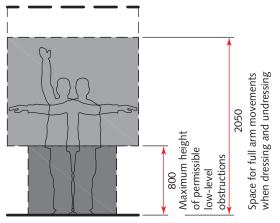




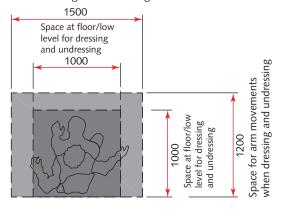
### Dressing and undressing: ambulant

- 5.24 These ergonomic drawings (see Figure 46) show the space requirements for ambulant dressing and undressing.
- 5.25 An identical space provision is suitable for semiambulant users though it should be located adjacent to a seating area.

Figure 46 Space requirements for ambulant dressing and undressing



Space for arm movements when dressing and undressing



# Seated recovery area

# **Room description**

- 5.26 This is an open-plan area with easy chairs. It will be used for patients with low clinical needs to sit and recover following a procedure (which may have required a local anaesthetic).
- 5.27 It should be an open-plan lounge-type space with comfortable upholstered, easily cleanable, chairs and may simply form a discrete part of a waiting area.
- 5.28 The area should contain a separate zone for clinical hand-washing.
- 5.29 Natural light should be provided.
- 5.30 Beverage facilities should be available nearby.
- 5.31 No room layout has been provided. For sizing seated recovery areas, the following allowances may be used:
  - 1.5 m<sup>2</sup> per easy chair;
  - 3 m<sup>2</sup> per wheelchair space.

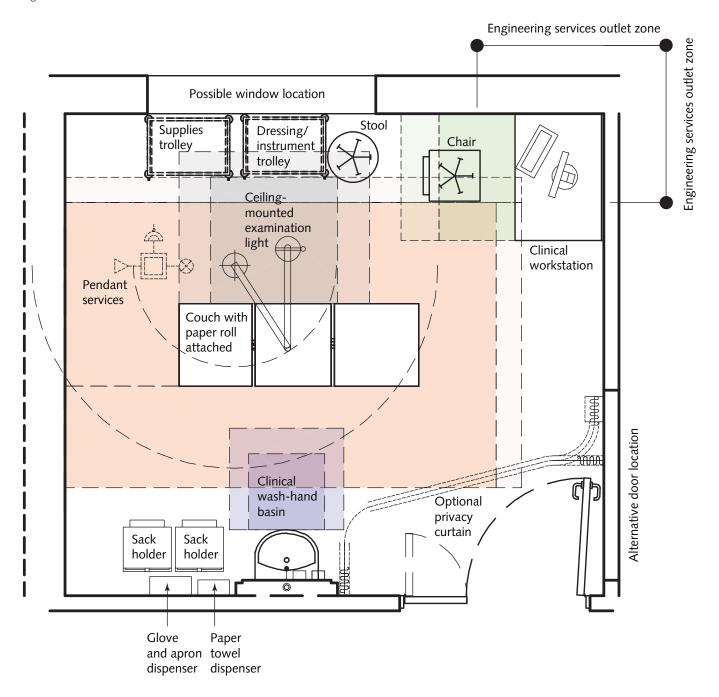
# 6 Generic clinical spaces: Treatment rooms

# Treatment room: all-round couch access

- 6.1 This room is intended as a flexible clinical space to be used by a wide range of specialties.
- 6.2 The room has been sized to accommodate mobile diagnostic equipment, for example mobile ultrasound equipment.
- 6.3 It is assumed that sterile instruments and dressings will be held within the treatment room on an instruments/dressings trolley. The trolley may be prepared in the treatment room or an associated clean utility room.
- 6.4 Medical oxygen and vacuum will generally be required. Medical air, nitrous oxide and gas scavenging may also be required. See Health Technical Memorandum 02-01 for specific requirements.
- 6.5 Treatment rooms should be mechanically ventilated, with 10 air changes per hour supply and extract.

- 6.6 The following procedures require a treatment room (that is, with mechanical ventilation):
  - invasive procedures, that is, procedures that cut the superficial layers of the skin, for example removal of moles, warts, corns, biopsies etc;
  - use of certain rigid endoscopes including laryngoscopes (used during resuscitation procedures), otoscopes and ophthalmoscopes.
- 6.7 Blackout blinds and dimmable lighting are recommended for flexibility in use, for example sessional ultrasound, ENT or eye care use.
- 6.8 The room layout provided (see Figure 47) shows a standard three-section couch.
- 6.9 The alternative door location (that is, to match the layout of option 1 of the double-sided couch access consulting/examination) implies that the window would be located behind the couch. This would require privacy control, which is not good, psychologically, for patients. However, it would provide better trolley access to the couch in an emergency.

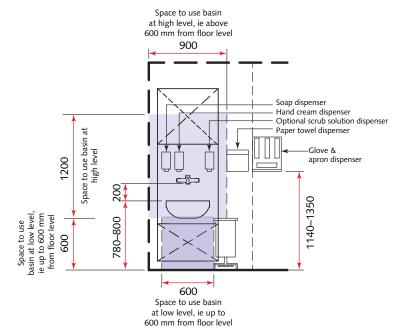
Figure 47 Treatment room: all-round couch access



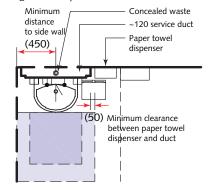
### Clinical wash-hand basin

- 6.10 These ergonomic drawings (see Figure 48) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- **6.11** The basin should be fitted with nontouch taps.
- 6.12 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 6.13 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 6.14 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- 6.15 The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- **6.16** Lever taps are not illustrated.
- 6.17 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

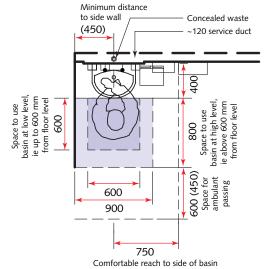
Figure 48 Space requirements for standing use of a clinical wash-hand basin assembly



#### Elevation (showing sensor tap)



# Projecting concealed services duct

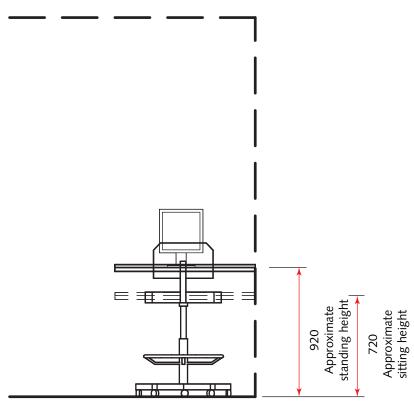


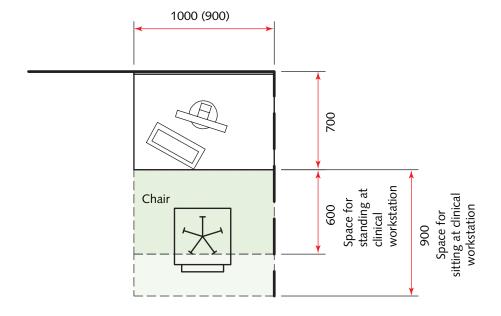
Flush concealed services duct

### Clinical workstation

- **6.18** This ergonomic drawing (see Figure 49) shows the space requirements for a clinical workstation.
- 6.19 The clinical workstation is intended for accessing and updating patient records within a clinical environment. It should only be used for short periods of time.

Figure 49 Space requirements for a clinical workstation



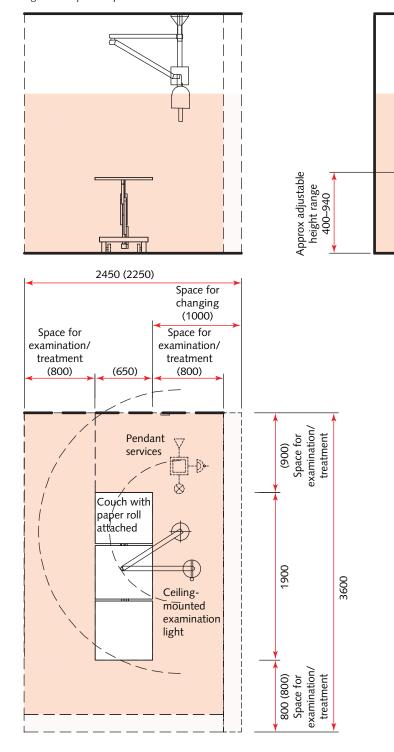


### Couch with all-round access

- **6.20** This ergonomic drawing (see Figure 50) shows the space requirements for all-round access to a three-section couch.
- 6.21 Pendant services should be provided where allround couch access is required. The type of pendant will vary depending on the services being provided.
- 6.22 The type of pendant required will vary depending upon the level of services being provided (for example fixed power and data only, power data and medical gas with vertical adjustment, or with vertical and horizontal adjustment etc). However, this document assumes that in a generic treatment room only simple services are anticipated.

Pendant services

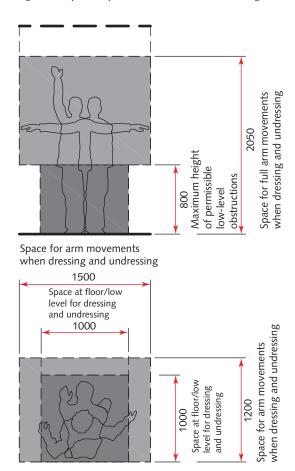
Figure 50 Space requirements for all-round access to three-section couch



# Dressing and undressing: ambulant

- 6.23 These ergonomic drawings (see Figure 51) show the space requirements for ambulant dressing and undressing.
- **6.24** An identical space provision is suitable for semi-ambulant users though it should be located adjacent to a seating area.

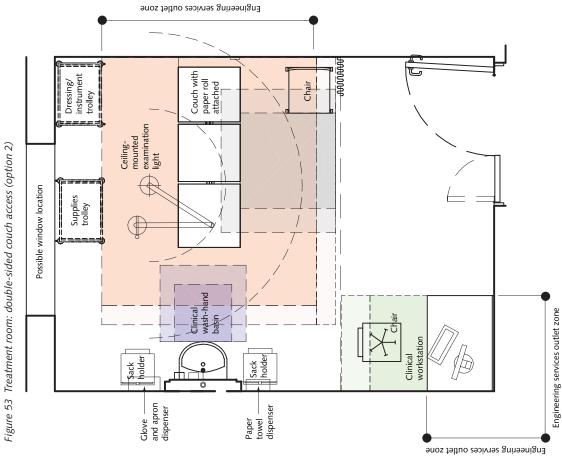
Figure 51 Space requirements for ambulant dressing and undressing



# Treatment room: double-sided couch access

- 6.25 This room is intended as a flexible clinical space to be used by a wide range of specialties.
- 6.26 The room has been sized to accommodate mobile diagnostic equipment, for example mobile ultrasound equipment.
- 6.27 It is assumed that sterile instruments and dressings will be held within the treatment room on an instruments/dressings trolley. The trolley may be prepared in the treatment room or an associated clean utility room.
- 6.28 Medical oxygen and vacuum will generally be required. Medical air, nitrous oxide and gas scavenging may also be required. See Health Technical Memorandum 02-01 for specific requirements.
- 6.29 Treatment rooms should be mechanically ventilated, with 10 air changes per hour supply and extract.
- **6.30** The following procedures require a treatment room (that is, with mechanical ventilation):
  - invasive procedures, that is, procedures that cut the superficial layers of the skin, for example removal of moles, warts, corns, biopsies etc;
  - use of certain rigid endoscopes including laryngoscopes (used during resuscitation procedures), otoscopes and ophthalmoscopes.

- 6.31 Blackout blinds and dimmable lighting are recommended for flexibility in use, for example sessional ultrasound, ENT or eye care use.
- 6.32 Two room layouts have been provided (see Figures 52 and 53).
- 6.33 Both layouts include a standard three-section couch and a privacy curtain separating the couch end of the room. Alternatively, a privacy curtain may be included inside the door. See Health Building Note 00-04 for further details.
- **6.34** Option 1 may accommodate an island couch if engineering services are provided using a pendant and the privacy curtain is located just inside the door.
- 6.35 The alternative door location on option 1 (that is, to match the layout of option 1 of the double-sided couch access consulting/examination room) implies that the window would be located behind the couch. This would require privacy control within the curtained area, which is not good, psychologically, for patients. However, the alternative door location would provide better patient trolley access to the couch in an emergency.
- 6.36 Option 2 is effectively identical to the consulting/ examination room double-sided couch access, option 2. The clinical administration space is on the inside wall of the room (that is, away from the natural light) and the examination space is on the outside wall (that is, requiring privacy control due to the proximity of the window). The room layout cannot comfortably accommodate an island couch layout.



Engineering services outlet zone

Couch with rough ocation

Couch with rough ocation

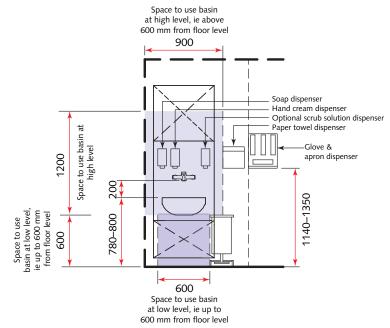
Sack Sack bodger roll

Glove Paper and dispenser dispenser dispenser dispenser dispenser dispenser dispenser dispenser.

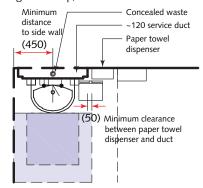
### Clinical wash-hand basin

- 6.37 These ergonomic drawings (see Figure 54) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- **6.38** The basin should be fitted with nontouch taps.
- 6.39 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 6.40 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 6.41 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- **6.42** The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- **6.43** Lever taps are not illustrated.
- **6.44** For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

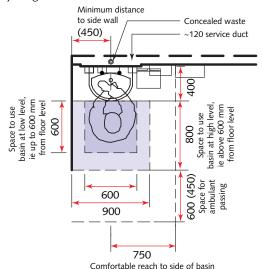
Figure 54 Space requirements for standing use of a clinical wash-hand basin assembly



#### Elevation (showing sensor tap)



### Projecting concealed services duct

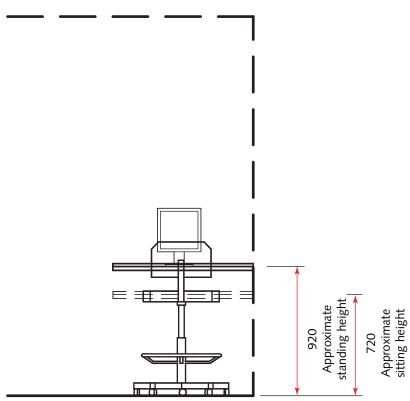


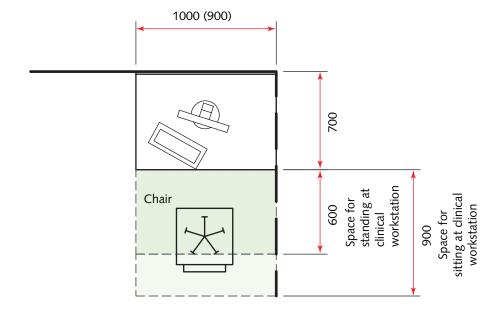
Flush concealed services duct

### Clinical workstation

- 6.45 This ergonomic drawing (see Figure 55) shows the space requirements for a clinical workstation.
- 6.46 The clinical workstation is intended for accessing and updating patient records within a clinical environment. It should only be used for short periods of time.

Figure 55 Space requirements for a clinical workstation

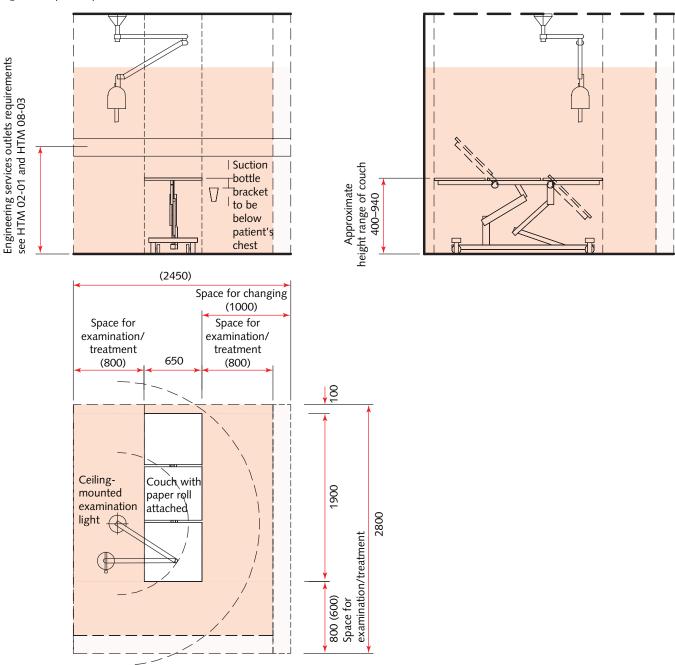




### Couch: double-sided access

- 6.47 These ergonomic drawings (see Figure 56) show the space requirements for double-sided access to a three-section couch. The overall general space requirements for a three-section couch are the same as for a two-section couch.
- **6.48** Ceiling-mounted examination lights should be provided where double-sided couch access is required.

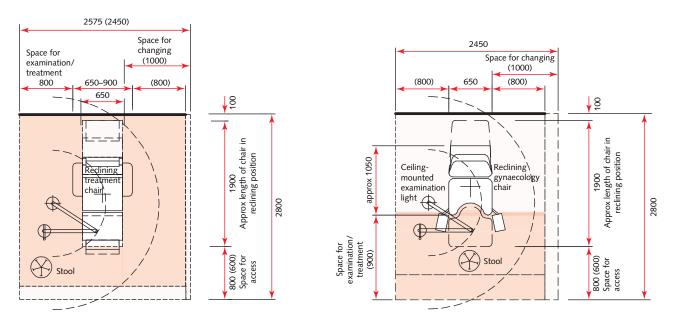
Figure 56 Space requirements for double-sided access to a three-section couch

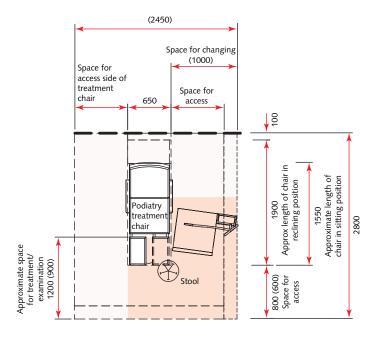


### Treatment chairs (various): double-sided access

- **6.49** These ergonomic drawings (see Figure 57) show the space requirements for double-sided access to a variety of treatment chairs.
- 6.50 The reclining treatment/therapy chair provides the most flexible option for general examinations and treatments.
- 6.51 The reclining gynaecology chair may be used for general examinations and treatments or female internal examinations. A variety of attachments are available to assist internal examinations of females
- including stirrups, leg supports or footrests. The use of the various methods is subject to local clinical and/or patient/client preferences.
- 6.52 The podiatry treatment chair incorporates separate leg supports, which may be adjusted independently of one another.
- 6.53 The activity space for the podiatry treatment chair assumes the examination light is attached to the podiatry trolley. The illustrated chair is mobile. Floor-mounted chairs are also available although these may reduce flexibility in room use.

Figure 57 Space requirements for double-sided access to a variety of treatment chairs

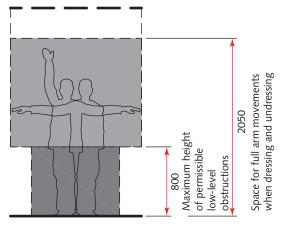




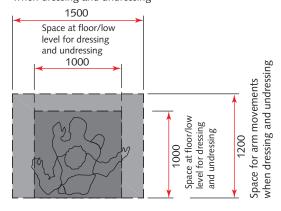
### Dressing and undressing: ambulant

- **6.54** These ergonomic drawings (see Figure 58) show the space requirements for ambulant dressing and undressing.
- 6.55 An identical space provision is suitable for semiambulant users though it should be located adjacent to a seating area.

Figure 58 Space requirements for ambulant dressing and undressing



Space for arm movements when dressing and undressing



# 7 Generic clinical support spaces: Entrance, reception and waiting

### Children's play area

### Room description

- 7.1 A safe and secure children's play area should be provided off all main waiting areas. Young children should be able to play in this area without disturbing patients/clients in the waiting area.
- 7.2 The location of the play area should facilitate easy and constant observation from the waiting area.
- 7.3 If possible, there should be access to an outside play area. Playground equipment and surfacing should comply with BS EN 1176-3, 1176-4 and 1177.
- 7.4 A clearly positioned sign should explain that children are welcome but not the clinic's responsibility.
- 7.5 No room layout has been provided. An allowance of 2 m<sup>2</sup> per child may be used for sizing children's play areas with a minimum recommended size of 6 m<sup>2</sup>

### Infant feeding room

### Room description

- 7.6 This room should allow a baby to be fed in privacy. It should be easily accessible from waiting areas or other areas expected to use the facility.
- 7.7 The fabric of the room should be sound absorbent.
- 7.8 It should include comfortable seating with washable covers and a hand-wash basin with nontouch taps.
- 7.9 Dimmable lighting and facilities for waste disposal should be provided.
- **7.10** Ceiling-mounted mobiles and facilities for playing music are recommended.
- 7.11 This room may be used for expressing breast milk, though expressed milk will be stored elsewhere.
- 7.12 No room layout has been provided.

### Information/resource centre

### Room description

- 7.13 An information/resource area is a public space for the provision of healthcare-related information (both printed and via the Internet).
- 7.14 The space will contain a mixture of tables and chairs, and computer workstations.
- 7.15 It should be located close to an entrance or waiting area with access to beverage-making facilities.
- 7.16 It should be informal and welcoming in character.
- 7.17 It may include lockable cupboards, telephones and TV/video facilities.
- 7.18 The size of the area will depend on the number/ type of users, range of display information, whether the area is staffed or not, and whether it is an enclosed space or open bay.
- 7.19 No room layout has been provided.

### Reception desk

### Room description

- **7.20** A reception desk is similar to a staff communication base except that:
  - particular emphasis should be placed on the design of the desk to encourage patients and visitors to approach the base, including children;
  - additional consideration may be placed on providing privacy screens at the reception desk to assist with patient confidentiality;
  - a reception desk should be located so that it commands a clear, unobstructed view of the entrance and waiting area and access routes to clinical areas;
  - the 1200 mm working width will be required as more prolonged use will be expected.

- 7.21 As well as registering patients and making appointments, clinical administration work will also take place here. Public access to clinical areas will be controlled from the reception desk.
- 7.22 It is assumed patient records are electronic. The space allowance does not include space for notes trolleys.

### Waiting area

### **Room description**

- 7.23 Waiting areas should be close to the clinical or work area served and WC facilities. Main waiting areas should be adjacent to the main reception desk. Occupational therapists and/or ergonomists should be consulted on the selection of seating. Steps should be taken to ensure chairs cannot be used as potential weapons either by fixing chairs to the floor or to each other.
- 7.24 Locating waiting areas together may facilitate overspill arrangements. Large waiting areas may be broken down into smaller areas by the skilful arrangement of seating and by indoor planting.
- 7.25 The seating layout should be considered carefully to prevent confrontational situations (for example, by trying to avoid seats directly opposite each other). Seating should not be located immediately outside clinical rooms.
- 7.26 Natural light should be provided. Steps should be taken to prevent solar heat gain.

- 7.27 Doors from waiting areas into non-public access areas should be fitted with access control systems.
- 7.28 Background music and other entertainment facilities and enclosed notice boards may be provided.
- 7.29 No room layout has been provided. For sizing waiting areas, the following allowances may be used:
  - 1.5 m<sup>2</sup> per ambulant place (that is, in a general chair);
  - 3 m<sup>2</sup> per wheelchair place.
- 7.30 For briefing purposes, waiting areas may be sized at 1.85–2.25 m<sup>2</sup> per place (see Table 1 on page 68). This allows for:
  - 10% of waiting places to be suitable for people in wheelchairs;
  - a children's play area based on 10% of the number of main waiting places and sized at 2 m<sup>2</sup> per child (with a minimum space for three children).
- 7.31 Where there is a higher percentage of children and/ or people in wheelchairs, this allowance will need to increase to 2–3 m<sup>2</sup> per place. The allowance does not include:
  - WCs;
  - optional spaces such as self-registrations points, vending machines, nappy changing rooms, baby feeding rooms and telephone booths.

Table 1 Waiting area sizes

Waiting area: 10 places					
Component spaces	% of users	Qty	Unit area allowance (m²)	Total area (m²)	Waiting area allowance (m <sup>2</sup> )
Ambulant places	90%	9	1.5	13.5	
Wheelchair places	10%	1	3	3	
Children's play area (no. of children)	10%	3	2	6	
Net allowance				22.5	2.25 per place
Waiting area: 20 places					
Component spaces	% of users	Qty	Unit area allowance (m²)	Total area (m²)	Waiting area allowance (m²)
Ambulant places	90%	18	1.5	27	
Wheelchair places	10%	2	3	6	
Children's play area (no. of children)	10%	3	2	6	
Net allowance				39	1.95 per place
Waiting area: 30 places					
	% of users	Qty	Unit area allowance (m²)	Total area (m²)	Waiting area allowance (m²)
Ambulant places	90%	27	1.5	40.5	
Wheelchair places	10%	3	3	9	
Children's play area (no. of children)	10%	3	2	6	
Net allowance				55.5	1.85 per place
Waiting area: 40 places					
	% of users	Qty	Unit area allowance (m²)	Total area (m²)	Waiting area allowance (m <sup>2</sup> )
Ambulant places	90%	36	1.5	54	
Wheelchair places	10%	4	3	12	
Children's play area (no. of children)	10%	4	2	8	
Net allowance				74	1.85 per place

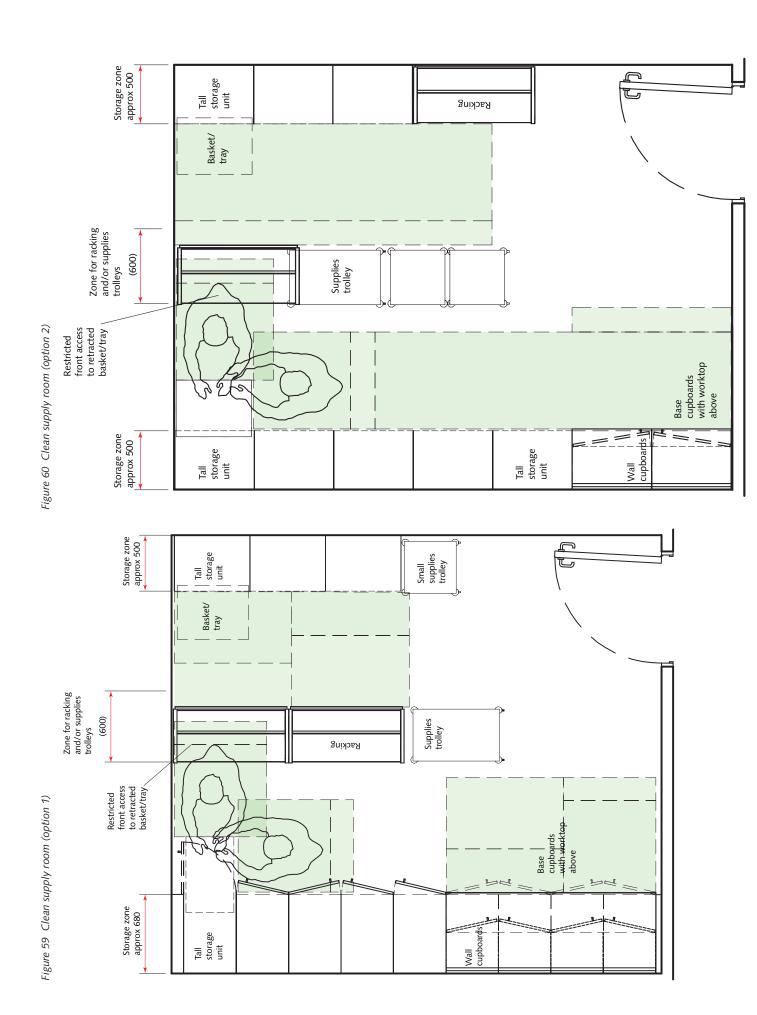
### 8 Generic clinical support spaces: Utility

### Clean supply room

### Room description and layout

- This room is effectively a store for sterile supplies and consumables. Empty supplies trolleys and dressings/instruments trolleys will be held here and restocked for distribution to wards and clinical areas. It is not for storing medicines. Where clean supply rooms are used, and medicines storage/ preparation is required outside clinical rooms, each clean supply room should be supported by a series of medicine store/preparation rooms.
- Two room layouts have been provided (see Figures 59 and 60).
- **8.3** The width of both room layouts is just about acceptable to include racking and/or supplies

- trolleys along the centre of the room; this is on the understanding that the tall modular storage cabinets are accessed from the side.
- **8.4** Option 1 is slightly wider allowing the storage units to be arranged so that an additional base cupboard and wall cupboard can be accommodated.
- 8.5 The illustrated space requirements for accessing modular base and upper cabinets is based on space to access standard cupboards, not using baskets or trays. However, adequate space is available for side access to baskets or trays.
- 8.6 The illustrated space requirements for accessing modular racking is based on space to access open shelves.

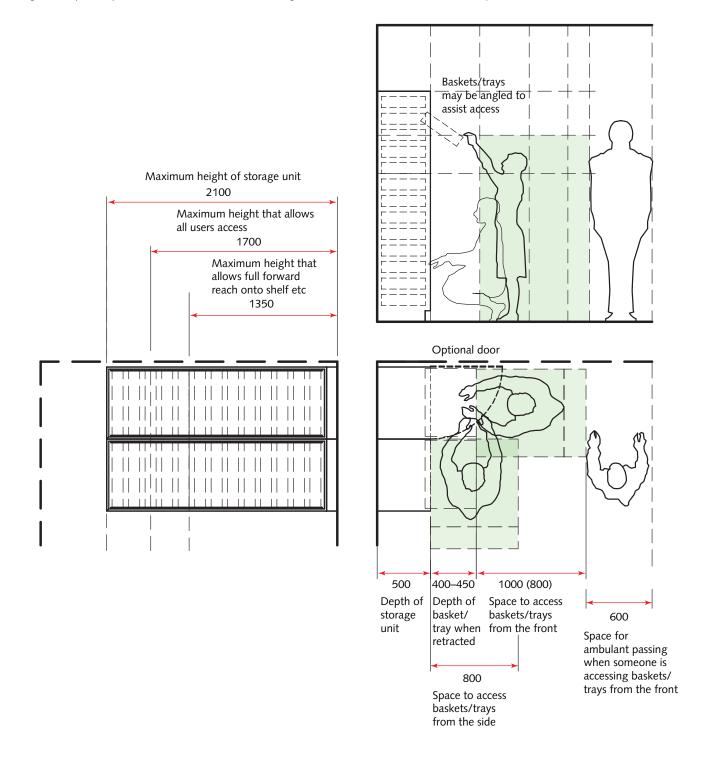


### Ergonomic drawings

### Tall modular storage cabinets

- 8.7 Tall modular storage cabinets are generally constructed to accommodate 600 × 400 mm baskets and trays to provide a variety of fixed or mobile storage options. The cabinets may be constructed to have either 400 mm or 600 mm wide facing baskets or trays.
- 8.8 This ergonomic drawing (see Figure 61) shows the space requirements to access a cabinet with 600 mm wide baskets/trays.
- 8.9 Tall modular storage cabinets are generally 2100 mm high; the top shelves are higher than those recommended for normal fixed storage units because the baskets/trays can be angled to enable their contents to be accessed.

Figure 61 Space requirements to access tall modular storage cabinets with 600 mm wide baskets/trays

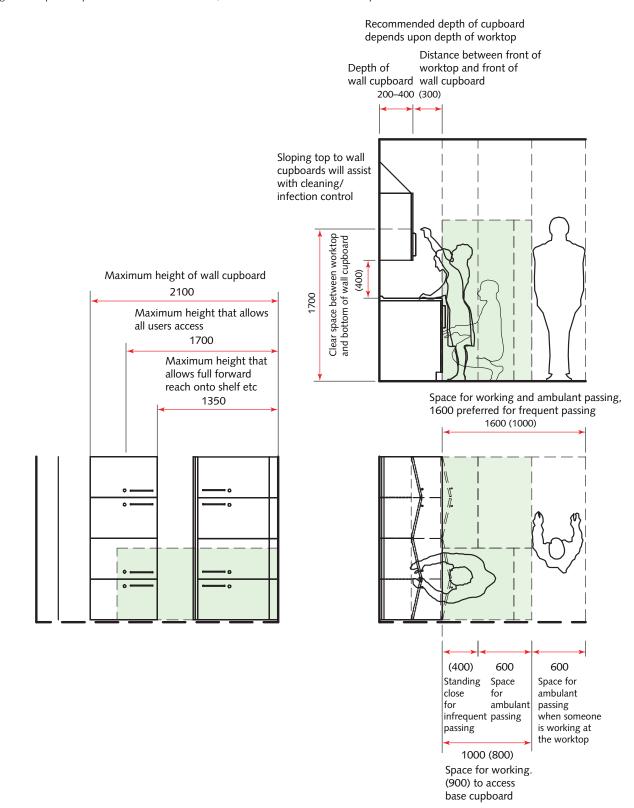


### Standard base and wall cupboards

**8.10** This ergonomic drawing (see Figure 62) shows the space requirements to access standard, floor mounted, base and wall cupboards. Where

worktops or other obstructions project more than 500 mm, the reach dimensions illustrated relate to the front edge of the wall cupboard (that is, reaching into the cupboard would proved difficult).

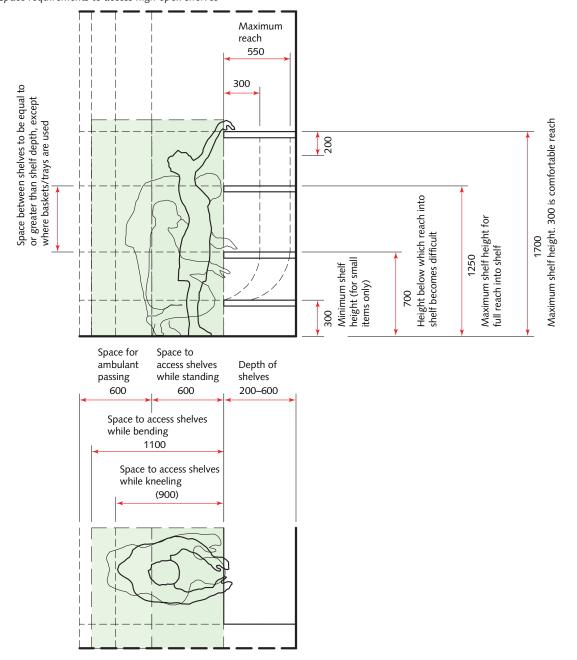
Figure 62 Space requirements to access standard, floor mounted base and wall cupboards



### Open shelves

- 8.11 This ergonomic drawing (see Figure 63) shows the space requirements to access high open shelves. The same principles apply to modular open racking.
- **8.12** The height and dimensions of the shelves should relate to the size and weight of items stored and frequency with which they will be handled.
- 8.13 Frequently used items should be stored on shelves positioned at 300–1500 mm above floor level. Frequently used small items should be stored on shallow shelves at or near worktop height (that is, 900 mm). Heavy object should be stored below worktop height.
- Figure 63 Space requirements to access high open shelves

- **8.14** The shelf intervals (that is, space between two shelves) should at least equal the depth of the shelves.
- 8.15 The illustrated access space is for general use (with shelves up to 450 mm deep). Where items are large or heavy the access space may need to increase by up to 500 mm.
- **8.16** Where heavy or otherwise difficult to move items are stored at the end of shelves a 200 mm clearance is required to the side of the object for safe access.

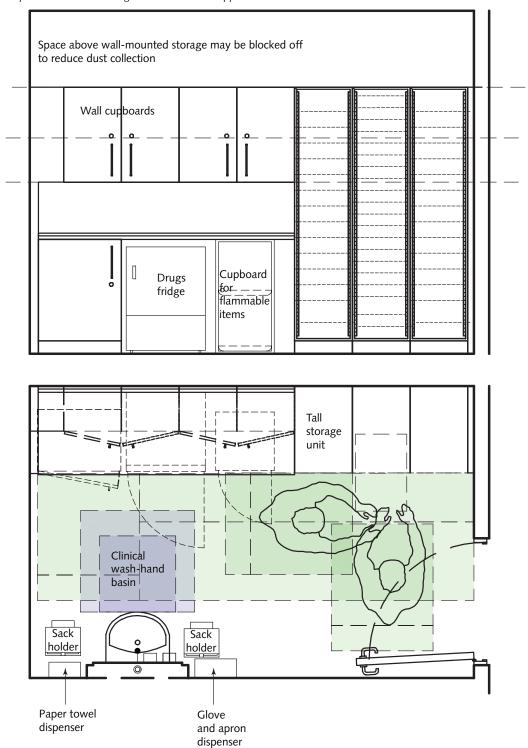


## Clean utility room without controlled drugs cupboard

### Room description and layout

- **8.17** This room is for storing sterile supplies and consumables, excluding infusion fluids, and for storing and preparing medicines, excluding controlled drugs.
- **8.18** Empty supplies trolleys and dressings/instruments trolleys will be held here and restocked for distribution to wards and clinical areas.
- 8.19 The illustrated space requirements (see Figure 64) for accessing modular base and upper cabinets is based on space to access standard cupboards, not using baskets or trays. However, adequate space is available for side access to baskets or trays.

Figure 64 Space requirements for accessing modular base and upper cabinets

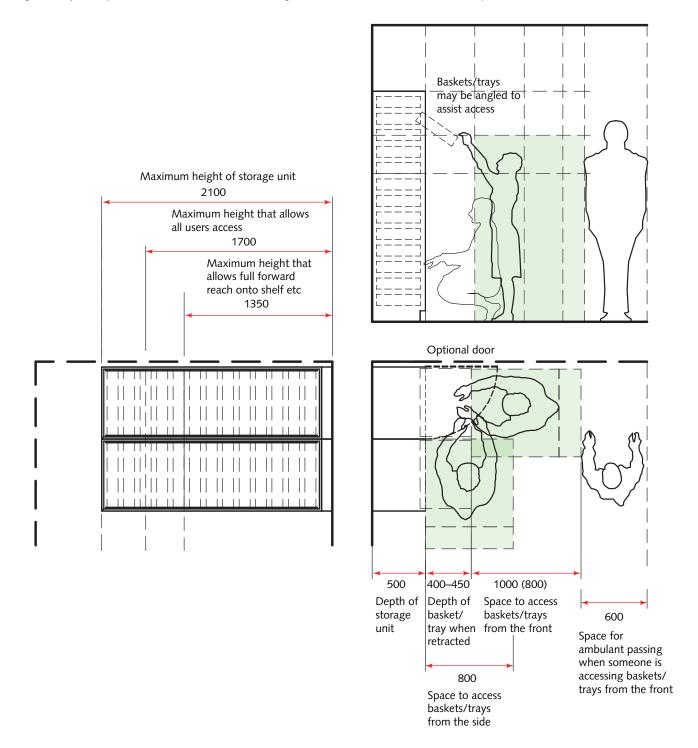


### Ergonomic drawings

### Tall modular storage cabinets

- 8.20 Tall modular storage cabinets are generally constructed to accommodate 600 × 400 mm baskets and trays to provide a variety of fixed or mobile storage options. The cabinets may be constructed to have either 400 mm or 600 mm wide facing baskets or trays.
- 8.21 This ergonomic drawing (see Figure 65) shows the space requirements to access a cabinet with 600 mm wide baskets/trays.
- 8.22 Tall modular storage cabinets are generally 2100 mm high; the top shelves are higher than those recommended for normal fixed storage units because the baskets/trays can be angled to enable their contents to be accessed.

Figure 65 Space requirements to access tall modular storage cabinets with 600 mm wide baskets/trays

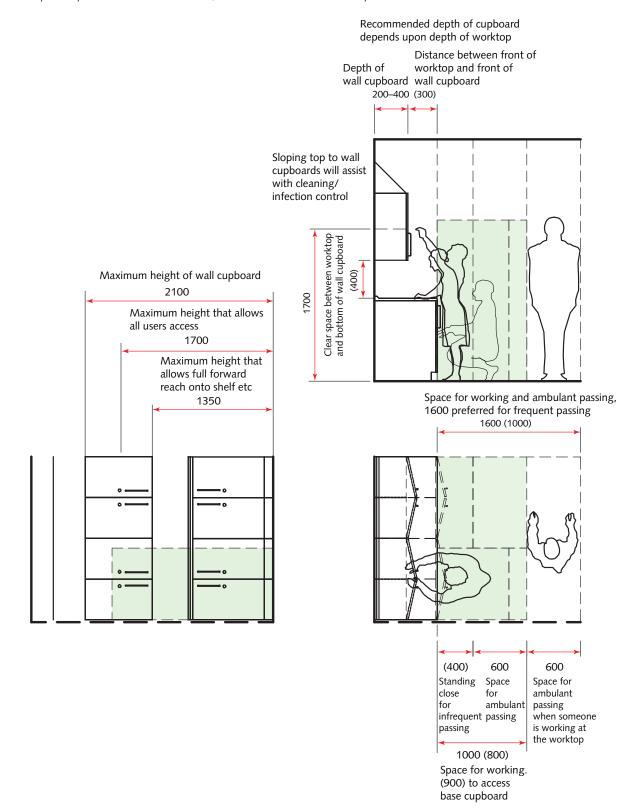


### Standard base and wall cupboards

8.23 This ergonomic drawing (see Figure 66) shows the space requirements to access standard, floor mounted, base and wall cupboards. Where

worktops or other obstructions project more than 500 mm, the reach dimensions illustrated relate to the front edge of the wall cupboard (that is, reaching into the cupboard would proved difficult).

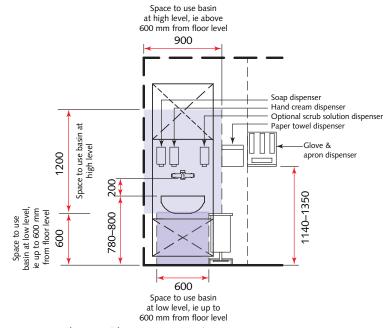
Figure 66 Space requirements to access standard, floor mounted base and wall cupboards



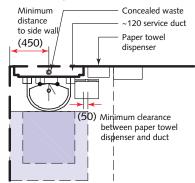
### Clinical wash-hand basin

- **8.24** These ergonomic drawings (see Figure 67) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- 8.25 The basin should be fitted with non-touch taps.
- 8.26 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 8.27 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 8.28 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- **8.29** The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- **8.30** Lever taps are not illustrated.
- 8.31 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

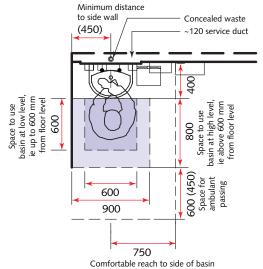
Figure 67 Space requirements for standing use of clinical wash-hand basin assembly



Elevation (showing sensor tap)



Projecting concealed services duct



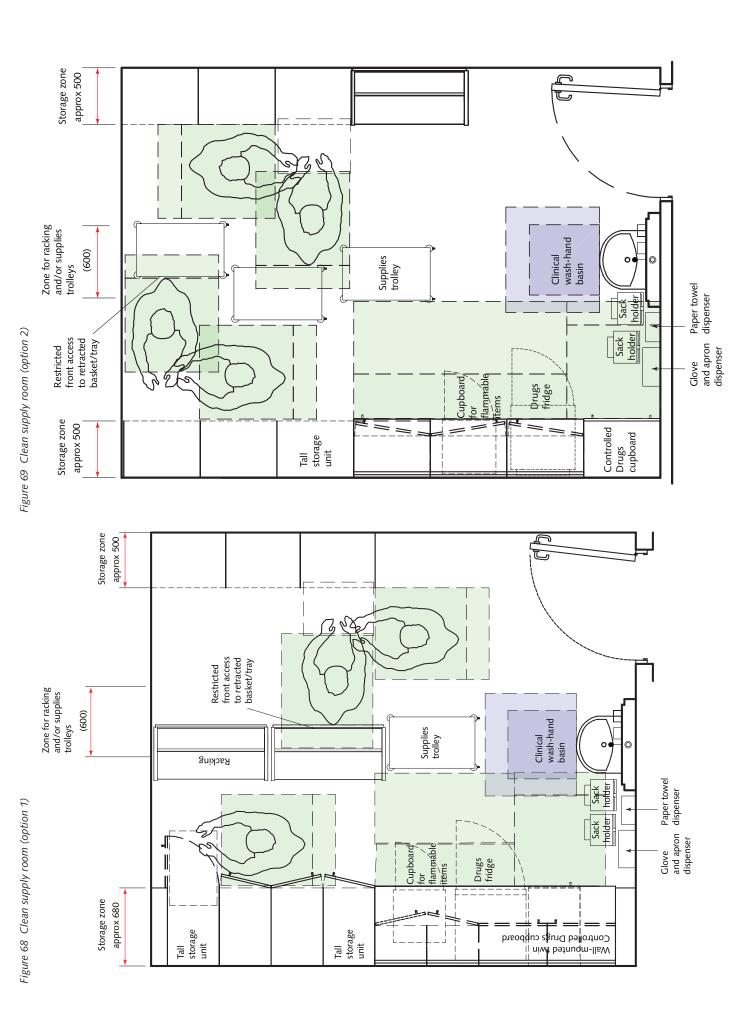
Flush concealed services duct

### Clean utility room

### Room description and layout

- **8.32** This room is for storing sterile supplies and consumables, including infusion fluids, and for storing and preparing medicines, including controlled drugs.
- 8.33 Empty supplies trolleys and dressings/instruments trolleys will be held here and restocked for distribution to wards and clinical areas.
- **8.34** Two room layouts have been provided (see Figures 68 and 69).
- **8.35** Both layouts provide limited access to the tall storage units from the front (i.e. it is assumed

- access will be from the side). However, option 1 is slightly wider allowing the tall storage units to be arranged so that the room can accommodate an extra storage unit and racking as opposed to just mobile trolleys down the centre of the room.
- 8.36 The illustrated space requirements for accessing modular base and upper cabinets is based on space to access standard cupboards, not using baskets or trays. However, adequate space is available for side access to baskets or trays.
- **8.37** The illustrated space requirements for accessing modular racking is based on space to access open shelves.

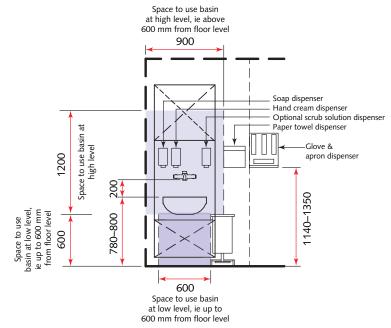


### **Ergonomic drawings**

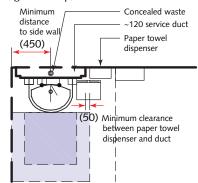
### Clinical wash-hand basin

- 8.38 These ergonomic drawings (see Figure 70) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- **8.39** The basin should be fitted with nontouch taps.
- 8.40 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 8.41 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 8.42 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- **8.43** The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- **8.44** Lever taps are not illustrated.
- 8.45 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

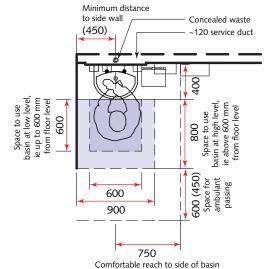
Figure 70 Space requirements for standing use of a clinical wash-hand basin assembly



Elevation (showing sensor tap)



### Projecting concealed services duct

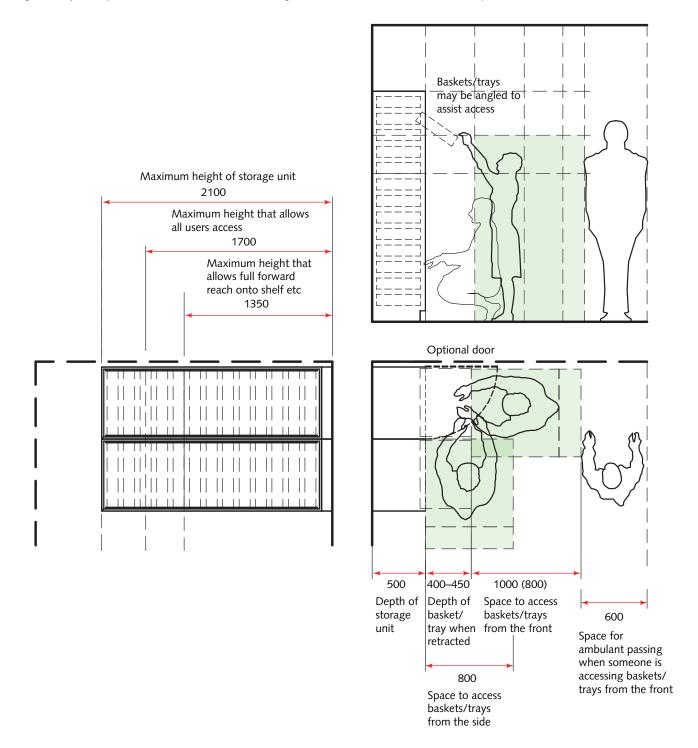


Flush concealed services duct

### Tall modular storage cabinets

- 8.46 Tall modular storage cabinets are generally constructed to accommodate 600 × 400 mm baskets and trays to provide a variety of fixed or mobile storage options. The cabinets may be constructed to have either 400 mm or 600 mm wide facing baskets or trays.
- 8.47 This ergonomic drawing (see Figure 71) shows the space requirements to access a cabinet with 600 mm wide baskets/trays.
- 8.48 Tall modular storage cabinets are generally 2100 mm high; the top shelves are higher than those recommended for normal fixed storage units because the baskets/trays can be angled to enable their contents to be accessed.

Figure 71 Space requirements to access tall modular storage cabinets with 600 mm wide baskets/trays

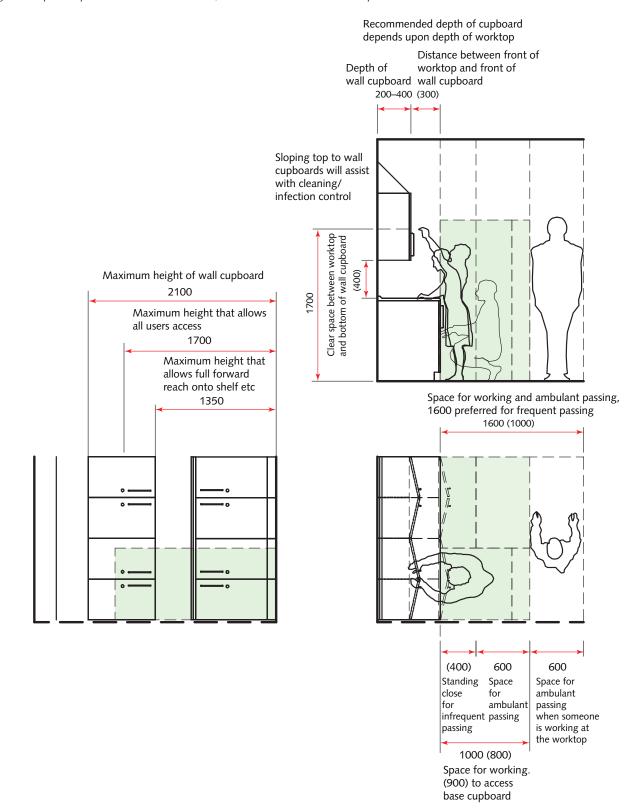


### Standard base and wall cupboards

**8.49** This ergonomic drawing (see Figure 72) shows the space requirements to access standard, floor mounted, base and wall cupboards. Where

worktops or other obstructions project more than 500 mm, the reach dimensions illustrated relate to the front edge of the wall cupboard (that is, reaching into the cupboard would proved difficult).

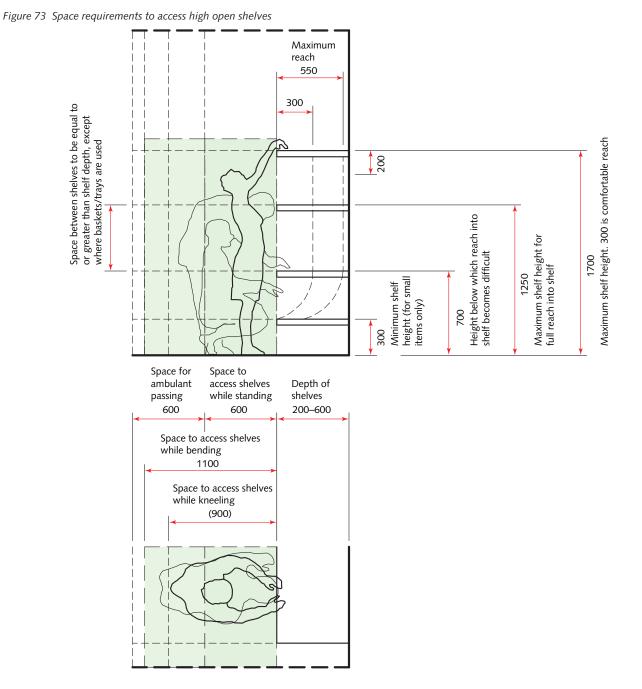
Figure 72 Space requirements to access standard, floor mounted base and wall cupboards



### Open shelves

- **8.50** This ergonomic drawing (see Figure 73) shows the space requirements to access high open shelves. The same principles apply to modular open racking.
- **8.51** The height and dimensions of the shelves should relate to the size and weight of items stored and frequency with which they will be handled.
- 8.52 Frequently used items should be stored on shelves positioned at 300–1500 mm above floor level. Frequently used small items should be stored on shallow shelves at or near worktop height (that is, 900 mm). Heavy object should be stored below worktop height.
- worktop neight.

- **8.53** The shelf intervals (that is, space between two shelves) should at least equal the depth of the shelves.
- 8.54 The illustrated access space is for general use (with shelves up to 450 mm deep). Where items are large or heavy the access space may need to increase by up to 500 mm.
- 8.55 Where heavy or otherwise difficult to move items are stored at the end of shelves a 200 mm clearance is required to the side of the object for safe access.



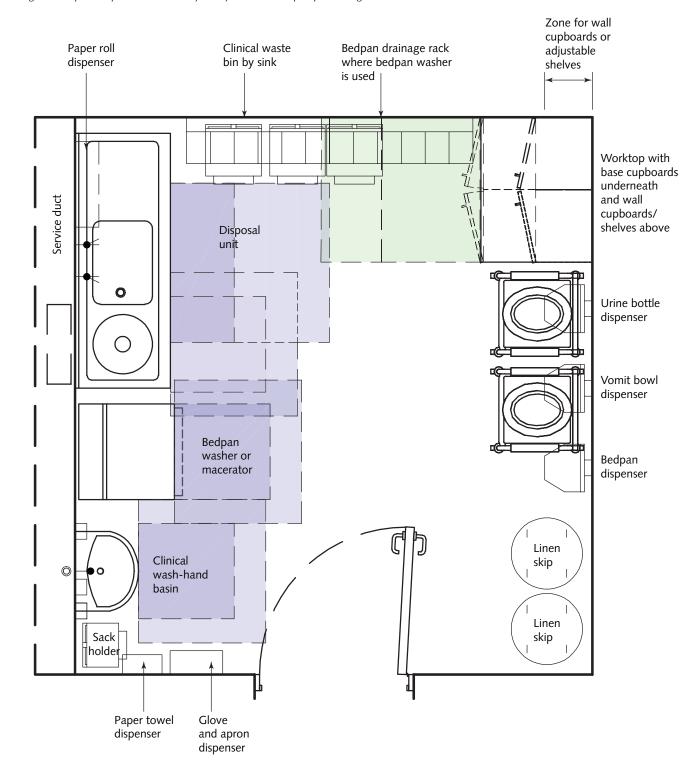
### Dirty utility room for bedpan processing

### Room description and layout

- 8.56 This room will fulfil the same functions as the dirty utility room with the addition of the disposal of the contents of bedpans and urine bottles into a macerator or bedpan washer.
- 8.57 It will also be used for storing clean urine bottles, bedpans (or bedpan liners) and vomit bowls, and for holding dirty linen where used. Commodes and sani-chairs may be stored here.
- 8.58 The location of the dirty utility rooms should minimise travel distances for staff from patient areas to reduce the risk of spillages and cross contamination, and to increase working efficiencies.
- 8.59 Local policy will determine whether to use disposable or reusable urine bottles and vomit bowls and/or whether to use bedpans with liners.

- 8.60 The room layout provided (see Figure 74) is based on the use of a macerator or washer.
- 8.61 Where a macerator is used, consideration should be given to providing both a macerator for the disposal of the liners and waste products and a washer for the subsequent cleaning of bedpan holders etc. This arrangement is currently a topic for discussion on the basis of perceived improved infection control but is not specifically recommended.
- **8.62** The illustrated space requirements for accessing modular base and upper cabinets is based on space to access standard cupboards, not using baskets or trays. However, adequate space is available for side access to baskets or trays.
- 8.63 The layout has taken on board research from the Loughborough University Healthcare Ergonomics & Patient Safety unit, DH research report B(05)02, Dec 2007.

Figure 74 Space requirements for dirty utility room for bedpan processing

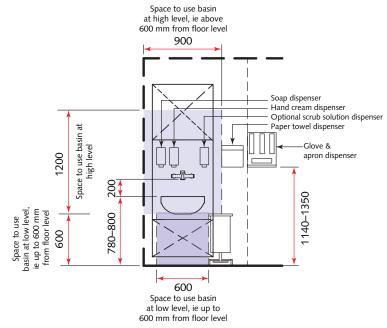


### **Ergonomic drawings**

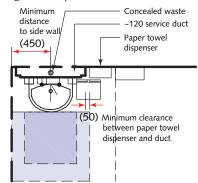
### Clinical wash-hand basin

- 8.64 These ergonomic drawings (see Figure 75) show the space requirements for standing use of a clinical wash-hand basin assembly. For seated use, the basin will need to be lowered.
- **8.65** The basin should be fitted with nontouch taps.
- 8.66 The recommended fixing height of a lever tap on a clinical wash-hand basin is 1095 mm. Where a lever tap is used, the fixing height of the dispensers should be chosen to reduce any possible conflicts in use.
- 8.67 The illustrated clinical wash-hand basin projects 400 mm from the back panel or wall. However, clinical wash-hand basins may vary from 350 to 500 mm projection. Where basins deeper than 400 mm are used, the impact on/from other components and/or activities undertaken within any space should be considered when evaluating any room layout.
- 8.68 The glove and apron dispenser illustrated is a combined unit; this is considered the most compact solution although separate units may also be used. Even the most compact unit cannot practically be located within comfortable reach of the basin; it should, however, be conveniently located within the room.
- **8.69** The ergonomic advice for the height of horizontal elbow operated lever taps is based on the following data:
  - "Elbow height for shod, slightly bent posture (as when leaning forward) for 50%ile UK male = 1134 mm, for female 1049 mm. 1090 mm is considered the best compromise for an elbow height for both male and female use. The ergonomic advice for the height of a lever tap is 75 mm below elbow height giving a figure height of approx 1015 mm."
- 8.70 Lever taps are not illustrated.
- 8.71 For detailed information on basins, see Health Building Note 00-10 Part C 'Sanitary assemblies'.

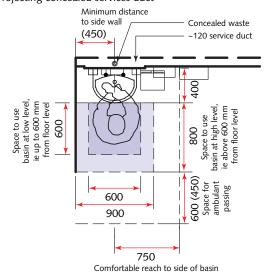
Figure 75 Space requirements for standing use of a clinical wash-hand basin assembly



Elevation (showing sensor tap)



Projecting concealed services duct



Flush concealed services duct

### Disposal unit

- **8.72** This ergonomic drawing (see Figure 76) shows the space requirements for a disposal unit comprising a combined sink and hopper.
- 8.73 Subject to local infection control advice, consideration may be given to providing integrated units (that is, a combined unit with a washer or macerator, bucket sink, and base cupboard/storage unit).

Figure 76 Space requirements for disposal unit comprising combined sink and hopper

